

## **The Role Of Agricultural Extension In The Empowerment Of The Tampilon Putra Farmer Group In Belayan Village, North Malinau**

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### **ABSTRACT**

The role of extension workers in empowerment is to help farmers improve their welfare by enriching knowledge, where extension workers help farmers to be independent, strong and able to solve a problem. The aims of this study were to determine the role of agricultural extension workers in empowering the Tampilon Putra farmer group in Belayan Village, North Malinau District. Knowing the level of empowerment of the Tampilon Putra farmer group in Belayan Village, North Malinau sub-district. Knowing the strategy of empowering the Tampilon Putra farmer group through agricultural extension workers in Belayan Village, North Malinau District. The location of this research is the Tampilon Putra Farmers Group, Belayan Village, North Malinau District, Malinau Regency. The sampling method used in this research is purposive sampling. Respondents in this study amounted to 30 people, namely the Tampilon Putra farmer group with active members. The data analysis used in this research is descriptive qualitative to determine the role of agricultural instructors in empowering farmer groups, secondly using a Likert scale to measure attitudes, opinions, perceptions of a person or group of people about the occurrence of social phenomena, third using SWOT analysis to determine farmer group empowerment strategies. Based on the results of the study that the role of agricultural extension workers as motivators, facilitators, and educators was (Good) in the process of empowering the Tampilon Putra Farmer Group, the level of empowerment of farmer groups with the level of participation, fulfillment of needs and skills possessed by farmer group members was (Good), strategy empowerment of farmer groups shows the value of  $x < 0$  that is 0.69 and  $y > 0.65$ . This means that the position of the farmer group empowerment strategy is in quadrant I with the recommendation given is a growth strategy.

### **Keywords:**

*Role of Extension,  
Empowerment*

### **INTRODUCTION**

Indonesia has been known as an agricultural country that has abundant natural resources, so it has great potential for agribusiness business development in the current era of globalization. This business is expected to be able to make a major contribution to the agricultural sector in improving the economy. The development of the agricultural sector as the main food sector in Indonesia is very important. This is because more than 55% of the Indonesian population works and carries out their activities in the chain sector and lives in rural areas (Krisnandhi, 2009).

Agricultural extension is a non-formal education for farmers which includes activities in the knowledge and skills of extension workers to farmers and their families which take place through the teaching and learning process (Mardikanto, 2009).

Agricultural extension workers must be competent agricultural experts, in addition to being able to guide farmers, extension workers also provide motivation, provide information and increase farmer awareness so that they can encourage their interest in learning in facing problems in the field. In the development of the extension performance system in the regions, especially in Belayan Village, Malinau Regency, North Malinau District, there are many obstacles.

In general, among others, the lack and limited infrastructure in supporting counseling activities in the field such as, props. in addition, the quality of human resources of farmers, most of whom have a secondary education background, some even have never gone to school so that more

strategies and approaches are needed to farmers so that farmers can accept and understand a good extension system. in addition, access to technology, both extension workers and farmers is very minimal, due to the lack of procurement of technical training, so that facilities are included and in activities[1]technical training activities for extension workers and farmers are lacking so that extension workers are difficult in terms of applying the latest technology, as well as difficulty in facing and changing the behavior patterns of skills and attitudes (PKS) of farmers due to various kinds of characters faced, such as farmers who are willing to accept, unwilling to accept, accept but not yet willing to try, and accept as well as try/apply. Malinau Regency has 3 Excellent Programs, one of the Government Programs is Regional Rice (RASDA).

The purpose of Rasda is to educate the public not to depend on the rice distributed by the central government through Bulog. The Malinau Regency Government also helped alleviate poverty in Malinau by distributing Rasda to targeted families. One way for the Rasda program to run is for local governments in Malinau Regency, especially in the agricultural and food sectors, to carry out planting season program activities (MT1, MT2, and MT3), provide Superior Seeds, and provide fertilizer to farmers. This activity aims to enable farmers in Malinau to increase their production and in addition to being consumed, farmers can also sell their grain (Rice) to Rasda so that farmers can support their families' economy. Based on the description above, researchers are interested in

researching related to "The Role of Agricultural Extension Workers in Empowering the Tampilon Putra Farmer Group in Belayan Village, North Malinau District, Malinau Regency".

