

The Influence of The Sustainable Food Garden Program (P2L) Implementation on The Empowerment of Women's Farmer Groups with Social Entrepreneurship as A Moderating Variable In Denpasar City

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ABSTRACT: This study aims to examine the implementation of the P2L Program and the empowerment of women farmer groups in Denpasar City, and analyze with social entrepreneurship as a moderation variable to develop programs and strengthen the empowerment of women farmer groups so that more substantial benefits are felt and the program can be held sustainably. This study uses primary and secondary data sources, as well as quantitative and qualitative data types. This study was conducted on 80 respondents from four sub-districts in Denpasar City with proportionate random sampling technique and sample selection was carried out by accidental sampling technique. The analysis of the implementation of the P2L Program on the empowerment of farmer women groups, as well as its interaction with social entrepreneurship as a moderation variable was processed with the SmartPLS application version 4.1.0.1. Furthermore, the test results are interpreted by quantitative descriptive methods. Based on data from the research location, it is known that the implementation of the P2L Program in Denpasar City is quite good and the empowerment of women farmer groups is relatively high. The results of the analysis of the study show that, the implementation of the P2L Program in Denpasar City is quite good and the empowerment of P2L farmer women groups in Denpasar City is relatively high, social entrepreneurship moderates by strengthening the influence of the implementation of the P2L Program on the empowerment of farmer women groups in Denpasar City.

Keywords: P2L program, empowerment, social entrepreneurship

INTRODUCTION

Community empowerment programs are now not focused on rural communities, but can also be aimed at urban communities, especially empowerment efforts to meet food needs independently. Food demand will increase in line with the growth of the population in an area. Urban areas certainly have obstacles related to the availability of land for farming, considering the many phenomena of land conversion, where most of them are used for infrastructure development. Based on these conditions, the government is intensively striving for safe and independent food security areas, by utilizing vacant land in the environment where urban people live. A form of empowerment program related to food fulfillment independence efforts by utilizing dormant land and vacant land in urban areas for farming activities is the

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Sustainable Food Yard Program (P2L). The P2L program is designed with the main goal of creating an area that has adequate food availability, easy access to food at the household level that is diverse, nutritious, and safe, and reducing the phenomenon of stunting in the community. Now, the P2L program is a real part of the empowerment and implementation of urban agriculture that is intensively pursued by the government. The P2L program has been implemented throughout Indonesia, including in the city of Denpasar, Bali Province. Based on the results of research from Fauzi, et al. (2022), namely the application of agricultural activities in urban areas and areas around urban areas, not only provides positive values in efforts to meet food needs, but also provides practical values that have an impact on economic and ecological sustainability. In line with the research, the P2L Program can be an effort to optimize the use of urban land for small-scale farming, the use of free time for urban communities to be more productive by farming, create green open spaces, and have the opportunity to increase income.

Referring to the results of research by Ariyani, et al. (2021) that the community empowerment program can be said to be successful if there is an increase in welfare obtained by the community. The P2L program will be an additional source of income for the community with good post-harvest handling, and encourage the strengthening of the local economy through the creation of new jobs. This can be realized through the implementation of a consistent and sustainable P2L Program. Based on data from the Denpasar City Agriculture Office in 2024, there are 14 active farmer women groups that implement the P2L Program and are spread across four sub-districts. All groups of women farmers implementing the P2L Program have been verified by the technical team and integrated in the Agricultural Extension Management Information System (SIMLUHTAN). Flashback during the Covid-19 pandemic, the implementation of the P2L Program in Denpasar City was stopped due to restrictions on activities outside the home. After a few years, when conditions returned to normal, the P2L program began to be rarely implemented by farmer women groups, on the grounds that the program did not have follow-up activities, lack of activity funds, lack of activity monitoring, and lack of substantial benefits obtained.

The P2L program implemented by a group of women farmers in Denpasar City can increase the capacity of urban communities in farming. Initially, the P2L Program was known to the members of the farmer women group through socialization activities, then given early stage training related to planting, maintenance, harvesting and crop processing. The program is able to make the people of Denpasar City, especially housewives who have limited knowledge, abilities and farming experience so that they become potential human resources to carry out farming activities. Counseling, training and mentoring need to be carried out regularly to enable members of the P2L implementing women farmer groups in Denpasar City to be more active in farming at home, so that they are more independent in their efforts to fulfill food. In addition, qualified knowledge and abilities will have an impact on the empowerment of the members of the farmer women group through creativity and innovative actions through the use of household waste as a means of agricultural production such as fertilizers and organic pesticides, to the processing of agricultural raw products into processed products that have a selling value. This condition will realize the expansion of benefits for farmer women groups, of course it will also have an impact on the sustainability of the P2L Program in the future, because the program is not considered a mere formality program, but a solution to the community's needs to increase income.

Housewives who are members of the farmer women group, can use the P2L Program as a vehicle to pour creativity together in processing crops that have the opportunity to earn

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household income. In line with the results of Ayu's (2017) research, the P2L Program can improve the quality of human resources and utilize available natural resources to improve the economy of local communities. To realize this, social entrepreneurship can be used as a study to strengthen the implementation of the P2L Program in supporting changes in social and economic conditions of the community. Social entrepreneurship, according to Abu Bakar, et. al (n.d.), is a phenomenon that has emerged to overcome various social and economic problems in society with an innovative approach and has been adapted to the conditions of the community, thus causing changes in people's lives. Social entrepreneurship can be a solution for farmer women groups so that there are sustainable programs and substantial benefits. This research is important because it analyzes social entrepreneurship as a development of the implementation of the P2L Program to increase the empowerment of farmer women groups. This study has the objectives of 1) identifying the implementation of the P2L Program and the empowerment of P2L farmer women groups in Denpasar City, and 2) analyzing social entrepreneurship as a moderation variable that strengthens the influence of the implementation of the P2L Program on the empowerment of farmer women groups in Denpasar City.

