

The Role of Youth Entrepreneur and Employment Support Services (YESS) Program to Increasing Beneficiary Income: A Comparative Study of West Java and East Java

Miko Harjanti¹, Linda Tri Wira Astuti^{2*}

¹Balai Besar Pelatihan Manajemen dan Kepemimpinan Pertanian, Jl. Raya Pertanian No.KM 11, Bogor. Indonesia

²Politeknik Pembangunan Pertanian Medan, Jalan Binjai Km 10, Medan. Indonesia

*Correspondence Email: lindatriwiraastuti@gmail.com

Submitted 8 May 2025; Approved 11 September 2025

ABSTRACT

This study aims to analyze the role of the YESS Program in increasing the income of beneficiaries in two provinces, West Java and East Java, using panel data regression methods. The data used includes information related to the realization of Training, realization of grants and subsidies, and Realization of Operating Expenses in both provinces. The results show that the income per beneficiary in West Java is lower compared to East Java. The average income per beneficiary in West Java is Rp 1,849,195/person and in East Java it is Rp2,124,039/person. In West Java, the most significant factor influencing the income of beneficiaries is the realization of grants and subsidies, indicating that the allocation of grants and subsidies has a substantial impact on income improvement. Meanwhile, in East Java, the most influential factor is the realization of program operations, suggesting that the success of program implementation is more decisive in increasing the income of beneficiaries in this region. This study provides insights into the effectiveness of the YESS Program, which can be influenced by local contexts and factors of implementation that differ between the two provinces. The implication of these findings is that policy interventions like YESS should go beyond technical training by also improving access to capital and providing ongoing mentoring. This integrated approach is more effective in boosting business performance and income for millennial farmers.

Keywords: *Income, Realization of Training, Grants and Subsidies, Operating Expenses, YESS Program*

BACKGROUND

The agricultural sector in Indonesia faces significant labor regeneration challenges. According to Kementerian Pertanian (2023), the average age of farmers in Indonesia continues to increase, while the number of young farmers interested in working in the sector is relatively low. This condition threatens the long-term sustainability of national agriculture (OECD, 2023). One of the main causes of low youth participation in the agricultural sector is the lack of access to education, training, capital, as well as the lack of attractive job opportunities in this field (IFAD, 2023).

The Youth Entrepreneurship and Employment Support Services (YESS) program is a strategic initiative that aims to increase youth participation in the agricultural sector through training, access to capital, and business development facilitation (Kementerian Pertanian, 2023). The program focuses on empowering youth in rural areas, especially those from poor and vulnerable economic groups, to become agricultural entrepreneurs or a competitive workforce in the sector. With a financing scheme from the International Fund for Agricultural Development (IFAD), the YESS Program has been implemented since 2019 in 15 districts in four provinces, namely West Java, East Java, South Kalimantan, and South Sulawesi. In 2023, the program was expanded to four additional districts to reach more beneficiaries.

The success of this program can be measured through the increase in participants' income after attending various trainings and other supporting programs. Although various youth empowerment programs have been implemented by the government and international organizations, there have not been many studies that specifically measure the impact of the YESS Program on beneficiary income using quantitative methods based on panel data. Several studies have been conducted, including one by Gunawan & Muzayanah (2023), which found that access to LKM-A (Agricultural Microfinance Institutions) significantly contributes to reducing the risk of poverty through the enhancement of financial inclusion. Another study by Anwarudin et al. (2020) indicated that the entrepreneurial capacity of young farmers in West Java remains low, and strengthening this capacity can be achieved through increasing the role of agricultural extension workers as well as other external support. In a related study, Prasetyo & Supriyanto (2022) evaluated the role of microfinance in enhancing agricultural productivity among rural youth, emphasizing the importance of financial services in improving agricultural performance and empowering young farmers. Therefore, it is important to analyze the effectiveness of the YESS Program in improving the economic welfare of beneficiaries using a quantitative approach based on empirical data to fill this gap and provide empirical evidence related to the effectiveness of the program in increasing participants' income.

This research is limited to the implementation of the YESS program in Java, namely in West Java Province consisting of 5 districts (Bogor, Cianjur, Subang, Sukabumi and Tasikmalaya) and East Java Province consisting of 5 districts (Malang, Banyuwangi, Pacitan, Pasuruan and Tulungagung). The results of this study are expected to provide input for policy makers, program managers, and academics in designing more effective and sustainable youth empowerment strategies in the agricultural sector.

This research aims to : (1) analyzing Income levels of YESS program beneficiaries in West Java and East Java, (2) analyzing the factors in the YESS program that have the most significant impact on changes in beneficiary income in West Java and (3) analyzing the factors in the YESS program that have the most significant impact on changes in beneficiary income in East Java

RESEARCH METHODS

1. Research Design

This research uses a quantitative approach with the panel data regression method (Ghozali, 2019). Panel data was chosen because it is able to capture variations between individuals and changes

that occur over time, thus providing more accurate analysis results compared to cross-sectional data (Sugiono, 2019).