### METHOD

The location of this study was carried out in Belayan Village, North Malinau District, The Performingon Putra Farmer Group. The determination of samples in this study using purposive sampling techniques is a sample determination technique with special considerations so that it is suitable for sample (Noor Juliansyah, 2011). The respondents taken in this study were as many as 30 people from all members of the Tampilon Putra farmer group in Belayan Village. With the criteria, the respondents are an active farmer group in Tampilon Putra Belayan Village. The data collection method uses observation, interview, and questionnaire techniques. The data analysis method uses descriptive qualitative for the first purpose by using the flow of stages through data reduction, data presentation, inference and verification as well as final conclusions. Meanwhile, to answer the second goal by using a likert scale to measure variables which are then described as indicators through questions using scores. As for answering the third goal by using a SWOT analysis.

### RESULT AND DISCUSSION

#### 1. The Role of Agricultural Extension Workers in empowering the Tampilon Putra Farmer Group in Belayan Village

The role of agricultural extension workers is to help farmers to obtain information and knowledge regarding the current development of agriculture to achieve a better life. Helping farmers predict the chances of success with all consequences that include being a Motivator, Educator and Facilitator by providing broad insights to farmers that can be influenced by various social and economic aspects.

##### 2. The Role of Agricultural Extension Workers as Motivators

Indicators	1	2	3	Average	Conclusion
Motivators	0	1	29	3	Good
	0	26	4	2	Good Enough
	0	2	28	3	Good
	0	21	9	2	Good Enough
				<b>2.58</b>	<b>Good</b>

Source: Primary Data Analysis, 2021.

##### 3. The Role of Agricultural Extension Workers as Educators

Indicators	1	2	3	Average	Conclusion
Educators	0	2	28	3	Good
	0	4	26	3	Good
	0	17	13	2	Good
	0	27	3	2	Good Enough
				<b>3</b>	<b>Good</b>

Source: Primary Data Analysis, 2021.

##### 4. The Role of Agricultural Extension Workers as Facilitators

Indicators	1	2	3	Average	Conclusion
Facilitator	0	3	27	3	Good
	0	3	27	3	Good
	0	4	26	3	Good
	0	1	29	3	Good
				<b>2.9</b>	<b>Good</b>

Source: Primary Data Analysis, 2021.

##### 5. The Level of Empowerment of the Munculon Putra Farmer Group

N	Internal Factors	Weight	Ratin	Weight	2	3	Averag	Conclusio
o		t	g	Score			e	n

<b>Strength</b>					
1	The surrounding environment supports the cultivation of rice plants	0.14	3.9	0.57	
2	Have good planning related to cultivation	0.14	3.4	0.47	
3	Mastering good and correct cultivation methods	0.15	3.7	0.54	
4	Have the ability and willingness to cultivate	0.14	3.7	0.54	
5	Have land for cultivation	0.14	3.5	0.49	
6	Rice farming is the main business of the belayan community	0.14	3.5	0.50	
7	Cooperation between groups is already good	0.14	3.7	0.53	
<b>Amount of power</b>		<b>1.00</b>		<b>3.63</b>	
<b>Debilitation</b>					
1	Lack of knowledge of technology and market information	0.16	2.8	0.45	
2	Lack of experience in running a business in groups	0.14	2.8	0.40	
3	Susceptible to pests	0.13	2.9	0.38	
4	Sales are still in the form of grain in collectors	0.14	3	0.43	
5	The result of production in self-consumption	0.16	2.8	0.45	
6	The frequency of mentoring is still lacking	0.14	3	0.41	
7	Members are less active in discussion events	0.14	3.2	0.41	
<b>Number of Weaknesses</b>		<b>1.00</b>		<b>2.94</b>	
<b>TOTAL IFAS</b>				<b>0.70</b>	
<b>Indicators</b>					
Participation of the Tampilon Putra Farmer Group	0	1	2	3	Good
	2	2	6	2	Good Enough
	0	2	8	3	Good
	0	0	3	3	Good
				<b>2.76</b>	<b>Good</b>
Meeting Needs	0	1	2	3	Good
	0	0	3	3	Good
	0	0	3	3	Good
	0	8	2	3	Good
				<b>2.93</b>	<b>Good</b>
Skills	0	0	3	3	Good
	0	1	2	3	Good
	0	0	3	3	Good
	0	1	1	2	Good
				<b>2.84</b>	<b>Good</b>

