

Analysis of City Government and Farming Community Partnership in Food Security Policy: Urban Farming Program

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Abstract.

The urban farming program is the city government policy to overcome the food security problem for the community's welfare. The study aims to discuss the partnership between the city government and the urban farming community in an urban farming program. It utilizes agricultural land and urban garden as the place for urban agroecological transformation as part of urban food security policy through the partnership capacity theoretical approach from Mathers, et al. This analytic descriptive study uses the case survey method, and data collection is obtained from the unstructured in-depth interview, focus group discussion, and observation in Jeruk urban village in Lakarsantri district in Surabaya. The findings show the success of the partnership between the department of food security and agriculture in Surabaya and Sri Sedono farmer group in the management of the integrated agricultural center. Urban farming program is influenced by mutual consensus which is beneficial to increase crop productivity. However, the result also indicates that the skill base factor is not optimal because of the limited personnel in PPL. Furthermore, the farmers are concerned about adopting new plant varieties. We suggest that the urban farming program can be sustainable and needs to increase the number of personnel in PPL. In addition, it is necessary to increase the entrepreneurial spirit of farmers so that they have innovation values to adopt new crop varieties, and the discipline through the increase of intensity assistance from PPL towards independent, skilled, and professional farmers.

Keywords: partnership; policy; food security; urban farming.

Introduction:

Community involvement in green space provision, design, management, and decision-making has become a political agenda in the last few decades (A Mathers, N Dempsey, JF Molin, 2015a). Furthermore, the dependence on food imports by several developed countries has made food supplies vulnerable and minimal, so it has implications for political and economic instability, and lack of food production (Millstone and Lang, in Parsudi, 2019). The world's population in 2050 is predicted to reach more than 9 billion and 66% of the population lives in urban areas. The higher the world's population lives in urban areas, the more role of cities in overcoming the vulnerability

of the food system becomes very important (Fauzi, Warid, Maulidian 2020).

Many people migrate to the cities hoping for their welfare improvement. They expect to get more opportunities in the city, but the contradiction happened (SA Mutiah, I Istiqomah, 2017). In line with this, the existence of new marginal or poor people causes differences in access to food by every family. This is the problem in urban food security as the result of urbanization increase, so the importance of economic access has a role in increasing food security (Frayne, in Anggrayni et al., 2015). Therefore, food security is a relevant topic, especially in urban areas because these areas do not always have good access to sufficiently

nutritious food (I Opitz, R Berges, A Piorr, T Krikser -, 2016). The urban farming policy is an alternative to food security strategy (N Malan - Agrekon (2015); B Pölling, MJ Prados, BM Torquati, G Giacchè... - Moravian ... (2017); Brent Mansfield, Wendy Mendes (2013). This policy is developing in various countries because it has many benefits (R Surls, G Feenstra, S Golden, R Galt, 2015 ; P Kullu, S Majeedullah, PVS Pranay, 2020; JA Nicklay, KV Cadieux, MA Rogers, 2020; A Gasparatos , 2020; A Rosyad, TY Astuti, EW Tini, 2020).

Urban farming has been used as food resources, beautified homes, and at the same time to meet the needs of changing lifestyles. Some factors including urbanization, urban poverty, and limited agricultural land are the factors that support urban farming development. The role and function of urban farming have also developed along with the revolution in health and human nutrition (AR Fauzi, W Warid, M Maulidian -, 2020a). Urban Farming is a new activity trend that is in urban areas demand and has made people stay at home more and provided many benefits. Limited community land is not an obstacle to creativity building that produces something useful as an alternative for production improvement on limited land, thereby it increases land efficiency (T Erissanti, S Supadi, S Suharno, 2021).

