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Identify agricultural commodities in the midlands of the Welang watershed based on social perception

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Abstract

This study aims to analyze people's perceptions to determine the superior commodities of critical land agriculture in the Welang watershed. The research sample was determined by using a non-random sampling technique, namely purposive sampling as many as 150 people from two sub-districts, namely Purwodadi and Purwosari districts. The data analysis method used is perception analysis based on the average score with parameters of conformity with community aspirations, employment, uniqueness, local and export market potential, and cost, technological, and institutional barriers with the support of IBM SPSS ver software. 23. The research findings are known to be able to obtain good perception values, especially the parameters of labor absorption and conformity with community aspirations as important social characteristics in an effort to determine the superior commodities of critical land agriculture. On the other hand, the lowest perception or lack of consideration is the potential of local and export markets because of the difficulty of establishing cooperation with exporters and the limited support of local governments that must find solutions in an effort to realize social sustainability.

Keywords: Perception, agricultural commodities, Welang Watershed

Full length article *Corresponding Author, e-mail: wahyu.agri@upnjatim.co.id

1. Introduction

Watersheds are currently one of the natural resources that require serious handling and show a declining trend. Watersheds scattered in several regions in Indonesia are experiencing land degradation [1], with the driving factors including land management that does not consider sustainability, changes in land function, high rainfall, and erosion, resulting in soil depletion subsidence. Soil fertility and, finally, the decline in soil productivity trigger the occurrence of critical land. Washington County Critical Lands Resource Guide in 2008 state that the term 'critical area' is used to describe the landscape conditions common, land with natural constraints that may endanger the life, safety, and welfare of citizens (such as flooding and unstable slopes) [2]. Meanwhile [3], explain critical land in watershed can be used as an indication that most of the land within the watershed is classified as critical, as a result of the carrying capacity of its land resources is no longer supported, such as its ability to store extremely low water, so that almost all rainfall falls over the surface of the ground into surface flows, and then goes into the river. Welang watershed is one of the many watersheds that experience the phenomenon of land degradation towards critical land [4, 5]. Welang watershed is part of the hydrological cycle which is precisely located in the east in Pasuruan Regency, with the main rivers flowing from their upstream in the south, receiving flow from their tributaries in the middle area and empties into the Madura Strait, which is the northern boundary of Pasuruan Regency. Welang River is the largest river catchment area of 518 km2, also 36 km longest and 35 m wide, but the flow rate is still lower than the Rejoso River, which has a smaller catchment area. This is due to the relatively short length of the Rejoso River, so the time of concentration is short, and the flow rate is large and fast to downstream. This can be seen from the flooding that occurred at the mouth of this river, which was bigger than at the mouth of the Welang River. [6] through his research, found the best alternative for the allocation of critical land use for agriculture with a focus on conservation activities that can reduce the shrinkage of critical land to 42.9% of the total watershed area. This study recommends that the management of critical land can consider logical reasons not only from the conservation aspect but also what cultivation benefits and social

disadvantages for the community in the area as a reflection of future land use planning. The biophysical component is considered not the main focus, but there are other components that also have the same proportion to be studied, namely social aspects [7, 8, 9]. Therefore, when farmers practice agriculture, it is not only influenced by their internal beliefs, values, knowledge, and past experiences but also the repeated interactions between social and biophysical environments [10, 11, 12, 13].

The social aspect is so essential in watershed management because the people who live in the watershed are part of the watershed ecosystem itself and will try to take advantage of all the natural resources contained in it or can be interpreted by humans as an active component and environmental managers will determine the pattern and land use patterns in a watershed area. This depends on the perception and behavior of the community in managing the watershed ecosystem. Sustainable agriculture has emerged as an alternative agricultural system to answer many obstacles, especially ensuring environmental sustainability. Social sustainability is defined as creating an equitable distribution of development outcomes, social mobility, social cohesion, community participation, community empowerment, social identity, and institutional development [14]. [15] stated that social sustainability means food sufficiency, income equality, food distribution, access to resources and support services, as well as farmer knowledge and awareness of resource conservation. [16] in contrast, declare that place more emphasis on social sustainability as it relates to the standard of living of those who work and live in agriculture as well as the neighborhood. People living in the Welang watershed should perceive the environment not only as an object that must be used to meet human needs (human-centric) but also must be maintained and managed for the sake of environmental sustainability itself (eco-centric). Although the results are not always positive in the sense of the word sustainability, they are often negative, namely the depletion of natural resources regardless of the risks to the environment.

