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Utilization of information through communication media On the behavior of farmers (case of vegetable farmers in casket hillion, wayame village, ambon city)

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Abstract

This study aims to analyze the relationship between the use of communication media and changes in the behavior of vegetable farmers. This research was conducted in Basket Hamlet, Wayame Village, Ambon City. Quantitative research approach, saturated sampling in designating a sample of 25 farmers. Data analysis uses Rank Spearman to see the relationship between variables. The research results show thatthere is no significant relationship between the content of information on vegetable cultivation via radio and TV and changes in farmer behavior. Meanwhile, leaflets and brochures have a real relationship between the content of information on vegetable cultivation and farmer behavior.

Keywords: Information, Communication Media, Farmer's Behavior

INTRODUCTION

The agricultural sector is one of the sectors that has a large contribution to the Gross Domestic Product (GDP) of 13.7% in 2021 (BPS, 2022). In addition, the percentage of workforce in the agricultural sector has increased in 2022 by 88.89% compared to the previous year 2021 of 88.43%, an increase of 0.46% (BPS, 2022). This condition shows that the agricultural sector still plays a strategic role in increasing national income and increasing employment, including in the horticulture sector.

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Horticulture is one of the potential agricultural sub-sectors and is encouraged to improve the welfare of farmers and their families. The horticulture sub-sector in the first and second quarters of 2021 recorded growth of 3.01% and 1.84%. This indicates the excellent contribution of the horticulture sub-sector to the structure of the National GDP (Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2022.Horticultural plants are plants that are needed by humans for bodily health because fruits and vegetables contain micronutrients and are sources of various vitamins, minerals and dietary fiber which are important for the growth, development and health of the body.

Today's society tends to consume vegetables and fruit and reduces foods that contain cholesterol. However, public awareness about the importance of horticultural crops for health has not been followed up by most farmers in remote areas to improve their performance by accessing various information. One of the problems faced by the agricultural sector is the weak mastery and access to agricultural technology. This is in line with Apriantono's statement (2016) that mastery of information and access to farmers' markets is still weak. Some of the information problems faced by farmers are that information technology is still limited, information on stocks of commodity needs has not been developed, the use of information technology has not touched farmers, farmers' interest in seeking information is weak,

Production of vegetable crops in Ambon City has decreased from year to year, where in 2016 the production of vegetables was 9,544, in 2017 there were 9,387, in 2018 there were 5,060, and in 2019 there were 4,970. Production which always decreases in Ambon City shows that there are problems at the farm level. The results of Sopacuaperu's research (2021) show that vegetable farmers in the Tawiri Village area do not utilize information channels related to vegetable farming activities. This is in line with the research results of Damanik, I and Tahitu, M (2020) showing thatnot all farmers who have cell phones with devices that support searching for agricultural information needed in cyberspace. It was further said, the motivating factor for farmers to obtain information through mobile media was only 3.8%. when compared to communicating with family and friends 68.1%. Based on this condition, it is interesting to study the relationship between the use of communication media and changes in the behavior of vegetable farmers in Basket Hamlet, Ambon City.

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RESEARCH METHODS

Research paradigm

The paradigm used in this study is the positivism paradigm. The basic consideration is using positivism, because this paradigm is rooted in ontological understanding which discusses the truth of a fact. To get the truth, we need an approach method to prove the truth of the fact. The approach method is a process of collecting data for research, in order to prove the truth of the facts.

The approach method used in this research is a quantitative approach method. According to Sugiyono, (2015) said, "the quantitative approach method is a method based on a positivist paradigm, used to research on certain populations or samples, collecting data using research instruments, analyzing data is quantitative or statistical, with the aim of testing the hypotheses set based on theory used.

Location and Time of Research

This research activity was carried out in Basket Hamlet, Wayame Village, Ambon City, Maluku Province with the consideration that this area is the center of vegetables in Ambon City. This research was conducted in February - March 2023.

Population and Sampling

Population

The population is a generalization area which consists of: objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2020). According to Handayani (2020), population is the totality of each element to be studied which has the same characteristics, it can be in the form of individuals from a group, events, or something to be studied. PThe population in this study were 25 vegetable farmers in Basket Hamlet, Ambon City.

Sample

According to Siyoto & Sodik (2015), a sample is part of the number and characteristics possessed by the population, or a small part of the population members taken according to certain procedures so that they can represent the population. Therefore, tsampling technique using saturated sampling technique. According to Sugiyono (2017), saturated sampling is a sampling technique when all members of the population are sampled, this is done when the population is relatively small, less than 30,

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or research wants to make generalizations with very small errors. Thus, the determination of the research sample is 25 respondents.

Data collection technique

According to Sugiyono (2014), "there are two main things that affect the quality of research data, namely the quality of research instruments, and the quality of data collection". In research, besides requiring the right method, it is also necessary to choose relevant techniques and data collection so that the results of the research are objective. Zuriah (2009) states, "Using appropriate data collection techniques and tools allows for objective data to be obtained." According to Bungin (2011), "The data collection method is part of the data collection instrument that determines the success or failure of a study." Therefore the data collection techniques used must be in accordance with the nature and characteristics of the research conducted or based on the approach used.

Based on the explanation above, the data collection techniques in this study used questionnaires, interviews, and observation.

Data Analysis Techniques

Data analysis techniques are methods or methods used to analyze research data (Widodo, 2017). Data analysis used in this study is quantitative analysis according to the Spearman Rank statistical test tool to predict the relationship between variables.

