FIELD AGRICULTURAL EXTENSION WORKERS' INFLUENCE AS MEDIATORS ON THE SUCCESS OF STRATEGIC IRRIGATION MODERNIZATION AND URGENT REHABILITATION PROJECT (SIMURP) PROGRAM

Siti Aisyah, Achmad Faqih, Ratna Komala, Nurjibbah Aini, Rima Merliana Dewi, Rio Alamsyah

Faculty of Agriculture, Universitas Swadaya Gunung Jati, Indonesia
Email: siti.aisyahagri@ugj.ac.id, achmad.faqih@ugj.ac.id

ABSTRACT

The role of field agricultural extension workers (PPL) as mediators for the success of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program is certainly very important because field agricultural extension workers are responsible for conveying information on programs held by the Cirebon Regency government for farmers. This research was conducted aiming to determine the effect of the role of field agricultural extension workers as mediators on the success of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program. The purpose of this study is: to determine the effect of the role of PPL as a mediator on the success of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program. The research design used in this research is descriptive quantitative research with a census sample research technique. The population used was the Mulya I farmer group in Kudukeras Village, Babakan District, Cirebon Regency. The part that is examined is the effect of the role of agricultural extension workers (PPL) as mediators on the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program. The number of samples used was 59 respondents with a census sampling technique. The research was conducted from May to June 2022. The data analysis technique used a simple linear regression test. Based on the results of the research and discussion that has been described, it can be concluded that the role of agricultural extension workers (PPL) as a mediator has a positive effect on the success of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program in Kudukeras Village, Babakan District, Cirebon Regency.

INTRODUCTION

The Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) is an integration of 4 Ministries/Institutions, namely the Ministry of National Development Planning of the Republic of Indonesia/National Development Planning Agency (Bappenas), Ministry of Public Works and Public Housing, Ministry of Home Affairs, and Ministry of Agriculture. In this project funded by loans from the World Bank and the Asian Infrastructure Investment Bank, each K/L has its own roles and responsibilities. However, it is expected that all activities of the ministries/institutions involved will contribute to the main objectives of the project, namely improving irrigation services and strengthening accountability in the management of irrigation schemes. In terms of improving irrigation services, there are two indicators as benchmarks for the success of activities, i.e. areas facilitated with new or rehabilitated irrigation/drainage services and percentage of crop intensity (IP).

The Ministry of Agriculture, in this case the Agricultural Human Resources Extension and Development Agency (BPPSDMP) as the National Project Implementation Unit (NPIU)

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is entrusted with pushing achievement indicators to increase IP from 180% to 200%. To achieve this goal, NPIU BPPSDMP developed an approach using Climate Smart Agriculture (CSA) cultivation technology. The application of the CSA method is claimed to be able to increase production and quality of agricultural products even in the midst of a changing climate while ensuring sustainable agriculture. The Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program is a strategic irrigation modernization and urgent rehabilitation program. The management is across four ministries and agencies, namely Bappenas, Ministry of Agriculture, Ministry of PUPR and Ministry of Home Affairs. The location of the implementation of the SIMURP project in Indonesia is in the Watershed Area (DAS). The implementation of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program is spread across several regions, one of which is Cirebon Regency with the location of the Cikeusik River Irrigation Area to be precise in the eastern part of Cirebon Regency. In supporting the SIMURP program mentioned above, the Cirebon District Agriculture Office is given the authority to carry out activities such as Support for the Implementation of Climate Smart Agriculture (CSA) Technology for Paddy and Non-Rice accompanied by Extension Workers.InTo support the SIMURP program mentioned above, the Cirebon District Agriculture Office is given the authority to carry out activities such as Support for the Implementation of Climate Smart Agriculture (CSA) Technology for Paddy and Non-Rice accompanied by Extension Workers.

The success of agricultural development is not only determined by the condition of agricultural resources, but also determined by the very strategic role of agricultural extension workers and the quality of the human resources that support it, namely human resources who master and are able to utilize and develop science and technology in the sustainable management of agricultural resources (West Java Food Crops Agriculture Office, 2011).

