

Strategies for Empowering Young Farmers in the Effort of Regeneration of Farmers in Wetlands of South Kalimantan Province

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Abstract

This study aims to analyze the role of the younger generation in farming work in wetlands, analyze factors related to the motivation of young people to choose jobs in the agricultural sector in wetlands and, analyze strategies for empowering young farmers in an effort to regenerate farmers in the wetlands of South Kalimantan. The analysis technique used is descriptive analysis, correlation analysis and AHP analysis. The research in general aims to gain among others the role of the younger generation in farming work in the wetlands of South Kalimantan, namely helping parents of farmers in the management of farming in the wetlands of South Kalimantan by (67%), becoming workers or farm laborers in farming jobs in the wetlands of South Kalimantan by (28%), and able to run their own (family) farm in the wetlands of South Kalimantan (5%). Factors related to the motivation of the younger generation to choose employment in the agricultural sector in the wetlands of South Kalimantan include the education level of the younger generation, the cosmopolitan of the younger generation, the interest of the younger generation in the agricultural sector and the area of land owned and the number of family members in the farming family, while the education level of parents is not related to the motivation of the younger generation to choose jobs in the agricultural sector in the wetlands of South Kalimantan and to the strategy of empowering young farmers in an effort to regenerate farmers in the wetlands of South Kalimantan, namely through increasing the variety of farming that is cultivated through diversification of farming and diversification of commodities cultivated by farmers in agricultural land areas.

Keywords: *young farmers, strategy, empowerment, wetlands*

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I. Preliminary

Quality Human Resources (HR) and have a very high commitment are needed to realize competitive Indonesian agriculture and contribute to income and welfare for all members of society who are engaged in agriculture without any regeneration will threaten the sustainability of agriculture in Indonesia and also threaten sovereignty of our country's food. This is supported by the results of a survey of modernization and the crisis of farmer regeneration conducted by the Center for Population Research LIPI in 2015 which showed that there had been a shift in children's work compared to the work of their parents from 60.4% of parents whose main job as farmers was only 7.1% of their children who live at home continue their parents' work in the agricultural sector. This shows that jobs that are already so familiar with the younger generation will not necessarily be the main choice of the younger generation to engage in these jobs in the future (Wirarti et al, 2017).

The decline in the interest of the younger generation to work in the agricultural sector is also seen in the 2003–2013 Agricultural Census data, which concludes that the agricultural workforce is dominated by older workers more than 40 years old, the number of young workers is not large and tends to decline compared to the previous 10 years. Similarly, based on data from the 1993–2003 Agricultural Census, the composition of workers in the agricultural sector by age has shifted, indicating a decrease in the number of young workers in the agricultural sector. The data shows that over the past two decades, in absolute and relative terms, the number of young farmers has experienced a relatively sharp decline, while those belonging to old age have increased. The crisis of young farmers in the agricultural sector and the dominance of old farmers have consequences for the sustainable development of the agricultural sector, especially on agricultural productivity, market competitiveness, rural economic capacity, and furthermore it will threaten food security and the sustainability of the agricultural sector (Sosilowati, 2016).

Based on this background, this research activity aims to analyze the strategy of empowering young farmers in an effort to regenerate farmers in the wetlands of South Kalimantan which will specifically analyze:

1. Analyzing the role of the younger generation in farming work in the wetlands of South Kalimantan

2. Analyzing the factors related to the motivation of the younger generation to choose jobs in the agricultural sector in the wetlands of South Kalimantan
3. Formulate a strategy for empowering young farmers in an effort to regenerate farmers in the wetlands of South Kalimantan

II. Research Methods

The research was conducted in Barito Kuala Regency. The determination of the research location was carried out intentionally, with the consideration that the location is a wetland area and has extensive farming activities and continues to exist every year. The research activity was carried out for six months, starting from May 2021 to October 2022.