Perception in a narrow sense is vision, how someone sees something, while in a broad sense is a view or understanding or assessment that is how someone views or interprets something; perception also includes a communication process that arises because of a response to a stimulus [17]. According to [18] a person's attitude towards something comes from personal experience, especially in his immediate environment, for example, at home, school, work, and the surrounding community. Perceptions of agricultural actors are needed as a basis for determining agricultural commodities to be superior or most desirable commodities. According to [19] what is meant by superior commodities are commodities that have a strategic position to be developed in an area. Certain commodities are said to be socially feasible if they provide business opportunities that can be carried out and accepted by the local community so that they have an impact on employment [20].

The research position supports the idea of novelty, which describes the management of critical land by exploring perceptions of the parameters of social aspects. The reality in the field is often found that the use of an agricultural cultivation area by the local community is usually based on culture and customs that have been going on for a long time. This study aims to analyze social perceptions to determine the superior commodities of critical land agriculture in the Welang watershed.

2. Materials and methods

2.1. Location

The location in the study using purposive area sampling) was determined in themedium-land area of Pasuruan Regency which was identified as critical land with a total area of 1,949.79 Ha covering two areas, namely Purwodadi and Purwosari Districts. The twoareas have 3 units of land use, including rainfed rice fields and dry fields.

2.2. Sampling

The research sample is a component of the community that is considered a stakeholder or has an interest in the research area. Respondents needed are respondents who are directly involved or considered to have the ability and understand the problems related to the determination of superior agricultural commodities. Therefore, a non-random sampling technique was used, namely purposive sampling, so that 75 respondents were determined per sub-district so that a total of 150 respondents consisted of 1. Representative farmers assigned to the catchment area of the Welang River were also actively engaged in agricultural cultivation; 2. Community leaders, as a symbol of mutual agreement from ideas, actions, and community behavior to address problems and perceptions to assess leading agricultural commodities, and 3. Village heads in selected areas or staff who represent cross-check the suitability of agricultural commodities proposed to be superior and provide economic prosperity to farmers in the area.

2.3. Data Analysis

Data analysis based on community perceptions that are qualitative in nature is then quantified using an interval scale or a Likert scale [21]. Measurable indicators for each answer are associated with a form of a statement or attitude support, namely 'Strongly Agree' (5), 'Agree' (4), 'Neutral' (3), 'Disagree' (2), and 'Strongly Disagree.' (1) The scale criteria used to quantify the research parameters [22][20] consist of Conformity with Community Aspirations; Employment; Uniqueness; Local and Export Market Potential; Cost, Technology, and Institutional Barriers. The perception is then determined based on the size of the centralized data distribution using the mean (means) approach with the help of IBM SPSS ver. 23 software.

3. Results and discussion

Agricultural activities are often faced with this problem when it relates to farmer decision making, where agricultural actors are the subjects of these activities. The existence of production risks and farmers' awareness of environmental sustainability will affect the selection of cultivated commodities. It is not easy for farmers to do conservative farming in the sense of preserving the environment and reducing land degradation.

Table 1: Social Perception in Determining Critical Land Agricultural Commodities in the Midlands of Pasuruan Regency

No.	Statement	STS =1		TS = 2		N = 3		S = 4		SS = 5		Average
		f	%	f	%	f	%	f	%	f	%	
Conformity with Community Aspiration												
1.	A1	5	3,3	25	16.7	33	22,0	84	56,0	3	2,0	3,37
2.	A2	1	0,7	36	24,0	20	13,3	86	57,3	7	4,7	3,41
3.	A3	1	0,7	27	18,0	22	14,7	95	63,3	5	3,3	3,51
4.	A4	1	0,7	23	15,3	12	8,0	103	68,7	11	7,3	**3,67**
5.	A5	1	0,7	35	23,3	35	23,3	75	50,0	4	2,7	3,31
	Average Statement											3,45
Employment												
1.	B1	5	3,3	6	4,0	22	14,7	107	71,3	10	6,7	**3,74**
2.	B2	9	6,0	61	40,7	27	18,0	38	25,3	15	10,0	2,93
3.	B3	1	0,7	69	46,0	28	18,7	49	32,7	3	2,0	2,89
4.	B4	0	0,0	13	8,7	26	17,3	106	70,7	5	3,3	3,69
5.	B5	0	0,0	10	6,7	46	30,7	90	60,0	4	2,7	3,59
	Average Statement											3,36
Uniqueness												
1.	C1	3	2,0	72	48,0	25	16,7	44	29,3	6	4,0	2,85
2.	C2	0	0,0	18	12,0	37	24,7	93	62,0	2	1,3	3,53
3.	C3	5	3,3	70	46,7	39	26,0	32	21,3	4	2,7	2,73
4.	C4	2	1,3	30	20,0	53	35,3	55	36,7	10	6,7	3,27
5.	C5	1	0,7	10	6,7	48	32,0	87	58,0	4	2,7	**3,55**
	Average Statement											3,18
Local and Export Market Potential												
1.	D1	4	2,7	12	8,0	25	16,7	103	68,7	6	4,0	3,63
2.	D2	1	0,7	10	6,7	26	17,3	94	62,7	19	12,7	**3,80**
3.	D3	2	1,3	24	16,0	50	33,3	63	42,0	11	7,3	3,38
4.	D4	4	2,7	74	49,3	41	27,3	27	18,0	4	2,7	2,69
5.	D5	10	6,7	87	58,0	34	22,7	18	12,0	1	0,7	2,42
	Average Statement											3,18
Cost, Technological, and Institutional Barriers												
1.	E1	1	0,7	21	14,0	31	20,7	91	60,7	6	4,0	3,53
2.	E2	3	2,0	73	48,7	38	25,3	31	20,7	5	3,3	2,75
3.	E3	0	0,0	64	42,7	58	38,7	25	16,7	3	2,0	2,78
4.	E4	5	3,3	24	16,0	32	21,3	87	58,0	2	1,3	3,38
5.	E5	0	0,0	4	2,7	56	37,3	83	55,3	7	4,7	**3,62**
	Average Statement											3,21

