
INFLUENCE THE HUMAN RESOURCE CAPACITY ON PERFORMANCE OF AGRICULTURAL EXTENSION OFFICERS FOR AGRICULTURAL EXTENSION INI KONAWA REGENCY

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ABSTRACT

This study aimed to examine is the human resource capacity on extension officers in agricultural extension; performance of extension officers in agricultural extension; and influence the human resource capacity on the performance of agricultural officers in agricultural extension in Konawe Regency. The research sample comprised the entire population of agricultural extension officers in agricultural extension who are State Civil Apparatus (ASN) in Konawe Regency, totaling 113 individuals, with sampling conducted through a census method. The research variables consist of independent variables, namely the capacity of human resources of agricultural extension officers and dependent variables, namely the performance of agricultural extension officers in agricultural extension. Data analysis for this research employs both descriptive and inferential statistics. Descriptive statistics are utilized to outline the characteristics of the variables, where as inferential statistical analysis is employed to investigate the influences variable of capacity of human resources of agricultural extension officers on the performance of agricultural extension officers in agricultural extension. The inferential statistical technique applied in this research is Simple Regression Analysis. The results of the study showed that the human resource capacity of agricultural extension officers is in the good category. The research results also showed that the performance of agricultural extension workers is in the good category. The results of the study also show that the human resource capacity of agricultural extension officers has a significant positive effect on the performance of agricultural extension officers in agricultural extension in Konawe Regency. Increasing the capacity of human resources for agricultural extension officers will improve the performance of agricultural extension officers in agricultural extension.

Keywords : *Agricultural Extension, Extension Officers, Human Resource Capacity, Performance.*

INTRODUCTION

Increasing the welfare of farmers will be achieved if farmers are able to increase the productivity of the farming they manage. Increasing the productivity of agricultural products can be done by carrying out effective agricultural extension activities. Agricultural extension as part of the agricultural development system has a very strategic position in agricultural development. Agricultural extension is an effort to build community capacity carried out through a farmer learning process by applying the principles of agricultural extension properly and correctly, supported by other agricultural development activities. Huda & Harijati, (2016), stated that agricultural instructors have an important role in agricultural development because as agents of change, instructors are the spearhead who directly relate to farmers.

Agricultural extension officers are required to demonstrate effectiveness in executing agricultural extension activities. Ali et al (2018), that the assessment of indicators reveals that the accomplishments of agricultural trainers encompass the following: the distribution of information regarding agricultural technology, the enhancement of

empowerment and autonomy among farmers and business stakeholders, the establishment of beneficial partnerships between farmers and business entities, improved access for farmers and business actors to financial institutions, a rise in productivity within agribusiness, and an increase in the incomes and overall prosperity of farmers. Adriani et al (2021), that the role of agricultural instructors in executing agricultural extension encompasses several key responsibilities: (a) disseminating extension materials tailored to the specific needs of farmers and applying agricultural extension methods in designated areas; (b) enhancing farmers' capacity to obtain market information, technology, infrastructure, and financial resources; (c) fostering the growth and development of agricultural institutions with a focus on both quantity and quality; (d) promoting the establishment and advancement of farmers' economic institutions, also emphasizing quantity and quality; and (e) improving overall productivity.

The effectiveness of agricultural extension officers in delivering agricultural support, particularly in Konawe Regency, continues to face challenges. Syafruddin et al (2014), that the performance of agricultural experts in Konawe Regency has been reported to exhibit a moderate level of achievement, as agricultural extension officers have not completely executed the components associated with the prestige of their role. Refiswal, (2018), that he stated that the performance of agricultural instructors still experiences limitations. This situation has given rise to the current situation of farmers who are still shackled by poverty, so agricultural extension still needs to continue improving its performance to help farmers solve their own problems, especially in aspects of their agricultural activities in his set. Pinati et al (2020), that who reported the results of their research that field agriculture instructors were classified as adequate. The level of satisfaction of rice farmers with the performance of field agriculture instructors is considered adequate.

The effectiveness of agricultural extension officers is influenced by various factors, with one significant aspect being the staff's capacity to execute agricultural extension activities. Berlo (1960), that we recommend four essential human resources that every professional extension agent should possess. These four qualifications include: (1) effective communication skills; (2) a positive work attitude; (3) a strong capacity for knowledge; and (4) sociocultural traits of the instructor that are suitable or adaptable to the sociocultural context of the target community. Edmonds et al., (2016) that it was highlighted that a key competency in the field of communication literature is communicative behavior. This behavior can be conceptualized as an ecosystem encompassing both observable and unobservable elements. Kamariah (2016), that parliament acknowledges the existence of at least three dimensions of staff capacity, which include: a) Knowledge capacity, b) Skill capacity, and c) Conduct and ethics in the workplace.

It is essential to investigate the impact of human resources and the social on the performance of agricultural extension agents, particularly in Konawe Regency. The research questions identified are: (1) how is the human resource capacity on extension officers in agricultural extension; how is performance of extension officers in agricultural extension; and (3) how does influence the human resource capacity on the performance of agricultural officers in agricultural extension in Konawe Regency.

