AGRISOCIONOMICS
Jurnal Sosial Ekonomi dan Kebijakan Pertanian
ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

IMPROVING THE WORK PERFORMANCE OF AGRICULTURAL EXTENSION WORKERS THROUGH INCREASING CAPACITY, WILLINGNESS, AND OPPORTUNITY

Yufina Risti Indriyani*, Erlinda Yurisinthae, and Eva Dolorosa
Agribusiness Study Program, Faculty of Agriculture, Tanjungpura University, Pontianak, West Kalimantan, Indonesia

*Correspondence Email: ristiindriyani23@gmail.com

Submitted 20 February 2023; Approved 02 August 2023

ABSTRACT

The implementation of development is inseparable from the agricultural sector, which is closely related to extension activities. The performance of extension workers plays a role in determining the success of extension activities. Performance measurement is needed so the organization can make the right decisions for further development. This research aims to determine the factors that affect the performance of agricultural extension workers in Kubu Raya Regency using the Work Performance Theory. Primary data were collected through questionnaires and interviews of respondents with survey methods to identify and analyze the performance of agricultural extension workers using PLS-SEM. The determination of respondents used the census method with the subject of research of 62 agricultural extension workers in Kubu Raya Regency as the second largest rice production center in West Kalimantan. The analysis showed that the exogenous latent variables positively and significantly influence work performance. The research found factors that affect the performance of agricultural extension workers in Kubu Raya Regency include: work experience, knowledge, age, motivation, task characteristics, attitude towards work, perception of the role of extension workers, actions of coworkers, the need for information, compensation, working conditions, organizational policies and time. The efforts can be made to improve performance, such as Training of Trainers, basic and technical training, placing extension workers on their competencies, giving rewards, utilizing of Cyber Extension websites, and strengthening the role and function of BPP.

Keywords: *agricultural extension, PLS-SEM, work performance*

BACKGROUND

The implementation of development is inseparable from the agricultural sector, which is closely related to extension activities. The extension is required to the establishment of sustainable and environmentally friendly agricultural development (Dumasari, 2020). Agricultural extension is a process of non-formal empowerment of agricultural communities to realize farmers who are independent and able to solve their problems (Budi, 2018; Sirnawati, 2020). It aims to enable agricultural business actors to access market information, technology, capital, and other resources, to increase productivity, business efficiency, income, welfare, and awareness of environmental conservation (Kementerian Pertanian, 2009). Through extension activitieshakim, transfer information and technology from extension workers to farmers who are mostly poorly educated and over 50 years old (Chimoita et al., 2017; Joshi & Narayan, 2019; Pello et al., 2019).

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

Extension activities can be successful if farmers play an active role. Farmer participation is an important component in increasing the success of extension activities (Danso-Abbeam et al., 2018; Maulidiah et al., 2021; Suvedi et al., 2017) and agribusiness sustainability (Anwarudin & Dayat, 2019). The managerial and technical ability of farmers as agricultural workers is improved through extension training (Rokhani et al., 2021). Indicators of the success of extension activities are increasing in agricultural yields and farmer incomes (Kosim et al., 2021; Olagunju et al., 2021; Yuniarsih et al., 2021). It can be seen from the increase in the farmer exchange rate as well as changes in farmer behavior shown by an increase in production yields, the use of inputs (means of production), and prices (Evenson, 1997).

The ability of extension workers also contributes to the success of extension. Extension workers must have the knowledge, technical skills, and personal characteristics that lead to outstanding performance (Shah et al., 2013). Soemardjo in Listiana (2018) argues that an extension worker must have non-formal educational abilities, i.e., personal, social, managerial, and professional competencies. According to Bahua (2016), extension workers must have communication skills, extensive knowledge, independence, and the ability to adapt to the characteristics of the farmer. High ability and motivation will make a person at a high level of performance. The level of performance is influenced by personal factors (i.e., capacity and willingness) and environmental factors, i.e., opportunity. If one of these dimensions is at a low level, it will affect the decline in performance (Blumberg & Pringle, 1982).

Mangkunegara in Hakim (2021) explained that performance is an assessment of work results in quality and quantity according to the responsibilities given. Performance indicators of agricultural extension workers, i.e., abilities and skills, rewards, social level, work experience, personality, education, work motivation, internal and external environment of the organization (Bahua, 2016), comparison between extension workers and the number of farmers, transportation facilities, distance and quality of the road to the extension location (Antwi-Agyei & Stringer, 2021), government support, the role of extension workers, careers (Ashraf & Hassan, 2021), ability to master technology (Sabir et al., 2019). Information about performance is needed to help organizations make decisions regarding work performance achieved (Bahua, 2016). Ivan Cevih in Dharma (2010) stated the purposes of performance evaluation are organizational development, reward, motivational tools, HR (Human Resources) planning, compensation, and continuous communication (Dharma, 2010). In general, agricultural extension workers' performance is relatively good (Prasetyo et al., 2020; Rosnita et al., 2017).

Kubu Raya Regency is a paddy production center with the second-largest harvest area in West Kalimantan. However, its productivity is still relatively low compared to other regencies in West Kalimantan Province (BPS Provinsi Kalimantan Barat, 2022). Agricultural production is one of the indicators of the success of extension services, so the performance of agricultural extension workers in Kubu Raya Regency needs to be evaluated to determine the influencing factors and efforts that can be made to improve them. Based on this, the research aims to determine the factors that affect the performance of agricultural extension workers in Kubu Raya Regency using the Work Performance Theory by Blumberg & Pringle (1982) and analyzed using PLS-SEM. This is the novelty of research because the study focuses on determining the factors that affect performance and suggests to improving agricultural extension workers' performance in Kubu Raya Regency.

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

RESEARCH METHODS

The research was conducted in Kubu Raya Regency. The research location was chosen because Kubu Raya Regency is a paddy production center with the second-largest harvest area in West Kalimantan in 2021. However, its productivity still needs to improve (BPS Provinsi Kalimantan Barat, 2022). The high comparison of the number of villages and the number of farmer groups that must be fostered with the number of existing extension workers makes this research necessary to determine the factors that can affect the performance of agricultural extension workers in Kubu Raya Regency (BPS Kabupaten Kubu Raya, 2022; Simluhtan, 2022).

The research was conducted from April 2022 to January 2023. The research aims to determine how much a variable affects other variables based on the correlation coefficient (Syahza, 2021). The types of data obtained are primary data sourced from questionnaires and interviews of respondents and secondary data sourced from books, research journals, and statistical data. The relatively small population size made all of the subjects in this research use saturated sampling techniques or census methods to determine respondents (Banunaek et al., 2017; Syahza, 2021). The respondents to this research were all Field Agricultural Extension Workers at the Food Security and Agriculture Office of Kubu Raya Regency, totaling 62 people and one Head of Extension. According to Barclay in Hossan (2020), a popular heuristic indicates that a small PLS model sample size should equal ten times the biggest number of inner model paths conducted at a particular construct in the inner model. In this research, there are three paths in the inner model, so a minimum of 30 respondents are needed.