Urban farming is the concept of gardening by utilizing existing space at homes or settlements. It has some benefits such as creating green spaces in urban areas, bringing sustainable profits and income, and becoming a source of knowledge. The community gets the availability of vegetables as a source of nutrition. It is greening the environment and reducing the impact of global warming. In addition, it can strengthen the togetherness atmosphere and create a culture of cooperation in the urban community. Urban Farming is spread across empty and marginal lands around the world, embraced by government and civil society as the source of food, ecosystem services, and jobs, especially during the economic crisis (N McClintock, 2010).

A partnership is the association of two or more parties who have joint responsibility for a certain period to manage an activity (Barnes et al., 2008; Burton & Mathers, 2014 in A Mathers, N Dempsey, JF Molin (2015b). Partnerships are related to the concept of governance that it does not work in isolation, however, it relates to civil society

and non-government including the community. Partnerships can be informal way based on mutual understanding of the roles and responsibilities of each, or formal way based on written agreement and contract. The capacity partnership is the measure of the extent to which cross-sectoral partnerships can develop, deliver, and achieve the goal, as well as respond to internal and external changes that affect a place. Furthermore, A Mathers, N Dempsey, JF Molin (2015c) suggest the theory of partnership capacity has six factors, namely: (a) the fund; (b) commitment; (c) motivation; (d) skill-based partnership; (e) communication; (f) political influence.

The food crisis is becoming a threat to society nowadays, and based on the data from Global Hunger Indonesia (GHI), the hunger rate in Indonesia is experiencing a downward trend from 24.9% (2010) to 17.9% in 2022. However, Indonesia still ranks 77th out of 121 countries and Indonesia has a moderate level of hunger (<https://www.globalhungerindex.org/pdf/en/2022/Indonesia.pdf>). Therefore, Indonesia must remain vigilant against the threat of famine that triggers various major problems such as health, social, and security. Urban farming is the source of local fresh food that has an important role (I Opitz, R Berges, A Piorr, T Krikser -, 2016). Therefore, the community can participate in realizing food sovereignty, food independence, and food security to anticipate food crises (the food law article 130 paragraph 1) so that people who live in urban areas get involved in the urban farming movement as an effort to ensure food availability.

Urban Farming is the program applied in Surabaya a capital city that has densely populated in East Java province. It is known as the city of trade and services so the contribution of the agricultural sector is relatively minor. The poor population in Surabaya in one year has increased by 4.18% from 5.02% in March 2020 to 5.23% in March 2021 based on the statistics official news, namely, the increase of 6.82 thousand people from 145.67 thousand people in March 2020 to 152.49 thousand people in March 2021 or the number has increased by 4.68%
file:///C:/Users/aguss/Downloads/BRSbrsInd-20211221170302.pdf

An urban farming program is a form of city government agility to overcome the food availability problem and assist the poor people in fulfilling the consumption needs of nutritious food

and reduce family expenses. Food security policy for a region is the factor that must be implemented as the concern of the regional government for the community. It is the development of healthy, intelligent, active, and productive human resources (Law Number 18 Year 2012 concerning food) (<https://peraturan.bpk.go.id/Home/Details/39100>). For this reason, government commitment is very important because the provision of food is in accordance with the nutritional needs of the population both in quantity and quality. It is an effort that must be implemented in the context of realizing the program to increase food security. Thus, the realization of food security is the result of all interactions between subsystems or components of food availability, food distribution, and food consumption

(<https://luk.staff.ugm.ac.id/atur/UU18-2012Pangan.pdf>).

There is an interesting finding that the urban farming program implemented by Surabaya government has been going on for more than 10 years (since 2010). This program is aimed at reducing personal expenses and increasing the farmer capacity, especially the poor people as the member of urban farmer groups in all sub-districts in Surabaya based on community empowerment in farmer groups (<https://repository.unair.ac.id/16168/>). The crops from urban farming farmer groups include the supply for the city necessity, such as hotels, restaurant, and it is distributed out of town. Surabaya has thirty-one sub-districts and thirteen of them have rain-fed rice fields. However, the agricultural land has experienced a functional shift reaching 814.80 Ha or 31.51% (from 1,771.20 Ha in 2017 to 2,586 Ha in 2021) in the last five years. Furthermore, the contribution of gross domestic product (GDP) at current prices to the agricultural sector in Surabaya is relatively low, when it is compared to other sectors, like trade, processing, and services. The agricultural sector has contributed only 0.16 in 2021 and tended to decrease in the last five years that PDRB of this sector in 2017 was still at 0.18. So, it experienced a decrease of 0.02 (Badan Pusat Statistik (<bps.go.id>)).