The implementation of community empowerment programs, particularly in urban settings, is becoming increasingly urgent due to the challenges posed by population growth, urbanization, and food security. In Denpasar City, the Sustainable Food Yard Program (P2L) is critical for addressing these challenges, especially given the limitations on land availability for agriculture in urban environments. With the rise in food prices and the need for sustainable solutions, understanding how to enhance the impact of such programs, especially through the involvement of women farmer groups, is vital. This research is timely as it evaluates how social entrepreneurship can amplify the effectiveness of the P2L Program, ultimately leading to more sustainable food security and economic empowerment.

This study introduces a novel perspective by investigating the role of social entrepreneurship as a moderating variable in the implementation of the P2L Program, particularly focusing on its impact on empowering women farmer groups. While previous studies have addressed community empowerment and sustainable agriculture, this research uniquely links the concept of social entrepreneurship with urban agricultural initiatives to explore how innovation, community cooperation, and economic activity can strengthen empowerment outcomes. The combination of social entrepreneurship and the P2L Program offers fresh insights into how such initiatives can be made more sustainable and economically impactful, ensuring that they extend beyond mere food production to create long-term social and economic benefits.

The objectives of this study are to evaluate the implementation of the P2L Program in Denpasar City and analyze the empowerment of women farmer groups through the lens of social entrepreneurship. Additionally, it aims to explore how social entrepreneurship moderates the relationship between the P2L Program and the empowerment of these groups. The benefits of this research are multifaceted: it will provide a clearer understanding of how social entrepreneurship can optimize the P2L Program, enhance the economic empowerment of women, and contribute to the sustainability of urban agriculture. By identifying key factors that hinder or enhance the effectiveness of the program, this research offers actionable recommendations for policymakers, community leaders, and organizations aiming to improve food security and empower women in urban communities.

RESEARCH METHODOLOGY

Several methods are used to collect research data, including surveys with the distribution of questionnaires for the main data collection, observations to collect information and additional data, and documentation. This study uses primary and secondary data sources, as well as quantitative and qualitative data types. Primary data is sourced from research respondents, while secondary data is sourced from various journals, books, and official government websites. The types of quantitative data include data on groups of women farmers implementing the P2L Program, respondents' answers through the distribution of questionnaires, and the results of the SEM test between the implementation of the P2L Program on the empowerment of women farmer groups with social entrepreneurship as a moderation variable, while the type of qualitative data includes the characteristics of the respondents, additional information from the results of interviews regarding the implementation of the P2L Program, and literature studies related to the research.

RESULT AND DISCUSSION

Characteristics of P2L Implementing Women Farmer Groups in Denpasar City

There are 21 groups of women farmers implementing P2L spread across Denpasar City, but only 14 groups of women farmers are active and registered with SIMLUHTAN. The distribution in each sub-district is North Denpasar District has eight groups of women farmers, West Denpasar District has one group of women farmers, South Denpasar District has two groups of women farmers, and East Denpasar District has three groups of women farmers. Based on the data obtained, the area of land cultivated by the farmer women group for the development of the demonstration plot is between 0.50 – 1 acre. The types of plants that are generally cultivated are horticulture such as chili, eggplant, tomato, spinach, kale, mustard greens, shallots, green onions, and pumpkin. The characteristics of the respondents in the study included age, formal education, occupation, farming experience, and the area of the yard being cultivated. In detail, the characteristics of the research respondents can be seen in Table 1, Table 2, Table 3, Table 4, Table 5 and Table 6 as follows.

Table 1. Characteristics of Respondents by Age

No.	Age (years)	Category	Sum	
			Person	Percentage
1.	< 15	Not yet productive	0	0
2.	15 – 64	Productive	80	100
3.	> 64	Unproductive	0	0
	Total		80	100,00

Source: Primary data (processed, 2024)

All respondents in the study are still in the productive age category which is in the range of 15 – 64 years. This is supported by the fact in the field that all respondents still have a strong physique and are able to carry out farming activities. In line with the results of Nafisah's (2020) research, the criteria for a person with an age that is classified as mature and ready to work is a range of 15 – 64 years old who is included in the productive category or in the working age. All research respondents were in the productive age category so that they were able to complete a job and were able to carry out the same farming activities repeatedly.

Table 2. Characteristics of Respondents Based on Formal Education

No.	Formal Education (Years)	Category	Sum	
			Person	Percentage
1.	1 – 9	Basis	1	1,25
2.	10 – 12	Intermediate	48	60
3.	> 12	Above	31	38,75
	Total		80	100,00

Source: Primary data (processed, 2024)

The majority of respondents had a formal education history between 10 – 12 years with the secondary category, which means that they had occupied or had completed their education in high school (SMA) or equivalent as many as 60% or 48 respondents. The categorization is based on the National Education System Law No. 20 of 2003, the existence of the 9-Year Compulsory Learning Program as basic education. A few years later, in 2013, the 12-Year Compulsory Learning Program was developed again or called universal secondary education. Other respondents had educational history in the elementary and upper categories. In line with research from Ramadhana (2023), that the level of education is able to improve a person's quality of life by creating good economic conditions. Referring to the results of Dwihestie's (2016) research, formal education is able to make a person have a better perspective and absorption of information. Thus, it can be said that it has a fairly good absorption of information, is able to accept and implement new innovations, and is able to increase household income through creativity in processing crops.