Latent variables are variables whose quantitative value cannot be directly known. Exogenous variables are not predicted by other variables, while endogenous variables are predicted by other variables (Hair, et al., 2014). Based on Work Performance Theory by Blumberg & Pringle (1982), the exogenous latent variables in this research are capacity, motivation, and opportunity. The endogenous latent variable is the work performance of the extension worker. A manifest variable is a directly measurable variable or what is commonly called an indicator. The manifest variables of capacity are age, health, level of education, knowledge, work experience, and skills. The manifest variables of willingness are motivation, job satisfaction, job status, attitude towards work, perceived task characteristics, and perceived role expectations. The manifest variables of opportunity are facilities, work situations, actions of coworkers, leader behavior, organizational policies, the information needed, utilization of IT, time, and compensation. Manifest variables of work performance are preparation of extension, extension implementation, evaluation and reporting, and career development.

AGRISOCIONOMICS
Jurnal Sosial Ekonomi dan Kebijakan Pertanian
ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

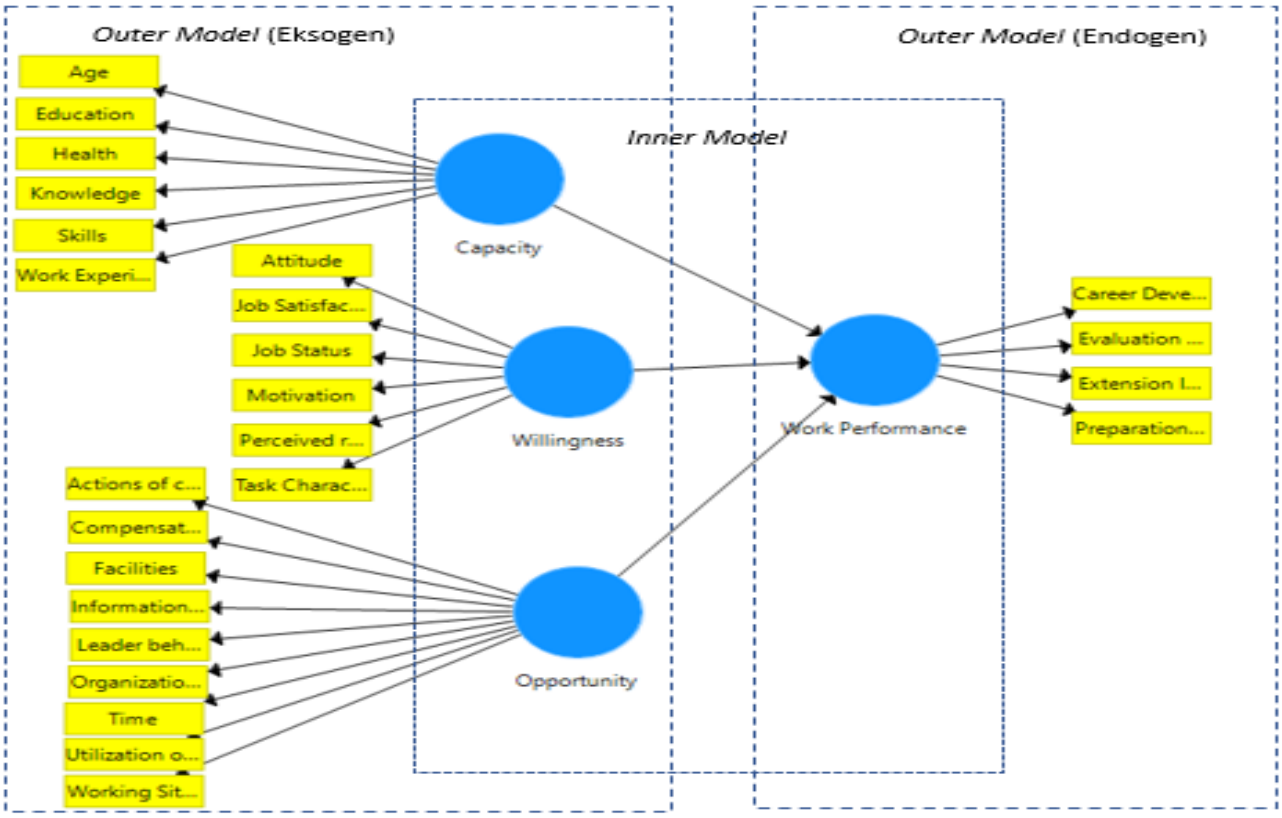


Figure 1. Research Model Specifications
Source: Secondary Data Analysis (2022)

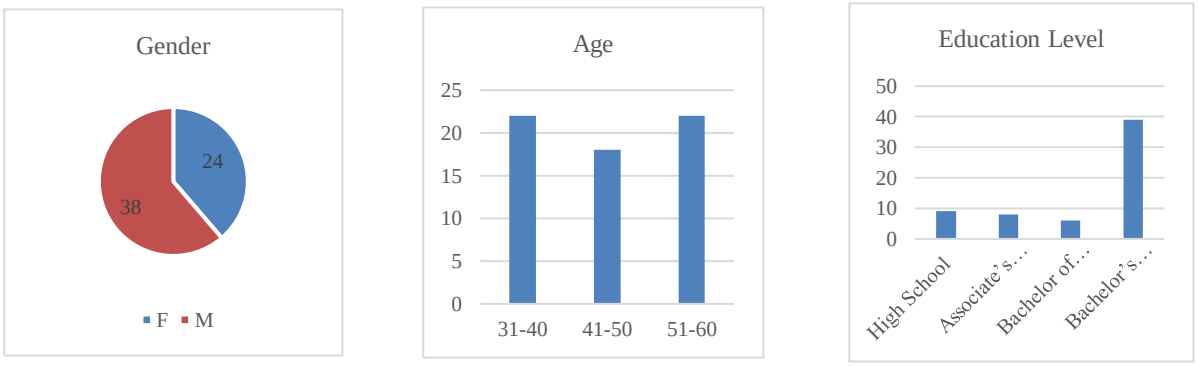
The research model specification figure explains the relationship that occurs between latent variables (i.e. capacity, willingness, opportunity, and work performance), and the manifest variables are reflective. The PLS-SEM analysis tool is used to answer the hypothesis that capacity, willingness, and opportunity affect work performance.

