Evaluate the Program in Strengthening Group Business's Capital Effectiveness of Beef Cattle Farm to Increase Farmers' Income in Kupang Regency

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ABSTRACT

Research has been conducted, and this study aims to know the effectiveness and income of the program in Strengthening Group Business's Capital (SGBC) by performance, the assistance of government institutions, and local institutions, then point to income. The data collecting method used was multi random sampling such-stage as the first seven district samples were selected based on purposive random sampling, and the second 200 respondents were chosen. Data, then, were analyzed by applying analysis of descriptive and inferential use of SPSS and SMART PLS software. The result showed that performance, assistance, and local institutions significantly affected program effectiveness by direct effect and income by indirect effect with the role of mediating factors; while, point significantly affected farmers' income.

Key words: performance, assistance, local institutional, effectiveness, income.

INTRODUCTION

In 2019 population of beef cattle in the Kupang regency is reached 21.78% of the total population of East Nusa Tenggara Province (NTT), which is at the number of 236,983 heads higher than other regencies in NTT. It shows that Kupang Regency has become one of the biggest beef cattle producers in the region (BPS Kabupaten Kupang, 2020). Although the population keeps increasing, the condition does not significantly affect the cattleman's income. This term plays a vital role in the benefit of cattlemen in the Kupang regency, which cannot yet reach the standard of economic safety.

Description of the low income by the cattleman in Kupang regency which causes slower economic growth for them, especially in rural villages. Obed Haba Nono (2011) says that it takes approximately ten months to breed beef cattle. This problem profoundly affects the low income of cattlemen. The main effect depends on the natural resources for the cattle and the cattle management, which is still undeveloped, and the natural climate, which is primarily unconducive for the breeding (Nalle, 2016).

One of the significant efforts from the government is to put the cattlemen through the development pattern, which allows them to work together in a small group (not individually) and support them with Strengthening Group Business's Capital Program (SGBCP) that distributes the support exclusively to cattleman group. The program's success cannot be detached from the other supportive factors used by the cattlemen and the government.

MATERIALS AND METHODS

This research has been done in Kupang Regency, East Nusa Tenggara Province (NTT). The population in this study were all farmers who received the Strengthening Group Business Capital Program for cattle, amounting to 540 people spread over 54 groups. Furthermore, the determination of sample groups was carried out by purposive sampling, where from 54 groups, 20 sample groups were taken with consideration that 20 groups were active. Respondents were all group members from the 20 sample groups. Thus, the total selected respondents were 200 representative respondents.

The variable in this research includes an independent variable that is SGBCP Performance (X1), Livestock Office Assistance(X2), and Institutional Group (X3), and also the dependent variable includes Effectivity of SGBCP (Y1) and Cattleman Income (Y2). The research data is analyzed using software SPSS v.25 and SMART PLS 3.0.