Table 3. Respondent Characteristics Based on Occupation

No.	Work	Sum	
		Person	Percentage
1.	Housewives	33	41,25
2.	Self employed	19	23,75
3.	Private employees	27	33,75
4.	Other	1	1,25
	Total	80	100,00

Source: Primary data (processed, 2024)

Most of the respondents were housewives or informal workers as many as 41.25% or 33 respondents, which means that respondents can arrange time to be involved in the implementation of the P2L Program. The respondents, namely housewives and those who do not work formally, also need to be given the opportunity to be productive by involving them in various empowerment programs such as the P2L Program. In line with the results of research from Susanto, et al. (2023) that housewives have a greater opportunity to carry out productive activities that can also increase household *income*.

The respondents in the study had a household member between two and five people, with the majority of respondents having a medium category of household members as many as 91.25% or 73 respondents. Regarding the implementation of the P2L Program, if the number of household members increases, it will be in line with the amount of food consumption, so efforts to cultivate food, especially vegetables, independently at the household level are needed. This has an impact on reducing the amount of household spending. According to the results of research from Asra (2021), people who farm at home and are able to meet their food needs independently, are able to reduce household spending on vegetables by up to 80%.

Table 4. Characteristics of Respondents Based on the Number of Household Members

No.	Number of Household Members (People)	Category	Sum	
			Person	Percentage
1.	2 – 3	Little	5	6,25
2.	4 – 5	Keep	73	91,25
3.	> 5	Many	2	2,50
Total			80	100,00

Source: Primary data (processed, 2024)

The following table 6 shows that as many as 87.50% or 70 respondents have less than five years of farming experience, according to the category of Soeharjo and Patong *in* Perdana (2016), where this condition is included in the category of less experienced (the length of farming is less or equal than five years). The majority of housewives, of course, do not have farming experience, so they need direction and guidance from experienced people from group members and even from experts such as PPL. According to the results of research from Mukti (2022), novice farmers can improve their skills by forming social relationships with experienced farmers to gain new knowledge and information. Therefore, research respondents can learn to farm with other experienced members, as well as learn from the companion PPL through socialization and training.

Table 5. Characteristics of Respondents Based on Farming Experience

No.	Length of Farming Experience (Years)	Category	Sum	
			Person	Percentage
1.	≤ 5	Less experienced	70	87,50
2.	> 5 – 10	Quite experienced	9	11,25
3.	> 10	Experienced	1	1,25
Total			80	100,00

Source: Primary data (processed, 2024)

In accordance with the category from Irwan (2021) that yard land of less than 0.2 – 0.5 are included in the narrow category. The area of the yard for farming in Table 7 is the area of land in the yard of the house used by the respondents to farm personally to meet the needs of vegetables at the household level.

Table 6. Characteristics of Respondents Based on the Area of Yard Land for Farming

No.	Yard Area for Farming (are)	Category	Sum	
			Person	Percentage
1.	≤ 0.2 – 0.5	Narrow	77	96,25
2.	> 0.5 – 1.0	Keep	3	3,75
3.	> 1.0	Broad	0	0
Total			80	100,00

Source: Primary data (processed, 2024)

A total of 96.25% or 77 respondents used narrow category of house yard land as farmland. In line with Kamaruddin's (2020) research, namely narrow yards in residential environments can be used to carry out urban agricultural activities by utilizing several methods, such as hydroponics, tabulampot, verticulture and the use of *polybags*. All respondents gave information that they used *polybag* and tabulampot planting media for 945| The Influence of The Sustainable Food Garden Program (P2L) Implementation on The Empowerment of Women's Farmer Groups with Social Entrepreneurship as A Moderating Variable In Denpasar City

farming. The use of the planting method has been adjusted to the conditions of the respondents, especially the use of *polybag* media for farming in private yards because it is more flexible in its arrangement, easy to control per plant, and cheaper than using potting media.

Implementation of the Sustainable Food Yard (P2L) Program in Denpasar City

The implementation of the Sustainable Food Yard Program (P2L) is encouraged by the government, especially during *the Covid-19 pandemic*, with the hope that people at the household level can meet food needs independently and can be developed as a sustainable empowerment effort so that people are more active and creative in their efforts to utilize all resources they have, so that they have the opportunity to increase household income. The implementation of the P2L Program began through socialization by the technical team, the process of submitting farmer women groups and their requirements, the verification process by the technical team, the inauguration process, and the process of providing financial assistance. This series of processes has been complied with by the farmer women group so that 14 farmer women groups in Denpasar City have been inaugurated. The financial assistance provided is to support all program activities such as the purchase of tools and materials for farming. Based on information from all respondents, the most horticultural crops are planted, especially vegetables such as eggplant, spinach, kale, mustard greens, chili, and green onions, because it is easier to grow at home. In addition, the area of land or demonstration plots managed by the group has an average area of between 1 – 2 acres. This area is in accordance with the requirements of the 2021 P2L Juknis, where the minimum land area of each group is 100 – 200 m² according to the availability in their respective regions. The implementation of a program can be measured through planning (*input*), implementation (*process*), to the benefits (*output*) felt by the program objectives.