The subjects in this study were respondents and informants. Respondents are people who are chosen to tell about themselves or who experience directly the social phenomenon being studied. Informants are people who can provide information about themselves, others, and the environment. The unit of analysis in this study is the generation of young farmers whose families are engaged in farming. The population in this study were all farmers and their families working on farming. The sampling technique in this research is *simple random sampling*. Simple random sampling was chosen because the population of young farmers whose families are engaged in farming have the opportunity to be selected as samples. The selection of informants was carried out *purposively* through the *snowball sampling technique* which was needed to obtain continuous information between one informant and another. As chairman of the group, farmer groups, community leaders, agricultural extension field (PPL), the Department of Agriculture District and the parties relating to the empowerment of young farmers regeneration efforts of farmers in the wetlands of South Kalimantan in both strategy and program.

Qualitative and quantitative data processing is carried out through data reduction, namely sorting, focusing, and simplifying the data so that it can be used to answer research objectives. Quantitative data obtained through questionnaires will be processed using *Microsoft Excel 2010* and then processed using *SPSS for Windows version 23 software*.

The statistical test used is a correlation test to analyze the relationship of factors related to the motivation of the younger generation to choose jobs in the agricultural sector in the wetlands of South Kalimantan. The error rate used in this study is 5 percent or with a significance level of 0.05 with a confidence level of 95 percent. Qualitative data is processed through data reduction obtained through in-depth interview techniques and field observations, both obtained through recordings and written into field notes. The results of data reduction are important information regarding research questions and research objectives. Qualitative and quantitative data are combined and processed and then analyzed to be presented in the form of cross tabulations, narrative texts, matrices, charts and images to obtain conclusions related to the formulation of the problem and research objectives. The conclusion of the research results is carried out by taking the results of the analysis between variables that are consistent. The analysis used in this study are:

1. Qualitative descriptive analysis was used to describe the role of the younger generation in farming work in the wetlands of South Kalimantan. The primary data obtained qualitatively were collected in a data tabulation and diary.
2. Statistical analysis using correlation test which serves to examine the relationship of five socio-economic factors of farmers to various motivations of the younger generation to work in the agricultural sector

No	Young Generation Motivation		Socio-Economic Factors
1.	Y 1	<=>	X1
2.	Y 2	<=>	X2
3.	Y 3	<=>	X3
4.	Y 4	<=>	X4
5.	Y 5	<=>	X5
6.	Y6	<=>	X6

Y: Motivation younger generation

X2 : P Education youth (years old)

X1: Education orang tua (years old)

X3: Kekosmopolitan younger generation (ordinal)

X4: Interests younger generation (ordinal)

X 6 : J otal member in RT (Org)

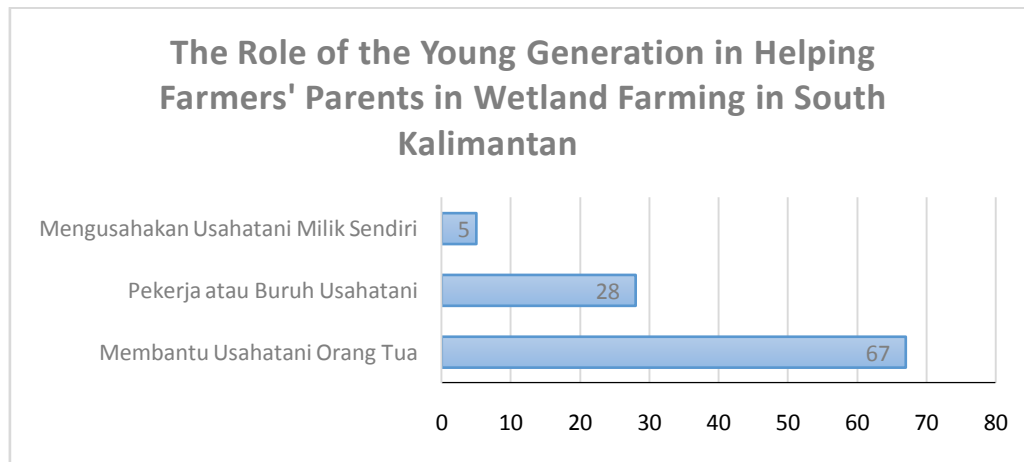
X5 : Area of farm land (Ha)

3. To answer the third objective of formulating a strategy for empowering young farmers in an effort to regenerate farmers in the wetlands of South Kalimantan, AHP (Factor Hierarchy Analysis) analysis was used.