MATERIALS AND METHODS

The survey took place between April and June 2024 in Konawe Regency, located in Southeast Sulawesi Province. The study's population or unit of analysis, comprised all agricultural extension workers from the Konawe Regency, who are civil servants, amounting to a total of 113 individuals. Sugiyono (2017), that the text elucidates that the population constitutes a generalized domain comprising both objects and subjects, each possessing specific properties and characteristics that researchers utilize in their studies, leading to the formulation of conclusions. Rephrase Shukla (2020), indicates that population is the total number of analysis units whose characteristics are estimated.

The research sample for this study was established through a census approach, encompassing the entire population of 113 agricultural experts in Konawe Regency. Etikan et al (2016) that he contended that the census test is often referred to as a saturated test. A saturated sample is a sampling method in which the entire population is selected as the sample, and this approach is commonly known as a census.

This study incorporated both independent and dependent variables. The research variables consist of independent variables, namely the capacity of human resources of agricultural extension officers and dependent variables, namely the performance of agricultural extension officers in agricultural extension. The capacity of human resources of variables (X), includes : encompasses knowledge (X1.), attitudes and work ethics (X2), proficiency in technical aspects of innovation (X3), communication skills (X4), and familiarity with the target social culture (X5); and the performance of agricultural extension officers (Y), includes: the dissemination of extension

materials tailored to farmers' needs (Y1), the application of agricultural extension methods in the designated area (Y2), enhancing farmers' capacity to access market information, technology, infrastructure, and financing (Y3), fostering and developing farmer group institutions (Y4), improving farming productivity (Y5), and nurturing and developing farmer economic institutions (Y6).

The instrument variables in this research were assessed using a Likert scale, where the responses to each item of the instrument were assigned weights and values, specifically: strongly agree (5), agree (4), neutral (3), disagree (2), and strongly disagree (1). According to Joshi et al (2015), the Likert scale serves as a tool to evaluate attitudes, opinions, and perceptions of individuals or groups regarding social phenomena. The examination of the research data was conducted through both descriptive and inferential statistical methods. Descriptive statistics were employed to characterize the human resource capacity and performance of extension officers. According to Kaur et al (2018), that descriptive statistics are utilized to summarize or present an overview of the subject being examined, employing data derived from samples or populations in their current form, without engaging in additional analysis or making extensive inferences. Sugiyono (2017), that following is the formula for quantitative descriptive analysis in research:

$$I = \frac{R}{K}$$

Description:

- I : Class Interval
- R : Range
- K : Number of Classes

The inferential statistical technique applied in this research is Simple Linier Regression Analysis. Inferential statistical analysis is employed to investigate the influences variable of capacity of human resources of agricultural extension officers on the performance of agricultural extension officers in agricultural extension. The simple linear regression formula is:

$$Y = a + bX + e \quad (\text{Sugiyono, 2017})$$

Description:

- Y = Predicted value
- a = Constant
- b = Regression coefficient
- X = Independent variable
- e = Standard error

RESULTS AND DISCUSSION

Human Resources Capacity of Extension Officers

Human resource capacity is the ability of human resources to carry out the duties and responsibilities given to them with sufficient education, training and experience (Mangkunegara, 2017). The human resource capacity of extension officers in this research includes: knowledge, attitudes and work ethics, mastery of technical aspects of innovation, communication skills, and introduction to the target social culture. The results of research on the human resource capacity of extension officers in this study are presented in Table 1.

Table 1. Human Resource Capacity Of Extension Officers in Konawe Regency

Number	Dimensions	Average	Category
1	Knowledge	3.71	Good
2	Attitude and Work Ethics	3.61	Good
3	Mastery of Technical Aspects of Innovation	3.66	Good
4	Communication Skills	3.73	Good
5	Introduction to Target Socio-Culture	3.73	Good
Total Average		3.69	Good

Source: Processed Primary Data, 2024.

Table 1 showed that the human resource capacity of extension officers in Konawe Regency is in the good category. This shows that agricultural extension officers in Konawe Regency generally have good human resource capacity but still need to improve further. The human resource capacity of extension officers has an important role in supporting the performance of agricultural extension officers. Tewu (2015), states that human resource capacity has an important role for humans in carrying out their activities. Hasibuan (2009), that professionally, extension officers should have quality human resource capacity to have good knowledge and understanding of farmers and their social systems, and have good abilities regarding the production (cultivation) process.

Performance of Extension Officers

Performance is work performance or actual achievement that has been achieved by an employee. A person's performance is a comparison of the work results achieved by a person with the standards determined by an organization. Performance also means the results achieved by a person, both quality and quantity in an organization in accordance with the responsibilities given to him (Siregar, 2019). The performance of extension officers in this research includes: carrying out dissemination of extension materials according to farmers' needs; carry out the application of agricultural extension methods in the target area; increasing farmers' capacity to access market information, technology, infrastructure and financing; growing and developing farmer group institutions; increasing farming productivity; and growing and developing farmer economic institutions. The results of research on the performance of agricultural instructors are presented in Table 2.

