Assessing the Implementation of Social Security Program for Tobacco Farmers in Jember Regency

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ABSTRACT
This research delves into the implementation of social security programs, particularly focusing on tobacco farm workers in Jember regency, Indonesia. Despite the mandatory nature of the BPJS Ketenagakerjaan, many tobacco farm laborers remain uncovered, posing risks to their social and economic well-being. Utilizing a quantitative research methodology, the study employs questionnaires and statistical analysis to understand the factors influencing participation in the BPJS Employment program. Findings reveal that variables such as Program Urgency, Farmers’ Knowledge, Program Benefits, Farmers’ Expectations, and the Role of Local Government collectively explain 67.5% of tobacco farmers’ participation. Notably, Program Urgency and Program Benefits significantly impact participation, highlighting the vital role of social security in providing financial assurance against job-related risks. Moreover, active involvement of the Local Government is essential in fostering farmers’ interest and engagement in the program. These findings underscore the significance of social security programs for tobacco farm workers, emphasizing the need for government support and facilitation to enhance program participation and ensure the welfare of vulnerable laborers.

Key words: government; implementation; participation; social security programs; tobacco farm workers.

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INTRODUCTION
Social security is a form of social protection aimed at ensuring that all citizens can meet their basic needs adequately (Bonnet et al., 2010; Devereux & Sabates-Wheeler, 2004; Kalusopa et al., 2012; Kannan, 2004). According to Law No. 24 of 2011, there are two Social Security Administrators: the Social Security Administrator for Health (BPJS Kesehatan) and the Social Security Administrator for Manpower (BPJS Ketenagakerjaan). BPJS Kesehatan provides health social security for the entire Indonesian population, covering individuals from infancy to old age (Ridwan, 2022). On the other hand, BPJS Ketenagakerjaan offers social security for employment, including five programs: Work Accident Insurance, Death Insurance, Old-Age Insurance, Pension Insurance, and Job Loss Insurance for all formal and informal workers, both Indonesian citizens and foreign nationals, who have worked in Indonesia for a minimum of 6 months.

This research primarily focuses on the implementation of social security programs for tobacco farm workers in Jember regency. BPJS Ketenagakerjaan is mandatory social security for every worker, requiring all employers to register their employees in the program. Besides being mandatory, BPJS Ketenagakerjaan operates a national social security system based on the principles of mutual cooperation, non-profit,
transparency, prudence, accountability, portability, mandatory participation, trust funds, and the entirety of the Social Security Fund’s management results being used for program development and the utmost interests of participants. Additionally, informal sector workers should also be enrolled in the BPJS Ketenagakerjaan program, including tobacco farm workers.

Tobacco farm workers are individuals who work for landowners or tenants, receiving wages from individuals or companies involved in tobacco cultivation, ranging from seedling to post-harvest stages. They face various risks in their work, and the implementation of social security programs can enhance their well-being. However, according to data from the Ministry of Manpower, many tobacco farm workers remain uncovered by social security programs, which can have adverse effects on their social and economic conditions. Moreover, in Jember regency, there are several issues regarding the implementation of social security programs, such as the lack of understanding and community participation. Therefore, researching the implementation of social security programs for tobacco farm workers in Jember regency is crucial.

Based on the aforementioned background, several problem identifications arise: many tobacco farm workers remain unregistered as participants in BPJS Ketenagakerjaan, inadequate allocation of DBHCHT funds for social security protection for tobacco farm workers, and suboptimal role of the Jember regency government in supporting the implementation of Presidential Instruction No. 2 of 2021 regarding the optimization of social security program implementation in Jember regency.

From these identified problems, the following problem formulations are derived: (1) How is the implementation of social security programs for tobacco farm workers in Jember regency?; (2) How is the allocation of DBHCHT funds for the protection of tobacco farm workers in Jember regency?; and (3) What policies has the Jember regency government implemented to support the implementation of Presidential Instruction No. 2 of 2021 regarding the optimization of social security program implementation in Jember regency?

With the research question, the objectives of this study are: (1) To obtain a scientific description of the implementation of social security programs for tobacco farm workers in Jember regency; (2) To analyze the policies of the Jember regency government in protecting tobacco farm workers; and (3) To explore new policies that the Jember regency government will undertake for the implementation of Presidential Instruction No. 2 of 2021 regarding the optimization of social security program implementation in Jember regency.