2. Data and Data Sources

The data used in this study consisted of primary data: Collected through a survey of YESS Program participants who have joined the program in the 2021-2024 period. The survey includes information on beneficiaries' income for 1 year, assistance in the form of training, grants and subsidies and operational costs provided to each district. And secondary data: Obtained from official reports of the YESS Program, IFAD publications, and statistical data from the Ministry of Agriculture

3. Target Beneficiaries

The target beneficiaries and implementation approach of the YESS Program are individuals, with the following criteria:

- a) Youth (male or female) aged between 17 and 39 years old, gender involvement as program participants is highly considered.
- b) Domiciled in the location of the YESS Program activities (in the sub-district in the district as the location of the YESS Program). This domicile is indicated by KTP or Family Card.
- c) A poor family or youth with an income below the poverty line, but with basic assets. The criteria for poor families or poor youth refer to the poverty standards issued by BPS. As a reference, BPS has released the results of the calculation of the poverty line as of March 2019 which is a family income of Rp. 1.99 million / month or an individual income of Rp. 425,250 / month. Data on poor families can also be obtained from the local Kelurahan / Village or RT head.
- d) Youth from emerging youth families, earning above the poverty line but vulnerable to becoming poor, and owning standard assets (radios, electronic devices, bicycles). With an income of IDR 1.0 - 1.5 million per month.
- e) Near-poor families have incomes slightly above the poverty line but have small-scale businesses in agriculture, are able to become contact farmers (as lead farmers) and can play an active role in the community.
- f) Have done business or have an interest in doing business (becoming an entrepreneur) or working in agriculture.

4. Population and Sample

The population and sample in this study are beneficiaries in all districts in West Java and East Java Provinces where the YESS Program activities are located. West Java Province consists of 5 districts (Bogor, Cianjur, Subang, Sukabumi and Tasikmalaya) and East Java Province consists of 5 districts (Malang, Banyuwangi, Pacitan, Pasuruan and Tulungagung). The data processed is combined data from beneficiaries in each district in 2021-2024, with the following distribution:

Table 1. Distribution of Beneficiary Districts in 2021-2024 in West Java and East Java Provinces

No.	Province	District	Year as PM
1	West Java	Cianjur	2021 – 2024
		Subang	2021 – 2024
		Sukabumi	2021 – 2024
		Tasikmalaya	2021 – 2024
		Bogor	2023 - 2024
2	East Java	Malang	2021 – 2024
		Pacitan	2021 – 2024
		Pasuruan	2021 – 2024
		Tulungagung	2021 – 2024
		Banyuwangi	2023 – 2024

Source : Kementerian Pertanian (2023)

5. Research Variables

The variables used in this study include:

- a) Dependent Variable: Beneficiary income in one year (in Billion Rupiah)
- b) Independent Variable:
 - Realization of Training (X1), is the amount of assistance provided in the form of training provided to beneficiaries during 1 year (in Billion Rupians).
 - Realization of Grants and Subsidies (X2), is the amount of assistance provided in the form of grants and capital subsidies for beneficiaries based on competitively submitted proposals in 1 year (in Billion Rupiah).
 - Operational Realization (X3) is the operational cost incurred for program activities in each district (mentoring, consultation, etc.) (in Billion Rupiah)

6. Data Analysis

Panel data is a combination of time series data and cross section data. This panel data is used to determine significant factors based on repeated observations of an object at different times. Statisticians often use this method to find out how a factor has an influence on certain problems periodically. Panel data regression is a development of multiple linear regression. Both are used to predict the parameters of the regression model (Baltagi, 2021).

The approach used to estimate the panel data regression model is:

a) Common Effect Model

This model is the simplest model in panel data regression. This model uses Ordinary Least Squares (OLS) in combining cross section and time series data in estimating regression parameters. The Common Effect Model has the following form:

$$Y_{it} = \alpha + \beta_j X_{itj} + \varepsilon_{it}$$

Description,

Y_{it} = dependent variable for the i-th object in the t-th period

X_{it} = jth independent variable for the i-th object in the t-th period.

ε_{it} = error for the i-th object in period t

α = intercept of the regression model

β_j = parameter for the jth variable

b) Fixed Effect Model

The assumption of this model is that there are different influences between objects. In this model, differences in object and period characteristics are accommodated in the intercept so that the intercept changes over the period. The Fixed Effect Model uses dummy variables to estimate unknown parameters so it is also called the Least Square Dummy Variable (LSDV) Model. The Fixed Effect Model has the following equation:

$$Y_{it} = \alpha_i + \beta_j X_{itj} + \sum_{i=2}^n \alpha_i D_i + \varepsilon_{it}$$

Description:

Y_{it} = dependent variable for the i-th object in the t-th period

X_{itj} = j-th independent variable for the i-th object in the t-th period.