III. Results And Discussion

3.1. The Role of the Young Generation in Farm Work in Wetlands of South Kalimantan

Based on the results of our research in the field and interviews with several key informants, it was found that three major roles of the younger generation in farming work in the wetlands of South Kalimantan, namely the younger generation as the party who helps the family business or assisting the parents in doing the farming, the two younger generations as workers or laborers or people who benefit in the form of wages from the farming work they do and the third is the younger generation who act as entrepreneurs or farming to produce something for themselves or their families or in other words this young generation has become the manager of their own farm , in general as illustrated in the graphic image and explanation as follows:



The Role of the Young Generation in Farm Work in the Wetlands of South Kalimantan

3.1.1. The Role of the Young Generation in Helping Farmers' Parents in Wetland Farming in South Kalimantan

Based on the picture of the role of the younger generation in the wetlands of South Kalimantan Province, the highest proportion of their role is in helping parents in farming activities that are managed or managed by the parents of the younger generation, this can be understood as part of child service to people in addition to continuing to study. they must also continue to carry out their obligations to help to lighten their parents' workload while also starting to learn how to try to earn a living in the future when they are adults and have responsibilities to themselves and to their families later. There are several descriptions of the activities carried out by the younger generation in carrying out activities to help parents in their farming activities based on the dominant farming activities carried out by parents or farmers, namely food crops and plantations . One of the descriptions of the activities carried out by human labor in food crop farming in the wetlands of South Kalimantan Province is the activity of planting rice seeds which is still done manually by farmers. cultivators cannot do it mechanically the same as in superior rice. For activities from the exploitation of oil palm plantations that require human labor to do it, both from the Immature Plants (TBM) phase to Mature Plants (TM), in the TBM phase the maintenance of plant seeds until the age of the plant is ± 3 years, many activities are carried out using human labor starting from fertilization, eradicating HPT to weeding and trimming the midrib of the oil palm plant. Likewise, when oil palm plantations have entered the TM phase, many activities or farming activities must be carried out by human labor, one of the prominent activities is the activity of extracting or harvesting oil palm Fresh Fruit Bunches (FFB), which until now still cannot be done mechanically. or use a machine. In addition to the wetland oil palm plantations in South Kalimantan, the younger generation or the children of the farmers also help their parents a lot in doing citrus plantations such as those in the Barito Kuala District, where the existing citrus plantations are cultivated with the system. surjan where this system is an intercropping system between citrus plants and rice plants, where some of the land is planted with rice plants and partly planted with citrus plants.

3.1.2. The Role of the Young Generation as Workers or Farm Workers in Wetland Agriculture in South Kalimantan

Based on the graph of the role of the younger generation in farming work in the wetlands of South Kalimantan Province, the number of young people who become farm workers or laborers is 28%, this is indeed far compared to the role of the younger generation to help their parents in doing farming, this is certainly not separated from the priority. activities to help parents in family-owned farming activities instead of becoming

workers or farm laborers in other farmer-owned farms and if they become farm laborers or participate in farming work, the younger generation or children of farmers also do more on agricultural lands owned by farmers around their place of residence or their neighboring farmers because it is easier to manage the time when they work and also easier to access the existence of the land they work on as farm laborers or workers . Almost similar to the work they do when they work to help their parents' farms, the work they do also revolves around activities that agricultural tools and machines cannot or less do, which now help farmers a lot in cultivating the fields, fields, gardens and other types of agricultural land. Activities such as the planting process, maintenance which includes the control of Plant Pests and Diseases (HPT) are still activities that provide a lot of employment opportunities for the younger generation or children of farmers to become TKLK farmed by neighboring farmers or their relatives. If it is described further, such as what happens to the activities of the younger generation in helping their parents' farming activities, there are several activities that become jobs in food crop farming activities, plantations or other agricultural activities .