LITERATURE REVIEW

Kertonegoro (2008) asserts that social security embodies a welfare concept designed to safeguard both social and economic risks for communities, aiding national economies in rectifying income distribution injustices by providing assistance to low-income groups. It is evident that social security ensures benefits, thus protecting workers from income loss due to incapacity to work and ensuring basic needs for their families, thereby upholding human values against uncertainty and despair (Barrientos, 2016; Garland, 2014; Organization, 2000; Robson, 2022; Standing, 2017; Vrooman, 2009).
From the aforementioned discussions, it can be concluded that social security represents a form of economic protection in the shape of monetary benefits and social protection through services, care, and medical treatment when certain risks occur during employment. According to Soepomo (2001), social security serves as protection for laborers in the form of monetary compensation for lost or reduced income. The indicators for measuring social security include work accident benefits, old-age benefits, death benefits, health benefits, and sense of security and comfort (Ahmad et al., 1991; Anifalaje, 2016; Badalivand & Karimian, 2021; Guest, 1997; Jain, 1999; McClure, 2013; Rao et al., 2006).

1. Work accident benefits: Compensation provided to protect against work-related accidents, including those occurring during commutes to or from work.
2. Old-age benefits: Lump-sum payments made by companies to employees who have reached retirement age within a predetermined timeframe or under specified conditions.
3. Death benefits: Compensation provided to beneficiaries upon the death of a worker not due to a work-related accident.
4. Health benefits: Provision of healthcare such as primary healthcare services, advanced referral healthcare services, and hospitalization.
5. Sense of security and comfort: Facilities provided by companies to support work and make employees feel secure and comfortable in their jobs.

The National Social Security System (SJSN) in Indonesia is a state program aimed at providing social protection certainty for the entire Indonesian population. Through SJSN, it is hoped that all residents can obtain adequate protection in case of events leading to loss or reduction of income due to illness, work accidents, reaching old age or retirement, and death. As a follow-up to the mandate of Law Number 40 of 2004 concerning SJSN and to maximize social security coverage for the entire Indonesian population, the Government enacted Law Number 24 of 2011 concerning the Social Security Organizing Agency (BPJS Law), which mandated the establishment of two Social Security Organizing Agencies, namely BPJS Health, a transformation of PT. Askes (Persero), and BPJS Employment, a transformation of PT. Jamsostek (Persero).

The enactment of the BPJS Law represents a significant step in the implementation of the national social security system for the entire Indonesian population. BPJS Employment, formed since January 1, 2014, will commence operations no later than July 1, 2015, providing Employment Social Security covering Work Accident Insurance (JKK), Old-Age Insurance (JHT), Pension Insurance (JP), and Death Insurance (JKM). The implementation of employment social security and sustainable financing poses significant challenges, necessitating a series of strategic steps from the Government and BPJS Employment.

METHOD

Research methodology is a scientific approach to obtaining data for specific purposes and utilities (Sugiyono, 2010). Thus, this study employs a quantitative research method. Quantitative method involves the use of numerous numerical data from data collection to interpretation (Supriatin et al., 2022). Meanwhile, research methodology is a meticulous and thorough study of all facts. Quantitative research is commonly utilized in psychology, economics, demography, sociology, marketing,
health, community and human development, among others. It is less frequently employed in anthropology and history. However, quantitative research in mathematical sciences such as physics is also considered, albeit with differing terminologies within its context.

Quantitative research methodology is defined as part of a systematic investigation into phenomena by collecting data for subsequent measurement using mathematical or computational statistical techniques. This research is predominantly conducted using statistical methods in the collection of quantitative data through research studies.

The primary data collection technique in this study involves the utilization of questionnaires followed by regression analysis and classic assumption tests including tests for normality, autocorrelation, multicollinearity, heteroscedasticity, and linearity.

RESULT AND DISCUSSION

Multiple regression, as opposed to simple linear regression, can be deemed a robust model if it meets the criteria of Best Linear Unbiased Estimator (BLUE). Achieving BLUE relies on satisfying classical assumptions. At least five classical assumption tests must be conducted for a multiple linear regression model, namely: normality test, autocorrelation test, multicollinearity test, heteroskedasticity test, and linearity test.