Table 7. Implementation of the Sustainable Food Yard (P2L) Program

No.	Indicators	Average score	Percentage	Category
1.	Understanding of the program	3,50	63,40	Good
2.	Program-related abilities	3,36	60,36	Pretty good
3.	Activeness in the program	3,26	58,76	Pretty good
4.	Program implementation and benefits	3,35	60,20	Pretty good
	Average	3,37	60,52	Pretty good

Source: Primary data (processed, 2024)

The data presented in Table 8 is the respondent's assessment preference regarding the implementation of the P2L Program in Denpasar City, with the average overall score achievement being 3.37 or 60.52%, which shows that the implementation of the P2L Program in Denpasar City is quite good. The implementation of the program is measured by the understanding by the members of the farmer women group related to the program, the ability they have related to the program, the activeness of the members of the farmer women group, and the implementation and benefits of the program felt. However, there are important findings from the comprehension indicator which belongs to the good category with an average score of 3.50 or 63.40%, where respondents understand the goals and series of programs only limited to farming activities to meet personal food needs, especially vegetable needs, but do not understand well the goals and next steps such as processing or selling the results of these farming activities. The majority of respondents provided information that the

P2L program only allows to have an impact on reducing the purchase of vegetable food with farming activities, because there has not been a realization of follow-up activities such as processing and making processed vegetable products that have the opportunity to increase the income of each group of women farmers.

Regarding these indicators of understanding, indicators of respondents' abilities that are included in the category of quite good are the impact of a lack of understanding of business opportunities in the agricultural sector, especially agribusiness. Overall, program-related ability indicators achieved an average score of 3.36 or 60.36%. This is due to several factors, including the absence of follow-up activities such as crop processing, limited funds for the purchase of tools and raw materials for processing, and the lack of awareness of respondents about business opportunities. In practice, respondents who are housewives certainly have the ability to process and cook, because it is a daily activity that is carried out. However, the funds owned by each group are very small or even not enough to buy various needs for processing activities. The majority of respondents said that the funds received at the beginning of the activity were only enough to buy tools and materials for farming, so they were not able to support the purchase of tools and raw materials to produce processed vegetable products. The majority of respondents provided information that, independently, each group of farmer women occasionally tries to process the vegetables they grow, such as making shredded from papaya fruits, making chips from spinach and mustard greens, making sweets from eggplant, and even making crispy kale. All processed products that have been tried for production by farmer women groups have added value and have a longer consumption period. However, the ability of farmer women groups to become snack products has not yet reached the stage of being sold or become a business opportunity, because, in addition to the limited production tools and raw materials, it is also constrained by the limited number of vegetables produced for processing. In addition, the ability to process kitchen waste into a means of production to save on the purchase of fertilizers and pesticides for farming. This ability is an added value of the P2L Program because it reduces household waste to the final processing site and supports environmental cleanliness. In addition, the use of organic fertilizer from natural waste will help improve soil conditions in the yards of houses in urban areas.

Furthermore, the indicators of respondents' activeness in the program are quite good. There are several factors that are the reason for the acquisition of the assessment preference, such as the absence of other activities that boost the sustainability of the program, which has been stopped due to pandemic constraints so that it is necessary to re-socialize so that the members of the farmer women group are more active in carrying out activities, as well as the lack of periodic monitoring and evaluation from the technical team. The indicator of activity in the program, as a whole, reached an average score of 3.26 or 58.76%. The activeness of the respondents of the P2L Program was recognized only at the beginning of the program, however, due to the lack of monitoring and evaluation and the support of not achieving other benefits from the program, some members of the farmer women group began to rarely participate in the program. In addition, due to the existence of important activities that coincided with a series of P2L activities, several times the members of the farmer women group were absent.

Finally, the application and benefits felt by the respondents had an average score of 3.35 or 60.20% with a fairly good category, because the implementation of the respondent program was only up to the stage of farming and personal consumption, so there was no expansion of the benefits felt. All vegetable products grown by groups of women farmers on

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group land or demonstration plots, are only distributed to members, and the processing is only limited to the stage of personal consumption. Based on this information, it can be seen that the implementation of the P2L Program has not been maximized so that it has not reached the stage of processing and selling crops. The implementation of a sustainable P2L Program must certainly have economic benefits so that it is more felt by farmer women groups, so that the program can be said to have an opportunity to increase community income. Therefore, further steps are needed to encourage economic benefits to achieve more substantial benefits for the community, especially housewives who do not work and are members of the P2L farmer women group in Denpasar City.

Empowerment of Women Farmer Groups in Denpasar City

The empowerment of farmer women groups is one of the benchmarks for the success of an empowerment program with the active participation of the target community so that there is an increase in understanding and ability, according to the results of research from Aji (2020). The empowerment of women farmer groups is measured by several indicators adopted from Suharto's theory (2008) in Firmansyah (2012), namely the ability to be aware and willing to change (*power to*), the ability to increase capacity through various access acquisitions (*power within*), the ability to face risks and overcome obstacles (*power over*), and the ability to cooperate and solidarity (*power with*).