RESULT AND DISCUSSION

Characteristics Of Respondents

The characteristics of extension workers are an inherent personal part that underlies decision-making. Age level implies the length of service, so the higher the age, the better the performance. The level of education affects the way of thinking and acting at work. Some extension workers who are continuing their education toward a Bachelor of Applied Science. Some do not continue their studies because they will retire or are less interest in formal education. Individual characteristics determine how extension workers solve problems encountered (Ilhami et al., 2020). Characteristics affect the ability to innovate and the level of performance of extension workers. Individuals with communicative and cooperative characteristics will more easily adapt to the work environment (Tai et al., 2012).

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024



(a) (b) (c)

Figure 2. Characteristics of Extension Workers: (a) Gender, (b) Age, and (c) Education Level
Source: Primary Data Analysis (2022)

Evaluation Of Measurement Models (Outer Model)

Evaluation of the measurement model aims to see the relationship between the latent variable and its manifest variable by conducting validity and reliability tests.

1. Convergent validity. Manifest variables can considered valid if its obtain an outer loading value > 0.7 (Gye-Soo, 2016). The analysis results show that in the latent variable capacity, the valid manifest variables are age, knowledge, and work experience. In the latent willingness variable, valid manifest variables are motivation, attitude towards work, perceived task characteristics, and perception of roles. Valid manifest variables in the latent opportunity variable include work situation, coworker actions, organizational policies, time, compensation, and the type of information needed. All manifest variables are valid in the endogenous latent variable, which is work performance. Reliability testing measures composite reliability, Cronbach's alpha, and AVE (Average Variance Extracted) on all latent variables. All latent variables in this research have qualified the recommended value so that it can be interpreted that all variables are reliable.

   Table 1. Reliability

Latent Variable	Cronbach's Alpha > 0.6	Composite Reliability > 0.7	AVE > 0.5
Capacity	0.716	0.834	0.627
Willingness	0.790	0.863	0.613
Opportunity	0.855	0.891	0.578
Work Performance	0.722	0.827	0.544

   Source: Primary Data Analysis (2022)

2. Discriminant validity. Discriminant validity aims to test that latent variables are different from other variables. Tests can be performed by cross-loading to measure the reliability of manifest variables and Fornell-Larcker Criterion or Heterotrait-Monotrait (HTMT) to measure the reliability of latent variables (Hair, Sarstedt, et al., 2014; Hamid & Anwar, 2019; Hossan et al., 2020). Cross-loading test results are valid if the correlation value of manifest variables with its latent variable is greater than the correlation value of manifest variables with other latent variables (Hair, et al., 2014). The results of the analysis stated that the manifest variables of each variable are valid and reliable. The value of the correlation between latent variables itself is greater than the value of correlation with other latent variables, so it has passed the Fornell-Larcker Criterion test. All latent variables have a Heterotraite-Monotraite (HTMT) value below 0.9, which means the variable is reliable.

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

Evaluation Of Structural Models (Inner Model)

Structural model evaluation is a measurement to answer the problems regarding the influence of capacity, willingness, and opportunity on the work performance of agricultural extension workers in Kubu Raya Regency. Based on the model framework and hypothesis built in this research, the structural equation model analysis results can be displayed in the following figure.

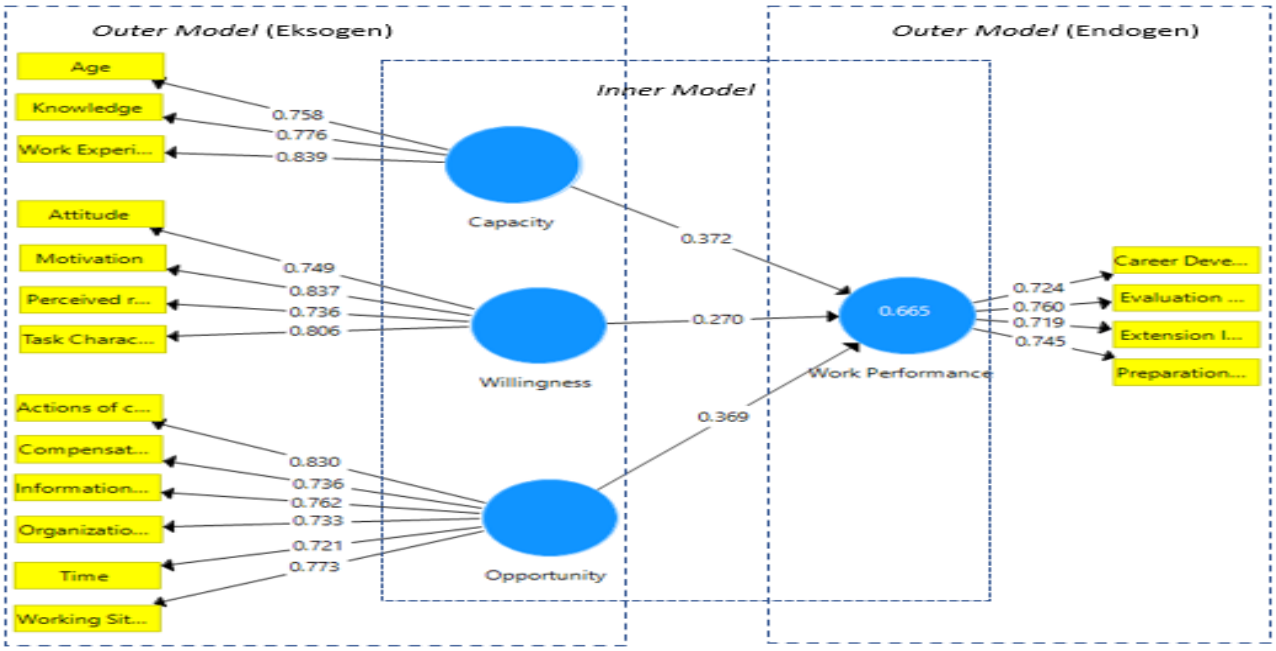


Figure 3. Structural Equation Model Output on Smart PLS v.3.3.9
Source: Primary Data Analysis (2022)

Structural model testing by the coefficient of determination test, GoF (Goodness of Fit) test, and path coefficient test to prove the hypothesis.

1. Coefficient Of Determination (R square). The coefficient of determination or R square is a measurement of how much an exogenous variable affects an endogenous variable (Hamid & Anwar, 2019). The R square value obtained in this research was 0.665 which means that the work performance variable can be explained by 66.5% of the variables tested in this study model and 33.5% explained by other variables that were not researched.
2. Path Coefficient and T statistic. The measurement of the path coefficient is intended to determine the direction of the relationship between exogenous variables to endogenous variables. The table bellow shows that statistically, all three exogenous latent variables (i.e., capacity, willingness, and opportunity) have a significant effect on endogenous variables (work performance). The results showed that the statistical T value > t table (1.96) with a significant level of 5% and the P value < 0,05 which means that the hypothesis is accepted. Capacity has the most direct influence of 0.372 while willingness and opportunity have a direct influence of 0.270 and 0.369 on work performance.