Normality test

A common method for determining whether a model is normally distributed is by inspecting the residual histogram to see if it resembles a "bell curve." However, relying solely on visual inspection can be misleading. Another approach to assess normality is by using the ratio of Skewness divided by its standard error and the ratio of Kurtosis divided by its standard Kurtosis. Typically, if both Skewness and Kurtosis ratios fall within the range of -2 to 2, the data can be considered normal.

Linearity test

The linearity test aims to ascertain whether two variables have a significant linear relationship. This test is usually a prerequisite for linear regression or correlation analysis. The analysis of BLUE (Best Linear Unbiased Estimator) serves as a criterion ensuring that an estimator in regression analysis produces unbiased, linear, and minimally variant parameter values compared to other possible estimators. BLUE stands for Best Linear Unbiased Estimator. In a regression model, BLUE can be achieved if classical assumptions are met. These assumptions include normality, homoscedasticity, absence of multicollinearity, absence of autocorrelation, and a linear relationship between independent and dependent variables. If classical assumptions are satisfied, the regression parameters obtained will be BLUE.

Autocorrelation test

Autocorrelation testing in a linear regression model is necessary when dealing with time series data. Autocorrelation refers to a value at a specific sample or observation being highly influenced by preceding observations. Several methods can be used to detect autocorrelation. Firstly, the Durbin-Watson (DW) test, which is specifically for first-order autocorrelation and requires an intercept in the regression model and no lagged variables among the explanatory variables. The decision on whether
autocorrelation exists is based on the DW value. If the DW value falls between 2 - du and 4 - du, the autocorrelation coefficient is zero, indicating no autocorrelation. If the DW value is less than 2 - du, the autocorrelation coefficient is greater than zero, indicating positive autocorrelation. If the DW value is between du and dl, no conclusion can be drawn. Similarly, if the DW value is greater than 4 - du, the autocorrelation coefficient is greater than zero, indicating negative autocorrelation. Again, if the DW value falls between 4 - du and 4 - dl, no conclusion can be drawn. By employing a 5% confidence level, the presence of autocorrelation in the model can be determined.

Table 1. Autocorrelation Test

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.758a</td>
<td>.675</td>
<td>.547</td>
<td>.61897</td>
<td>1.681</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Local Government, Knowledge, Expectations, Urgency, Benefits
b. Dependent Variable: Participation

Detection of Positive Autocorrelation: Positive autocorrelation is detected if dw < dl. No positive autocorrelation exists if dw > dU. If dL < dw < dU, the test is inconclusive or cannot be inferred. Detection of Negative Autocorrelation: Negative autocorrelation is detected if (4 – dw) < dL. No negative autocorrelation exists if (4 – dw) > dU, where du represents Durbin upper and dl represents Durbin lower.

Based on the explanation above, it is concluded that there is no autocorrelation when the value of DL < DW > DU and DL < (4-DW) > DU. With DW, or Durbin Watson, being 0.635, and the value of 82, variable 6, the results are dl = 1.8008 and du = 1.4883. Therefore, the calculation yields: 4 - 1.681 > 1.4883, resulting in 2.319 > 1.4883, indicating no negative correlation.

Multicollinearity Test

There are several ways to test multicollinearity in a model, including the VIF test and correlation test. The VIF test is conducted by examining the VIF values for each variable, determining if they exceed 10. If any VIF value is greater than 10, the model is indicated to have multicollinearity issues. Another method is to conduct a partial correlation test, assessing the strength of the relationship between two explanatory variables, known as correlation. To identify if there is a multicollinearity problem between two independent variables, the significance value (2-tailed) is observed. If it is less than 0.05 (a=5%), serious multicollinearity symptoms are indicated. The analysis results show VIF values below 10, indicating no multicollinearity.
Heteroskedasticity Test

Heteroskedasticity test, akin to normality test, commonly determines whether a model is free from heteroskedasticity issues by examining Scatter Plots and observing whether residuals exhibit any specific patterns. This approach can be misleading because determining whether a model is free from multicollinearity issues solely based on visual inspection cannot be reliably justified. Several statistical methods exist to ascertain whether a model is free from heteroskedasticity problems, such as the White test, Park test, Glejser test, among others.