D_i = dummy variable

ε_{it} = error for the i-th object in period t

α_i = intercept of the regression model

β_j = parameter for the j-th variable

c) Random Effect Model

This model assumes that the effect of the object is random or random for the entire cross section. Unlike the Fixed Effect Model, differences in object and period characteristics are accommodated by errors. The Random Effect Model is formulated as follows:

$$Y_{it} = \alpha_i + \beta X_{it} + \varepsilon_{it}$$

where $\varepsilon_{it} = u_i + v_t + w_{it}$

Description:

u_i = error on the i-th observation

v_t = error at observation t

w_{it} = compound error

Furthermore, the steps taken in this study are as follows

a) Selection of the best model

1) Chow Test

This test is used to select the best model between FEM and CEM. This selection is based on the comparison of the values F_{hitung} and F_{tabel} . If the value of $F_{hitung} > F_{tabel}$, then the model chosen is FEM.

2) Hausman Test

This test is used to select the best model between FEM and REM. The basis for selection is to compare the values of χ^2_{hitung} and χ^2_{tabel} . If the value of $\chi^2_{hitung} < \chi^2_{tabel}$, then the model chosen is REM.

3) Breusch-Pagan Test

To determine whether the REM model is better than the CEM model, the Lagrange Multiplier (LM) test developed by Breusch-Pagan can be used. This test is based on the residual value of the CEM model. If the P value is greater than alpha then the model chosen is CEM.

b) Classical Assumption Test

The equation obtained from an estimation can be operated statistically if it meets the classical assumptions, which are free of multicollinearity, heteroscedasticity, autocorrelation, and normally distributed.

c) Significance Test

The significance test is a procedure used to see whether or not the regression model that has been made is good. This test consists of the F test conducted to test the significance of the model as a whole, the t test conducted to evaluate the significance of each independent variable, and the coefficient of determination.

1) Simultaneous Test Hypothesis (F Test)

H0: Variables X1, X2, and X3 Together have no Effect on PM Program Income

Ha: Variable X1, X2, and X3 Jointly Affect the Income of PM Program.

2) Partial Test Hypothesis (t test)

H01: The variable Realization of Training program/training (X1) does not affect the income of PM Program.

Ha1: Variable Realization of Training Program/training (X1) Affects PM Program Income.

H02: Grants and subsidies realization variable (X2) has no effect on PM Program revenue.

Ha2: Variable Realization of Grants and subsidies (X2) Affects PM Program Revenue

H03: Variable Realization of operating expenses (X3) has no effect on PM Program Revenue

Ha3: Variable Realization of operating costs (X3) Affects PM Program Revenue

d) Draw conclusions from the panel data regression model for influential factors based on the results obtained from the panel data regression analysis.

RESULT AND DISCUSSION

1. Income levels of the Ministry of Agriculture YESS Program beneficiaries in West Java and East Java

The beneficiaries of the YESS program are poor youth with incomes below the poverty line, but have basic assets with an age range of 17 - 39 years and live in the location of the YESS Program activities. The number of beneficiaries in West Java is 63,608 people spread across Bogor Regency as many as 4,445 people, in Cianjur Regency as many as 18,112 people, in Subang Regency as many as 13,212 people, in Sukabumi Regency 18,578 and in Tasikmalaya Regency 9,261 people. Meanwhile, in East Java Province, 67,552 beneficiaries were distributed in Banyuwangi Regency as many as 9,532 people, in Malang Regency as many as 13,362 people, in Pacitan Regency as many as 15,882 people, in Pasuruan Regency as many as 15,684 people and in Tulungagung Regency as many as 13,092 people.

The income and amount of assistance provided through the YESS program in each district also varies depending on the location and number of beneficiaries. The following is the distribution of income and assistance provided through the YESS program in each district in West Java and East Java Provinces.

Table 2. Income and Statistical Description of Activities of YESS Program Beneficiaries in 2021-2024 in Each District in West Java and East Java Provinces (in Milyar Rupiah)

No.	District	Minimal	Maximum	Average	St Dev
1	West Java				
	Income (Y)	20,9240	343,1820	117,6236	95,2635
	Training Realization (X ₁),	0,4530	6,3969	2,4475	1,6243
	Realization of Grants and Subsidies (X ₂),	0,7729	4,0448	1,7487	0,8871
	Operational Realization (X ₃)	1,7935	7,9602	4,0522	1,7037
2	East Java				
	Income (Y)	13,9902	372,6089	143,4831	92,0450
	Training Realization (X ₁),	0,9077	5,1883	3,4295	1,3212
	Realization of Grants and Subsidies (X ₂),	1,8655	6,7448	3,7043	1,2956
	Operational Realization (X ₃)	0,9679	5,9323	3,3900	1,4082

Source: Primary data processed (2024)

Based on Table 2, the average income received by beneficiaries of the YESS Program in East Java is higher than that of beneficiaries in West Java. Specifically, the average income per beneficiary in East Java is Rp 2,124,039 per person, while in West Java it is Rp 1,849,195 per person. This indicates that the average income in East Java is approximately 14.87% higher than in West Java. This income gap appears to be closely related to the volume and nature of assistance provided. In East Java, the average training assistance per person amounts to Rp 50,767.76, whereas in West Java it is only Rp 38,447.69 per person. This represents a 32.02% higher training support in East Java. Similarly, the provision of grants and subsidies is significantly greater in East Java (Rp 54,836.10 per person) compared to West Java (Rp 27,492.44 per person), showing a 99.45% increase.