Innovation is needed in food security policy oriented on plantation and agriculture by utilizing narrow urban land, and vacant land for cultivating crops that have economic value and self-sufficiency in providing sustainable food (HS

Mulyani, H Agustin, 2018). The municipal government in Surabaya has developed an urban farming program by agriculture service based on Regional Regulation in Surabaya Number 12 Year 2014 concerning the spatial planning for Surabaya from 2014 to 2034. It is budgeted in the Regional Revenue and Expenditure Budget. The program aims at preventing food insecurity so that food crops are developed in twenty-four locations in Surabaya, including in Lakarsantri district which has the widest rain-fed rice fields approximately 519.60 Ha out of thirteen sub-districts in Surabaya. Urban Farming in this city is applied by empowering thirty-five farmer groups. Each group has different members between twenty-five and forty members (<https://news.schoolmedia.id/artikel/Saatnya-Urban-Farming-Tak-Hanya-Sekadar-Gaya-Hidup-45>).

The initial program has begun from the potential social asset namely the community who are educated with the community-based program. So, it is necessary to support the municipal government and other stakeholders by paying attention to current issues, namely food scarcity and limited land for agricultural development, fishery, and livestock sectors. The food security and agricultural training implementation agency (DKPP) has designed a community-based community empowerment, including the urban farming program in the agriculture, fishery, and livestock sectors). Furthermore, DKPP has formed a team consisting of motivators, technical Teams (according to the educational background in agriculture, fisheries, and animal farming), and agricultural counseling (PPL). This program is an agricultural business in urban areas by utilizing open land around the community. The land used is an average of 5-50 m². Commodities that are commonly cultivated include short-lived plants, such as various leaf and fruit vegetables, medicinal plants, and ornamental plants (<https://dkpp.surabaya.go.id/urbanfarming/>).

Previous research on urban farming by R Islam, C Siwar (2012); Nevin Cohen and Kristin Reynolds (2015); W Junainah, S Kanto, S Soenyono (2016); Susanne Thomaier (2018); W Valley, H Wittman (2019) highlights the potential for sustainable urban farming policy. While A Gasparatos (2020) analyses various types of urban farming related to ecosystems. RL Rutt (2020); AF Sumardjo (2021); B Surya, S Syafri, H Hadijah, B Baharuddin, AT Fitriyah..., (2020) analyzes the impact of family

empowerment on adaptation and opportunity for small-scale urban farmer's equality toward the changes in the market for urban farming products; J Hou, D Grohmann (2018) analyzes the collaboration and partnership in integrating community garden with the city park; and S Amelia, ER Nawangsari (2021); W Junainah, S Kanto, S Soenyono (2016) examines the implementation of the urban farming program.

Research in the literature review that focuses on partnership or collaboration with the case of the urban farming programs in the United States and England by Twiss, J, Dickinson, J., Duma, S., Kleinman, T., Paulsen H., and Rilveria, L. (2003); A Mathers, N Dempsey, JF Molin (2015d); JA Nicklay, KV Cadieux, MA Rogers (2020). Research by Twiss, J, Dickinson, J., Duma, S., Kleinman, T., Paulsen H., and Rilveria, L. (2003) analyzes the partnership between urban organizations and gardening communities in building social capital through community garden from the perspective of Mayer (1996) in California, United States of America. A Mathers, N Dempsey, and JF Molin (2015d) discuss the extent to which urban community group has the capacity in cross-sectoral partnership with local government to ensure sustainable green spaces, in the perspective of Burton & Mathers (2014) in Sheffield, London, and Stockton-on-Tees, England. JA Nicklay, KV Cadieux, and MA Rogers (2020) analyze the collaboration between urban farmers, policy maker, scholars, and communities who use urban agriculture and gardening as the sites of ecological, social, and political transformation representing urban agroecological spaces, using collaborative practices from Nicklay et al. al. (2019) in Minneapolis/St. Paul, United States of America.