Source: Primary Data Analysis, 2021.

## 6. Strategy for Empowering the Munculon Putra Farmer Group

The empowerment of farmer groups is essentially the creation of an atmosphere that allows the potential of the community to develop. It is based on the view that no society has absolutely no power. The empowerment of farmer groups is very important because along with the times it requires the ability of farmer groups in a better and independent direction. As an empowerment strategy, it is necessary to know what are the factors of strengths, weaknesses, opportunities and threats, so we can develop a strategy for the empowerment of the Tampilon Putra Farming Group.

### a. Internal Factors Affecting the Empowerment of the Tampilon Putra Farmer Group

**Table 3** Internal Factors of the Men's Performing Farmers Group  
Source: primary data analysis, 2021

### b. External Factors Affecting the Empowerment of The Munculon Putra Farmer Group

**Table 4** External Factors of the Farmers Group appearon Putra

No.	External Factors
	Opportunities

1	The facilities provided by agricultural extension workers are adequate
2	The existence of market opportunities
3	Consumers who come to buy grain to farmers directly
4	The fulfillment of facility needs has begun to be met by agricultural extension workers
Number of Opportunities	
<b>Threats</b>	
1	Less favorable weather such as the occurrence of rains that lead to crop failure.
2	Attacks of pests and diseases
3	The condition of supporting infrastructure such as roads, irrigation, bridges is not supportive
4	Price game by middlemen

Source: primary data analysis, 2021

### c. Determination of Farmer Group Empowerment Strategy

**Table 5** Ifas Analysis Results of The Performingon Putra Farmer Group

N o.	Internal Factors	Weight	Rating	Weight Score
<b>Strength</b>				
1	The surrounding environment supports the cultivation of rice plants	0.1	3.	0.
		4	9	57
2	Have good planning related to cultivation	0.1	3.	0.
		4	4	47
3	Mastering good and correct cultivation methods	0.1	3.	0.
		5	7	54
4	Have the ability and willingness to cultivate	0.1	3.	0.
		4	7	54
5	Have land for cultivation	0.1	3.	0.
		4	5	49
6	Rice farming is the main business of the belayan community	0.1	3.	0.
		4	5	50
7	Cooperation between groups is already good	0.1	3.	0.
		4	7	53
<b>Amount of power</b>		<b>1.0</b>	<b>3.</b>	<b>3.</b>
		<b>0</b>		<b>63</b>
<b>Debilitation</b>				
1	Lack of knowledge of technology and market information	0.1	2.	0.
		6	8	45
2	Lack of experience in running a business in groups	0.1	2.	0.
		4	8	40
3	Susceptible to pests	0.1	2.	0.
		3	9	38
4	Sales are still in the form of grain in collectors	0.1	3	0.
		4		43
5	The result of production in self-consumption	0.1	2.	0.
		6	8	45
6	The frequency of mentoring is still lacking	0.1	3	0.
		4		41
7	Members are less active in discussion events	0.1	3.	0.
		4	2	41
<b>Number of Weaknesses</b>		<b>1.0</b>	<b>2.</b>	<b>2.</b>
		<b>0</b>		<b>94</b>
<b>TOTAL IFAS</b>				<b>0,</b>
				<b>70</b>