This trend aligns with the principles of human capital theory Becker (2009), which posits that greater investment in education and training enhances productivity and income. In this case, the increased support in East Java both in terms of financial subsidies and capacity building has likely led to improved entrepreneurial performance and income generation among beneficiaries.

Interestingly, operational costs in West Java are higher, amounting to Rp 63,705.73 per person, while in East Java they are lower at Rp 50,183.65 per person. This reflects a 26.89% higher operational expenditure in West Java, which indicates that a greater portion of the program funds are allocated to categories such as technical assistance and consultancy services, procurement of goods and services, salaries and allowances, and general operational costs. These expenditures include the

The Role of Youth Entrepreneur and Employment Support Services (YESS) Program to Increasing Beneficiary Income: A Comparative Study of West Java and East Java (Harjanti and Astuti, 2025)

engagement of consultants for studies and evaluations, procurement of office equipment and vehicles for supporting the NPMU and PPIU, salaries for project staff, and various operational activities such as travel, communication, vehicle maintenance, and reporting. While these categories are necessary to ensure the program's infrastructure and governance, a higher concentration of expenditures in these areas particularly in West Java may lead to reduced flexibility for allocating funds toward direct empowerment of beneficiaries. This underscores the importance of balancing institutional spending with field-level support to optimize program impact.

Environmental and institutional differences may also account for the observed disparities. East Java benefits from stronger agricultural infrastructure, more developed market linkages, and a more robust local support system for young agripreneurs. Additionally, the effectiveness of program facilitators such as mobilizers, mentors, and financial advisors plays a vital role. Rivera & Qamar (2003) emphasize that institutional support and quality of extension delivery greatly influence the success of rural development programs. Meilaningsih & Yuniastuti (2022) concluded that East Java has strong intersectoral linkages, particularly in manufacturing and communication sectors. These linkages help to facilitate the marketing and distribution of agricultural products and support the business ecosystem for young farmers.

The income disparity between beneficiaries in West Java and East Java can be explained by differences in the allocation and efficiency of program assistance. East Java's higher investment in training and financial support, coupled with lower operational costs and stronger enabling environments, appears to have significantly contributed to better economic outcomes. These findings underscore the importance of strategic resource allocation and contextualized program implementation to optimize the impact of rural youth development initiatives.

2. Factors in the Program that Affect Beneficiary Income

This study uses data from 2021 to 2024, which is the effective operational period of the Ministry of Agriculture's YESS program. This study uses the panel data regression method to examine the effect of training assistance variables; grant and subsidy assistance variables; and operational cost variables on beneficiary income.

a. West Java Province

West Java is one of the provinces in Java Island which is the location of the YESS program activities with 5 selected districts.

1) Determining the Panel Data Regression Model

The stage of determining the panel data regression model begins with conducting the Chow Test, Hausman Test and Breusch-Pagan Test. Based on the Chow Test, the prob value (0.1773) is greater than 0.05 so that the selected model is the Common Effect Model (CEM). Because the CEM was chosen, the Hausman test was not carried out and immediately conducted the Breusch-Pagan (LM) test. The LM test results state that $\text{prob} (1,000) > 0.05$ so that the selected model is the Common Effect Model (CEM).

2) Classical Assumption Test

In Panel Data Regression, FEM and CEM models use the OLS approach, while the normality test is not mandatory in the OLS approach. Based on this, in West Java with the

selected model being CEM, only multicollinearity and heteroscedasticity tests need to be conducted.

a) Multicollinearity Test

The multicollinearity test in this study is seen based on the VIF value. Based on this value, it is known that all independent variables have a value of less than 10 ($X_1 = 2,85$, $X_2 = 6,27$, $X_3 = 3,91$, and mean $VIF = 4,34$), therefore it can be concluded that there are no symptoms of multicollinearity.

b) Heteroscedasticity test

The heteroscedasticity test in this study is based on Breusch-Pagan / Cook-Weisberg. Where the Prob value $> \chi^2 = 0.2995$, this means that the probability value is greater than 0.05 so that it can be concluded that there are no symptoms of heteroscedasticity.