Table 8. Empowerment of P2L Farmer Women Groups

No.	Indicators	Average score	Percentage	Category
1.	Desire changes	3,60	64,20	Tall
2.	Capacity building	3,34	60,04	Keep
3.	Facing risks and overcoming obstacles	3,39	60,84	Keep
4.	Building cooperation	4,01	70,76	Tall
	Average	3,58	63,96	Tall

Source: Primary data (processed, 2024)

Based on the respondents' assessment preferences in Table 9, it is known that the overall average score reaches 3.58, equivalent to 63.96% of the maximum percentage, which is included in the high category. The achievement of this score was due to the high ability of the respondents to change so that they were willing to participate in the P2L Program to increase their insight and skills in the field of agriculture, as well as the high ability of the respondents to build cooperation within the group so that they could run the program collectively. However, the other two indicators, namely the ability to increase capacity and the ability to face risks and overcome obstacles, have scores in the medium category.

The ability or desire to change is the main and important component of the implementation of a program, especially a community empowerment program. The desire to change is a strong foundation or a driving force to determine what is needed and done for a person. There are several factors that cause the high ability to change from the members of the farmer women group, namely the emergence of their own initiative to increase farming knowledge and skills and increase productive activities. In addition, there was an invitation from members of the farmer women group to participate in the program, so that the desire to change together by inviting relatives, neighbors and even friends to achieve changes in terms of economy, social and environment. the ability or desire to change has an average score of 3.60 or the equivalent of 64.20%.

The second indicator is the ability to increase capacity through easy access to additional knowledge and skills with the initial socialization and training of the P2L Program. The socialization obtained by the members of the farmer women group was able to increase farming insights and the training obtained was able to increase farming skills to support the optimization of the use of yards as a form of urban agriculture. The P2L program teaches members of farmer women groups to carry out organic farming activities, reduce the threat of land use for non-agricultural activities in urban areas, and facilitate access to the availability of foodstuffs, especially vegetables that are safe to consume and easy to obtain. However, this ability is still felt to be lacking because it does not have more substantial economic benefits. The ability to process crops into processed products with selling value has not been optimally carried out, so there is no opportunity to increase income or economic benefits. Overall, the indicator of the ability to increase capacity, especially the skills produced, has not been felt by the farmer women group, so the average score obtained is 3.34 or equivalent to 60.04% with the medium category.

The third indicator, the ability to face risks and overcome obstacles, has an average score of 3.39 or 60.84% with the medium category. The causative factor is the lack of optimal application of advanced skills as an effort to increase the income of members of the farmer women group. The ability to face risks and overcome obstacles is only to the stage of daring to try farming in the yard without fear to dare to decide things that can be applied by the group without hesitation, such as observing the potential of the surrounding area as group farming land or demonstration plots wisely. The ability to implement business from farming activities to post-harvest handling has not been carried out because there is still doubt and fear due to the limited capital owned by the farmer women group and the lack of qualified business understanding. Almost all respondents stated that they wanted to try to do business from vegetables produced collectively both from demonstration plots and private yards, but still needed more thorough preparation, especially the preparation of tools and raw materials.

The ability to build cooperation is the fourth indicator, which has an average score of 4.01 or equivalent to 70.76%. The score was obtained due to the establishment of a family spirit within the group, the solidarity built to achieve mutual change, and the existence of good relations with external parties such as PPL and other stakeholders. This ability is a reflection of the good degree of empowerment of the farmer women group internally. All respondents agreed to build good cooperation to support the implementation of the P2L Program, so that the empowerment of farmer women groups based on this indicator is high.

Social Entrepreneurship as a Moderating Variable between the Implementation of the P2L Program on the Empowerment of Women Farmer Groups in Denpasar City

Social entrepreneurship as a moderation variable is measured based on four indicators, namely social value, community groups, innovation and economic activity. Social entrepreneurship is a study to help find solutions according to the needs of the community by utilizing various resources around them, so that they are able to produce creativity such as innovations to produce goods and services, by integrating community skills and knowledge to achieve social, economic and environmental well-being. The model tested in this study is depicted through the following path diagram.

Outer Model Test

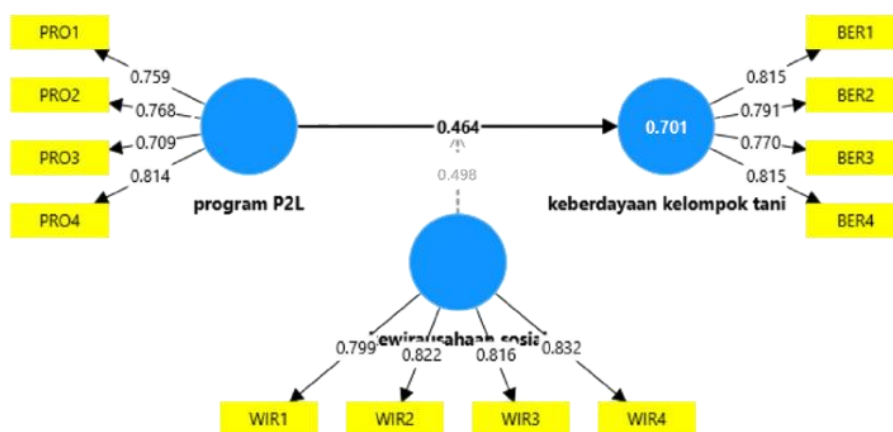


Figure 2. Outer Model Test Results

Evaluation *Outer Model* to assess the validity and reliability of the research model. Test *Outer Model* aims to specify the relationship between latent variables and their indicators. In more detail, the results of the validity and reliability tests are presented in Table 10, Table 11, and Table 12.