Table 2. Path Coefficient

	Original Sample	**T Statistik > 1.96**	**P Value < 0.05**
Capacity→Work Performance	0.372	2.659	0.008
Willingness→Work Performance	0.270	2.345	0.019
Opportunity→Work Performance	0.369	2.347	0.019

Source: Primary Data Analysis (2022)

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

3. Effect size (F square). The F square value describes how much the exogenous variable affects the endogenous variable (Huang, 2021). The effect is low if $0.02 < F^2 < 0.15$, moderate if $0.15 < F^2 < 0.35$, and high if > 0.35. Capacity gives the greatest influence because capacity is a personal factor that determines how well one performs in completing tasks.

Table 3. F square

	F square
Capacity→Work Performance	0.347 (moderate)
Willingness→Work Performance	0.099 (low)
Opportunity→Work Performance	0.170 (moderate)

Source: Primary Data Analysis (2022)

4. Predictive relevance (Q square). The value of predictive relevance (q^2) shows how well the resulting observation is. Observation is considered good if the q^2 value is above 0. The results of the analysis showed a Q square value of 0.302 so the observations can be categorized as good.
5. Fit Model (Goodness of Fit). The fit model shows how well the model research was through NFI (Normed Fit Index) and SRMR (Standardized Root Mean Residual) values. Ghozali in Astiti (2019) mentioned that the research model is considered fit if the SRMR value is < 0.1 and not feasible if it is > 0.15 (Astiti et al., 2019). The SRMR value obtained in this research was 0.134 which means that the model is not yet fit but still suitable for use. The NFI value obtained was 0.544 explaining the matching value of the research model of 54.4%.

The Effect of Capacity on Work Performance

The capacity of extension workers in Kubu Raya Regency is relatively low. This can impact on the performance of extension workers and farmers' satisfaction with the extension services provided. In addition to education, the capacity of extension workers is also measured by their knowledge and skills. For extension to run well, extension workers must have good communication skills. The results of the analysis showed that manifest variables: work experience, knowledge, and age affect performance. The highest influence is indicated by work experience. As many as 75.8% of extension workers have a working period of more than 10 years. The higher the work experience, the more understanding of the situation and conditions in the work, and the better able to overcome the existing problems in the field. The work experience of extension workers affects the farmers' confidence level in receiving the information conveyed (Chimoita et al., 2017; Listiana et al., 2018). The implementation of Training of Trainers (ToT) activities can improve knowledge and skills and increase the experience of agricultural extension workers in Kubu Raya Regency (Bappeda Kota Subulussalam, 2021; Dinas Pertanian Kota Semarang, 2018).

Knowledge relates to technical abilities obtained from education and training. Participation in training will improve the competence and performance of extension workers (Bahua, 2018; Kustanti et al., 2021). There are 35% of field agricultural extension workers in Kubu Raya Regency have not attended basic training. Extension workers are required to obtain basic training that is considered effective in improving knowledge, attitudes, and skills to be applied in the field (Lestari & Safitri, 2022). Basic training aims to build a foundation for the implementation of the tasks, equalize perceptions of the functions and roles of agricultural extension workers, and increase capacity and professionalism. Basic training can be carried out by budgeting training funds by both local governments and related agencies to send training participants to training centers (Aziz, 2021;

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

Nabire.Net, 2021) or collaborating by bringing in experts from training centers (Abay, 2022; Kabupaten Bone Bolango, 2019).

Age also affects the capacity of extension workers. The age distribution of extension workers in Kubu Raya Regency is almost evenly distributed the age 31-40 years = 35.48%, the age of 41-50 years = 30.65%, and the age of 51-60 years = 33.87%. The age of the extension worker is closely related to work experience and the level of emotional stability in dealing with problems. The higher the age of the extension workers, the better their ability (Purwidyaningrum et al., 2021; Widakdo et al., 2021). Giving awards or rewards can motivate extension workers to improve their low performance or maintain their achievements (Voo et al., 2019). Rewards can be in the form of salary increases or additional benefits, incentives, or promotions. Placing extension workers on their competencies will help them obtain good performance (Hanafi, 2016).

The Effect of Willingness on Work Performance

The willingness of extension workers in carrying out their duties is quite high. Extension workers understand their duties and responsibilities to carry out extension activities. This condition must be maintained so that extension workers remain enthusiastic about working so that the performance of extension workers can be further improved. The results of the analysis showed that manifest variables (i.e., motivation, attitude towards work, job characteristics, and perceptions of role) were valid to be used to measure the willingness of extension workers. Motivation exerts the greatest influence, and perception of the role with the least influence. The main motivation for extension workers in Kubu Raya Regency is for the welfare of farmers and career advancement. Nataliningsih (2020), in her research, proves that the intrinsic motivation of extension workers is to increase the rank of functional positions and extrinsic motivation are social needs related to farmer groups.

Attitudes toward work correlate with willingness, in line with the findings of Damianus' research (2021). Being positive toward work will make a person motivated to increase their knowledge about their work and contribute to improving performance (Damianus et al., 2021). Understanding the task characteristics will bring a sense of responsibility, knowing the skills needed and the impact of work on the lives of others. The extension worker's perception of task characteristics will affect their performance (Abdelghany, 2013). Perceived role expectations of extension workers affect performance and increase production (Sundari et al., 2021). In line with Sundari's research (2021), extension workers hold an important role as mentors and consultants in increasing paddy production. Research data shows that the perceived role expectations of extension workers as facilitators, motivators, and communicators in Kubu Raya Regency are good.

The Effect of Opportunity on Work Performance

Extension workers can make good use of existing opportunities to support their work. Although some extension workers still do not have official vehicle facilities, they still carry out extension activities. This is due to the sense of responsibility for work and the attachment between extension workers and farmers. The results of the analysis showed that manifest variables (i.e. work situation, co-worker actions, organizational policies, type of information needed, time, and compensation) were valid to be used to measure extension employment opportunities. The greatest influence is by co-workers' actions and the smallest influence is by time. The actions of a co-worker are realized in harmonious relationships between extension workers, sharing information and

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

experiences. In line with Nataliningsih's research (2020) with the creation of comfort in the work environment, the extension program can be implemented. Maximizing the function of the Agricultural Extension Center (BPP) as a place to gather and share information will strengthen the relationship between extension workers.