The role of PPL as a mediator in procuring infrastructure facilities provides equipment and physical buildings used to carry out agricultural extension services. Utilization of facilities and infrastructure is the optimal use of equipment and physical buildings in an effective and efficient agricultural extension. The agricultural extension and infrastructure sector has the task of preparing materials for policy formulation, implementation and provision of technical guidance as well as monitoring and evaluation in the field of infrastructure, manpower and methods as well as information on agricultural extension services.(Faqih, 2016a). This program seeks to ensure that the agricultural sector remains safe in providing food supplies for the community as well as a form of empowerment for farmers.

As an empowerment program, the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program is expected to be a solution for farmers and it is hoped that this program can make a real contribution to farmers. This is also included in the main goal of empowerment and of course this program must also be in accordance with the principles of community empowerment where there must be self-sufficiency or independence from farmers in managing their land, of course with the assistance of extension workers from BPP in each region. This program is expected to be sustainable so that this program can be a solution not only during a pandemic but can also be a solution for the following years (Pians, 2020).

From these problems the researcher wants to analyze the role of agricultural extension workers as mediators who influence the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program in Kudukeras Village, Babakan District, Kunigan Regency. Based on the background that has been described, the research objective is to

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determine the effect of the role of PPL as a mediator on the success of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program.

RESEARCH METHOD

Research design

This research will be carried out in Kudukeras Village, Babakan District, Cirebon Regency. The location selection was carried out purposively with the consideration that Kudukeras Village, Babakan District, Cirebon Regency was one of the recipient villages of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) assistance program. This research was carried out from May to June 2022 and the object of the research isMulya I Farmer Group in Kudukeras Village, Babakan District, Cirebon Regency with a total sample of 59 people.

Operational variables are divided into 2 namelyThe dependent variable is the variable that arises because of the independent variable. The dependent variable (dependent variable) in this study namely The success of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) Program. while the independent variable is the independent variable, namely the role of PPL as a mediator.

Variable Operationalization

Table1. Operational Research Variables

No	Variable	Indicator	Sub-Indicators	Measurement Scale
1.	Role of PPL as Mediator (X)	Information success frequency	Service Punctuality Involvement	Ordinal
		Clarity in the delivery of information	Material presentation Socialization Speaking skills	Ordinal
		Linking information sources with farmers	Discussion Visit Technical guidance	Ordinal
2.	The Success of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) Program (Y)	Productivity	Results Land area	Ordinal
		Acceptance of farmers	Production amount Price	Ordinal
		Farmers' income	Sale Production Cost	Ordinal

Data Collection Techniques

The data collection technique is by observing and interviewing through questionnaires.This method is used in data collection techniques by making a list of written questions posed to respondents which in this case are filled out by farmers who have received the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program.

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This method is used to reveal data from the variable Role of Field Agricultural Extension as a mediator (X) and the Success of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) Program (Y).

Data analysis technique

Descriptive Analysis

The descriptive research variable is used to find out the respondents' answers, namely the influence of the Role of Field Agricultural Extension (PPL) as a Mediator for the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) Program. This analysis uses descriptive analysis of percentages using a quantitative research design supported by qualitative data (Sugiyono, 2017).

Table 2. Intervals and Categories of Respondents' Answers

No	Respondent Answer Intervals	Answer Category
1.	81 - 100 %	Strongly agree
2.	61 - 80 %	Agree
3.	41 - 60 %	Disagree
4.	21 - 40 %	Disagree
5.	0 - 20 %	Strongly Disagree

Simple Linear Regression

Simple linear regression analysis is an equation model that describes the relationship of one independent variable/ predictor (X) with one dependent variable/ response (Y), which is usually depicted with a straight line. Simple linear regression analysis is mathematically expressed by: $\hat{Y} = a + bX$ which: $\hat{Y}$ = regression line/ response variable a = constant (intercept), intercept with the vertical axis b = regression constant (slope) X = independent variable/ predictor.