Some of the work that the younger generation does *full-time* is mostly done for 6-8 hours per day, done during school holidays or free time after helping parents have finished. While the jobs are done part-time or *parttime* much done during the afternoon at about 3 -4 hours each working on the job, however in doing part-time jobs still have to remember that does not interfere with the main activities of the younger generation in terms of These are the children of the farmers in learning, the work they do should not drain excessive energy so that the night time that should be used for studying is only used for rest because they are tired of working in the afternoon or evening. For farming, plantations in the wetlands of South Kalimantan Province also provide many jobs for the surrounding community or workers who come from other areas to find work. There are many activities on plantations in wetlands that require human labor to do them, especially for maintenance works of several plantation crop commodities that are cultivated in the wetlands of South Kalimantan. In oil palm commodity plantations, for example, the maintenance of oil palm plantations, both during the TBM and the TM phase, requires a lot of manpower. In the TBM phase, the activities of fertilizing, weeding, eradicating HPT to pruning sandmarks all require human labor to do it. Likewise, during the TM phase of FFB harvesting, periodic fertilization every 6 months, plate cleaning and selection of oil palm fruit bunches all require human labor to do it.

3.1.3. The Role of the Young Generation to Operate Own Farming in Wetland Agriculture in South Kalimantan

Becoming an agricultural entrepreneur or in this case the younger generation who have dared to take risks to get involved in managing land or agricultural commodities as a livelihood or source of income that they can rely on as a livelihood supporter to live and live. Based on the results of our research, the proportion of the younger generation who have the courage to make decisions in this activity is still very small when compared to activities just helping their parents or being workers on farms that are not their own. Only 5 percent of the younger generation or farmers' children have managed their own farming, this is also motivated by various factors, some of which are caused by farming inherited by their parents, limited education level and because of their own desire to start their own farm.

3.2. Socio- Economic Factors Relating to Motivation of the Young Generation to Choose Jobs in the Agricultural Sector in Wetlands of South Kalimantan

Based on the analysis of data on the correlation between some of the factors that were related to the motivation of the younger generation to choose jobs in the agricultural sector in the Wetlands of South Kalimantan obtained the following results:

Table 1 . The results of the correlation test between the factors that are thought to be related to the motivation of the younger generation to choose jobs in the agricultural sector in the Wetlands of South Kalimantan

No.	Factors	Correlation coefficient	T.tab	T.count	Information
1.	Parent's education	Serial correlation	0.361	0.211*	Thank Ho
2.	Farmer's Children Education (Young Generation)	Serial correlation	0.361	0.373*	Reject Ho
3.	Cosmopolitan of the Young Generation	Spearman rank correlation	0.361	0.691*	Reject Ho
4.	Interest of the Young Generation in work	Sperm rank correlation	0.361	0.744*	Reject Ho
5.	The area of cultivated land	Serial correlation	0.361	0.675*	Reject Ho
6.	Number of Farmer Family Members	Serial correlation	0.361	0.449*	Reject Ho

Source: *Primary data processing 2021*

The results showed that the education level of the parents of planters had an insignificant correlation ($T_{hit} < T_{table}$) on the motivation of the younger generation to choose jobs in the agricultural sector or in other words, the higher the education level of the parents of the younger generation, the lower the motivation of the younger generation. young people to choose jobs in the agricultural sector. Logically, if parents who lived before their children existed were able to achieve a certain level of education, then these parents would certainly be able to provide an overview to their children as the younger generation of the fields of work that they might be able to engage in outside of work. the agricultural sector which their parents had been involved in all this time. No parent who goes to graduate school will expect their children to be able to go to elementary school as well and work as farmers, of course they expect their children to achieve the maximum level of education possible either with their own costs and efforts from the family or expecting help. from the government and the private sector through scholarship programs.

Statistical results show the relationship between the education of the younger generation of farmers and the motivation of the younger generation to choose jobs in the agricultural sector in the wetlands of South Kalimantan has a significant correlation where the higher the level of education taken by a young generation of agriculture, the greater the motivation to work in the agricultural sector. , this is certainly an encouraging thing for the sustainability of the agricultural sector even though the correlation value is not too high or far from the rejection area where it is only 0.013 difference, which means that of the many younger generations of farmers who have high education, they are also motivated to work in the sector. other than agriculture, and vice versa, the younger generation who do not have a high education will tend to choose to stay as farmers even though the opportunity to get work outside of farming work is still open but pi is more for jobs in the informal sector.