The need for information, especially in agriculture, is obtained to prepare extension materials and solve problems in the field. Extension workers obtain the information needed, especially about production technology, post-harvest, and packaging as well as the marketing of products through social media such as Whatsapp, Facebook, and Youtube. Acceleration of information that is timely, placed, and the target is needed by optimizing the use of information technology devices (Sabir et al., 2019). The activeness of extension workers in finding the latest agricultural information through various media is highly recommended to increase farmer's knowledge and introduce the latest agricultural innovations (Anang et al., 2020; Suratini et al., 2021; Wulandari, 2015). The Ministry of Agriculture has even launched a cyber extension website to make it easier for agricultural extension workers to find and share information needed for agricultural extension services (Cahyono et al., 2020). It is necessary to socialize the use of cyber extension to agricultural extension workers in Kubu Raya Regency.

The work situation is the condition of the infrastructure in the working area and the workload of extension workers. Kubu Raya Regency has 118 villages and 1,884 farmer groups fostered by 62 field agricultural extension workers. The results showed that more than 62% of extension workers fostered two to three villages in their working areas. Ideally, an extension worker fosters one village (Walangadi et al., 2021). An agricultural extension worker is given eight to sixteen farmer groups to be fostered (Kementerian Pertanian, 2009). However, 75.81% of agricultural extension workers in Kubu Raya Regency fostered more than sixteen farmer groups and even 25.8% of extension workers fostered more than 32 farmer groups. High workloads and inadequate facilities can reduce the competence of extension workers (Arifianto et al., 2017).

The shortage of extension workers can have an impact on production and productivity so it is necessary to increase the number of agricultural extension workers () based on workload and a map of the position of agricultural extension workers by the local agency then submitted to the Regional Head for follow-up (Pemerintah Indonesia, 2003; Pramono et al., 2017). The determination of the needs of agricultural extension workers is calculated based on the workload determined from the indicators, i.e. the number of villages that have agricultural potential, the number of assisted farmer groups, and the level of adoption of technological innovations (Kementerian PANRB, 2020).

The extension workers' opportunity to improve performance is also influenced by organizational policies that regulate the educational background of extension workers entirely from agriculture. This is certainly important as basic knowledge in carrying out extension tasks. The income suitability with the workload also affects the opportunity to improve performance. The higher the service life and class of extension workers, the better the compensation received. The time indicator is characterized by the intensity of attendance and punctuality in the meeting of extension workers at BPP. The Agricultural Extension Center (BPP) is a place for discussion, and a source of information for extension workers, so attendance at each meeting plays an important role in the opportunity to improve the performance of extension workers. Strengthening the role and function of BPP as a leading agricultural institution in the field will increase the capacity of extension workers to realize the success of agricultural development (Pusat Penyuluhan Pertanian, 2022). Strengthening BPP is carried out through the provision of extension workers, operational costs, information

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

communication technology, as well as agricultural extension infrastructure and facilities using the district/city budget, the Ministry of Agriculture's budget, and/or other legitimate and non-binding funding sources (Pemerintah Indonesia, 2022).

Work Performance

Overall, the performance of agricultural extension workers in Kubu Raya Regency is quite good. Extension workers have performed their duties and understand their role in their work. Despite their work placement in a remote location with poor infrastructure, they still completed it. The work performance variable was influenced by 66.5% by the three variables (capacity, willingness, and opportunity) tested in this research model and 33.5% were explained by other variables that were not researched. All manifest variables of the work performance are valid, including extension preparation, extension implementation, evaluation and reporting, and career development. The manifest variable that dominates is evaluation and reporting. Extension workers routinely make reports on the implementation of extension (exercises and visits) and report on related links and carry out evaluations of the implementation of agricultural extension at least once a year.

Extension preparation is the planning of information and technology transfer activities by creating extension programs (Kementerian Pertanian, 2009; Prasetyo et al., 2020; Yusuf et al., 2021). The implementation of extension can be carried out either individually, in groups, or mass through face-to-face meetings, field schools, and demonstrations of ways/plots/areas. The topics given in the extension must be following the potential of the land and the characteristics of farmers to be right on target. The implementation of extension activities (i.e. preparation, implementation, evaluation, and reporting), will increase the credit points of extension workers to improve their performance and career of extension workers. Administrative completeness must be considered as evidence of having carried out extension activities for career development or promotion.

CONCLUSION AND SUGGESTION

The results of the analysis showed that capacity, willingness, and opportunity have a positive and significant influence on work performance. Factors that affect work performance from the capacity variable are work experience, knowledge, and age; from the willingness variable are motivation, task characteristics, attitude towards work, and perceived role expectation of extension workers; from the opportunity variable are co-worker actions, the need for information, compensation, work situations, organizational policies and time.

The results showed that capacity has the greatest influence on performance. Increasing the capacity of extension workers can be done by organizing Training of Trainers (ToT) activities for them, placing them by their competencies, and budgeting funds by local government and local agency to facilitate them to obtain basic functional training because it affects their performance and career advancement. The motivation of extension workers in carrying out tasks is high so giving rewards both in the form of incentives and promotions as a form of attention to outstanding extension workers will motivate other extension workers to further improve their performance.

Socialization of the use of the cyber extension website launched by the Ministry of Agriculture, strengthening the function and role of the Agricultural Extension Center (BPP) through the provision of extension workers, operational costs, information communication technology, as well as agricultural extension infrastructure and facilities using the district/city budget, the Ministry of

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

Agriculture's budget, and/or other legitimate and non-binding funding sources. Increasing the number of agricultural extension workers based on workload and a map of the position of agricultural extension workers by the local agency then submitted to the Regional Head for follow-up. Organizations should be more active in budgeting funds for extension capacity building and supporting extension activities by equipping the necessary facilities. Extension workers must also support the organization's programs and decisions.

REFERENCES

Abay, U. (2022). Peningkatan Kompetensi Penyuluh Pertanian Provinsi Bali Melalui Pelatihan Fungsional. Swadaya: Media Bisnis Pertanian. https://www.swadayaonline.com/artikel/12148/Peningkatan-Kompetensi-Penyuluh-Pertanian-Provinsi-Bali-Melalui-Pelatihan-Fungsional/

Abdelghany, M. (2013). Measuring Job Characteristics of Agricultural Extension Centers' Personnel in Assiut Governorate Using Hackman and Oldham'S Model. Arab Universities Journal of Agricultural Sciences, 21(2), 133–139. https://doi.org/10.21608/ajs.2013.14814

Anang, B. T., Bäckman, S., & Sipiläinen, T. (2020). Adoption and Income Effects of Agricultural Extension in Northern Ghana. Scientific African, 7, 1–11. https://doi.org/10.1016/j.sciaf.2019.e00219

Antwi-Agyei, P., & Stringer, L. C. (2021). Improving the Effectiveness of Agricultural Extension Services in Supporting Farmers to Adapt to Climate Change: Insights from Northeastern Ghana. Climate Risk Management, 32, 1–13. https://doi.org/10.1016/j.crm.2021.100304