t test

According to Ghozali (2016), the t statistical test basically shows how far the influence of one dependent variable individually in explaining the dependent variable. The test was carried out using a significance level of 0.05 (a=5%). Acceptance or rejection of the hypothesis is carried out with the following criteria:

The results of regression testing of the PPL role variable as a mediator show that this variable has a significant value of 0.000 <0.050 and for t count it is known that it is 5.095 with a t table of 1.672. With a comparison of t count 5,095 > t table of 1,672, it can be concluded that H0 is rejected and H1 is accepted. This shows that the variable role of PPL as a mediator influences the variable success of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program because the activities are carried out and are good at explaining the information obtained.

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Coefficient of Determination (R2)

The coefficient of determination is carried out to find out how much influence the independent variable has on the dependent variable. According to Ghozali (2016) the coefficient of determination (R2) basically measures how far the model's ability to explain the dependent variables. In another multiple linear regression model, the contribution of the independent variable to the dependent variable will be seen by looking at the total coefficient of determination (R2), if the R2 obtained is close to one, it can be said that the stronger the model applies the relationship of the independent variable to the dependent variable.

Formula:

Kd = r2 x 100

Information:

Kd   = Coefficient of Determination

r2   = Correlation

RESULTS AND DISCUSSION

Descriptive Analysis

As for knowing the number of respondents who agreed or disagreed in expressing their opinion through a questionnaire, it can be seen in the following table:

Table 3. Statements of Respondents Regarding the Variable Role of PPL as Mediator

Indicator	Actual Score (Real)	Ideal Score (Hope)	Percentage (%)	Category
Information success frequency	1936	2655	72.9%	Agree
Clarity in the delivery of information	1944	2655	73.2%	Agree
Linking information sources with farmers	2028	2655	76.3%	Agree
Total number	**5908**	**7965**	**74.1%**	**Agree**

Based on Table 3, it can be seen that the frequency indicator for information success is 72.9%, which means that the indicator is categorized as agree. The indicator of clarity in conveying information is 73.2%, which means that the indicator is categorized as agree. The indicator links sources of information with farmers with a percentage of 76.3%, which means that the indicator is categorized as agreeing. A clearer explanation can be seen as follows.

Information Success Frequency

The frequency of successful information from an ideal score of 2655 gets an actual score of 1936, which means that the farmers receiving the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program agree that extension workers have provided good service, have attended and provided appropriate information to farmers and have involve farmers in activities that have been held by BPP Babakan District.

To assess the frequency indicators of information success, the following steps are used:
1) The actual score was obtained by calculating all of the respondents' opinions, namely 1936 from 59 respondents and 9 indicator questions.

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2) The ideal score is obtained from the highest value multiplied by the number of respondents also multiplied by the number of indicator respondent questions, namely 5 x 59 x 9 = 2655.

The selection of measurements must consider several aspects, for example the objectives of the research, the context of the organization that uses it, aspects of the information system, and the independent variables used to assess its success, the research method, and the level of analysis whether at the individual, organizational or societal level (Jogiyanto, 2007).

According to Hartati (2020) this information system, in the opinion of the author, is important to develop because 1) The working area of the KPSDMP-KP includes BPP and Posluhtan which are geographically spread throughout the Garut Regency area, so that communication is supported by a good information system between extension agents in districts, sub-districts and villages very necessary to provide the best service to farmers. 2) New innovations in agriculture from the Agricultural Research and Development Center will be accessed more quickly by KPSDMP-KP. 3) Information systems are also important for adding the latest knowledge related to all information related to farming (agribusiness) from upstream to downstream. Gradually depending on the cost capability and readiness (skills) of the operating operator. The results of the study also note that at the district level (KPSDMP-KP) and most of the sub-districts (BPP) already have computers, so all that remains is to add tools that can be used to access the internet network. It would be nice if when this internet-based information system was applied it was accompanied by training until the operators (from KPSDMP-KP employees) could be released to run the system. So that dependence on service providers can be reduced or even eliminated. It would be nice if when this internet-based information system was applied it was accompanied by training until the operators (from KPSDMP-KP employees) could be released to run the system. So that dependence on service providers can be reduced or even eliminated. It would be nice if when this internet-based information system was applied it was accompanied by training until the operators (from KPSDMP-KP employees) could be released to run the system. So that dependence on service providers can be reduced or even eliminated.