RESULTS AND DISCUSSION

Constructive Examination of Exogenous Effect Toward Endogenous

Constructive examination effect of exogenous toward endogenous is known based on statistic value through the bootstrapping process, and the result can be seen in Table 1.
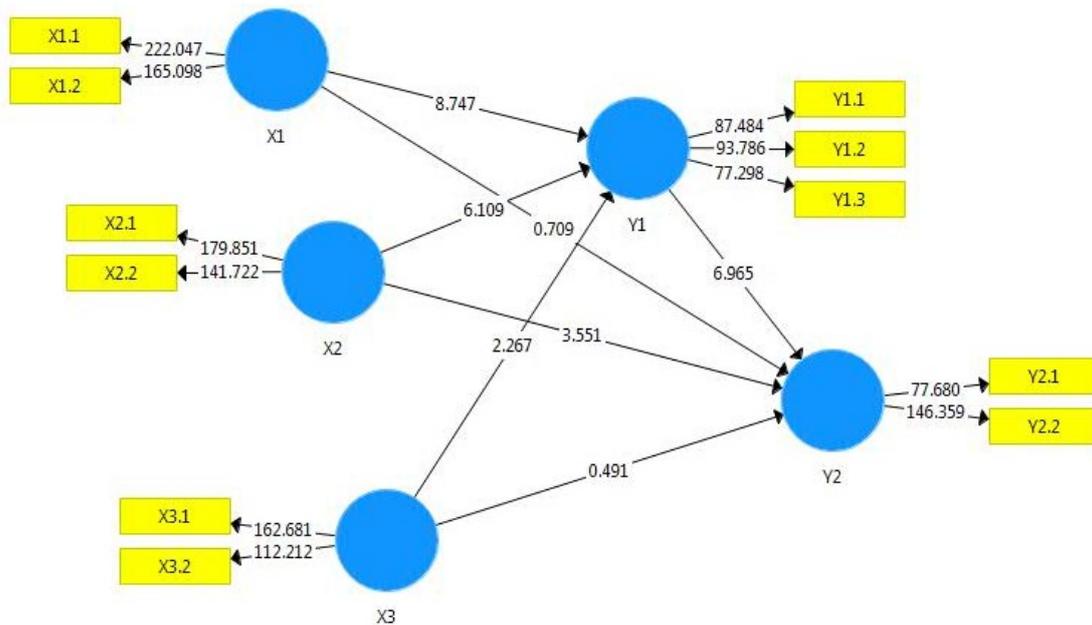
Table 1. T-Statistic

Path	Original Sample	Sample Mean	Standard Deviation	T Statistics (>1.96)	P Values <0.05	Descript.
X1 -> Y1	0.545	0.547	0.064	8.568	0.000	Significantly
X1 -> Y2	0.276	0.280	0.093	2.978	0.003	Significantly
X2 -> Y1	0.309	0.305	0.053	5.869	0.000	Significantly
X2 -> Y2	0.532	0.522	0.087	6.144	0.000	Significantly
X3 -> Y1	0.127	0.129	0.053	2.404	0.017	Significantly
X3 -> Y2	0.055	0.062	0.057	0.961	0.337	Not significantly

Source: Primary Data

Based on Table 1, it is shown that the direct relation between Institution and Income is at the T-Statistic 0.961 < 1.96, and it does not have any significant impact. The insignificant is construction X3 toward Y2, where the route itself is the central hypothesis, and it is done by mediation construct with additional exclusive relation factor through Y1 and Y2. The mediation construct's usage can be seen in Picture 1.

Picture 1: Route analysis by using construct mediation approach

Based on Picture 1, construct Y1 is a mediator who mediates the relation between construct X3 and Y2. The relation examination construct of exogenous X3 and Y2 using mediation factor Y1. The bootstrapping result can be seen in Table 2.

Based on Table 2, the relation analysis between exogenous construct and endogenous construct can be described that the performance positively has a positive relationship and significantly impacts effectivity. The relation between performance and income has a direct negative link, and this construct does not impact substantially. The assistance construct and effectivity have a positive association exclusively, and it is significant statistically. On the other side, income has a positive relationship, which is significant statistically. On one side, institution and effectivity have a positive direct relation, which has impacted significantly. The exclusive relation between institution and income is negative. It does not have any effect especially. Meanwhile, the whole relationship between performance and effectivity has a positive impact significantly.

Tabel 2. The direct effect and indirect effect

Path	Original Sample	T Statistics (>1.96)	P Values <0.05	Descript.
Performance -> Effectivity	0.542	8.709	0.000	Significantly
Performance -> Income	-0.072	0.722	0.471	Not Significantly
Performance -> Efectivity -> Income	0.350	5.680	0.000	Significantly
Assistance -> Effectivity	0.310	5.935	0.000	Significantly
Assistance -> Income	0.333	3.729	0.000	Significantly
Assistance -> Efectivity -> Income	0.199	4.609	0.000	Significantly
Institutional -> Efectivity	0.128	2.352	0.019	Significantly
Institutional -> Income	-0.027	0.488	0.626	Not Significantly
Institutional -> Efectivity -> Income	0.084	2.177	0.030	Significantly
Efectivity -> Income	0.641	7.640	0.000	Significantly

Source: Primary Data

The analysis results describe that using the mediation approach that does not significantly impact increases the T-Statistic toward the substantial relation in exogenous construct X3 and endogenous construct Y2. Yet, the process through mediation factor has a significant effect on the exclusive impact of exogenous construct relation X1 and endogenous construct Y2 statistically. On the other side, there is still an indirect effect of the mediation factor on exogenous and endogenous.

