Analysis of socio-economic characteristics That Affect the level of income of farmers in the district budget gambier raft banjarnegara districtcentral java

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ABSTRACT
This study aims to analyze social characteristic economics farmer of jasmine of Gambir that is farmer age, other production contribution, amount of family responsibility, wide is ownership of the farm, and production storey level Able to influence storey level of earnings of the farmer in the District of Raft Sub-Province of Banjarnegara. Research executed by using the method of survey with especial targets is all farmer of jasmine of Gambir in District of rafts. Analysis of data the used is analysis of regression doubled linear with Test-T, Test-F as well as the coefficient of determination (R2). Result of research show pursuant to Test-T in the social reality characteristic of old age farmer economics, amount of family responsibility, and other production contribution do not have an effect on reality to storey level of earnings of the farmer of jasmine of gambier. While production and wide of the farm have an effect on reality to storey level of earnings of the farmer of jasmine of gambier. Test-F show all characteristic of social economics in the reality have an effect on reality to storey level of earnings of the farmer of jasmine of gambier. Coefficient analysis of determination (R2) indicate that storey level of earnings of the farmer of jasmine of Gambir in District of Rafts Sub-Province of Banjarnegara 74.9% influenced by variables old age farmer, other production contribution, family responsibility, wide of the farm, and production. While the rest 25.1% influenced by other variables roomates do not check. Test-F show all characteristic of social economics in the reality have an effect on reality to storey level of earnings of the farmer of jasmine of gambier. Coefficient analysis of determination (R2) indicate that storey level of earnings of the farmer of jasmine of Gambir in District of Rafts Sub-Province of Banjarnegara 74.9% influenced by variables old age farmer, other production contribution, family responsibility, wide of the farm, and production. While the rest 25.1% influenced by other variables roomates do not check.

Key words: Economic Social, Farmer, Jasmine, Earnings, Banjarnegara
INTRODUCTION

Sub-district Raft is false one districts in Banjarnegaraa District and is the only districts that seek or develop jasmine farming Gambir. The Gambir jasmine is one of the commodities that are developed in addition to coconut deres Banjarnegara district, robusta coffee, arabica coffee, cardamom, sugar, pepper, kapok, nutmeg, quinine, tobacco, patchouli kemukus, clove, and tea. Gambir jasmine farming in the District Raft is a type of tree or shrub that can be harvested throughout tahun. Selain it easy gambier jasmine plant species to be cultivated. Gambir jasmine development efforts in Sub Raft in 2012 showed a condition that the land is getting narrower. This shows that there has been over the land of jasmine Gambir into other plants. It is more driven because prices always fluctuate Gambir jasmine or has not been stable.

Social and economic characteristics that can affect the income of farmers in the district Gambir jasmine Raft farmers such as age, income obtained from cultivation of jasmine gambier and other income, number of dependents, land ownership and production. It is certainly an impact on household income levels of farmers. Social and economic characteristics of farming communities in the District Raft of course be different with areas or other districts, especially socio-economic characteristics of farmers jasmine Gambir. Therefore, the existence of socio-economic characteristics of farmers jasmine Gambir supposedly had an influence on the income level of farmers. Efforts to develop intensive farming Gambir jasmine should begin to be improved. Moreover for the farmers with land holdings are relatively narrow. Farmers should seek to allocate the factors of production are owned and try to understand the influence of socio-economic characteristics of the level of income generated.

RESEARCH METHODS

The basic method of research used in this study is a survey method that observation or investigation activities are carefully and thoroughly to obtain a clear and well on a particular issue and in a region tertentu. Tujuan of the survey is to obtain a representative picture of the area with the right (Sugiarto et al, 2003). The research was conducted in 2013 in the District of Banjarnegara District Raft covering 10 villages, namely Situwangi, Bracelet, Pingit, Comparative, Raft, Adipasir, Kincang, Tanjunganom, Badamita, and Lengkong. Goal of this research is the farmers of arable land owners jasmine Gambir of each village in District rafts expanses of land for farming jasmine Gambir. The sampling method or design of sampling this study using stratified random sampling, ie taking samples by dividing

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population into strata then the sample was selected
randomly from each stratum (Sugiarto et al, 2003).
Determination strata based on the number of
farmers land owners jasmine (population)
amounted to 676 people. Sample size
determination using the formula Slovin; Setiawan
\[ n = \frac{N}{1+Nd^2} \]
Description: \( n \) (sample size), \( N \) (population size),
d (prediction error). The results of the sample size
calculation that is used by 87.