The use of an information system is influenced by individual abilities (self-efficacy). Everyone's individual abilities are different so the way they operate a system to get the information needed is also different. According to Novela (2012) there is a positive relationship between social factors and conditions that facilitate the use of information technology. This is similar to the results of Amin (2013), John and Surej (2013), reveals that computer self-efficacy has a positive effect on the intention to use the information system.

Based on this explanation, it is assumed that technology acceptance, social factors, facilitating conditions and computer self-efficacy will influence the utilization of information technology systems. Based on this phenomenon, the aim of this research is to examine and analyze the effect of technology acceptance, social factors, facilitating conditions and computer self-efficacy on technology utilization.

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1) Clarity in Submitting Information

Clarity in conveying information from an ideal score of 2665 gets an actual score of 1944, which means that the farmers receiving the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program agree that the extension workers have explained the material clearly and can be understood by farmers, have made visits/socialization regularly scheduled and has provided explanations held by the Babakan District BPP.

To assess indicators of clarity in conveying information, the following steps are used:

a) The actual score was obtained by calculating all of the respondents' opinions, namely 1944 of 59 respondents and 9 indicator questions.

b) The ideal score is obtained from the highest value multiplied by the number of respondents also multiplied by the number of indicator respondent questions, namely 5 x 59 x 9 = 2655.

Information is the result of thinking that is obtained both from oneself and from the environment by involving intellectual processes. This intellectual process includes the processing of stimuli obtained through the senses and then forwarded to the brain to be processed based on insight, experience, and faith, after which it can be received as information and becomes a message if it is communicated to others (Wijianto, 2008). Good information is information that has quality or quality. According to Elian (2014) states that quality information is determined by conformity with facts, timely, relevant in decision making, and describes the problem or solution as a whole and complete.

In a public organization communication is a difficult and complex process. The process of transferring news downwards within an organization or from organization to organization, and other communicators are often subject to distortions, both intentional and unintentional. Because if different communication sources provide inconsistent interpretations of a standard and policy objectives, or the same information source provides conflicting interpretations that are full of contradictions. At one-point policy implementers will find it more difficult to carry out a policy intensively.

According to this explanation, effective communication occurs when each group member has the same understanding of information in receiving information. The effectiveness of counseling through communication and improving the skills of farmers through groups will provide optimal results. In this regard, the government has launched a group institutional development program that receives intensive and continuous guidance from the government (Rintjap et al., 2015).

With information technology, the amount or presentation of rice production will increase and be clear even with a fixed number of human resources, in other words, technology has an important role in agriculture (Basavaraja et al., 2008). In addition, farmers also need knowledge in using this technology so that the process is efficient.

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Linking Information Sources with Farmers

Linking information sources with farmers from an ideal score of 2655 to an actual score of 2028, which means that farmers receiving the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program agree that extension workers have provided media for discussion, made visits and organized trainings held by BPP Babakan District.

To assess the indicator of connecting sources of information with farmers, the following steps are used:

1) The actual score was obtained by calculating all of the respondents' opinions, namely 2028 from 59 respondents and 9 indicator questions.
2) The ideal score is obtained from the highest value multiplied by the number of respondents also multiplied by the number of indicator respondent questions, namely 5 x 59 x 9 = 2655.

Mulyandari (2011) stated that so many research results in agriculture have been and are being carried out, and there will continue to be agricultural research in the future, at home and abroad. The results of agricultural research in the form of agricultural information both in terms of production and marketing techniques are essentially to improve or solve existing problems in agriculture. This information is not just for consumption for other researchers to be used as reference material but far ahead is for farmers, especially to improve their standard of living and welfare, which in the end is also to meet the needs of all human life.