The difference in this study is the focus on the partnership capacity involvement of several parties, such as municipal government in Surabaya, food security and agricultural training implementation agency (DKPP), and urban farmer community, *Sri Sedono* farmer group (Poktan), Jeruk urban village, and Lakarsantri sub-district. This study aims to discuss the capacity of DKPP and *Sri Sedono* urban farming program partnership. The analysis uses three related processes to visualize it. First, analyze the development of the urban farming program partnership between DKPP and *Sri Sedono* farmer group. Second, analyzing the partnership capacity involvement theory of several parties. Third, discussing the supporting and inhibiting factors in the partnership.

Methods:

The study uses a holistic case study design to investigate the partnership capacity in managing the urban farming program at the integrated agricultural center (SPT) in Jeruk urban village, Lakarsantri sub-district in Surabaya. This study provides a rational description for a single case approach (Sharpe, 2006; Yin, 1994 in Geoff Dickson, Simon Milnec & Kim Wernerc, 2017), with a qualitative descriptive approach which is analyzed critically in reality, and constructed locally and specifically (Denzin dan Lincoln, 2010). The focus of the partnership study between DKPP and *Sri Sedono* farmer group is the manager of urban farming.

The role and influence in managing urban farming program partnerships at the integrated agricultural center are based on their own experiences since 2018. Ten people were selected consisting of agricultural counseling (PPL) from DKPP in Surabaya as the key informant, public relation staff from DKPP as the main informant, the chairman and the members of *Sri Sedono* farmer groups, and the community in the integrated agricultural center in Jeruk urban village as the additional informant. The criteria for site selection is the sub-district area that has the largest agricultural land (rainfed rice fields). The integrated agricultural center is an agricultural area that utilizes village treasury land (BKTD). It is established as an agricultural pilot project by municipal government for other urban village and sub-district to realize an urban farming program. It has the largest number of agricultural business households in Jeruk urban village.

This study takes place over six months from November 2021 to April 2022. The data is collected based on primary data from observation and in-depth interviews through snowball sampling. The finding from the interview is used to understand the partnership capacity of several parties. Secondary data from the document is supported by field notes, archives, and websites. The validity of the data uses a credibility test through triangulation (time, source, and method triangulation). The findings are based on the author's interpretation and analyzed through four techniques of thought (Miles, M. B., Huberman, A. M., & Saldaña, 2014).

Results and Discussion

Surabaya and Lakarsantri sub-district

Surabaya is the capital of East Java province located between 07° 9' to 07° 21' south latitude and 112° 36' to 112° 54' east longitude. The area is in the lowland with an altitude of 3-6 meters above sea level, except for the area to the south which has an altitude of 25-50 meters above sea level. The territorial boundary on the north side is Madura Strait, on the east side is Madura Strait, the south side is Sidoarjo, and the west side is Gresik. Its area reaches ± 326.81 km² consisting of thirty-one districts which cover one hundred and fifty-four villages. The population of Surabaya in 2021 is 2.88 million people with the growth rate of 0.28%, with a density reaching 8,612 people/km². Lakarsantri subdistrict is located in West Surabaya with an altitude of ± 10 meters above sea level with the area of 17.73 km² that has six sub-districts, namely Lakarsantri, Lidah Kulon, Bangkingan, Lidah Wetan, Sumur Welut, and Jeruk. Jeruk urban village has 2.7 km² area. The population is 60,816 people.