Anwarudin, O., & Dayat. (2019). The Effect of Farmer Participation in Agricultural Extension on Agribusiness Sustainability in Bogor, Indonesia. International Journal of Multicultural and Multireligious Understanding, 6(3), 1061–1072. https://doi.org/10.18415/ijmmu.v6i3.1028

Arifianto, S., Satmoko, S., & Setiyawan, B. M. (2017). Pengaruh Karakteristik Penyuluh, Kondisi Kerja, Motivasi terhadap Kinerja Penyuluh Pertanian dan Pada Perilaku Petani Padi di Kabupaten Rembang. Agrisocionomics: Jurnal Sosial Ekonomi Dan Kebijkan Pertanian, 1(2), 166–180. https://doi.org/10.14710/agrisocionomics.v1i2.1888

Ashraf, S., & Hassan, Z. Y. (2021). The Challenges Facing Agricultural Extension from the Viewpoint of Agricultural Officers in Pakistan. Journal of Agricultural Science and Technology, 23(3), 499–513. https://dorl.net/dor/20.1001.1.16807073.2021.23.3.11.8

Astiti, N. P. N. S., Suamba, I. K., & Artini, N. W. P. (2019). Pengaruh Disiplin Kerja, Kepuasan Kerja Dan Loyalitas Karyawan Terhadap Kinerja Karyawan Agrowisata Bagus Agro Pelaga. Agrisocionomics: Jurnal Sosial Ekonomi Pertanian, 3(1), 1–9. https://doi.org/10.14710/agrisocionomics.v3i1.4801

Aziz, A. (2021). ASN Penyuluh Pertanian Aceh Tenggara Ikuti Diklat Dasar Fungsional Penyuluh Pertanian di Bapeltan Jambi. PEMKAB ACEH TENGGARA. https://acehtenggarakab.go.id/berita/kategori/pertanian/asn-penyuluh-pertanian-aceh-tenggara-ikuti-diklat-dasar-fungsional-penyuluh-pertanian-di-bapeltan-jambi

Bahua, M. I. (2016). Kinerja Penyuluh Pertanian. Deepublish. https://bappenas.go.id/files/rpjmd_dan_rkpd_kab_kota/RKPD Kota Denpasar 2016.pdf

Bahua, M. I. (2018). Peran Kompetensi Penyuluh Pertanian pada Keterampilan Petani Bawang Merah. Agriekonomika, 7(2), 112–119. https://doi.org/10.21107/agriekonomika.v7i2.4489

Banunaek, M. F., Suminah, & Karsidi, R. (2017). Pemberdayaan untuk Meningkatkan Kinerja Penyuluh Pertanian di Kabupaten Boyolali, Provinsi Jawa Tengah. Jurnal Penyuluhan, 13(2), 210–221. https://doi.org/https://doi.org/10.25015/penyuluhan.v13i2.15169

Bappeda Kota Subulussalam. (2021). Training of Trainer (TOT) Petugas Penyuluh Pertanian Terpadu dalam Mewujudkan Sustainable Palm Oil di Kota Subulussalam.

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

http://bappeda.subulussalamkota.go.id/info/162/training-of-trainer-tot-petugas-penyuluh-pertanian-terpadu-dalam-mewujudkan-sustainable-palm-oil-di-kota-subulussalam.html

Blumberg, M., & Pringle, C. D. (1982). The Missing Opportunity in Organizational Research: Some Implication for a Theory of Work Performance. Academy of Management Review, 7(4), 560–569. https://doi.org/https://doi.org/10.2307/257222

BPS Kabupaten Kubu Raya. (2022). Kabupaten Kubu Raya Dalam Angka 2022. Badan Pusat Statistik Kabupaten Kubu Raya. https://kuburayakab.bps.go.id/pressrelease/2022/03/04/735/nilai-tukar-petani--ntp--januari-2022-di-kalimantan-barat-sebesar-145-26-poin.html

BPS Provinsi Kalimantan Barat. (2022). Provinsi Kalimantan Barat Dalam Angka 2022. BPS Provinsi Kalimantan Barat. https://kalbar.bps.go.id/publication/2022/02/25/a56f1074cd96425dead3f279/provinsi-kalimantan-barat-dalam-angka-2022.html

Budi, S. (2018). Penyuluhan Pertanian : Teori dan Penerapannya. CV. Sefa Bumi Persada - Aceh. https://repository.unimal.ac.id/5123/1/bUKU.pdf

Cahyono, B., Setyowati, R., & Ihsaniyati, H. (2020). Adopsi Cyber Extension oleh Penyuluh Pertanian Lapangan (PPL) dan Faktor yang Mempengaruhi. Jurnal Penyuluhan, 16(2), 240–249. https://doi.org/10.25015/16202028362

Chimoita, E. L., Onyango, C. M., Kimenju, J. W., & Gweyi-Onyango, J. P. (2017). The Agricultural Extension Agents Influence on the Uptake of Improved Sorghum Technologies in Embu County, Kenya. Universal Journal of Agricultural Research, 5(4), 219–225. https://doi.org/10.13189/ujar.2017.050403

Damianus, A., Luciano, A., Ubasa, A., Magallanes, T., Encarnacion, M. J., & Ranay, F. B. (2021). Attitude toward the work and its influence on the Individual work performance of employees: Basis for Attitude Management. Technium Social Sciences Journal, 18(1), 378–394. https://hal.archives-ouvertes.fr/hal-03195389/document

Danso-Abbeam, G., Ehiakpor, D. S., & Aidoo, R. (2018). Agricultural Extension and its Effects on Farm Productivity and Income: Insight from Northern Ghana. Agriculture and Food Security, 7(74), 1–10. https://doi.org/10.1186/s40066-018-0225-x

Dharma, S. (2010). Manajemen Kinerja, Falsafah, Teori dan Penerapannya. Pustaka Pelajar.

Dinas Pertanian Kota Semarang. (2018). Training of Trainers bagi Penyuluh Pertanian Swadaya. https://dispertan.semarangkota.go.id/training-penyuluh-pertanian/

Dumasari. (2020). Pembangunan Pertanian Mendahulukan yang Tertinggal. Pustaka Pelajar. http://digital.library.ump.ac.id/1063/

Evenson, R. (1997). Chapter 4 - The Economic Contributions of Agricultural Extension to Agricultural and Rural Development. In Improving agricultural extension: A reference manual. https://www.fao.org/3/W5830E/w5830e06.htm#TopOfPage

Gye-Soo, K. (2016). Partial Least Squares Structural Equation Modeling (PLS-SEM): An Application in Customer Satisfaction Research. International Journal of U- and e- Service, Science and Technology, 9(4), 61–68. https://doi.org/10.14257/ijunesst.2016.9.4.07

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). SAGE Publications, Inc. https://doi.org/10.1016/j.lrp.2013.01.002

Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial Least Squares Structural Equation Modeling (PLS-SEM): An Emerging Tool in Business Research. European Business Review, 26(2), 106–121. https://doi.org/10.1108/EBR-10-2013-0128

Hakim, M., Hidayat, H., & Fanani, M. R. (2021). HRIS, Kepuasan Kerja dan Kinerja Karyawan. In Yogyakarta: Indomedia Pustaka (1st ed.). CV. Lebah Buku Group.