Regression Analysis in this study resulted in the following model:

\[ Y = -0.673 + 0.220X_1 - 0.09X_2 + 0.371X_3 - 0.168X_4 + 0.220X_5 + e \]

Where:

- \( Y \) = Participation of Agricultural Laborers
- \( a \) = Constant
- \( X_1 \) = Program Urgency
- \( X_2 \) = Farmers’ Knowledge
- \( X_3 \) = Program Benefits
- \( X_4 \) = Farmers’ Expectations
- \( X_5 \) = Role of Local Government (PEMDA)
- \( e \) = Error

Coefficient of Determination Test

The coefficient of determination test is a method to measure the model's ability to explain how independent variables collectively influence the dependent variable. The higher the coefficient of determination, the greater the ability of independent variables to explain variations in the dependent variable. The coefficient of determination can significantly impact farmers’ decision-making processes, particularly in understanding the extent to which independent variables contribute to explaining variations in the dependent variable.
The table above illustrates that the R Square data is 0.675 or 67.5 percent, indicating the participation of farm laborers in the BPJS employment program, which is explained by the variations in the variables of Program Urgency (X1), Farmer Knowledge (X2), Program Benefits (X3), Farmer Expectations (X4), and Local Government Role (X5). The independent variables, including Program Urgency (X1), Farmer Knowledge (X2), Program Benefits (X3), Farmer Expectations (X4), and Local Government Role (X5), collectively contribute only 67.5% to the Participation of Farm Laborers in the BPJS Employment Program (Y).

**Simultaneous Test**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>39.333</td>
<td>5</td>
<td>7.867</td>
<td>20.533</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>29.118</td>
<td>76</td>
<td>.383</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>68.451</td>
<td>81</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Participation
b. Predictors: (Constant), Local Government, Knowledge, Expectations, Urgency, Benefits

The F-test in regression is a statistical test used to determine whether the variables Urgency of Program (X1), Farmers’ Knowledge (X2), Program Benefits (X3), Farmers’ Expectations (X4), and Local Government Role (X5) collectively influence the dependent variable Participation of Farmers in the Program (Y). The F-test is conducted by testing the hypothesis that all regression coefficients in the model are zero, or in other words, there is no significant influence from the independent variables on the dependent variable. If the significance value of F is less than 0.05, it can be interpreted that the independent variables collectively influence the dependent variable. The F-test is often referred to as a simultaneous test. The F-test is conducted simultaneously with the t-test, which is used to test the partial effect of independent variables on the dependent variable.

The analysis results indicate that the F-test with a significance value of 0.00 or below 0.05, implying that the variables Urgency of Program (X1), Farmers’ Knowledge (X2), Program Benefits (X3), Farmers’ Expectations (X4), and Local Government Role (X5) collectively influence the participation of farmers in the employment social security program.
Partial Test (t-test)

In multiple regression analysis, the partial test is a significance test conducted individually to assess the significance (real influence) of independent variables (X) on the dependent variable (Y). This partial test is carried out to examine the significance of partial regression coefficients and to determine whether the independent variables (X) have a partial effect on the dependent variable (Y). The partial test, or t-test, in multiple linear regression analysis aims to ascertain whether individual independent variables (X) have an effect on the dependent variable (Y) individually.

The partial test is conducted by testing the null hypothesis (H0) that the partial regression coefficient of the independent variable (X) is equal to zero against the alternative hypothesis (Ha) that the partial regression coefficient of the independent variable (X) is not equal to zero. This partial test can be performed using a t-test.