(<https://surabayakota.bps.go.id/publication/2021/09/24/7f74d3d9e745f7499d19575e/kecamatan-lakarsantri-dalam-angka-2021.html>)

Integrated agricultural center (SPT) in Jeruk urban village and Sri Sedono farmer group

Jeruk urban village is one of the sub-districts in Lakarsantri that has population of 8,873 people. They have the educational composition of 2,522 people (28.42%) that have not attended school, 599 inhabitants (6.75%) who have not finished elementary school/equivalent, 1,698 inhabitants (19.14%) who graduated from elementary school/equivalent, and 1,094 people (12.33%) graduated from junior high school/equivalent. So, the number of people who have completed or not yet completed elementary school/equivalent

reaches 87.67%, meanwhile, Lakarsantri district has the widest agricultural land in the form of rainfed rice fields in Surabaya. For this reason, municipal government has developed an integrated agricultural center in Jeruk urban village which is managed jointly by DKPP and Sri Sedono farmer group. It is a beginner farmer group based on the classification of the agricultural counseling center in the ministry of agriculture.

The integrated agricultural center in Jeruk urban village is one of the assets owned by municipal government, located in West Surabaya under the management of DKPP covering an area of 7.6 Ha, and it is used for the cultivation of various productive plants, and food crops. Furthermore, the results are consumed by the citizen. In realizing the urban farming program in SPT, *Sri Sedono* farmer group has thirty-five members that manage BKTD covering an area of 4 hectares. In addition, all the members are traditional farmers.

Urban farming partnership program

The government has developed a poverty alleviation program because of the poor people's condition. It is implemented through various local government work units (SKPD) in municipal government. In this case, it is regulated in the Decree of Surabaya Mayor Number 188.45/300/436.1.2/2011 regarding the poverty alleviation program implemented by the regional poverty alleviation coordination team in Surabaya. The urban farming program is one of the programs developed through DKPP partnership in municipal government with Sri Sedono farmer group through the integrated agriculture center (SPT). The development of SPT is managed in partnership shown in table 1 below:

Table 1. Development of Integrated Agricultural Center (SPT) in Jeruk, Lakarsantri district

Year	Activity forms	Land area	Land Status	The result
2017	The socialization of rice planting using Jajar Legowo System (Jarwo) from Kodim 0832/South Surabaya and DKPP	3.8 Ha	The paddy field of <i>Sri Sedono</i> framer group	To increase the number of crops
2018	SPT condition	41.1 Ha	BKTD in municipal government, owned by developer and individual	SPT development is planned to be divided into three sectors, namely agriculture (rice and vegetables), animal farming (cow, and goat), fishery (fish cultivation)
2018	SPT development stage I	6.8 Ha	BKTD	Experimental garden, fruit, trees, rice field, playground plazas, and jogging tracks
2019	The harvest from Kodim 0832, farmers, and related stakeholders	3.8 Ha	BKTD land is managed by <i>Sri Sedono</i> farmer group in, Jeruk, Lakarsantri district.	The harvest is consumed and sold in the form of wet dry grain and harvested dry grain.
2020	SPT development stage II	6.8 Ha	BKTD	The cattle for cows and goats
				Edu-tourism through the learning of growing crops and taking care of the animal farm
2020	The construction of two reservoirs	-	SPT area	The cultivation of red tilapia, catfish, and patin
2020	The harvest	4 Ha	BKTD	Honey sweet potato, and cassava
2022	Paddy harvest	4 Ha	BKTD	Paddy harvest is consumed and sold in the form of rice as the result of cooperatives' collaboration

Source: from the author, 2023

Capital funding:

The capital factor is optimal because the funding for the urban farming program comes from the funds that have been budgeted by DKPP in the regional government work plan (RKPD). This program is not specifically listed separately in RKPD, but it is part of the program that has a wider

scope. Furthermore, DKPP distributes the budget directly in the form of agricultural equipment and supporting materials to avoid the risks when it is given in cash. *Sri Sedono* farmer group has thirty-five members who do not get the opportunity to be assisted in marketing because they can market their products independently. Besides, this farmer group

already has capital funding support through a farmer card scheme from the bank named BNI approximately Rp. 20,000,000, - which is calculated according to the area of land specifically for rice commodities. It is used to purchase supporting equipment which is the responsibility of the farmer group, and purchase seeds that are not subsidized. DKPP distributes the following items, such as quality seed, fertilizer, agricultural medicine, as well as technical assistance from planting to harvesting.

Commitment:

To empower the farmer through the program, DKPP does socialization that involves PPL assistants and facilitates the supporting program. The farmer groups are adaptive to the knowledge changes in managing land from traditional to more modern patterns. It is applied through various trials of new commodity crops (demplot), the coaching from East Java agricultural technology study center (BPTP). PPL guides continuously from planting to harvesting. Routine coaching every year is in the form of workshops from BPTP, and comparative studies to agricultural centers in other districts. In addition, PPL and the chairman of Sri Sedono farmer group are responsible for and involved in daily activities, and the management of planning, planting, and harvesting. BPTP is involved as the initiator of the seminar and workshop. However, there is a limited number of PPL to assist farmer groups in five sub-districts in Lakarsantri, so the coaching activities are not optimal. The partnership is not supported by a formal agreement. It is only based on an agreement because institutionally the task of DKPP is to coach the farmer group in that area. However, there has never been a substantial problem. This indicates that the commitment factor is realized optimally when the aspect of knowledge and time contribute to the benefits so that they can support the aspect of involvement and agreement.

Motivation:

The initial partnership focused on fertilizer subsidies. However, it developed in line with Sri Sedono farmer group expectations after receiving training in both knowledge and skills to develop the agricultural sector. For this reason, it can be independent and productive. On the other hand, DKPP has an innovative program to empower farmers and relieve them from limited funding. This common agenda can build the aspiration of

farmers both in internal forum and consultation with PPL. Municipal government has an interest in developing food diversification as an effort to fulfill adequate nutrition and food for the community. Therefore, Sri Sedono farmer group supports it by planting various food crops commodities, such as cassava, honey sweet potato, corn, and brown rice that increase market opportunity. The support for this program is realized through the development of SPT in which the utilization is supported Sri Sedono farmer group. This shows that the motivational factor is realized optimally. This is caused by Sri Sedono farmer group becoming the prime mover in realizing the municipal government program that has quite high economic potential.

Skill based:

Sri Sedono farmer group has thirty-five members with a traditional farmer background. In implementing the program, they have the opportunity to determine the types of plants to be developed before the planting season. So that, PPL can provide advice regarding the plan. If it is considered inappropriate, PPL will provide another more appropriate option. PPL selects coaching substances including from private company that offers active ingredient products. PPL as the coach for the farmer group has expertise according to the required field of knowledge. However, the staff is still limited to mentoring and managing the urban farming program which covers five sub-districts in Lakarsantri. These districts are also developing this program. DKPP identified the area and land potential according to the commodity and plant varieties. It is supported by Sri Sedono farmer group to utilize abandoned land into productive land owned by individuals, and developers, as well as BKTD to be an integrated agriculture center (SPT). This points out that the basic skill factor is not optimal because of the limited number of PPL staff. This has an impact on the intensity of farmer group coaching activity.

Communication:

Information transmission has been going well from the planning to the implementation of the urban farming program through partnership patterns involving all levels of DKPP. Detailed socialization from DKPP about urban farming program partnership can attract the interest of Sri

Sedono farmer group to participate. The communication mechanism in this partnership program is applied directly using WhatsApp application. The coaching, consultation, and monitoring are implemented directly while the report uses indirect communication using Whatsapp. The coaching related to the program is in the form of discussion among the farmers, farmers, and PPL that farmer group's proposal has got consideration before being followed up. Therefore, their expectation hopefully is accommodated. The communication takes place in two directions, although not all of the farmer

problems have received a solution from DKPP. The communication factor is implemented optimally in terms of communication and information access to ease the two parties to do partnership.