Methods of data collection in this research
was conducted through interviews, which is taking
the data directly (primary) by way of question and
answer to the farmers of respondents using the
instrument questionnaire has been provided,
registration activities are secondary data bari
various sources of literature, scientific journals,
reference sources relating to research, and
observation of data collection by means of direct
observation of the object studied. Variables used
in this research are: a). Age Farmers (X1) is aged
farmers who grow jasmine Gambir in units (Year),
b). Contributions Other Income (X2) is the
contribution of income derived from the income of
farmers in addition to the main (jasmine Gambir)
in units (IDR), c). Number of Dependent Family
(X3) is the number of family dependents jasmine
gambier farmers in units (People), d). Land (X4)
is an area of land owned by farmers who used the
jasmine farming Gambir in units (hectare), e).
Production (X5) is the number of results from
Gambir jasmine farming activities acquired during
the harvest period in units (Kg / hectare), and f).
Farmer income is the net revenue derived from the
farmers' Gambir jasmine farming in units (Rupiah).

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e \]

\( \beta_0 \) = constant
\( \beta_1 \) Regression Coefficients Factor = X1
\( \beta_2 \) Factors X2 = Regression Coefficients
\( \beta_3 \) Regression Coefficients Factor = X3
\( \beta_4 \) Regression Coefficients Factor = X4
\( \beta_5 \) Regression Coefficients Factor = X5
e = Variable Disruptors

Testing the hypothesis of the social
characteristics economy affecting the level of
income of farmers, processed and analyzed
through
partial test and simultaneously.
The following test:

1. **Partial Hypothesis Testing (Test-T)**

Partial testing using T-Test is a test for
significant influence of independent variables on
the dependent variable individually. Significance
test is
procedure in which the sample results are used to determine decision for receive or reject Ho refused based on the value of statistical tests obtained from the data.

\[ t = \frac{\text{bi} \cdot \text{b} \cdot \text{Sb}}{\text{nk}} \]

Information:
- bi = Coefficient of Free All i
- b = Value hypothesis Nol
- Sb = Standard Deviation (Standard Deviation) of Variables All i

Finding the critical value t of table t with df = nk and \( \alpha \) is certain. The decision to accept or reject Ho is based on a comparison of t arithmetic and t table (critical values).

If: \( t > t \) table, then Ho is rejected and Hi received and vice versa if \( t < t \) table, Ho Ho accepted and then rejected.

2. **Hypothesis Testing In Unison (Test-F)**

Testing simultaneously use F-test aims to test the effect of all independent variables dependent terhadapvariabel together (simultaneously).

\[ F_{hitung} = \frac{R^2}{k - 1} \]

Information:
- \( R^2 \) = Coefficient of Determination
- k = Number of Independent Variables
- n = Total Sample

Looking for a critical value (F table); df (k-1, nk) where k = the number of parameters including the intercept. The decision to accept or reject Ho is based on comparison of the calculated F and F table. If: F count> F table, hence Ho refused and Hi accepted and vice versa if F arithmetic <F table, the Hi Ho is accepted and rejected.

3. **The coefficient of determination (R2)**

According to Bowo (2010) in Widarjono (2007) coefficient of determination is to determine how much percentage of donations the independent variable on the dependent variable that can be expressed as a percentage. The percentage of the effect of all of the independent variable on the dependent variable values can be known from the magnitude of the coefficient of determination (R2) of the regression equation. The closer to zero the coefficient of determinsi a regression equation, the smaller the influence of all independent variables on the dependent variable and vice versa.

**RESULTS AND DISCUSSION**

Social and economic characteristics that affect farmers’ income, namely Gambir jasmine; age of farmers (X1), the contribution of other income (X2), the number of dependents (X3), land area (X4), and production (X5). Obtained multiple regression equation is written as follows:

\[ Y = 555025.286 - 5664.444 X1 - 0.004X2 - 52562.300X3 + 1208570.155X4 + 9090.741 X5 \]

1. **Hypothesis Testing Using Test-T**

<table>
<thead>
<tr>
<th>No.</th>
<th>variables</th>
<th>Koef. Regression</th>
<th>titung</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>age farmers</td>
<td>-5664.444</td>
<td>-1569</td>
</tr>
<tr>
<td>02</td>
<td>Contribution Income Other</td>
<td>0.004</td>
<td>-0111</td>
</tr>
<tr>
<td>03</td>
<td>amenability Family</td>
<td>-52562.300</td>
<td>-1832</td>
</tr>
<tr>
<td>04</td>
<td>Land area</td>
<td>1208570.155</td>
<td>2.244</td>
</tr>
<tr>
<td>05</td>
<td>Production</td>
<td>9090.741</td>
<td>10.964</td>
</tr>
</tbody>
</table>

Based on Table 1 explained that the results of analysis of the age variable-T Test farmer have T count of -1569. T count <T

\[ \text{table or -1569 <2.132, then Ho is accepted and} \]

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This means that the variable age

farmers do not significantly affect the level of income Gambir jasmine growers in District Raft. Regression coefficient value of -5664.444 and the negative sign, meaning that farmers age variable effect is inversely proportional to the level of farmers' income in the District Raft Gambir jasmine. If the age of farmers increased by 1%, it will reduce the income of farmers amounted to 5664.444%. Signs negative regression coefficient indicates that the older, the income of farmers is getting smaller or reduced. This condition is due to the relatively old age of farmers and relatively uniform so that variations in age does not affect the income of farm households.