Source: primary data analysis, 2021

Based on the calculation of the IFAS matrix in the table above which consists of strength factors and weakness factors, the first most important strength factor is that members of the Tampilon Putra Farmer Group have the ability and willingness to cultivate rice plants, the two members of the Tampilon Putra Farmer Group master good and correct cultivation methods, the third is that the surrounding environment supports the cultivation of rice plants. The score from the weighting of the strength factor was obtained by 3.63 and the weakness factor by 2.94 with a score difference of 0.69 (this value is obtained from the result of the total strength being subtracted with the total result of weakness) So the total overall strength and weakness is 0.70. Determining the factors that have an influence on the empowerment of the Tampilon Putra Farmer Group, it is necessary to evaluate external strategic factors[1], both opportunities and threats using EFAS. More details can be seen in the Table below.

**Table 6** Results of EFAS Analysis of The Performingon Putra Farmer Group in Belayan Village

N o.	External Factors	Weight	Rating	Weight Score
<b>Opportunities</b>				
1	The facilities provided by agricultural extension workers are adequate	0.23	3.33	0.76
2	The existence of market opportunities	0.25	3.63	0.92
3	Consumers who come to buy rice grain to farmers directly	0.33	3.83	1.25
4	knowledge of facility needs has been met by agricultural extension workers	0.19	3.47	0.66
<b>Number of Opportunities</b>		<b>1.00</b>		<b>3.60</b>
<b>Threats</b>				
1	Less favorable weather such as the occurrence of rains that cause crop failure	0.27	2.9	0.79
2	Attacks of pests and diseases	0.28	3	0.85
3	supporting infrastructure conditions such as roads, irrigation, bridges are less supportive	0.21	3	0.62
4	Price game by middlemen	0.24	2.9	0.69

Amount of Threats	1.00	2.95
<b>TOTAL EFAS</b>		<b>0,65</b>

Source: primary data analysis, 2021

Based on the EFAS matrix in the table above which consists of opportunity factors and threat factors. The first most important opportunity factor is consumers who come to buy rice grain directly to farmers with a weight score of 1.25, the second is the market opportunity with a weight score of 0.92. The results of the analysis

(opportunities, and threats) by 0.65. This means that the influence of opportunity is greater than the threat in empowering the farmer group of the men. So that in figure 1, it is known that the strategy for empowering farmer groups is in quadrant 1 (one) with the growth strategy. In the calculation of weights and ratings above, the SWOT quadrant is obtained as follows:  $S = 3.63$   $W = 2.94$   $O = 3.60$   $T = 2.95$  Then the SWOT strategy is in quadrant I, which is aggressive.



Figure 1. SWOT quadrant matrix of the Tampilon Putra Farmer Group

of the EFAS table above showed that the opportunity factor obtained a score of 3.60 and the threat factor obtained a score of 2.95 with a score difference of 0.65. So that the total number of opportunities and threats is 0.65. The explanation from the table above shows that the difference in scores is weighted by internal strategy factors (strengths, weaknesses) of 0.69. This means that the influence of strength is greater than weakness. And table 6 shows that the difference in scores weighted by external factors

Based on Figure 1 above, it is known that the strengths possessed are greater than the weaknesses, resulting in an X-axis in a SWOT diagram. Likewise, the odds faced are greater than the threats so as to produce a Y-axis in the SWOT diagram with a value showing that the difference between the value of opportunity and threat shows the number 0.65 (the value obtained from the value of the total opportunity is reduced by the total threat) While the difference between

the value of strength and weakness shows a number of 0.69 (this value is obtained from the result of total strength in less with the result of total weakness) then the group empowerment strategy tani tampilon putra berda dikuadran 1 i.e. support an aggressive strategy or SO (Strenght – Opportunities) strategy, where farmers have a strong function that is shown by their strengths and opportunities.