Table 9. Results of Convergent Validity Test

No.	Variable	Indicators	Loading Factor	AVE	Information
1.	Implementation Program P2L	X1.1	0,759	0,593	Valid
		X1.2	0,768		Valid
		X1.3	0,709		Valid
		X1.4	0,814		Valid
2.	Entrepreneurship Social	M1.1	0,799	0,668	Valid
		M1.2	0,822		Valid
		M1.3	0,816		Valid
		M1.4	0,832		Valid
3.	Empowerment Group Peasant Women	Y1.1	0,815	0,637	Valid
		Y1.2	0,791		Valid
		Y1.3	0,770		Valid
		Y1.4	0,815		Valid

Source: Primary Data (processed, 2024)

The results of the convergence validity test showed that all research constructs had a *loading factor* value exceeding 0.70 and an AVE value exceeding 0.50 so that it was declared valid.

Table 10. Results of the Validity Test of Discrimination

No.	Indicator No.	Cross Loading Variable			Information
		Implementation Program P2L	Entrepreneurship Social	KWT Empowerment	
1.	X1.1	0,759	0,552	0,539	Valid
2.	X1.2	0,768	0,557	0,610	Valid
3.	X1.3	0,709	0,427	0,501	Valid
4.	X1.4	0,814	0,524	0,641	Valid
5.	M1.1	0,630	0,799	0,601	Valid
6.	M1.2	0,626	0,822	0,643	Valid
7.	M1.3	0,460	0,816	0,649	Valid
8.	M1.4	0,478	0,832	0,602	Valid

9.	Y1.1	0,597	0,566	0,815	Valid
10.	Y1.2	0,622	0,603	0,791	Valid
11.	Y1.3	0,610	0,632	0,770	Valid
12.	Y1.4	0,556	0,635	0,815	Valid

Source: Primary Data (processed, 2024)

It is known that the cross loading value is more than 0.70 and exceeds the correlation value of other latent variable indicators, so it is said to be valid.

Table 11. Reliability Test Results

No.	Variable	Cronbach's Alpha	Composite Reliability	Information
1.	X1. P2L Program Implementation	0,761	0,848	Reliable
2.	Y1. KWT Empowerment	0,810	0,875	Reliable
3.	M1. Social Entrepreneurship	0,835	0,890	Reliable

Source: Primary Data (processed, 2024)

The results of the reliability test of each variable are measured through Cronbach's alpha value and composite reliability value which has exceeded 0.70, so it is said to be reliable.

Inner Model Test

Based on the previous Figure 2, it is known that the R-square has a value of 0.701 which means that the model prediction can explain the empowerment of farmer women groups from the implementation of the P2L Program and social entrepreneurship by 70.10% which is included in the moderate prediction power. The remaining 29.90% was explained by other variables that were not measured in the study.

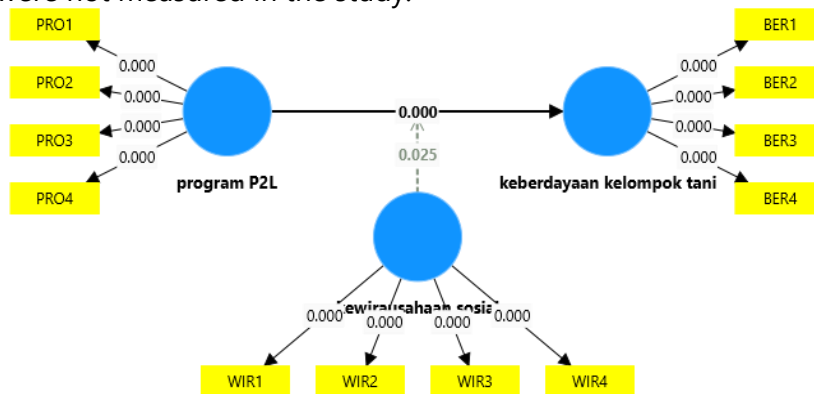


Figure 3. Inner Model Test Results

There are also other model fit test results measured from the PLS Predict value as a substitute for the blindfolding test in SmartPLS version 4.1.0.1 to measure the level of model diversity shown by exogenous variables in explaining endogenous variables. The result of the Q Predict (Q2) calculation in this study is 0.631, so it can be concluded that the model in this study has a good relevant predictive value, because the value is greater than 0 and close to the value of 1 (Table 12).

Table 12. PLS Predict Test Results

Variable	Q Predict	RMSE	MAE
KWT Empowerment	0,631	0,632	0,480

Source: Primary Data (processed, 2024)

Hypothesis Test

Conceptually, moderation variables can affect the relationship or influence between variables by strengthening or weakening the effect of their interaction (Rahadi and Farid, 2021). To prove the research hypothesis, namely that social entrepreneurship strengthens the influence of the implementation of the P2L Program on the empowerment of farmer women groups in Denpasar City, an evaluation of the path coefficients including *original sample values*, *t-statistics* and *p-value* was carried out.

Based on the evaluation, it is known that the t-statistical value of 4.035 is greater than the t-count of 1.96, which means that the implementation of the P2L Program has an effect on the empowerment of farmer women groups. Furthermore, a t-statistical value of 4.982 was obtained greater than the t-count of 1.96, then, it can be said that the implementation of the P2L Program moderated by social entrepreneurship has an effect on the empowerment of farmer women groups. It can be concluded that there is a change in the t-statistical value which indicates a change in the influence between variables before moderation with the influence between variables after moderation as the basis for hypothesis testing.