Table 2. Performance of Extension Officers in Konawe Regency

Number	Dimensions	Average	Category
1	Carry out dissemination of extension materials according to farmers' needs	3.88	Good
2	Carry out the application of agricultural extension methods in the target area	3.48	Good
3	Increase farmers' capacity to access market information, technology, infrastructure and financing	3.42	Good
4	Growing and developing farmer group institutions	3.44	Good
5	Increasing farming productivity	3.71	Good
6	Growing and developing farmer economic institutions	3.52	Good
Total Average		3.57	Good

Source: *Processed Primary Data, 2024.*

Agricultural extension workers performance falls into the good group, as Table 2 demonstrates. This indicates that although agricultural extension workers have performed well in their roles, they still require improvement. The actual success of the work completed in compliance with the duties and obligations delegated to them and completed successfully and efficiently within a specified time frame is what is meant by agricultural extension agents' performance. Baruwadi et al (2020), that farmers' performance in raising farming output is influenced by the effective work of agricultural extension agents. The goal of this instructor's performance is to address the issues that farmers have when farming. Dewi et al (2021), that the performance is a job, task, or function carried out for a specific amount of time, or that the performance is a work result.

Research Result Data Analysis

This study analyzes the influence of human resource capacity of agricultural extension workers on their performance in agricultural extension services using simple linear regression analysis. This analysis will examine R-Square and hypothesis testing.

R-Square

R-Square or coefficient of determination in simple linear regression is a statistical measure that shows how much of the proportion or percentage of variation in the dependent variable (Y) can be explained by the independent variable (X). Suhan & Rashmi (2018), that a tool for assessing how much dependent variable are influenced by independent variable is the determination coefficient (R-Square). A more successful predictive model for the relevant research is indicated by a higher R-Square value. Additionally, the R-Square value (R^2) can be

used to assess the influence of particular independent variable and ascertain whether dependent variable (Y) have a substantial impact. The R-Square value is detailed in Table 3.

Table 3. R-Square Value

Construct	R-Square (R ²)
Performance of extension Officers	0.670

Source: Processed Primary Data, 2024.

Table 3 showed that the R-Square value for agricultural extension officers' performance is 0.670, meaning that human resource capability extension officers' have impact on performance of extension officers' by 67 percent impact. According to Chan & Idris (2017), that for endogenous latent variables in the structural model, an R-Square value of 0.67 or above indicates that exogenous variables have a significant impact on the endogenous variables. On the other hand, an R-Square value between 0.19 and 0.33 is regarded as weak, and a value between 0.33 and 0.67 is classified as medium.

Ghozali & Latan (2020) assert that an R-Square value exceeding 0.75 signifies a robust model, while an R-Square ranging from 0.50 to 0.75 denotes a moderate model, and an R-Square between 0.25 and 0.50 reflects a weak model. The criteria for evaluating R-Square are as follows: (1) An R-Square value of 0.75 or higher suggests a strong influence between constructs; (2) An R-Square value between 0.50 and 0.75 indicates a moderate influence; and (3) An R-Square value from 0.25 to 0.50 signifies a weak influence between constructs.

Hypothesis Testing

To evaluate the significance of the influence or link between variables, hypothesis testing entails examining the t-statistics (T) or P-value (P). According to Sarstedt et al (2021), that a significant influence or association is indicated by a t-statistics value more than 1.96 or a P-value below the significance level of 0.05. The P-value is the main focus of hypothesis testing in this study. The findings from the hypothesis testing conducted in this study are detailed in Table 4.

Table 4. Effect of Independent Variables on Dependent Variables

Construct	P Values
Human resource capacity -> Performance of extension Officers	0.000

Source: Processed Primary Data, 2024

Table 4 showed a P-Value of $0.000 < 0.05$ for the impact of human resource capacity of agricultural extension officers on performance of agricultural extension officers in agricultural extension. This demonstrates that performance of agricultural extension officers is significantly improved by their human resource capacity of agricultural extension officers. Performance of agricultural extension officers in carrying out agricultural extension will be influenced and improved by their human resources' ability or capacity to perform their duties. Bahua (2016), that internal factors - that is, factors that come from the instructor himself- such as formal education, training, age, motivation, length of service, or agricultural extension work experience, are among the factors that affect agricultural instructors' performance in their professional roles. Turangan et al (2019), that claimed that one of the elements influencing agricultural instructors' performance is their educational background. Since education has a significant impact on instructors' performance, more education undoubtedly improves instructors' performance because it increases their knowledge and abilities. Listiana et al (2018), claimed that extension activities, particularly those involving key players and business actors as extension service users, will be impacted by the low capacity of extension agents. Extension agents need to be highly capable in order to perform their jobs effectively.

CONCLUSION

Human resource capacity of agricultural extension officers' and performance of agricultural extension in agricultural extension in Konawe Regency are good category. Performance of agricultural extension officers' is significantly improved by human resource capacity. of agricultural extension officers' in agricultural extension in Konawe Regency, Agricultural extension officers perform better the more human resources they have.

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