Table 2 also shows that the mediation factor Y1 plays a vital role in mediating the significant effect on exogenous construct toward endogenous Y2. It means that the existence of construct Y1 as the mediation factor can increase the statistic value on the subject. Thus it is shown by the effectivity of endogenous construct, which has perfect mediation (complete mediation) in connecting the performance and income, effectivity has partial mediation in connecting the assistance and the payment, and the effectivity has complete mediation in which clicking the institution toward the income.

Relation Construct of SGBCP Performance (X1) Toward Effectivity of SGBCP (Y1) and Income (Y2)

The SEM analysis result shows that the construct performance significantly affects positively toward effectivity. It means that the effectivity is affected by performance. Both construct relation is directly proportional relation where the SGBC Program will be effective if the performance of SGBCP is high and *vice versa*. It also means that the SGBC Program will be effective if done at high performance.

Performance is the way to measure the result of the SGBC Program. According to Nuryanti et al. (2011), group enthusiasm in responding and managing the program well influences program performance. Two indicators, socialization and implementation have been used to measure the SGBC performance and its effects significantly on the effectiveness of SGBCP. Socialization in the first place is the key to ensuring the program's good results because this is the way to introduce the SGBCP to the aiming group, which includes the eligibility to get government support and the execution technique of the program. Socialization will expand the group's mindset if executed with a good purpose. Also, it will be implemented thoroughly during the execution process of the SGBC Program, and in the end, it will meet the oriented target. If it fails during the process, the program is not executed very well. Through socialization, there is intensive interaction between group members and aid providers, and this method is quite effective in influencing the target group in the innovation adoption process (Putri et al., 2018).

Implementation indicators on SGBC Program are also to measure the performance of the SGBCP towards the program's effectiveness. The program executed by following operational standards can meet the target entirely. According to Robbins & Judge (2011), in carrying out the work program, one must follow established procedures and work according to agreed operational standards to achieve specific targets or achievements. It is shown by the respondents' answers toward the SGBC Program. The respondents must concur that the government's cattle meet the standard of the SGBC Program.

According to Frinaldi & Ali Embi (2015), aspects of public or community satisfaction can be judged by happiness, pleasure, and feeling satisfied with the products/services received.

The SEM analysis results show that performance affects income through mediation or indirect effects. This means the payment is affected by arrangement through the effectiveness of SGBC. On the other side, it is also known that the mediation factor affects perfectly, which means the effectivity construct affects 100% by connecting constructs X1 and Y2.

The Relation of the three constructs is directly proportional when SGBCP performance is high; it affects the effectivity, then the income increases vice versa. This means that the SGBCP indicators in performance cannot measure the income rate exclusively. However, it needs other hands, effectivity indicator measurements, to affect the income altogether.

Thus, for increasing the income, the supported groups must fully participate in socialization for the sake of the program, which must be executed flawlessly. As a result, the cattleman can manage the business well. Then they can meet the target for a shorter period, which means that the productivity of the cattle increases, the breeding meets the period efficiently, and the income increases.

Assistance Construct Relation (X2) Toward SGBCP Effectivity (Y1) And Income (Y2)

The SEM analysis result shows that the assistance construct significantly affects the SGBCP effectivity. This result means the program's effectiveness is affected by the assistance factor. The relation of the two constructs is vertical, where the SGBC Program is effective when the assistance factor is executed precisely and *vice versa.*

The assistance is an essential factor, and it is the development tool that is considered adequate for helping the cattleman group to meet the standard of the SGBC program. Assistance in cooperation between the companion and client is based on integrity from both sides. According to Rahmawati & Kisworo (2017), facilitators are key parties that bridge the beneficiary and program provider. On the other side, through the cattleman group's assistance, the technique helped to run the group business.