3) Significance Test

Based on the test results, the model chosen is the Common Effect Model (CEM). Based on this table, the R Square value or the Determinant coefficient of 0.8640 or 86.40% shows that the Independent variables consisting of Training Realization, Grant and Subsidies Realization, and Operational Realization are able to explain the Total Income variable of the YESS Program Beneficiaries by 86.40%, while the remaining 13.6% is explained by other variables that are not included in this research model.

Simultaneous test obtained from the F test results counted $29.64 > F\text{-Table}$, namely 3.24 and Sig value. $0.00000 < 0.05$ then H_0 is rejected and H_a is accepted, meaning that the variables of Training Realization, Grant and Subsidies Realization, and Operational Realization of the YESS Program in West Java simultaneously affect the Total Income of YESS Program Beneficiaries in West Java Province.

The results of the analysis also show the following regression equation

$$Y = 0.585 X_1 + 9.020 X_2 + 0.0494 X_3 - 5.643 + e$$

Based on this equation, it is known that the constant value of - 5,643 means that without the variable realization of Training (X_1), Realization of Grants and Subsidies (X_2), and Operational Realization (X_3), the variable Total Income of all Beneficiaries will decrease by Rp 56.43 per 1 year.

The significance test of each variable x based on the t test obtained the following results:

a) Realization of Training (X_1)

The beta coefficient value of the training realization variable (X_1) is 0.585, meaning that if the value of the other variables is constant and variable X_1 has an increase of Rp. 1, the Total Revenue variable of all PMs will increase by Rp. 5.85 per 1 year. The results of the t test on the Training Program Realization variable (X_1) obtained a t -count value of 1.49 $< t\text{-table}$, which is 2.1009 and a sig value. $0.559 > 0.05$ then H_{a1} is rejected and H_{01} is accepted, meaning that the Training Program Realization variable (X_1) has no effect on the Total Income of Beneficiaries (PM) of the YESS Program.

The results of this study are consistent with the findings of Anwarudin et al. (2020), who stated that training and internships have no significant effect on the entrepreneurial capacity of young farmers in West Java. This is due to the low participation of young farmers in training and internship activities. Mulyadi (2019) found that human resource factors, including training, do not have a statistically significant impact on employment opportunities in the food crop agribusiness sector in West Java. This suggests that training alone may not directly enhance agribusiness performance outcomes.

In contrast, the findings of this study diverge from those of Ningsih et al. (2023), who emphasize that training and mentoring provided through programs such as YESS contribute to increased income by strengthening agribusiness activities. The study conducted by Laili & Wijanarko (2023) also found that entrepreneurial training exerts a positive and statistically significant influence on the income levels of entrepreneurs in Kampung Kue Rungkut, Surabaya.

Human Capital theory explains that each individual can develop income through increasing education, work skills and one's income level. This is supported by empirical research which explains that training contributes significantly to income. The materials, instructors, methods, time and training facilities can achieve optimal income. The success of training will kick-start the creativity, innovation, risk-taking, attitude and mentality of business people.

b) Realization of Grants and Subsidies (X2)

The beta coefficient value of the Grant and Subsidy Realization Variable (X2) is 9.020, if the value of the other variables is constant and X2 variable increases by Rp. 1, the Total Revenue variable of all PMs will decrease by Rp. 90.20 per 1 year. The results of the t test on the Grant and Subsidies Program Realization variable (X2) obtained a calculated t value of $3.997 > t\text{-table}$ which is 2.1009 and sig value. $0.004 < 0.05$ then H_a is accepted and H_0 is rejected, meaning that the Grant and Subsidies Program Realization variable (X2) has an effect on the Total Income of Beneficiaries (PM) of the YESS Program.

Grants and subsidies provided to increase capital for businesses that are being implemented by YESS beneficiaries. The competitive grant activities under the YESS Program in West Java Province represent one of the key strategies in promoting the emergence of accountable and sustainable young agricultural entrepreneurs. These grants are provided to rural youth who have submitted feasible business proposals and are assessed to have strong development potential. The primary objective of these grants is to develop self-reliant youth agripreneurs who are also socially driven and capable of mobilizing other young farmers in their communities. This approach aligns with the concept of agrisociopreneurship, where entrepreneurship in agriculture is not only profit-oriented but also delivers positive social impacts.

The grants provided under the YESS Program take various forms and are tailored to the needs and business stages of the beneficiaries. First, start-up capital grants are provided

to help young farmers initiate or strengthen their agricultural enterprises. These funds are used to purchase production inputs, farming tools, or raw materials. Second, business development grants are allocated to expand existing businesses, increase operational efficiency, and improve market access. Third, innovation and technology grants are designed to support the adoption of modern agricultural technologies, such as automated irrigation systems, digital business management tools, and online marketing platforms. In addition to financial support, the YESS Program also provides non-financial grants, including entrepreneurship training, business mentoring, and incubation programs, in collaboration with local agricultural vocational schools (SMK PPN), farmer training centers (P4S), and other training institutions (PPIU West Java, 2024).