According to Elian (2014) stated that the facts on the ground showed that most of the respondents searched for information on the internet in order to complement existing information, then broaden their horizons, so that not all of the information was passed on to farmers. Based on the confession of one of the respondents, they said that the information they obtained had actually been obtained before, it's just that they were trying to find more and more complete information via the internet. In general, information passed on to farmers is information that was not previously received by farmers. While the existing information becomes material for discussion with fellow extension workers, they keep a lot of this information to themselves. Likewise the results of agricultural research have been collected and publicly published to the public with various media, however, the information on the results of the agricultural research has in fact not reached its main target, namely the farmers. It is hoped that the stagnation of innovation and agricultural information that has occurred so far can be improved with ICT through access to market information, production inputs, consumer trends, marketing, disease and pest/livestock management, market opportunities, market prices, and so on (Mulyandar & Baga, 2019).

According to Amin (2013) the main focus of the application of ICT (Information and Communication Technologies) in agriculture is to meet the needs of farmers for information. Some of the important information needed by farmers that seems important for agricultural growth and development, including market information, latest techniques and technologies, rural development programs and subsidies, weather forecasting, post-harvest technology, general agricultural news, information on processing insurance/claims, input prices and availability, early warning and management of diseases and pests, soil testing and soil sampling information.

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As for knowing the number of respondents who agreed or disagreed in expressing their opinion through a questionnaire, it can be seen in the following table:

Table 4. Results of Respondents' Statements Regarding the Success Variables of the SIMURP Program

Indicator	Actual Score (Real)	Ideal Score (hope)	Percentage (%)	Category
Productivity	1340	1770	75.7%	Agree
Acceptance of farmers	1357	1770	76.6%	Agree
Farmers' income	2065	2655	77.7%	Agree
Total number	4762	6195	76.8%	Agree

Based on the results of the table above, it shows that the productivity indicator, farmer acceptance, is categorized as agree while farmer income is categorized as disagree. Meanwhile, to be clearer, it can be seen as follows:

1) Productivity

Productivity from an ideal score of 1770 gets an actual score of 1340, which means that farmers receiving the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program agree that extension workers have succeeded in increasing production yields and providing production land area in accordance with the Strategic Irrigation Modernization and Urgent Rehabilitation Project program. (SIMURP) .

To assess productivity indicators, the following steps are used:

a) The actual score was obtained by calculating all of the respondents' opinions, namely 1340 of 59 respondents and 6 indicator questions.

b) The ideal score is obtained from the highest score multiplied by the number of respondents also multiplied by the number of indicator respondent questions, namely 5 x 59 x 6 = 1770.

To increase the productivity of lowland rice farmers, farmers need to develop knowledge by participating in training provided by the agricultural service. Lowland rice farmers need to increase their ability, productivity and competitiveness as well as the absorption of agricultural technology is very much needed in efforts to diversify agricultural products. In fact, the economic prospects for lowland rice farmers are very large, considering that rice is a community need (both regional and national). Moreover, if it is supported by government policies that favor farmers, it can encourage the suitability of rice commodity prices. Therefore, if farmers can increase their production, it will be able to increase income and welfare for farming families.

According to Sumarjo (2019) productivity is a comparison between the results achieved (output) with the overall resources (input) used per unit of time. According to Djari (2008) at the company level, productivity is generally defined as a systemic concept and is related to changes in input to output by the system. Specifically, for the labor element, work productivity implies a comparison between the results (output) obtained in each unit of time.

In Kartasaputra (2012) to increase the productivity of lowland rice farmers, farmers need to develop knowledge by participating in training provided by the Agriculture Service. In line with this research in theory improving the quality of human resources can increase productivity, experience and facts are also combined factors that can help build the State (Nyamekye et al., 2016).

According to Brambilla and Porto (2011) farmers who provide large areas of land for their crops, the farmer's product will significantly increase and productivity will also increase significantly.