The chemopolitan attitude of the younger generation of agriculture has a significant relationship with the motivation of the younger generation to choose jobs in the agricultural sector in the wetlands of South Kalimantan. The younger generation who has a high level of cosmopolitan has a broader view of life which is not only limited to the life that is around them but various lives in various regions or other areas can also be known or understood. The era of information disclosure that does not limit space, distance and time has more or less influenced the attitude of the cosmopolitan level of the younger generation of agriculture towards life and work. The young generation of agriculture about the type of work they might be involved in either as a main job or a side job, do not forget to mention the agricultural sector as their job .

The result of the correlation coefficient test result is the largest correlation coefficient of all the factors tested whether it has a relationship with the motivation of the younger generation to choose jobs in the agricultural sector on wetlands in South Kalimantan Province, this is certainly not separated from the direct link between interest and motivation. where if a person has a great interest of course he will have a high motivation towards something and vice versa if he is not interested then there will be no visible motivation to achieve or realize what he wants in an activity or job even though in fact if you want to be serious it could be easy to make it happen.

The area of agricultural land owned by the farmers actually has a very close relationship with the net income earned by the farmers from farming which we previously correlated as well and turned out to have a fairly strong correlation in the motivation of the younger generation to choose jobs in the agricultural sector. However, empirically, of course, farmers who have large areas of land will not automatically have high incomes and will have high motivation to choose jobs in the agricultural sector. There are several reasons why ownership of large or narrow land does not automatically determine the size of the income of the farmers. farmer.

The F actor that has a significant relationship with the motivation of the younger generation is the number of farmer family members, the simple logic we can give is that the more the number of members in a family, the greater the costs that must be incurred by the family to support the number of family members. A family with 5 family members consisting of a father, mother and three children will need more money to meet their needs when compared to a family that only has three family members with a father, mother and one child. But this comparison will not apply if the family coverage is expanded and the lifestyle of each family is described in detail, then the costs incurred will be different for each family. However, in this study we only examined the number of members of the nuclear farming family and excluded lifestyle and other needs outside the basic needs of the family.

3.3. Strategy for Empowering Young Farmers in Efforts to Regenerate Farmers in Wetlands of South Kalimantan

A nalisa AHP is the determination of the factors that can be affecting actors in determining the strategy of empowering young farmers regeneration efforts of farmers in the wetlands of South Kalimantan obtained from analysis of data at level 2 Diman factors obtained based on the real conditions in which there are four factors that affect the resulting strategy, namely community behavior, natural conditions and the physical environment, the condition of community institutions and government policies. Furthermore, the goal setting stage is generated from the goals that are most likely to be carried out on the factors that have the greatest value

of all influencing factors, namely community behavior factors. While the last stage is the determination of the research output strategy with the highest value based on the opinions of various experts or interested parties .

In order to achieve these goals, the alternative strategies chosen are as follows:

1. Increasing the variety of farming that is cultivated through diversification of farming and diversification of commodities cultivated by farmers in the area of agricultural land so as to be able to increase the productivity of farming that is cultivated on the other hand with diversification of farming, farmers will not depend on one farm alone, if it fails there are other types of farming that capable of sustaining or supporting other failed farms. In addition, the diversification of the cultivated commodities is also able to increase the productivity of the cultivated farm so that it does not only rely on one commodity that is produced in units of land.

2. Increasing the efficiency of using farm inputs that are cultivated so as to make farming more profitable for farmers is done by incorporating more elements that contain advanced technology in farming management, efficiency and effectiveness in the use of agricultural inputs will have an effect on reducing costs (cost) and shorten the processing time of farming work so that it will provide cashflow for farmers who manage it more quickly.