Table 5. Results of the t-test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.673</td>
<td>.666</td>
<td></td>
<td>1.011</td>
</tr>
<tr>
<td>Urgency</td>
<td>.220</td>
<td>.072</td>
<td>.253</td>
<td>3.047</td>
</tr>
<tr>
<td>Knowledge</td>
<td>-.090</td>
<td>.067</td>
<td>-.111</td>
<td>-1.345</td>
</tr>
<tr>
<td>Benefits</td>
<td>.371</td>
<td>.080</td>
<td>.405</td>
<td>4.662</td>
</tr>
<tr>
<td>Expectations</td>
<td>.168</td>
<td>.077</td>
<td>.186</td>
<td>2.192</td>
</tr>
<tr>
<td>Local</td>
<td>.220</td>
<td>.077</td>
<td>.251</td>
<td>2.872</td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the t-test results in the table above, it is evident that the urgency of the Program variable has a t-value of 4.666 with a significance value of 0.03. This implies a significant influence of the urgency of the Program variable on the participation of tobacco farmers in the BPJS Employment program. The BPJS Employment program holds crucial importance for tobacco farmers as it provides social protection for those working in tobacco farming. By enrolling in the BPJS Employment program, tobacco farmers receive benefits such as old-age insurance, death benefits, accident insurance, and pension benefits. Participation in the BPJS Employment program ensures financial protection for tobacco farmers and their families against unforeseen risks during their work, thus underlining its significance in securing their well-being and that of their families in the future.

Meanwhile, the Program Benefit variable exhibits a t-value of 3.037 with a significance value of 0.00. This indicates a significant influence of the Program Benefit variable on the participation of farmers. This is because the benefits offered by the BPJS Employment program to tobacco farmers influence their participation in the program by providing social protection for them and their families against unforeseen risks during their work. By enrolling in the BPJS Employment program, tobacco farmers gain benefits such as old-age insurance, death benefits, accident insurance, and pension benefits. These benefits instill a sense of security among tobacco farmers, allowing them to concentrate more on enhancing their motivation and work productivity. Therefore, the benefits of the BPJS Employment program are crucial for
ensuring the well-being of tobacco farmers and their families in the future and can influence their participation in the program.

Furthermore, the Farmer's Expectation variable has a t-value of 2.19 with a significance value of 0.031, indicating a significant influence on farmers' participation. The Farmer's Expectation variable regarding the BPJS Employment program can affect farmers' participation in the program because their expectations can shape their perceptions of the program's benefits. If farmers have high expectations regarding the benefits of the BPJS Employment program, they are more likely to be interested in joining and becoming participants. Conversely, if farmers have low expectations regarding the benefits of the BPJS Employment program, they are less likely to be interested in joining and becoming participants. Therefore, the Farmer's Expectation variable can influence farmers' participation in the BPJS Employment program. However, there is no specific recent journal reference discussing the influence of the Farmer's Expectation variable on farmers' participation in the BPJS Employment program.

Regarding the Local Government's Role variable, it has a t-value of 2.872 with a significance value of 0.005, indicating a significant influence on farmers' participation. The Local Government's Role variable in the BPJS Employment program can affect farmers' participation in the program because the role of the local government can influence the access to information provided to farmers regarding the program. If the local government plays an active role in providing information and facilitating farmers' registration in the BPJS Employment program, farmers are more likely to be interested in joining and becoming participants. Conversely, if the local government does not play an active role in providing information and facilitating farmers' registration in the BPJS Employment program, farmers are less likely to be interested in joining and becoming participants. Therefore, the Local Government's Role variable can influence farmers' participation in the BPJS Employment program.

**CONCLUSIONS**

The research findings indicate that the R Square value of 0.675 or 67.5 percent explains the participation of tobacco farmers in the BPJS Employment program, attributable to variations in variables such as Program Urgency, Farmers' Knowledge, Program Benefits, Farmers' Expectations, and the Role of Local Government. Although collectively contributing 67.5% to Tobacco Farmers' Participation in the BPJS Employment Program, these independent variables demonstrate significant influence. The simultaneous F-test, alongside individual t-tests, underscores the collective impact of these variables on tobacco farmer participation in the BPJS Employment program. Further t-test results highlight the individual significance of each variable, particularly emphasizing the substantial influence of Program Urgency and Program Benefits on farmer participation. These findings underscore the importance of the BPJS Employment program for tobacco farmers, providing social protection and financial assurance against job-related risks, thus ensuring their welfare and influencing their active participation in the program. Moreover, the role of the Local Government is crucial, indicating that active involvement can foster farmers' interest and engagement in the program, emphasizing the importance of government support and facilitation in enhancing program participation.
REFERENCES