2. Attack of pests and diseases
3. The condition of supporting infrastructure such as roads, irrigation, bridges is not supportive
4. Price games by middlemen - Strategy
  1. Take advantage of the experience of trying to farm
  2. Improving the quality of rice production
  3. Conducting institutional / organizational development - Strategy

**d. Determination of Alternative Strategies for Empowering Farmer Groups**

The determination of the SWOT analysis based on the results of the SWOT diagram can be concluded Threats

1. Unfavorable weather such as the occurrence of rain that causes crop failure

<p><i>IFAS</i></p> <p><i>EFAS</i></p>	<p><b>Strength (Strength)</b></p> <ol style="list-style-type: none"> <li>1. The surrounding environment supports the cultivation of rice plants</li> <li>2. Have good planning related to cultivation</li> <li>3. Mastering the good and correct cultivation method</li> <li>4. Have the ability and willingness to cultivate</li> <li>5. Have your own land for cultivation</li> <li>6. Usaha tani padi is the main business of the belayan community</li> <li>7. Cooperation between groups is good</li> </ol>	<p><b>Weakness)</b></p> <ol style="list-style-type: none"> <li>1. Lack of knowledge of technology and market information</li> <li>2. Lack of experience in running a business in groups</li> <li>3. Easily attacked by pests</li> <li>4. Sales are still in the form of grain in collectors</li> <li>5. The results of production are in self-consumption</li> <li>6. The frequency of mentoring is still lacking</li> <li>7. Members are less active in discussion events</li> </ol>
<p><b>Opportunity)</b></p> <ol style="list-style-type: none"> <li>1. Facilities provided by agricultural extension workers are adequate</li> <li>2. There is a market opportunity</li> <li>3. consumers who come to buy grain to farmers directly</li> <li>4. Knowledge of facility needs has been met by agricultural extension</li> </ol>	<p>- Strategy</p> <ol style="list-style-type: none"> <li>1. Expand planting area and increase productivity of rice cultivation</li> <li>2. Develop rice farming business into superior rice.</li> <li>3. Develop rice farming business as a producer farmer for RASDA.</li> <li>4. Implement innovations or technologies that have been obtained from the results of coaching by agricultural extension services</li> </ol>	<p>- Strategy</p> <ol style="list-style-type: none"> <li>1. Establish cooperation with local agricultural extension workers to improve the human resources of the Tampilon Putra Farmer Group supported by the government</li> <li>2. Development of market marketing systems</li> <li>3. Marketing of rice production in the form of grain.</li> <li>4. Conduct training for the Tampilon Putra Farmer Group between agricultural extension workers.</li> </ol>

Source: Primary Data after processing,2021

Based on Table 7 above, the strategies that farmers can do in the SO strategy, WO strategy, ST strategy, and WT strategy are as follows:

**1. S-O Strategy**

The SO strategy is to utilize the strengths (S) owned by farmers to benefit from existing (O) opportunities, especially in the strategy of empowering the Tampilon Putra farmer group

through agricultural counseling in Belayan Village, North Malinau District, Malinau Regency. Expanding planting areas and increasing the productivity of rice cultivation In this strategy, the planting area owned by the farmers of the Tampilon Putra Farmer Group must be used all to increase production yields. So no land is vacated but managed to expand crop cultivation, Developing rice farming into superior rice so that the increase in production of members of the Tampilon Putra Farmer Group who cultivate rice farming needs to increase their production yields. With the aim that the results of its production can increase with good product quality, develop a rice farming business as a producer farmer for RASDA. To develop the agricultural sector, especially in North Malinau District, members of the Putra Artison Farmers Group in Belayan Village must be able to develop their rice farming business as producers for RASDA. So that it can provide benefits for individuals and organizations in their farmer groups, and apply innovations or technologies that have been obtained from the results of coaching by agricultural extension services. In managing the farming business, the Tampilon Putra Farmer Group must apply innovation or technology to the cultivation of its crops, thus providing a great opportunity in improving better cultivation techniques. With the development of the times the agricultural system will be more sophisticated and members of the Farmer Group need to train and learn to maximize agricultural products, especially in North Malinau District.