3. Changing the mindset of the younger generation and society towards jobs in the agricultural sector as lower-class jobs is done by increasing the image of farming and jobs in farming and agriculture as jobs that are equal to other jobs outside the agricultural sector. Farm work and jobs in the agricultural sector also provide decent income and remuneration so that farmers or agricultural workers can also prosper on a par with workers in the non-agricultural sector.

4. Increasing the knowledge of the younger generation about agriculture so that they are no longer farming in a subsystem but have been farming towards a profit carried out by adding activities to increase knowledge and skills through non-formal education that is tailored to the needs of farmers who no longer follow the program from the government to carry out various activities but are oriented towards assessment of farmers' needs for all kinds of information, technology that can change the orientation of farmers from subsystems to profit oriented

5. Increasing the role of farmer institutions to play a more active role in empowering existing young farmers, farmer groups no longer absolutely consist of heads of farmer families who may be old and can no longer be active in all kinds of farmer group activities. It is time for farmer groups to regenerate their membership, no longer based on farm ownership but rather on the most active farm managers, this is because the interest in making decisions in farming will be taken more by farm managers who actively manage their businesses, not by the owner of the farm itself. .

6. Increasing cooperative action outside the wider environment to establish profitable cooperation through farmer institutions is carried out by utilizing other functions that have not been used in farmer activities, namely being a means of cooperation with other parties outside the farmer group institution. Cooperation is established not only with fellow farmers but also with other parties outside the agricultural sector but can still support agricultural activities carried out such as banking institutions, marketing institutions and research institutions to obtain new technology references that can be used in farmers' farming.

Based on the priority order of the results of AHP processing, the strategy for empowering young farmers in an effort to regenerate farmers in the wetlands of South Kalimantan is through: (1) increasing the variety of farming that is cultivated through diversification of farming and diversification of commodities cultivated by farmers in agricultural land areas with a score of 0.224. (2) increase the efficiency of the use of farm inputs that are cultivated so as to be able to make farming more profitable for farmers with a score of 0.199. (3) changing the mindset of the younger generation and the community to work in the agricultural sector as a lower-class job with a score of 0.174. (4) increase the knowledge of the younger generation about agriculture so that they are no longer subsystem farming but have been farming towards profit with a score of 0.151. (5) increasing the role of farmer institutions to play a greater role in empowering existing young farmers with a score of 0.128. And (6) increasing cooperation actions outside the wider environment to establish profitable cooperation through farmer institutions with a score of 0.124.

IV. Conclusion

Based on the results of the research that we obtained in our research, we can draw temporary conclusions as follows:

1. The role of the younger generation in farming work in the wetlands of South Kalimantan, among others, helps parents of farmers in managing farming in the wetlands of South Kalimantan by (67%), becoming farm workers or laborers in farming jobs in the wetlands of South Kalimantan (28%).) and able to run their own (family) farming on a farm in the wetlands of South Kalimantan by (5%)

2. The perception of the younger generation of agriculture towards employment in the agricultural sector in the wetlands of South Kalimantan, namely that work as a farmer is a job that is seen as a noble job (80%), the

younger generation of farmers is proud to be part of a farmer's family or to be a farmer (62%), the younger generation farmers have the belief that if they become farmers they will also be able to live decently (54%), the younger generation is of the view that if they want to become farmers they need support from close family members (52%), the younger generation thinks that the work of farmers is equal to other jobs (46%), the younger generation Young people think that if you want to become a farmer you need adequate education about work as a farmer (34%) .

3. Factors related to the motivation of the younger generation to choose employment in the agricultural sector in the wetlands of South Kalimantan include the education level of the younger generation, the cosmopolitan of the younger generation, the interest of the younger generation in the agricultural sector and the area of land owned and the number of family members in the farming family, while the education level of parents is not related to the motivation of the younger generation to choose jobs in the agricultural sector in the wetlands of South Kalimantan

4. The strategy of empowering young farmers in an effort to regenerate farmers in the wetlands of South Kalimantan is through increasing the variety of farming that is cultivated through diversification of farming and diversification of commodities cultivated by farmers in agricultural land areas with a score of 0.224 .

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