As of 2024, more than 2,000 young farmers in West Java have received competitive grants through the program. The primary focus areas include Tasikmalaya, Garut, Cianjur, and Sukabumi Regencies. The grant amounts vary between IDR 5 million and IDR 15 million per beneficiary, depending on the feasibility and scope of each business proposal. Data from the West Java Provincial Project Implementation Unit (PPIU) indicate that many grant recipients have also been directed to access additional funding through formal financial institutions, such as the People's Business Credit (*Kredit Usaha Rakyat* – KUR), in an effort to scale up their enterprises (PPIU West Java, 2024).

It is worth noting that the program implementation in West Java has shown relatively higher operational expenditures compared to other provinces, such as East Java. The data indicate that the average operational expenditure per beneficiary in West Java is IDR 63,705.73, while in East Java it is only IDR 50,183.65, representing a 26.89% higher cost. These operational funds are allocated to support a range of essential activities, including technical assistance and consultancy services (e.g., hiring consultants, conducting surveys, evaluations, and software development), procurement of goods and services (e.g., office equipment, furniture, and vehicles for NPMU and PPIU operations), salaries and allowances for project staff, and general operating expenses (e.g., travel, communication, vehicle maintenance, and reporting).

While these expenditures are essential to ensure sound governance and smooth program delivery, maintaining a balanced allocation is crucial to avoid reducing the direct benefits received by youth beneficiaries. With an integrated approach that combines competitive grants, training, mentoring, and financial access, the YESS Program in West Java has successfully created a supportive ecosystem for youth agripreneurs. The program has demonstrated significant contributions toward transforming rural agriculture into a more modern, productive, and inclusive sector.

Sidik & Ilmiah (2021) identified business capital as the primary factor influencing the income of micro, small, and medium enterprises (MSMEs). Despite its importance, many MSMEs continue to face significant barriers in accessing capital and financing, which hampers their ability to scale operations or develop competitive products.

These findings align with those of Hasanah et al., (2020) and Mariam & Yuliani, (2022), who demonstrated that business capital has a positive and significant impact on MSME income, specifically in Purbalingga Regency and among Jakpreneur-assisted MSMEs in Tanjung Priok District, North Jakarta. This is because business capital serves as a fundamental component in supporting the sustainability and growth of both newly established and already mature enterprises.

c) Realization of operating expenses (X3)

The coefficient value of the variable Realization of Program Operational Costs (X3) is 0.0494, if the value of the other variables is constant and variable X3 has an increase of Rp. 1, the variable Total Revenue of All PMs will increase by Rp. 0.494 per 1 year. The results of the t test on the Program Operational Realization variable (X3) obtained a calculated t value of 1.17 > t-table which is 2.1009 and sig value. 0.964 > 0.05 then H_0 is rejected and H_{01} is accepted, meaning that the variable Realization of Program Operations (X3) has no effect on the Total Income of Beneficiaries (PM) of the YESS Program.

This is in accordance with research conducted by Chairunnisa & Abdillah (2022) which states that there is no significant positive effect between assistance and beneficiaries micro business income. This condition is attributed to the limited understanding among several beneficiaries regarding business management, particularly in the areas of financial management and digital product marketing.

Similarly, the study conducted by Sudirwo; et al. (2023) found that mentoring under the YESS program for millennial farmers in South Kalimantan did not have a statistically significant effect on business income, despite an observed income increase of 88.33 percent following program participation.

In another case, the READSI mentoring program, as examined by Baruwadi et al. (2013), also had a positive impact on increasing the income of rice farmers in Bongohulawa Village, Tilongkabila Subdistrict, Bone Bolango Regency. Although the increase was not statistically significant, the program contributed to income growth through various mentoring activities.

In contrast, a study by Ngangi & Timban (2021) demonstrated that financial management training for farmers in Ampreg Village significantly increased the income of farmer group members. This improvement was attributed to the transfer of knowledge and technology, which could be directly applied in farm business management.

b. East Java Province

East Java is one of the provinces on the island of Java that is the location for the implementation of YESS program activities with 5 selected districts.

1) Determining the Panel Data Regression Model

The stage of determining the panel data regression model begins with conducting the Chow Test, Hausman Test and Breusch-Pagan Test. Based on the Chow Test, the prob value (0.0343) is smaller than 0.05 so that the model chosen is the Fixed Effect Model (FEM).

Furthermore, the Hausman test obtained the results of P Value (Prob>Chi2) (0.9595)> Alpha 0.05 then H1 Reject or which means the best choice is the Random Effect Model (REM) rather than the FEM. The next stage is the Breusch-Pagan (LM) test. The LM test results state that prob (0.0306) > 0.05 so that the selected model is Random Effect Model (REM).

2) Classical Assumption Test

Based on the model selection in East Java, it is obtained that the selected model is REM, so it is only necessary to do a multicollinearity test. The multicollinearity test in this study is seen based on the VIF value. Based on this value, it is known that all independent variables have a value of less than 10 ($X_1 = 4,37$, $X_2 = 1,00$, $X_3 = 4,37$ and Mean VIF = 3,25), therefore it can be concluded that there are no symptoms of multicollinearity.