DISCUSSION

Communication Media Relations with Changes in Farmer Behavior

Communication media is a bridge or liaison for a person in determining his behavior. This is because the communication media is considered as a medium that can provide new information or new innovations, both through mass media channels and interpersonal communication media channels. Thus, through the use of communication media by farmers, it is hoped that a process of changing behavior in a better direction will occur. Therefore, to find out how strong the relationship between farmers in utilizing communication media is to change farmer behavior, a statistical test analysis is carried out using the Spearman Rank Correlation Test.Spearman's rank statistical analysis is part of non-parametric statistics and does not require assumptions of normality and linearity of the data, in the form of rankings and using an ordinal data scale.

Interpretation of the correlation analysis can be seen based on various requirements as follows;

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	Relationship Terms	In conclusion
1.	If the significance value is < than Alpha 0.05	then there is a relationship
2.	If the significance value is > Alpha 0.05	then there is no relationship
3.	Seeing the strength of the relationship (Correlation Coefficient) through the de Vaus Version Correlation Coefficient Interpretation table as follows:	
	0.00	No connection
	0.01 – 0.09	Relationships are meaningless
	0.10 – 0.29	Weak relationship
	0.30 – 0.49	Moderate relationship
	0.50 – 0.69	Strong relationship
	0.70 – 0.89	Relationships are very strong
	>0.90	The relationship is close to perfect

Table 1.Analysis of the relationship between communication media and changes in the behavior of vegetable farmers in Basket Hamlet, Wayame Village, 2023

Connection	*Correlation Coefficient*	*Sig. (2-tailed)*
Electronic Media and Behavior Change	0.504	0.111
Print Media and Behavior Change	0.292*	0.001
Interpersonal Communication and Behavior Change	0.481	0.045

Note: * significantly different at the 95% level of confidence.

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Electronic Media Relations with Changes in Farmer Behavior

Table 1 shows that the relationship between electronic media (information via TV and radio) and changes in farmer behavior has a significance value or sig (2-tailed) of 0.111 and a correlation coefficient of 0.504. In accordance with the requirements above; if the significance value (0.111) > Alpha 0.05, the conclusion is, "there is no significant relationship between information via electronic media and changes in farmer behavior, and the strength of the relationship (0.504) according to the interpretation table of the de Vaus version of the correlation coefficient, namely a strong relationship.

Based on the results above, it can be explained according to the results in the field that information about vegetable cultivation is not available through TV broadcasts or radio broadcasts so this does not have an impact on the process of changing behavior in farmers. However, farmers with TV and radio media have a strong relationship because farmers after finishing work and returning home, always use radio and television to listen more or watch entertainment programs, such as; Pro 2FM on RRI Ambon, which offers lots of the latest entertainment songs and dramas or films on various private TV channels that always offer entertainment, with a viewing time of 1-3 hours or a maximum frequency of 7-9 times a week.

Print Media Relations with Changes in Farmer Behavior

Table 1 shows that the relationship between print media (information through leaflets and brochures) and changes in farmer behavior has a significance value or sig (2-tailed) of 0.010 and a correlation coefficient of 0.292. In accordance with the requirements above; if the significance value (0.010) is < Alpha 0.05, the conclusion is, "there is a real relationship between information through print media and changes in farmer behavior, and the strength of the relationship (0.292) according to the de Vaus version of the correlation coefficient interpretation table, namely the relationship is weak.

Based on the results above, it can be explained according to the results in the field that information about vegetable cultivation is available through leaflets and brochures provided by extension agents to farmers, so this has an impact on the process of changing farmer behavior, where farmers' knowledge increases, then there is a tendency to act that leads to skill improvement. However, when viewed from the value of the strength of the relationship (Correlation Coefficient = 0.292), farmers have a weak relationship with print media because the level of exposure of farmers to print media is also low, where reading time is ± 30 minutes or the frequency of exposure is 1-2 times a week.

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Interpersonal Communication Relations with Changes in Farmer Behavior

Table 1 shows that the relationship between interpersonal communication media (information through field extension workers and service staff) with changes in farmer behavior has a significance value or sig (2-tailed) of 0.045 and a correlation coefficient of 0.481. In accordance with the requirements above; if the significance value (0.045) is < Alpha 0.05, the conclusion is, "there is a real relationship between information through interpersonal communication media and changes in farmer behavior, and the strength of the relationship (0.481) according to the table of interpretation of the de Vaus version of the correlation coefficient, namely the relationship is moderate.

Based on the results above, it can be explained according to the results in the field that information about vegetable cultivation, farmers also obtained from field extension officers during visits. At that time, farmers and extension workers communicated related to farmer activities regarding vegetables, even though the frequency of arrivals of extension agents was only at the beginning and end of activities carried out by farmers, the farmers took advantage of this meeting. The relationship between farmers and extension workers and service staff is mediocre because apart from the information they receive, farmers are also more independent with the information and experience they have, so there is no dependency on farmers from extension agents or service staff.

CONCLUSION

1. Communication media that are significantly related to changes in the behavior of farmers in Basket Hamlet, namely;
    a. Print media with sig.(2-tailed) 0.001 < of alpha 0.05. That is, leaflet and brochure printing media also contribute to information related to vegetable cultivation that supports the process of changing farmer behavior.
    b. Interpersonal communication media with sig.(2-tailed) 0.045 < of alpha 0.05. This means that even though field extension officers have a low frequency of visits, they also contribute information related to vegetable cultivation so that it also supports the process of changing farmer behavior.

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