2) Farmer Acceptance

Acceptance of farmers from an ideal score of 1770 gets an actual score of 1357, which means that farmers receiving the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program agree that extension workers have fulfilled the amount of farmers' production and influenced crop prices/yields.

To assess farmers' acceptance indicators, the following steps are used:
a) The actual score was obtained by calculating all of the respondents' opinions, namely 1357 of 59 respondents and 6 indicator questions.
b) The ideal score is obtained from the highest score multiplied by the number of respondents also multiplied by the number of indicator respondent questions, namely 5 x 59 x 6 = 1770.

According to Soekartawi (2013) revenue is the product of the production obtained by the selling price. Total revenue is a function of the number of goods, it is also the product of the number of goods multiplied by the goods per unit. As in the cost concept, the revenue concept also recognizes the meaning of the average margin. Average revenue (AR) is the revenue obtained per unit of goods, which is the quotient of total revenue to the number of goods, margin revenue (MR) is the additional revenue obtained from each additional unit of goods produced or sold(Sumarsono, 2013).

Farming revenue is the multiplication of the production obtained by the selling price of the product. Total revenue or gross income is the total production value before deducting production costs. Net income of farming is the difference between revenue and all costs or total costs. Farmers in obtaining high net income, farmers must strive for high revenues and low production costs (Sedyastuti, 2018). According to Soekartawi's research(2013)states that revenue is revenue minus expenses incurred. A person's income basically depends on work in the service or production sector, as well as the time spent on working hours, the level of hourly income received.

Hailu said(2014)states that agricultural and information technology has a positive and significant effect on the receipts and income of farmers, the relationship between them is that the greater the production, the higher the output. According to Mulyandari(2011)it was found that information technology has a significant relationship to rice production and farmer productivity. In Mulyani (2015) technology has a significant effect on acceptance through productivity.

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3) Farmers' income

Farmers' income from an ideal score of 2655 gets an actual score of 2065, which means that farmers receiving the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program agree that extension workers have made it easier to sell, have helped in production and financing.

To assess farmers' income indicators, the following steps are used:
a) The actual score was obtained by calculating all of the respondents' opinions, namely 2065 from 59 respondents and 9 indicator questions.
b) The ideal score is obtained from the highest value multiplied by the number of respondents also multiplied by the number of indicator respondent questions, namely 5 x 59 x 9 = 2655.

Income from a business depends on the relationship between production costs incurred by the amount of revenue from sales. One way to make a profit is to reduce costs. The income earned by farmers is not only determined by the level of production produced but also determined by the prevailing price level and the marketing system of the commodity. The amount of income greatly affects the level of welfare of farmers.

To increase farmers' income, there are several things that must be done, namely 1. Increasing farmer's production, namely to increase farmer's production, the government must first prepare seeds that are superior and suitable for highland areas. 2. Provide counseling to farmers about how to properly manage paddy rice farming, starting from land management to post-harvest. 3. Strengthening farmer groups so that it is easier to get information whenever there are new innovations.

Income is an indicator to measure the welfare of a person or society, so that this community's income reflects the economic progress of a society. According to Soekartawi (2013) individual income is income received by all households in the economy from payments for the use of the factors of production they own and from other sources. Then Soekartawi (2013) states income is the amount of income received by residents for their work performance during a certain period, whether daily, weekly, monthly or yearly. Business activities will ultimately generate income in the form of cash value received from product sales minus expenses incurred.

Agriculture still plays an important role in developing countries as one of the economic sectors which is a source of income for workers with an estimated 60 to 70 percent in developing countries (Nguyen et al., 2015). Not only that, on the other hand, the Indonesian economy is influenced by the availability of rice as a primary need (Zaeroni & Rustariyuni, 2016).