The construction phase is an undivided part of the assistance through the help of the cattleman group that the SGBC Program

supports. They will be led to have the ability to breed cattle. Depending on the mutual deal, the construction activity can be done once a month. The training includes breeding technique management. The purpose is to increase the capabilities of the cattleman group to access the technology and other supporting materials that help the cattleman group to manage the business efficiently. Furthermore, through construction which increases productivity and efficiency, the purpose of the SGBC program can be fulfilled thoroughly. According to Mosher (1987) and Setyono et al. (2013), the importance of cattleman group construction is one of the eligibilities to develop agriculture. On the construction indicator, there are seven questions asked to the respondents, and the results are as good as expected.

SEM analysis result shows that the assistance construct significantly affects income exclusively and exclusively. This means that the assistance indicators are not only to measure the income solely; otherwise, it needs other hands such as the effectivity to affect the payment nicely. Therefore, to increase the revenue, which can be done by assistance with more construction activities that can help the cattleman reach the result of the program in a short period. It means that the cattle productivity is increasing, and thus the income is also increasing. Habibullah (2011) states that mentoring provides convenience, facilities, and motivation to beneficiaries in utilizing resources for business sustainability and growing revenue.

Institution Construct Relation (X3) Toward the SGBCP Effectivity (Y1) and Income (Y2)

The SEM analysis result shows that the institution construct significantly affects the SGBCP effectivity. This result means that the relation between both constructs is directly proportional, where the SGBC Program will be effective if the institutional factor is executed substantially and *vice versa.*

The institution of the cattleman group is an effective tool for SGBC Program where the institutional group can ease the cattleman to work together as the ones for enhancing the business activity. On one side, the existence of an institutional cattleman group can help the group access information for the sake and benefit of the group, or it can help the group get support from outsiders. According to Aminawar et al. (2018), and institutional cattleman group is a regulation for the cattleman to regulate the

members to work in unity for the group's purpose. There are formal regulations such as law, constitutional law, and informal rules such as norms, artistic direction, social value, and the enforcement process of the law itself. Humans create the regulation to develop a beneficial arrangement for decreasing the uncertainty in the market. The more comprehensive the insight of farmers' information has a positive effect on increasing business (Ruhimat, 2017).

The SEM analysis result shows that the assistance construct does not significantly affect the income exclusively. Still, mediation analysis can access the development of institutional construct, which exclusively affects the income construct. This means that the institution can affect the income through the program's effectiveness. It is also known that the mediation factor affects perfectly, which means the construct effectivity program has 100% of the value for relating the X3 aspect and Y2.

The relationship between the three constructs is directly proportional if the institution is higher, affecting the effectivity program. Furthermore, it increases the income, *vice versa*. This means that the institutional indicators cannot significantly affect income value. To solve the puzzle, the effectivity indicator measurement is needed to complete the institutional to affect the payment. Thus, to increase the revenue, the group must work together to manage the business to meet the last result quickly.

The SGBCP Effectivity Relation (Y1) Toward Income (Y2)

SEM analysis result shows that the SGBCP effectivity construct positively affects income. It means that the effectivity factor of the program involves the payment. Relation between both is directly proportional, where the SGBC program gives the gain if the effectivity meets the target and *vice versa*. The SGBC effectivity program is decided by the achievement of the mark in a program where the result keeps approaching the goal, and the affectivity value will keep increasing. According to Caesarion et al. (2013), the suitability between planning and implementation significantly affects the program's effectiveness. The high rate value is also taken from the respondents, which means that the SGBC program can generate income. Therefore, cattle breeding must be fully developed for the sake of the group to save more income, then the existence of governmental support can help the economic problem (Darawati et al., 2013).

CONCLUSION

Based on the result of the discussion, it can be concluded: 1) SGBC effectivity program is affected significantly by SGBC construct performance, the assistance of livestock service, and institutional group. 2) Income is significantly affected by SGBC construct performance, the assistance of livestock service, and institutional group through mediation factor, which is SGBC effectivity program. 3) The income is significantly affected by the SGBC effectivity program.

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