Relationship of social capital to the level of motivation of local farmers in optimizing the potential of sago starch farming

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Abstract. This study purpose was to analyze the relationship of social capital, namely interaction, social responsibility, cultural values, cooperation and the role of village officials or other parties to the motivation of local communities. Social capital that grows and develops in the local community environment becomes a reference to increase motivation so that it can optimize the potential of sago to become a productive farm. Data were analyzed quantitatively using a Likert scale technique and correlation to determine the relationship of social capital to the level of motivation and are described descriptively. The location was chosen purposively or deliberately, the location of the study was conducted in a mooring village, with 50 respondents. The results showed that social capital was strongly related to the level of motivation in optimizing the potential of sago farming.

1. Introduction

The dependence of the Indonesian people on rice food consumption is so high that the availability of domestic rice is insufficient, as a result, the rice import program was implemented. Dependence on rice can be reduced through other alternative foodstuffs that can be cultivated in Indonesia as an effort to support food security in Indonesia such as sago, tubers, corn, breadfruit, and bananas [1]. Exploration of local food ingredients which currently has high potential in terms of benefits and uses, one of which is the sago commodity (Metroxylon sp) [2]. Related to efforts to optimize the potential of local commodity resources, it is very much needed an active role from local farmers to optimize the potential of sago and the diversification of processed sago, both in the form of processed food and non-food so that it can be a reference in exploring sago food [3].

Sago land area in Indonesia is approximately 1,000,000 hectares, where one of the areas of sago land distribution in Indonesia is Papua province. The potential area of sago land in Papua is around 771,716 hectares or around 85 percent of the national sago forest area. Areas of distribution of sago forests in Papua include Merauke Regency. In Merauke Regency, the distribution of sago plants is on the banks of rivers, lowlands and moist or wetlands. The potential of sago plants in Merauke Regency is quite high, as reported by BPS which shows that the Tanah Miring District is ranked fifth with a total planting area of...
around 126,007 m². In the Tanah Miring District area precisely in Tambat Village, there are active producers of sago processed, this makes the potential of sago in Kampung Tambat worthy of being the object of research to analyze social capital on the level of motivation of local farmers in optimizing the potential of sago [4].

The role of farmers to support food security through local food will be oriented to the socio-cultural aspects that will always synergize with the farming that will be cultivated. The socio-cultural aspect is the fundamental social capital among rural farmers and is a very important development capital for the life of rural communities. This is reflected in the high solidarity between citizens and also the strong sense of kinship among them. These elements need to be developed to be an economic benefit for them in optimizing the potential of local agriculture [5].

Motivation is a process which needs encourage a person to carry out activities that lead to the achievement of certain goals. Individuals who succeed in achieving these goals indicate their needs can be met or satisfied. Social capital that grows and develops will affect the motivation of local farmers which will eventually lead to the desire to be able to do farming by utilizing the available local potential. In conducting farming, the beginning was based on the desire of individuals (farmers) to do something that brings purpose, the concept is motivation [6].

In Papua, the perspective of local people on sago plants is closely related to the cultural and social aspects of the community. Sago is an endemic food for the local people of Papua, which is now rivaled or displaced by food products such as rice, wheat, corn, and others. With this, there needs to be a study to see the relationship of social capital to the level of motivation of local farmers in optimizing the potential of farming on sago commodities in the Tambat Village, Tanah Miring District.

2. Methods
The method used in this research is a quantitative method. This study uses a Likert scale technique to determine variations in respondents' answers based on opinions, attitudes, and statements as well as correlational analyzes and will be described as quantitative descriptive. Descriptive research is a method in research to analyze the status of human social groups. Correlation test is conducted to find out about the presence or absence and strength of a relationship between variables and other indicators related to an object or subject to be studied [7].

The research location is in Tambat Village, Tanah Miring District, Merauke Regency. Determination of the place is done intentionally (purposive sampling) with the consideration that Tambat Village has the potential of vast sago. The population in this study is the local community with a sample of 50 respondents. Data collection techniques by interview, observation and questionnaire filling [8].