Political Influence

The urban farming program is implemented optimally because it is aligned with the policy from the central government (the ministry of agriculture) to the regions to maintain the availability and affordability of food for the community through the farmers' involvement (table 2).

Table 2. Food Policy from the government, the ministry of agriculture, and municipal government

Policy	Substance
Law of the Republic of Indonesia Number 18 Year 2012 regarding food	Food is the basic human need and its fulfillment is part of human rights.
Government regulation of the Republic of Indonesia Number 17 Year 2015 regarding food security and nutrition	The community has the widest possible opportunity to participate in realizing food security and nutrition; Food security is the condition of fulfilling food for the nation and individuals
The regulation of the Minister of Agriculture in the Republic of Indonesia Number 67/PERMENTAN/SM.050/12/2016 regarding farmer institutional development	The farmer group development is aimed at strengthening the farmers to be strong and independent farm institutions; increasing the ability of members in agribusiness development, and increasing the capacity of the farmer group to implement its functions.
Regional regulation in Surabaya Number 12 Year 2014 regarding Spatial Plans for Surabaya from 2014 to 2034	The implementation of the urban farming program is aimed at realizing Surabaya development to be sustainable, efficient, effective, harmonious, and balanced. Municipal governments and related agencies must utilize and optimize the ecological function of green open spaces.

Source: from the author, 2023

The urban farming program is implemented optimally because the joint consensus reached by the two partners had succeeded in providing benefits. So, it increases the crop productivity of

cultivated plants from the perspective of partnership capacity from A Mathers, N Dempsey, and JF Molin (2015) (table 3).

Table 3. DKPP partnership with *Sri Sedono* farmer group in the urban farming program based on partnership capacity theory

Partnership capacity factor	DKPP in Surabaya	<i>Sri Sedono</i> farmer group
capital	Building SPT in Jeruk urban village and supporting the funding program from RKPD in municipal government	To support the program, farmer group obtains the funds' farmer card scheme from BNI bank according to the area of rice commodity land
commitment	To do an innovative program for empowering the farmers, DKPP gives socialization involving PPL assistants and program supporters	The farmer group is willing to be adaptive to innovation in changing crop patterns and plant cultivation by participating in coaching, knowledge, and skills development by PPL
motivation	To reduce personal expenses and increase the farmer capacity of farmers, especially the poor as the member of urban farmer groups based on community empowerment through an innovative program	Farmer group wants to increase their knowledge and agricultural skills to increase production and self-sufficiency
skill base	The program is supported by PPL and has the capacity and understands the farmer's character	All farmer members have the background as traditional farmers
communication	PPL facilitates a two-way communication mechanism for the program reporting system	Farmers find easy communication with PPL either directly or via WhatsApp
political influence	The program implemented is in line with the policy of the ministry of agriculture	Farmer groups can implement the program developed by DKPP

Source: from the author, 2022

**Partnership Supporting and Inhibiting Factors:
Supporting factors:**

DKPP has the capital capacity to provide farmer group needs for the urban farming program, and it has a commitment capacity to conduct a socialization program, coaching, and PPL technical involvement. If it is necessary involve DKPP external parties such as BPTP, seminar, and workshop by involving *Sri Sedono* farmer group's representative. Furthermore, DKPP has a motivational capacity called PPL technical assistance that understands the condition and aspirations of farmers. DKPP has communication capacity in PPL to develop a communication mechanism that makes it easier for DKPP and farmer groups to report program development in WhatsApp. So that, farmer groups don't have to go to DKPP or wait for PPL visitation.