Hamid, R. S., & Anwar, S. M. (2019). Structural Equation Modeling (SEM) Berbasis Varian: Konsep Dasar dan Aplikasi dengan Program SmartPLS 3.2.8 dalam Riset Bisnis. PT Inkubator Penulis

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

Indonesia. http://digilib.stiem.ac.id:8080/xmlui/handle/123456789/626

Hanafi, A. (2016). Influence of Individual Characteristic and Organization Climate on Job Satisfaction and Its Impact on Employee Performance. Sains Humanika, 8(4), 37–44. https://doi.org/10.11113/sh.v8n4.843

Hossan, D., Aktar, A., & Zhang, Q. (2020). A Study on Partial Least Squares Structural Equation Modeling (PLS-SEM) as Emerging Tool in Action Research. LC International Journal of Stem, 1(4), 130–145. https://doi.org/https://doi.org/10.47150

Huang, C. H. (2021). Using PLS-SEM Model to Explore the Influencing Factors of Learning Satisfaction in Blended Learning. Education Sciences, 11(5), 1–17. https://doi.org/10.3390/educsci11050249

Ilhami, S. D., Armanu, & Noermijati. (2020). Research in Business & Social Science The impact of individual characteristics towards employee performance of millennial employees : The moderating effect of training. International Journal of Research in Business and Social Science, 9(4), 323–329. https://doi.org/10.20525/ijrbs.v9i4.758

Joshi, R., & Narayan, A. (2019). Performance Measurement Model for Agriculture Extension Services for Sustainable Livelihood of the Farmers: Evidences from India. Theoretical Economics Letters, 09(05), 1259–1283. https://doi.org/10.4236/tel.2019.95082

Kabupaten Bone Bolango. (2019). Penyuluh Pertanian Ikut Pelatihan Dasar Jabatan Fungsional. Info Publik. https://infopublik.id/kategori/nusantara/334688/penyuluh-pertanian-ikut-pelatihan-dasar-jabatan-fungsional

Kementerian PANRB. (2020). Peraturan Menteri Pendayagunaan Aparatur Negara dan Reformasi Birokrasi Republik Indonesia Nomor 35 Tahun 2020 Tentang Jabatan Fungsional Penyuluh Pertanian. https://peraturan.bpk.go.id/Home/Details/143730/permen-pan-rb-no-35-tahun-2020

Kementerian Pertanian. (2009). Peraturan Menteri Pertanian Nomor 35 Tahun 2009 Tentang Petunjuk Teknis Pelaksanaan Jabatan Fungsional Penyuluh Pertanian dan Angka Kreditnya. http://bkd.kalbarprov.go.id/wp-content/uploads/2020/06/permentan_penyuluh_pertanian_35_2009.pdf

Kosim, M., Aji, J. M. M., & Hapsari, T. D. (2021). The Impact of Agricultural Extension on Productivity of Smallholder Sugarcane Farmers in East Java. IOP Conference Series: Earth and Environmental Science, 892(1), 1–8. https://doi.org/10.1088/1755-1315/892/1/012009

Kustanti, E., Rusmana, A., & Hadisiwi, P. (2021). Peningkatan Kompetensi Penyuluh Pertanian Di Balai Pengkajian Teknologi Pertanian (BPTP) Dengan Pemanfaatan Media Komunikasi. Analisis Kebijakan Pertanian, 19(2), 177–187. https://doi.org/10.21082/akp.v19n2.2021.177-187

Lestari, P., & Safitri, L. (2022). Kajian Efektivitas Pelatihan Dasar Ahli Terhadap Kinerja Penyuluh Dalam Mendukung Pembangunan Pertanian. Jurnal Pengabdian Masyarakat Indonesia (JPMI), 2(5), 621–627. https://doi.org/10.52436/1.jpmi.770

Listiana, I., Sumardjo, Sadono, D., & Tjiptopranoto, P. (2018). Hubungan Kapasitas Penyuluh dengan Kepuasan Petani dalam Kegiatan Penyuluhan. Jurnal Penyuluhan, 14(2), 244–256. https://doi.org/10.25015/penyuluhan.v14i2.18673

Maulidiah, I. A., Prayitno, G., & Aris Subagiyo. (2021). The Role of Agricultural Extension on The Development of Farmers Group (Case Study : Pare Sub-district, Blitar Regency, East Java). SOCA Jurnal Sosial Ekonomi Pertanian, 15(3), 482–494. https://doi.org/https://doi.org/10.24843/SOCA.2021.v15.i03.p06

Nabire.Net. (2021). Penyuluh Pertanian Nabire Ikuti Diklat di Batangkaluku Sulsel. https://www.nabire.net/penyuluh-pertanian-nabire-ikuti-diklat-di-batangkaluku-sulsel/

Olagunju, O., Hassan, S., Samad, M. Y. A., & Kasin, R. (2021). Enhancing Work Performance of Extension Agents Among Cocoa Farmers in Malaysia: The Influence of Human Resource Development Skills. Walailak Journal of Science and Technology, 18(5), 1–15.

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

https://doi.org/10.48048/wjst.2021.8985

Pello, W. Y., Renoat, E., & Banunaek, M. F. (2019). Pengaruh Peran dan Motivasi Penyuluh Pertanian terhadap Inovasi Teknologi Budidaya Tanaman Padi Sawah di Kecamatan Kupang Timur , Kabupaten Kupang Provinsi Nusa Tenggara Timur. Jurnal Penyuluhan, 15(2), 184–194. https://doi.org/https://doi.org/10.25015/penyuluhan.v15i2.27732

Pemerintah Indonesia. (2003). Peraturan Pemerintah Republik Indonesia Nomor 54 Tahun 2003 Tentang Perubahan atas Peraturan Pemerintah Nomor 97 Tahun 2000 Tentang Formasi Pegawai Negeri Sipil. https://peraturan.bpk.go.id/Home/Details/52332/pp-no-54-tahun-2003

Pemerintah Indonesia. (2022). Peraturan Presiden Republik Indonesia Nomor 35 Tahun 2022 Tentang Penguatan Fungsi Penyuluhan Pertanian. https://jdih.setkab.go.id/PUUdoc/176662/Salinan_Perpres_Nomor_35_Tahun_2022.pdf