## **2. W-O Strategy**

The WO strategy is to overcome the weaknesses (W) owned by the Tampilon Putra farmer group in Belayan Village, North Malinau District, Malinau Regency for existing opportunities (O), especially in implementing the strategy of empowering the Tampilon Putra farmer group. This strategy is used to overcome weaknesses and reduce existing opportunities such as collaborating with local agricultural extension workers to improve the human resources of the Tampilon Putra Farmer Group supported by the government, developing a market marketing system, marketing rice production in the form of grain, and conducting training on the Tampilon Putra Farmer Group between Agricultural extension workers

## **3. S-T Strategy**

The ST strategy is to utilize the strengths (S) possessed by the Tampilon Putra farmer group in Belayan Village, North Malinau District, Malinau Regency to avoid existing threats (T), especially in implementing the farmer group empowerment strategy, where this strategy can utilize the strength to avoid existing threats such as utilizing the experience of farming, improving the quality of rice production, and carrying out institutional / organizational development.

## **4. W-T Strategy**

The WT strategy is to reduce the weaknesses (W) owned by farmers in Belayan Village, North Malinau District, Malinau Regency and avoid existing threats (T). This strategy is used to reduce existing weaknesses and avoid existing threats such as using refuge plants as natural



enemies of pests, implementing new technologies as an effort to be independent of the Tampilon Putra farmer group, and improving planting patterns to avoid spreading diseases to other plants.

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#### REFERENCES

- [1] Krisnandhi, S. 2009. *Moving and building farms*. C.V. Yasaguna. Jakarta.
- [2] Mardikanto, 2009. *Agricultural Extension System. Eleven March University Press*. Surakarta.
- [3] Sutoro Eko. 2002. Village Community Empowerment, Village Community Empowerment Training Material, organized by the East Kalimantan Provincial Training Agency, Samarinda, December 2002
- [4] Department of Agriculture. 2011. Regulation of the Minister of Agriculture No. 273 of 2007 concerning Guidelines for Institutional Development of Farmers. <http://www.deptan.co.id>
- [5] Sunyoto Usman, 2004, *Community Development and Empowerment*, Yogyakarta: Pustaka Pelajar.
- [6] Lestari, S. (2009). Thesis. *Development of Tourism Villages in An Effort to Empower The Community*.
- [7] Kartasapoetra. A. G. 1994. *Agricultural Extension Technology*. Earth Script. Jakarta
- [8] Mardikanto, Totok. 2009. *Agricultural Extension Systems*. UNS Press. Surakarta.
- [9] Department of Agriculture. 2006. Law of the Republic of Indonesia Number 16 of 2006 concerning the Agricultural, Fisheries and Forestry Extension System. Jakarta.
- [10] Zakaria, 2006. *Agricultural Extension Basics Module*. Center for Management of Agricultural Human Resources Training, Ciawi. Bogor
- [11] Muljono Pajio. 2007. *Learning Society, Counseling and Nation Development*.
- [12] Roliandi, 2015. *The Role of Agricultural Extension Workers on Farmers' Knowledge in the Cultivation of Jajar Legowo Planting System (Case Study of farmer group "Cognate One" Tarakan City)*. Thesis. Faculty of