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Simple Linear Regression Tes
Coefficient of Determination

Table 5. Results of the Analysis of the Coefficient of Determination

Summary models			
Model	R	R Square	Adjusted R Square	std. Error of the Estimate
1	.559a	.313	.301	6.69023
a. Predictors: (Constant), ppl's role as a mediator			

From the results of the coefficient of determination test above, it means that the influence of the independent variable on the dependent variable can be seen by the value of the coefficient of determination. The value of the coefficient of determination can be seen from the R^2 value in the regression model. The R^2 value in this regression model is 0.313. This means that 31.3% of the success of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program in Kudukeras village is influenced by the variable role of agricultural extension workers as mediators.

The role of agricultural extension agents as mediators in the success rate indicator of information is that extension officers are tasked with conveying the findings of research institutions to farmers. On the other hand, farmers are obliged to report the implementation of the findings of the recommended research institute as a liaison, then the extension worker conveys the results of the application of the technology carried out by farmers to the relevant research institution as further reference material. Van Den Ban and Hawkins (2012), stated that the main role of extension in many countries was previously seen as the transfer of technology from researchers to farmers. Likewise, the role of extension is seen more as a process of helping farmers to make their own decisions by adding choices for them.

According to Kartasapoetra (2012) in each Agricultural Extension Working Area (WKPP) a PPL officer (field agricultural extension) is assigned who will carry out the following main tasks: 1) Disseminate useful agricultural information 2) Teach better skills 3) Provide suggestions or recommendations for businesses more profitable farming 4) Helping to develop production facilities, work facilities and agricultural information materials needed by farmers 5) Developing self-employment and self-sufficiency of farmers so that their standard of living can be further improved.

Amen (2013) stated that the main focus of the application of ICT (Information and Communication Technologies) in agriculture is to meet the needs of farmers for information. Some of the important information needed by farmers that seems important for agricultural growth and development, including market information, latest techniques and technologies, rural development programs and subsidies, weather forecasting, post-harvest technology, general agricultural news, information on processing insurance/claims, input prices and availability, early warning and management of diseases and pests, soil testing and soil sampling information.

Elian (2014) states agricultural extension agents in accordance with their main tasks and functions are positioned as technical functional executors in charge of preparing,

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implementing, developing, evaluating and reporting agricultural extension activities. Agricultural extension workers need adequate information support in carrying out their main duties and functions. The information obtained can be used to improve the performance, work performance and competence of agricultural extension workers.

The purpose of communication according to Levis(2003)among others are: (1) information, to provide information using a thought-provoking approach, (2) persuasive, to arouse recipient feelings, (3) changing the behavior (attitudes, knowledge and skills) of development actors, (4) increasing the ability to develop business efficiently in the field of business that can provide benefits for an indefinite period of time and (5) realize the active participation of the community in development.

The role of the agricultural extension agent as a mediator in the indicator of clarity in conveying information is that the field agricultural extension worker (PPL) provides the information then filters and evaluates the available information and processes the information into a form that is suitable for the recipient of the information (Cangara, 2012).

Mulyandri (2011) stated that so many research results in the agricultural sector have been and are being carried out, and there will continue to be agricultural research in the future, inside and outside the country. The results of agricultural research in the form of agricultural information both in terms of production and marketing techniques are essentially to improve or solve existing problems in agriculture. This information is not just for consumption for other researchers to be used as reference material but far ahead is for farmers, especially to improve their standard of living and welfare, which in the end is also to meet the needs of all human life.

The role of agricultural extension workers as mediators in the performance of farmer groups is a task that can be expected to be carried out by agricultural extension workers in providing information and connecting farmers with information sources to overcome the problems they face. Agricultural extension agents act as mediators, namely extension workers provide information and connect farmers with sources of information in solving the problems they face. The role of agricultural extension agents as mediators of agricultural extension in providing capital for farmers and their families, so that they have the ability to help themselves to achieve goals in improving the welfare of farmers and their families, without having to damage the surrounding environment (Djari, 2008).