Pramono, H., Fatchiya, A., & Sadono, D. (2017). Kompetensi Penyuluh Tenaga Harian Lepas Tenaga Bantu Penyuluh Pertanian di Kabupaten Garut, Jawa Barat. Jurnal Penyuluhan, 13(2), 194–209. https://doi.org/10.25015/penyuluhan.v13i2.16128

Prasetyo, A. S., Aulia, A. N., & Sinaga, A. S. (2020). Performance of Agricultural Extension Workers in Implementing Urban Agriculture Programs in Banyumanik District, Semarang City, Indonesia. Journal of Socioeconomics and Development, 3(1), 29–36. https://doi.org/10.31328/jsed.v3i1.1315

Purwidyaningrum, A., Rondhi, M., & Hapsari, T. D. (2021). Performance of Farming Extension Field during the COVID-19 Pandemic in East Java. IOP Conference Series: Earth and Environmental Science, 892(1), 1–6. https://doi.org/10.1088/1755-1315/892/1/012030

Pusat Penyuluhan Pertanian. (2022). Penguatan Peran dan Fungsi Balai Penyuluhan Pertanian (BPP). Cyber Extension. http://cybex.pertanian.go.id/mobile/artikel/99513/PENGUATAN-PERAN-DAN-FUNGSI-BALAI-PENYULUHAN-PERTANIAN-BPP/

Rokhani, Asrofi, A., Adi, A. H., Khasan, A. F., & Rondhi, M. (2021). The Effect of Agricultural Extension Access on The Performance of Smallholder Sugarcane Farmers in Indonesia. AGRARIS: Journal of Agribusiness and Rural Development Research, 7(2), 142–159. https://doi.org/https://doi.org/10.18196/agraris.v7i2.11224

Rosnita, R., Yulida, R., Dewi, N., Arifudin, A., & Andriani, Y. (2017). The Performance of Agricultural Extension Workers on Empowerment and Independent Smallholder Farmer in Riau Province, Indonesia. International Journal of Agriculture System, 5(1), 69–83. https://doi.org/10.20956/ijas.v5i1.1173

Sabir, Sugiyanto, Sukesi, K., & Yuliati, Y. (2019). The Strategy for Implementing Agricultural Extension Based on Cyber Extension in Malang Raya Region, Indonesia. Habitat, 30(1), 8–15. https://doi.org/10.21776/ub.habitat.2019.030.1.2

Shah, J. A., Asmuni, A., & Ismail, A. (2013). Roles of Extension Agents Towards Agricultural Practice in Malaysia. International Journal on Advanced Science, Engineering and Information Technology, 3(1), 59. https://doi.org/10.18517/ijaseit.3.1.278

Simluhtan. (2022). Data Penyuluh Pertanian, Perikanan dan Kehutanan. https://app2.pertanian.go.id/simluh2014/viewreport/rekapbp3k_poktan_agt.php?id_prop=61&prop_utuh=6112 [diakses 11 Februari 2022]

Sirnawati, E. (2020). Urgensi Penyuluhan Pertanian Baru Di Indonesia. IAARD Press. https://penerbit.brin.go.id/press/catalog/book/259

Sundari, R. S., Umbara, D. S., Hiidayati, R., & Fitriadi, B. W. (2021). Peran Penyuluh Pertanian terhadap Hasil Produksi Padi Sawah di Kabupaten Tasikmalaya. Agriekonomika, 10(1), 1474. https://doi.org/https://doi.org/10.21107/agriekonomika.v10i1.9962

Suratini, Muljono, P., & Tri Wibowo, C. (2021). Pemanfaatan Media Sosial untuk Mendukung Kegiatan Penyuluhan Pertanian di Kabupaten Minahasa Provinsi Sulawesi Utara. Jurnal Penyuluhan, 17(1), 12–24. https://doi.org/10.25015/17202132302

Suvedi, M., Ghimire, R., & Kaplowitz, M. (2017). Farmers' Participation in Extension Programs and

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (1): 97-111, March 2024

Technology Adoption in Rural Nepal: a Logistic Regression Analysis. Journal of Agricultural Education and Extension, 23(4), 1–21. https://doi.org/10.1080/1389224X.2017.1323653

Syahza, A. (2021). Metodologi Penelitian (Edisi Revisi). Unri Press. https://www.researchgate.net/publication/354697863_Metodologi_Penelitian

Tai, C. L., Chen, L. C., Chang, C. M., & Hong, J. Y. (2012). The Impact of Individual Characteristics, Personality Traits, Perceived Risk on Young People's Intention to Participate in Overseas Working Holiday. Procedia - Social and Behavioral Sciences, 57, 388–395. https://doi.org/10.1016/j.sbspro.2012.09.1202

Voo, I. C., Soehod, K., Ashari, H., Shahrin, E., Zaidahwati, N., Noor, R. bte M., & Doulatabadi, M. (2019). Individual Characteristics Influencing Employee Innovative Behavior with Reward as Moderator in Universiti Teknologi Malaysia. Proceedings of the International Conference on Industrial Engineering and Operations Management, 3439–3449. http://ieomsociety.org/ieom2019/papers/785.pdf

Walangadi, Y. T., Bahua, M. I., Arham, M. A., & Jamil, M. H. (2021). The Influencing Factors on the Performance of Agricultural Extension Agents in Corn Farming (a Study Conducted in Gorontalo Province). IOP Conference Series: Earth and Environmental Science, 681(1), 1–6. https://doi.org/10.1088/1755-1315/681/1/012001

Widakdo, D. S. W. P. J., Holik, A., & Iska, L. N. (2021). Efek Usia dan Tingkat Pendidikan terhadap Kinerja Tenaga Bantu Penyuluh Pertanian. Jurnal Penyuluhan, 17(1), 52–59. https://doi.org/10.25015/17202131614

Wulandari, R. (2015). Information Needs And Source Information Of Agricultural Extension Workers in DIY. Agraris: Journal of Agribusiness and Rural Development Research, 1(2), 85–87. https://doi.org/10.18196/agr.1212

Yuniarsih, E. T., Andriyani, I., Rahmatiah, Halil, W., Rahmi, Anas, S., & Sunanto. (2021). Relationship Analysis of Farmers Participation in Agricultural Extension with Corn Production Levels in South Sulawesi. IOP Conference Series: Earth and Environmental Science, 911(1). https://doi.org/10.1088/1755-1315/911/1/012070

Yusuf, M. S. A., Hassan, S., Syarifuddin, N., Ramzi, N. I. M., Ismail, N. S., & Yaakob, N. A. (2021). Extension Agent Performance Level in Granary Areas, Malaysia as Perceived by Farmers. International Journal of Academic Research in Business and Social Sciences, 11(10), 1–12. https://doi.org/10.6007/ijarbss/v11-i10/10914