Inhibiting factor:

The skill capacity base factor is not optimal. In this case, DKPP is not optimal in providing technical PPL personnel according to the needs of the farmer group mentor in planning, planting, and managing the crop. It has an impact on farmers who are not disciplined in land management and changes the crop patterns to traditional ones without the knowledge of PPL. Therefore, there is the delay in subsidized fertilizers, the hinder of the planting season, crop failures, and loss of experience for both parties.

Partnership analysis Twiss, J, Dickinson, J., Duma, S., Kleinman, T., Paulsen H., and Rilveria, L. (2003); A Mathers, N Dempsey, JF Molin (2015b); JA Nicklay, KV Cadieux, MA Rogers (2020). The result of the case study shows

the partnership between DKPP in municipal government and *Sri Sedono* farmer group is successfully optimal according to the perspective of A Mathers, N Dempsey, and JF Molin (2015e). It is caused by the success of partnership supported by six aspects of partnership capacity in implementing the urban farming program through available land use policy: BKTD (owned by municipal government), a private company(developers), and individuals. The finding of this study shows that partnership is still an informal method, however, it continues and even succeeds in achieving the goals. It is because of the program which is part of DKPP duty and responsibility as there is policy alignment from the Ministry of Agriculture and municipal government. Therefore, the program provides mutual benefits. The skill base factor is still not optimal because of the limited personnel in PPL.

The research findings show that the role capacity of DKPP in partnership needs to be increased, especially the skill base factor, namely the aspect of availability in PPL personnel. This is supported by the research finding of A Mathers, N Dempsey, and JF Molin (2015e). It uses the partnership capacity theory from Burton & Mathers (2014) that local government has the role of the implementer, and it can turn into a facilitator in economic, social, and political aspects. It involves more support from the community to develop their capacity. The findings of this study are also supported by the research finding by Twiss, J, Dickinson, J., Duma, S., Kleinman, T., Paulsen H., and Rilveria, L. (2003). It uses a city model approach and healthy community (CHCC Model) from Mayer (1996) that the regional government temporarily approved 'Adopt-A-Lot' policy, namely the use of public and private properties to increase the capacity of community garden space. The finding of this study is also in line with the result of research by JA Nicklay, KV Cadieux, and MA Rogers (2020) based on management practice from Nicklay et al. (2019) that urban agroecology is the media for ecological, social, and political transformation through the process and relationship with people, group, and places.

The implications of the results of this study reveal that the limited number of PPLs assisting the Urban Farming Program has the potential to reduce the success rate of the program. The long term, can affect the motivation of farmers to develop programs. This research is limited to the practice of partnerships in managing urban agriculture related

to government policies in the field of food security, so it does not represent all food security policies. Therefore, the development of partnerships for the management of the Urban Farming Program is not only limited to the aspects of urban farmer support, capital, land availability although limited, but policy guarantees for the availability of PPL for the need for sustainable program implementation. For future researchers, to develop research in the field of urban farmer institutions, related to the institution's ability to manage the urban farming chain from to the marketing of agricultural products. Future researchers can focus more on the role of institutions and the resilience capabilities of urban farmers in ensuring program sustainability.

Conclusions:

The result of the study shows the partnership between DKPP and *Sri Sedono* farmer group in the urban farming program is implemented optimally by using the theory of partnership capacity analysis. However, the implementation of the skill base factor is not optimal because of the limited personnel in PPL. Furthermore, it is concerned about the certainty of the crop when it adopts a new plant variety. The important lesson from the partnership success that has lasted up to now is the support of capital certainty, commitment, motivation, communication, and political influence factors, namely the alignment of food security policy from the central government to the regional government.

We suggest urban farming programs can be sustainable if there is an increase in the farmers' ability to adopt innovative new crop varieties. Moreover, the discipline of farmers has an important role to increase the intensity of coaching from PPL. For this reason, the number of PPL personnel needs to be added to make independent, skilled, and professional farmers

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