3) Significance Test

Based on the test results, the model chosen is the Random Effect Model (REM). R Square value or the Determinant coefficient of 0.7392 or 73.92% shows that the Independent variables consisting of Training Realization, Grant and Subsidies Realization, and Operational Realization are able to explain the Total Income variable of the YESS Program Beneficiaries by 73.92%, while the remaining 26.08% is explained by other variables that are not included in this research model.

The simultaneous test obtained from the F test results counted $80.32 > F\text{-Table}$, namely 3.24 and Sig value. $0.00000 < 0.05$ then H_0 is rejected and H_a is accepted, meaning that the variables of Training Realization, Grant and Subsidies Realization, and Operational Realization of the YESS Program in West Java simultaneously affect the Total Income of YESS Program Beneficiaries in West Java Province.

The results of the analysis also show the following regression equation:

$$Y = 5.054 X_1 + 12.58 X_2 + 51.51 X_3 - 99.64 + e$$

Based on this equation, it is known that the constant value of - 99.64 means that without the variable realization of Training (X_1), Realization of Grants and Subsidies (X_2), and Operational Realization (X_3), the variable Total Income of all Beneficiaries will decrease by Rp 99.64 per 1 year.

The significance test of each variable x based on the t test obtained the following results:

a) Realization of Training (X_1)

The beta coefficient value of the Training realization variable (X_1) is 5.054, if the value of the other variables is constant and variable X_1 increases by Rp. 1, the total revenue variable of all PMs will increase by Rp. 5.054 per 1 year. The t test results on the Training Program Realization variable (X_1) obtained a sig value. $0.726 > 0.05$ then H_{a1} is rejected and H_{01} is accepted, meaning that the Training Program Realization variable (X_1) has no effect on the Total Income of Beneficiaries (PM) of the YESS Program.

Similarly, in West Java Province, the training component of the YESS program did not have a significant impact on its beneficiaries in East Java. This finding is consistent with the study by Sudirwo et al. (2023), which reported that training under the YESS program did not significantly increase the income of millennial farmers in South Kalimantan. However, when

training was combined with capital support in the form of competitive grants and subsidies, along with mentoring, these interventions collectively had a positive and significant effect on the income of young farmers. This suggests that training delivered in isolation without accompanying capital assistance and mentoring tends to be less effective, particularly given that the average human resource capacity of millennial farmers remains relatively low.

These findings highlight the importance of an integrated approach in capacity-building programs for young farmers. Training alone may not be sufficient to enhance agribusiness outcomes, particularly when beneficiaries have limited initial knowledge or experience.

This research is different from the results obtained by Mariam and Yuliani (2022), which states that skills training has a positive effect on the income of Jakpreneur Assisted MSMEs in Tanjung Priok District, North Jakarta. The more often you attend skills training, the more experience or knowledge about MSMEs, so that business actors can generate optimal income.

b) Realization of Grants and Subsidies (X2)

The beta coefficient value of the Grant and Subsidy Realization Variable (X2) is 12.58, if the value of the other variables is constant and the X2 variable increases by Rp. 1, the Total Revenue variable of all PMs will decrease by Rp. 12.58 per 1 year. The t test results on the Grant and Subsidies Program Realization variable (X2) obtained a sig value. $0.078 > 0.05$ then H_a 1 Reject and H_0 1 Accepted, meaning that the Grant and Subsidies Program Realization variable (X2) has no effect on the Total Income of Beneficiaries (PM) of the YESS Program.

These findings are consistent with the study conducted by (Umar et al., 2023), which found that neither self-financing nor loan capital had a statistically significant effect on the income of lowland rice farmers. Although there was an increase in income, the impact was not statistically significant. This was attributed to farmers' lack of habit in maintaining household financial records, resulting in income that did not correspond proportionally with expenditures.

Similarly, a study by Pataniho & Fevriera (2022) showed that capital assistance from non-governmental sources did not have a positive effect on farmers' income, primarily due to the ineffective use of the capital provided. However, these findings contrast with the results of a study by Nabillah et al. (2024), which, based on a Social Return on Investment (SROI) analysis, concluded that the competitive grant program under YESS successfully generated economic, social, and environmental benefits.

c) Realization of Operating Expenses (X3)

The coefficient value of the variable Realization of Program Operational Costs (X3) is 0.0494, if the value of the other variables is constant and the X3 variable increases by Rp. 1, the total revenue variable of all PMs will increase by Rp. 51.51 per 1 year. The t test results on the Program Operational Realization variable (X3) sig value. $0.000 < 0.05$ then H_a 1 is accepted and H_0 1 is rejected, meaning that the Program Operational Realization variable (X3) has an effect on the Total Income of Beneficiaries (PM) of the YESS Program.