Table 13. Hypothesis Test

Variable	Original sample (O)	Average sample (M)	Standard deviation (STDEV)	T-statistics (O/STDEV)	P-value
X1 → Y1	0,464	0,478	0,115	4,035	0,000
M1 → Y1	0,374	0,363	0,096	3,895	0,000
X1*M1 → Y1	0,498	0,487	0,100	4,982	0,025

Source: Primary Data (processed, 2024)

In addition, the value of the coefficient of the P2L Program implementation path on the empowerment of women farmer groups in Denpasar City is 0.464, which means that it has a unidirectional influence and has a positive value with meaning, the better the implementation of the P2L Program will also have an impact on increasing the empowerment of women farmer groups by 46.40%. The value of the second path coefficient is used as a comparison, where the implementation of the P2L Program on the empowerment of farmer women groups in Denpasar City moderated by social entrepreneurship has a value of 0.498 which means a unidirectional influence and a positive value, which means, the better the implementation of the P2L Program moderated by social entrepreneurship has an impact on increasing the empowerment of farmer women groups by 49.80%.

There is also a *p-value* that indicates the significance of the influence between variables, where *the p-value* of the implementation of the P2L Program on the empowerment of farmer women groups has a value of 0.000 which shows a significant influence, and the *p-value* of the implementation of the P2L Program on the empowerment of farmer women groups moderated by social entrepreneurship has a value of 0.025 which shows a significant influence. It can be concluded that there is a significant increase in influence between variables before and after moderation, so that the moderation variable is said to strengthen the influence between variables.

F-square Test Results

The results of *the f-square test* to evaluate the magnitude of the effect of each interaction between variables, where the magnitude of the effect of the implementation of the P2L Program on the empowerment of women farmer groups is directly valued at 0.190 which means it has a moderate effect, and the magnitude of the effect of the implementation of the

P2L Program on the empowerment of women farmer groups moderated by social entrepreneurship has a value of 0.213 which also has a moderate effect. Based on the value of *the f-square*, it is known that the moderation variable strengthens the relationship between the variables, by comparing the amount of effect before moderation with the amount of effect after moderation, which shows that the interaction of social entrepreneurship as a moderation variable strengthens the influence of the implementation of the P2L Program on the empowerment of farmer women groups with an increase in the amount of effect (Table 15).

Table 14. F-square Test Results

Relationship Between Variables	F2 value
Implementation of KWT's Empowerment → P2L Program	0,190
KWT Empowerment Social Entrepreneurship →	0,157
Implementation of KWT's → P2L*Social Entrepreneurship Empowerment Program	0,213

Source: Primary Data (processed, 2024)

Based on the results of the hypothesis test by evaluating the value of the path coefficient, t-statistic value, *p-value* and *f-square value*, the hypothesis of this study is accepted, namely social entrepreneurship as a moderation variable, strengthening the influence of the implementation of the P2L Program on the empowerment of women farmer groups in Denpasar City.

Social Entrepreneurship Strengthens the Influence of the Implementation of the P2L Program on the Empowerment of Women Farmer Groups in Denpasar City

The results of the SEM test with moderation variables show that social entrepreneurship strengthens the influence of the implementation of the P2L Program on the empowerment of women farmer groups in Denpasar City. The evaluation of the value of the path coefficient between variables is directly evidenced by the results of the implementation of the P2L Program affecting the empowerment of farmer women groups. The results of the test show that the implementation of the P2L Program has a significant and unidirectional influence on the empowerment of farmer women groups due to a good understanding of the procurement of socialization by the technical team regarding the purpose of farming in yard land related to the availability of safe and easy food at the household level, so that it has an impact on the empowerment of members of farmer women groups who want to change and cooperate by forming a group of women farmers implementing P2L and have implemented farming activities on demonstration plots and private yards. However, the ability related to post-harvest handling, the activeness of members in advanced activities that faded, and the lack of perceived program benefits, have not played a major role in the empowerment of women farmer groups, especially in the ability to increase capacity and the ability to face risks and overcome obstacles.

The implementation of the P2L Program which is quite good but has a high effect on the empowerment of the farmer women group is due to the lack of good understanding of the members of the farmer women group about other objectives of the program, where it was said in the 2021 P2L Program Juknis that the program has the opportunity to increase income by selling its crops in the form of fresh and processed products. Errors in the receipt of information received by members of the women's group are also the cause of poor understanding of the program. In addition, farming activities carried out by farmer women groups are considered limited to efforts to fulfill vegetables independently at the household

level. The members of the farmer women group do not have a sufficient understanding of the business opportunities from farming products, so that for a few respondents the series of farming activities from the P2L Program seems to be a formality and has not felt substantial benefits from its implementation. Based on research from Fauzi, et al. (2022), which is also supported by research from Indriani and Murlianti (2024) with similar research results, namely the P2L Program has not been able to achieve community welfare goals to increase household income and is only limited to saving on food purchase costs. This is because there have been no follow-up activities carried out by the group, especially in the processing and sale of crops.

To solve this problem, it is necessary to conduct a review of the implementation of the P2L Program with the elements needed by the members of the farmer women group so that the expansion of other benefits, especially economic benefits, is felt so that it has an impact on group empowerment. These elements can be in the form of innovation to creativity that supports the development of better program implementation. Based on these needs, social entrepreneurship is needed in the implementation of the P2L Program because it has four important elements that are relevant including social values, community groups, innovation and economic activities. Social entrepreneurship as a moderation variable is needed to analyze more deeply the phenomenon researched from the implementation of the P2L Program which is explored with the hope of changing certain conditions such as changes in the empowerment of women farmer groups. The moderation variables in this study explore the variation in direction and the magnitude of the influence of the implementation of the P2L Program on the empowerment of farmer women groups.