The results of this study are supported by the results of research by Novela (2012) changes in the behavior of farmers in paddy rice farming after participating in the climate field school program there is a very real change because the farmers in the study area are mostly very responsive and responsive to existing innovations and after the farmers attend the climate field school the behavior of the farmers changes, farmers can/ better know how to anticipate extreme climates that often change. With the knowledge and attitudes of farmers in accepting the material taught by field agricultural extension agents, this will change the behavior of farmers, they will know and understand the material being taught so that it can be applied in rice farming.

Soekarno (2017) explained that the main characteristics of this community group include being intimate, the relationship is comprehensive and intimate. In addition, the relationship within the social group of this community is also private and exclusive (the association bond is only for people in the community). When extension workers as outsiders come to this community, the farming community will tend to refuse. Especially when extension workers come without understanding farmers and only come to give messages without any feedback process. Thus, farmers will tend to see this as a conflict.

The role of agricultural extension as a mediator in the indicators of connecting information with farmersnamely people who carry out the task of giving encouragement to farmers so they want to change their way of thinking, way of working and way of life that is more in line with the changing times, the development of more advanced agricultural technology. Thus an agricultural extension agent in carrying out his duties has three roles: a. Acting as an educator, providing knowledge or new ways of cultivating plants so that farmers are more focused in their farming business, increasing yields and overcoming failures in their farming business. b. Act as a leader, who can guide and motivate farmers to want to change their way of thinking, how they work so that openness arises and is willing to accept new farming methods that are more efficient and successful, so that their standard of living is more prosperous. c. Acts as an advisor, who can serve, provide instructions and help farmers either in the form of demonstrations or examples of work in farming solve all problems faced (Kartasapoetra, 2012).

According to the research results of Faqih and Aisyah (2019) in this case agricultural extension is an important factor in realizing agricultural goals. development. Through this counseling, the agricultural community is equipped with knowledge, skills, introduction of new technology packages and innovations in the field of agriculture with its business, planting or agribusiness values or principles, creating human resources with a basic philosophy of being diligent, cooperative, innovative, creative.In line with the results of research by Faqih (2016a) Agricultural extension plays an important role in improving the quality of human resources, as well as functioning as a learning process for the main actors so that farmers can help and organize themselves to access market information, technology, capital and other resources.

Information is something that is conveyed, it can be in the form of news, words or knowledge, this knowledge is obtained from investigations, studies or instructions. Information is an arrangement of facts or data that is conveyed from one person to another. Everyone has a different pattern of understanding of information (Evans, 2000). As stated by Mulayandari (2011) that in the process of transferring information, it must be based on the needs and problems of farmers and messages must be able to be tested by users.

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Test Results t

Table 6. Results of t test analysis

	Coefficients^a				
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	std. Error	Betas	t	Sig.
1 (Constant)	31,152	9,773		3,188	002
the role of ppl as a mediator	.495	.097	.559	5,095	.000

Source: SPSS Output Results

In Table 6 above the results of the regression test of the PPL role variable as a mediator shows that this variable has a significant value of 0.000 <0.050 and for t count it is known that it is 5.095 with a t table of 1.672. With a comparison of t count 5,095 > t table of 1,672, it can be concluded that H0 is rejected and H1 is accepted. This shows that the variable role of PPL as a mediator influences the variable success of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program because the activities are carried out and are good at explaining the information obtained.

According to Djari (2008) the role of agricultural extension workers as mediators of agricultural extension in providing capital for farmers and their families, so that they have the ability to help themselves to achieve goals in improving the welfare of farmers and their families, without having to damage the surrounding environment

The results of this study are supported by the results of research by Faqih (2016b) that the role of extension agents as mediators in the performance of farmer groups has a high category or has been implemented properly. This is similar to the results of research by Thomas et al.,(2020) that steps towards sustainable agriculture require information and knowledge of farmers and knowledge practices. The higher the information obtained, the more successful the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program will be.

CONCLUSION

Based on the results of the research and discussion that has been described, it can be concluded that the role of agricultural extension workers (PPL) as a mediator has a positive effect on the success of the Strategic Irrigation Modernization and Urgent Rehabilitation Project (SIMURP) program in Kudukeras Village, Babakan District, Cirebon Regency.

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