These operational expenditures reflect the extent of the program's investment in supporting institutional ecosystems and technical services that are crucial for the success of beneficiaries' agribusinesses. Within the YESS Program's financing structure, operational costs

are categorized into four main components: (1) Technical Assistance and Consultancies, which include the procurement of services from individual or institutional consultants, implementation of studies, surveys, independent evaluations, and software development—mostly executed at the NPMU and PPIU levels; (2) Goods and Services, used to procure institutional support facilities such as computers, vehicles, office furniture, and stationery; (3) Salaries and Allowances, covering staff salaries funded by both the IFAD loan and the Government of Indonesia's budget (APBN); and (4) Operational Expenses, which support activities such as official travel, communication, vehicle maintenance, and program reporting.

One of the allocations under operational costs is remuneration for field facilitators, which includes Youth Facilitators (Fasmud), Mobilizers, Mentors, and Financial Advisors (FA). These actors play a critical role in providing direct and continuous support to young agricultural entrepreneurs. Mobilizers are responsible for outreach, data verification of potential beneficiaries, capacity building for youth facilitators, and establishing working networks with stakeholders at district to village levels. Youth Facilitators provide technical and managerial assistance to beneficiaries, particularly in the areas of agriculture and basic financial literacy. Mentors assist beneficiaries in developing and implementing business plans, while also supporting them in identifying and overcoming critical challenges in business development. Meanwhile, Financial Advisors strengthen the capacity of Business Development Services Providers (BDSPs) in financial literacy, offer financial consulting, and facilitate access to formal financial institutions such as banks and cooperatives. Together, these four roles form a well-structured and complementary support ecosystem for beneficiaries.

An additional key actor in the YESS Program is the Business Development Services Provider (BDSP), or extension agents for business development. They provide business training, facilitate access to markets and agricultural inputs, and bridge collaboration between beneficiaries and value chain stakeholders. BDSPs also contribute to business group formation, dissemination of market opportunities, and mentor identification relevant to the agricultural sector.

Field studies in East Java Province highlight the critical importance of collaborative roles between Fasmud, Mobilizers, Mentors, and BDSPs, especially during the post-training phase. These facilitators actively assist beneficiaries in addressing business challenges and ensuring that training outcomes are implemented effectively. However, the limited number of formal training sessions under the YESS Program has prompted local initiatives such as self-funded training and Farmer Field Schools (SL), facilitated by BDSPs or local agricultural offices, to meet the technical needs of beneficiaries. Moreover, coordination among facilitators is further enhanced through the provision of shared working spaces at BDSP offices, which fosters a more inclusive, comfortable, and efficient working environment for implementing their mentoring tasks.

In West Java, the average operational expenditure per beneficiary reached Rp 63,705.73, whereas in East Java it was Rp 50,183.65, indicating a 26.89% higher operational spending in West Java. Despite this higher expenditure, West Java beneficiaries received lower direct

support, including training assistance and grants/subsidies. Operational Realization variable serves not only as a funding component but also as a key determinant of the quality of institutional support received by beneficiaries. The availability and optimization of operational costs provide space for structured, scheduled, and adaptive mentoring interventions tailored to the needs of beneficiaries on the ground. Ultimately, this contributes positively to improving the productivity and income of youth agripreneurs. These findings reinforce the importance of an integrated approach that combines financial, technical, and institutional support in empowering young agricultural entrepreneurs in a sustainable manner.

The results of this study are in line with research conducted by Nabillah et al. (2024) which states that millennial farmer businesses in Tukur District as beneficiaries of YESS in 2021 have increased income and market expansion because they get facilities from mobilizers to access a wider market so that they are able to make MOUs with large companies (PT. Sarimelati Kenca Tbk and PT. Maju Makmur Group).

The results of this study are also in accordance with research conducted by Paulu et al. (2022) which states that there is an effect of the Joint Business Group Program (KUBE) on increasing community income. KUBE is community empowerment related to providing access for the community in obtaining and utilizing community rights for improving economic life through mentoring activities.

CONCLUSION AND SUGGESTION

Based on the results of the analysis, several conclusions can be drawn. First, the average income per beneficiary in East Java is approximately 14.87% higher than in West Java. In West Java, the primary factors influencing beneficiary income are the realization of grants and subsidies. Meanwhile, in East Java, the income of beneficiaries is primarily affected by the realization of program operations.

In light of these findings, several recommendations are proposed. The program coverage should be expanded to other regions to broaden its impact. In West Java, efforts should be made to increase the realization of grants and subsidies to improve beneficiary income. Similarly, in East Java, enhancing the operational realization of the program is essential. Furthermore, policy interventions under programs such as YESS should adopt a comprehensive strategy that goes beyond technical training. Emphasis should be placed on improving access to capital and providing sustained mentoring. This integrated approach is expected to be more effective in enhancing business performance and increasing income levels among millennial farmers.

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