Based on the results of the SEM model test with moderation variables, social entrepreneurship strengthens the influence of the implementation of the P2L Program on the empowerment of women farmer groups in Denpasar City. The change in the condition of the empowerment of women farmer groups is caused by innovation and economic activities as the most important element that women farmer groups need most from social entrepreneurship. This is supported by the results of the evaluation of the path coefficient and the magnitude of the effect of changes between variables with the addition of moderation variables (interaction variables). Shortcomings in several aspects of the implementation of the P2L Program such as capabilities related to post-harvest handling and the expansion of benefits that are expected to be overcome by elements of innovation and economic activities. In line with the results of research by Darwis, et al. (2021), that social entrepreneurship is an important element in the implementation of community empowerment programs because it prioritizes collaboration and innovation in its activities.

Social entrepreneurship strengthens the influence of the implementation of the P2L Program on the empowerment of women farmers due to innovations tailored to the needs of women farmers that support capacity building and the ability to face risks and overcome obstacles, especially in achieving prosperity through opportunities to increase income. The innovations that play the most role in increasing the empowerment of farmer women groups, especially in the ability to increase capacity in the implementation of the P2L Program, are innovations in the use of kitchen waste into organic fertilizers and pesticides so as to reduce the cost of purchasing production facilities, and innovations in the use of plastic waste as planting media such as plastic bags and used bottles instead of *polybags* thereby reducing the cost of purchasing planting containers. The innovation also strengthens the implementation goals of the P2L Program, namely efforts to maintain cleanliness and support easy and environmentally friendly urban agriculture. The innovation carried out by the farmer women group has taken advantage of all the resources around. Referring to the results of the research

of Rangga, et al. (2022) which is in line with the results of this study, namely innovations in the use of waste and kitchen waste need to be carried out to support the optimization of yard land use. These innovations are able to add insight, skills, and concern to members of farmer women groups to implement the P2L Program with the collaboration of elements of social entrepreneurship, so that it has an impact on changing the empowerment of farmer women groups.

Furthermore, the element of social entrepreneurship that strengthens the influence of the implementation of the P2L Program on the empowerment of farmer women groups is economic activity. The variety of processing activities to the sale of farming products in the P2L Program that has been run by farmer women groups is only limited to selling vegetable seeds. The sale of the seeds is carried out by *the person to person method* to relatives and neighbors. This phenomenon provides clear evidence that P2L farmer women groups have tried to carry out sales activities to increase income. In addition, these economic activities are able to increase the empowerment of farmer women groups, especially in the ability to face risks and overcome obstacles, namely members of farmer women groups dare to try to implement business opportunities or entrepreneurship in agriculture even though it is still on a small scale. Another goal of the P2L Program is that the implementing community is able to produce agricultural commodities that have selling value. Regarding economic activities, the majority of respondents provided information that they have not been able to process crops for entrepreneurial purposes, due to the limited capital they have. However, the activity of processing crops several times is carried out by each group of women farmers to produce unique processed products to be traded at MSME festivals or cheap markets organized by the government. Processing agricultural products needs to be carried out to improve product quality so that it has the opportunity to increase selling value. In line with research from Rahmat, et al. (2021) that the processing of agricultural products into finished products (snacks) is one of the efforts that is expected to be able to improve the community's economy compared to being sold in raw form.

Other elements of social entrepreneurship also strengthen the influence of the implementation of the P2L Program on the empowerment of farmer women groups, namely social values including trust, fairness, honesty, mutual support and trying to foster good relationships with various parties. These results are supported by the establishment of good relationships fostered with external parties to get access to more affordable learning and better mentoring so that it has an impact on increasing new knowledge and skills. The increase in knowledge and skills from mentoring due to the formation of good social relations with stakeholders based on elements of social values, will have an impact on the empowerment of women farmer groups, especially on the ability to increase capacity and the ability to build cooperation. In line with research from Katili and Suhada (2019) which supports this explanation, it is said that the provision of training and assistance in empowerment efforts has an important role in increasing community empowerment, especially having an impact on economic improvement. Social value will strengthen the cooperative ability of members of farmer women groups in carrying out farming activities to sales as one of the indicators of empowerment.

Finally, the element of community groups in the sense of local communities as the main component of the implementation of the P2L Program which has an impact on the empowerment of farmer women groups. Based on the results of the previous analysis, social entrepreneurship strengthens the influence of the implementation of the P2L Program on the empowerment of farmer women groups due to the self-initiative to change and the common

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desire to become an independent society in food fulfillment. Members of the group of women farmers who understand farming methods become internal pilots of the group so that there is a process of spreading farming knowledge and skills. The P2L program is present as a food diversification movement based on the needs of the community and the benefits are felt by the community again. Therefore, it is necessary to cooperate with group members who are supported by farming knowledge and skills and are given exposure to business opportunities in the agricultural sector to increase opportunities for increasing income. This phenomenon is supported by research from Ulfa, et al. (2020) that an empowerment group needs to apply discipline and hard work together to maintain the active participation of the group in carrying out an empowerment program.

CONCLUSION

The conclusions of the research that can be summarized include the implementation of the P2L Program in Denpasar City including the category of quite good, the empowerment of P2L farmer women groups in Denpasar City including the high category, and social entrepreneurship as a moderation variable strengthens the influence of the implementation of the P2L Program on the empowerment of farmer women groups in Denpasar City.

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