- Agriculture. University of Borneo Tarakan
- [13] Department of Agriculture. 2002. *Revatilization of Agricultural Extension Services*. Jakarta Pusbangluhtan, PSDMP Agency, Ministry of Agriculture.
- [14] Mardikanto, T. 1991. *Agricultural Development Counseling*. Eleven March University Press, Surakarta.
- [15] Van de Ban and Hawkins. 1999. *Agricultural Extension*. Yogyakarta Kanisius.
- [16] Soekanto, 1990. *Sociology an introduction*. Rajawali Press Jakarta.
- [17] Ikbah Bahua Muhammad and Marleni Limonu. 20013. Model of Agricultural Extension Development in Gorontalo Province.
- [18] Risna. M. Rosni and Mariani. 2012. The role of agricultural extension to integrated pest control in rice crops based on the capability class of farmer groups in Labuan Amas Selatan District, Hulu Sungai Tengah Regency. *J. Rural Agribusiness*.
- [19] Mardikanto, T. 1998. *Agricultural Development Counseling*. Eleven March University Press, Surakarta.
- [20] Sairi Akhmad. 2015. The Role of Agricultural Extension Officers in Developing Rice Cultivation in Sumber sari Village, Loa Kulu District, Kutai Kartanegara Regency. *Journal. Fisip. Unmul*
- [21] Trimo. 2006. Policy on the Development of Joint Farming Groups (GAPOKTAN) as Economic Institutions in Rural Areas. Center for Socioeconomic Research. Bogor
- [22] Suhadiyono, L. 1992. *Counseling Guidance for Agricultural Extension Workers*. Erlangga. Jakarta
- [23] Abu Huraerah. 2008. Organizing and Community Development Models and Strategies for People-Based Development. Bandung: Humanities
- [24] Rosyidi. 2009. *Microeconomics of Demand Theory*, Jakarta: Erlangga
- [25] Rommy Famili, Marijono, Niswatul Imsiyah. 2017. The Role of Agricultural Extension Officers on the Empowerment of Farmer Groups in Tegalharjo Village, Glenmore District, Banyuwangi Regency. *Journal of Out-of-School Education*. Jember University.
- [26] Loyal Ningsih, Goddess. 2018. The Role of Agricultural Extension Workers in Empowering Farmer Groups (Case Study of Fertile Farmer Groups in Karang Agung Village, Bulungan Regency). Thesis of the

- Faculty of Agriculture, University of Borneo Tarakan, Tarakan.
- [27] Fiki Afrialfa, Roza Yulida, Arifudin. 2014. The Role of Counseling in Empowering Independent Oil Palm Farmers in Indragiri Hilir Regency. *Faperta Research Forum*, Volume 1 No 2, October 2014.
- [28] Mardikanto, T. 2009. *Agricultural Development Counseling*. March Eleven. University Press. Surakarta
- [29] Sugiono.2011. *Quantitative, Qualitative and R&D Research Methods*. London: Alfabeta.CV.
- [30] Winarni, Endang Widi. 2011. *Educational Research*. Bengkulu: FKIP UNIB Publishing Unit.
- [31] Arikunto Suharmisi. 2002. *Research Procedures*. Jakarta: Rineka Cipta.
- [32] Rahardjo, Mudjia. 2010. *Qualitative Research Data Analysis (An Empirical Experience)*. <http://mudjiarahardjo.com/materi-kuliah/221-analisis-data-researchkualitatif-anexample-experience.html>.
- [33] Riduwan. 2008. Introduction to Statistics for Educational, Social, Economic, Communication, and Business Research. Bandung: Alfabeta
- [34] Sugiono.2013. *Quantitative, Qualitative and R&D Research Methods*. London: Alfabeta.CV.
- [35] Rangkuti, Freddy. 2009. *SWOT Analysis of Business Case Dissecting Techniques*. Jakarta: Publisher PT. Gramedia Main Library
- [36] Zubaidi. 2011. *Character Education Design*. Jakarta: Kencana Prenada Media.
- [37] Setijorino Ludivica E. et al. 2004. The Role of Agricultural Extension Officers in the Development of People's Agriculture.
- [38] Yunasaf Unang, and Didin S. Taspin, 2011. The role of extension workers in the Learning Process of Dairy Farmers at KSU Tangagasari Sumendang.
- [39] Purnomo, S.H, Rahayu, E.T, Tanti, I.N. 2016. *Model of Empowerment of Women's Groups of Livestock Farmers in The Cultivation of Free-Range Chickens in Banyudono District, Boyolali Regency*. *Journal of Animal Science* Vol.14 (1), March 2016:1-12
- [40] Siagian, S. P.2003. *Human Resource Management*. Earth Script. Jakarta.

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