Based on the results of T-test analysis, other income contributing variables have a count of -0111 T while T table for 2132. This means that the T count - 0111 <T table 2,132 which means Hi Ho accepted and rejected. This means that the variable contribution of other income did not significantly affect the level of income of farmers in the district Gambir jasmine Raft. The regression coefficient value is negative, which means the effect is inversely proportional to income. Every additional dependents amounted to 1%, it can decrease the income of 52562,300%. Findings Suryani (2012) mentions that the labor supply significantly affected the income of farmers crops on dry land in Wonogiri. That is more or less the amount of labor will affect the income of farmers. At the study site, eventually affect the level of the income of farmers is low.

Variable land area by t-test analysis results obtained T count of 2,244 is greater than T table 2132. This means that T 2244 arithmetic> T table 2,132, which means that Ho refused and Hi accepted. It turned out that the land area variable real impact on farmers' income jasmine Gambir in District Rafts. The regression coefficient is positive, meaning that the variable has a land area of influence is directly proportional to income. Every additional land area of 1%, it will increase revenue by
1208570.155%. This is in line with the results of research conducted by Suryani (2012), the area real impact on farm income food crops because of the increasing area of land cultivated by farmers for cultivation of food crops then the higher the production of farm crops, causing a growing number of income received by farmers.

The results of T-test analysis shows that the variable production has T 10 964 count greater than 2,132 T table. Therefore

\[ T_{10}^{964} \text{ arithmetic} > T_{\text{table}} 2,132, \]

means that Ho refused and Hi accepted. This means that production variables significantly affect farmers' income jasmine Gambir in District rafts. While the value of the regression coefficient indicates a positive value, it means that production variables affect directly proportional to income. Every increase production by 1%, it will increase revenue by 9090.741%. Increased production of jasmine gambier caused more by the wider land area and the nature of the jasmine plant annual or every day can be learned so that productivity increased and farmers' income earned will increase.

2. Hypothesis Testing Using Test-F Based on Table 2 can be explained that the F count obtained at 48.337 while the F table 1.973823. It is proved that 48.337 F count > F table 1.973823, which means that Ho refused and Hi accepted. All socio-economic variables such as age farmers, the contribution of other income, dependents, land use, and the production turned out to have real impact on farmers' income jasmine Gambir in District rafts.

Based on Table 3 can be explained that the accuracy of the regression model used can be shown by the coefficient of determination (R2) were very close to 100% is equal to 0.749, which means variations in the value of income jasmine Gambir in District rafts can be explained 74.9% by the variable age of farmers, the contribution other income, dependents, land use, and production while the remaining 25.1% is influenced by other variables outside the model or other variables not studied.

Table 2. Analysis of Variance Farmers Bed Gambir Using Test-F

<table>
<thead>
<tr>
<th>Source variance</th>
<th>number Squares</th>
<th>db</th>
<th>the mean RataKuadrat</th>
<th>F Count</th>
<th>F Table 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>3.078x10^15</td>
<td>5</td>
<td>6.155x 10^12</td>
<td>48.337</td>
<td>1.973823</td>
</tr>
<tr>
<td>residual</td>
<td>1,031x1012</td>
<td>81</td>
<td>1,273x 1011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4,109x 10 13</td>
<td>86</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. Analysis The coefficient of determination (R2)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R2</th>
<th>adjusted R2</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.865</td>
<td>.749</td>
<td>0.733</td>
<td>356,847,252</td>
</tr>
</tbody>
</table>

Sources: Primary data is processed, 2013

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CONCLUSION

result analysis relationship relatively between socio-economic characteristics such as age of farmers, contribution of other income, dependents, large land, and production that influence Gambir jasmine farmers' income levels are partial (analysis Test-T) is:

a. variables age farmers, total amenability family, and contribution income other evidently not take effect real to Gambir jasmine farmers' income.

b. variables production and large land evidently significant effect on the level of income Gambir jasmine growers.

result analysis relationship relatively between socio-economic characteristics such as age of farmers, contribution of other income, dependents, large land, and production that influence Gambir jasmine farmers' income levels are simultaneously or together (analysis Test-F) show that all variable social The economy all influence significant effect on farmers' income jasmine Gambir.

result analysis coefficient determination ($R^2$) show that level income farmer jasmine gambir in sub-district Raft districts Banjarnegara 74.9% explained or influenced by farmers age variable, contribution earnings other, amenability family, large land, and production. While the remaining 25.1% is influenced by other variables not examined.

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