3. Result and discussions
3.1. Likert scale technique
Data processing using a Likert scale technique based on the distribution of respondents' answers can be seen in the following table:

| Statement Items                           | Number of Respondent Answer Scores | Total Score |
|------------------------------------------|-----------------------------------|-------------|
| Good relations established between fellow local communities | SR | R | C | T | ST |             |
|                                          | 1  | 2 | 3 | 4 | 5  | 184         |
|                                          | 0  | 2 | 66| 76| 40 |             |
Based on the Likert scale table of the results of the instrument on 50 respondents in Tambat Village shows that the indicators of good relations that exist between fellow local communities are categorized high with a score of 76 which means that the relationship that exists between fellow communities is strongly or closely interwoven. Indicators of social responsibility carried out in carrying out all the work is undertaken (farmers) are categorized quite high with a score of 66, meaning that not all farming communities are able to carry out responsibilities in the farming they are doing. Indicators of cultural values that are trusted by the community about sago plants are categorized high with a score of 80, meaning that community knowledge is very high about sago plants which are ancestral heritage plants that have cultural values. The indicator of cooperation carried out by the local farmer community is very high with a score of 100, meaning that the community really needs cooperation between one farmer and another farmer and the collaboration that has been established so far has been very high. The role of village officials and other parties is categorized high with a score of 64, meaning that the role of village officials and other parties in supporting the optimization of farming potential in Tambat Village has been done well.

3.2. Correlation technique
Data processing using correlation analysis techniques based on the distribution of respondents' answers as seen in the following table:

| Social capital | Level of motivation | Correlation coefficient | Significance | Number of respondents | Correlation |
|----------------|---------------------|-------------------------|--------------|-----------------------|-------------|
| Interaction    |                     | 0.839                   | 0.003        | 85                    | Strongly correlated |
| Social responsibility |               | 0.865                   | 0.000        | 85                    | Strongly correlated |
| Culture value  |                     | 0.841                   | 0.000        | 85                    | Strongly correlated |
| Cooperation    |                     | 0.842                   | 0.000        | 85                    | Strongly correlated |
| The role of village officials and other parties | | 0.886                   | 0.000        | 85                    | Strongly correlated |
Correlation test results show that the interaction, social responsibility, cultural values, cooperation and the role of village officials or other parties have a significant value <0.05 indicating there is a relationship or correlation between social capital (indicators) above on motivation.

3.2.1. Social capital (Interaction). Social capital correlates with motivation. The interactions that occur between local communities have a strong relationship that is 0.838. This strong interaction relationship can motivate the community to optimize the potential of sago starch farming in Tambat Village. Interaction relationships that occur are communication, networking and other social capital, so the higher the interaction relationship, the higher the motivation of local communities to optimize the potential in carrying out sago farming in Tambat Village.

3.2.2. Social responsibility. Social responsibility correlates with motivation. Community social responsibility for work (farmers) has a strong relationship that is 0.865. Social responsibility is closely related to the level of motivation, on a Likert scale test it is known that the responsibility in the local community is at a sufficient level, this proves there is still lack of awareness to be responsible for a farm work carried out. Therefore, it requires special motivation so that they can be more optimally responsible, so the higher the social responsibility of the local community, the higher their motivation to optimize the potential in carrying out sago farming in Tambat Village.

3.2.3. Culture value. Cultural Values have a correlation to motivation. Knowledge of cultural values by local people about sago plants has a strong relationship that is 0.841. The cultural value adopted by the community is their knowledge of sago as a heritage plant for their ancestors. With this knowledge, they need to optimize their potential by caring for, preserving and utilizing sago plants as a source of food for personal consumption or trading. The cultural values that exist in the community are related to motivation, so the higher the knowledge of cultural values, the higher the motivation of the local community to optimize the potential in carrying out sago farming in Tambat Village.

3.2.4. Cooperation. Cooperation has a correlation to motivation. Cooperation that exists between local communities has a strong relationship that is 0.842. Cooperation is a relationship that is able to create harmony in society. Collaboration requires rules, norms, responsibilities, and mutual trust among community members. There is a strong cooperative relationship to motivation so that it can be concluded that the higher the collaboration carried out, the higher the motivation of the local community to optimize the potential in implementing sago farming in Tambat Village.

3.2.5. The Role of Village Officials and Other Parties. The role of village officials and other parties has a correlation to motivation. The test results show that the role of village officials and other parties has a strong relationship that is 0.886. This shows that external parties can provide positive motivation to the local community. Therefore the higher the role played by village officials and other parties, the higher the motivation of the local community to optimize the potential in carrying out sago farming in Tambat Village.
4. Conclusion
The relationship of social capital to the level of motivation of local farmers in optimizing the potential of sago starch farming in mooring villages is positively correlated. The social capital is the interaction relationship, social responsibility, cultural values, cooperation and the role of village officials and other parties. The higher the social capital that occurs significantly in the local community, the higher the level of motivation of the local community to optimize the potential of sago starch farming in mooring villages, the sloping land district of Merauke Regency.

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