Source: Data Analysis (2021).

Description:

STS = Strongly Disagree; S = Agree; TS = Disagree; SS = Strongly Agree; N = Neutral

A1 = Communication (regular farmer group meeting/citizen meeting) that is established between farmers, and between communities runs smoothly

A2 = Community meeting involving community leaders/traditional elders to determine plant cultivation with consider local wisdom (culture, social norms and traditions)

A3 = The meeting to determine crop cultivation also involves representatives of the Department of Agriculture and is actively involved provide assistance/counseling, as well as other relevant information needed

A4 = Each individual farmer is given the same opportunity to have an opinion (ask and give advice/input) to determine crop cultivation during the meeting

A5 = After there is a mutual agreement in determining the type of commodity to be cultivated, it is carried out by all members farmer groups want to carry out the results of the meeting

B1 = Most of the farmers in your area have good farming skills (sowing seeds, hoeing, irrigating, plow, plant, fertilize, eradicate pests, even harvest)

B2 = Farmers in your area do not have problems with the regeneration of agricultural workers (eg parents inherit to children etc.)

B3 = The existence of farmers who until now survive because there are no other jobs

B4 = The existence of farmers who until now survive because farming is profitable

B5 = The concept of sustainable agriculture that pays attention to environmental protection, is economically profitable and especially the availability of agricultural labor in your area then the concept can be successful

C1 = There are plant commodities in your area that are unique compared to other areas

C2 = Farmers in your area maintain the cultivation of plants that have unique location specifications

C3 = Plant commodity that has this uniqueness, further development has been carried out by the relevant agency (nursery research activities to post-harvest treatment)

C4 = Farmers who maintain plant cultivation with unique location specifications, because the selling price is high

C5 = Preserving crop commodities with unique location specifications supporting the concept of sustainable agriculture

D1 = Plant commodities in your area have the potential to continue to be developed

D2 = Agricultural production in your area is sold in traditional markets scattered throughout

the district.
D3 = Agricultural production in your area can enter and meet the product criteria determined by the modern market or retail (supermarkets/minimarkets) in the Pasuruan Regency
D4 = Agricultural production in your area has the opportunity to be marketed abroad (export)
D5 = So far there has been socialization related to assistance from related agencies in partnering with exporters in product marketing overseas agriculture
E1 = Farmers feel constraints in capital especially to meet production costs
E2 = Farmers who are members of farmer groups (POKTAN) have difficulty obtaining funds from cooperatives or bank loans
E3 = Information and technology insights provided by extension workers to farmers are still difficult to understand and applied
E4 = Farmer group managers actively have activities to support the success of farming for their members
E5 = Cost, technological and institutional barriers will make it difficult to achieve the concept of sustainable agriculture

Thus, understanding the psychology of agricultural business actors and the surrounding community as an innovation deserves attention. In the context of sustainable agriculture, farmers' perceptions of innovation are very important because they become the basis for making decisions to accept or reject an innovation. Farmers need time to learn, understand, or try the innovations introduced. It is very possible for farmers to modify, do gradually, even postpone the concept of social sustainability for critical land management.

Perception is one of the important psychological aspects for humans in responding to the presence of various aspects and symptoms around them. Perception has a subjective nature, because it depends on the abilities and circumstances of each individual, so it is interpreted differently by one individual and another. [23] state that farmers' perceptions of environmental degradation, number of years of farming experience, and agricultural policies drive individual farmer attitudes and sustainable practices. The implication of this finding is the need to increase the learning ability of individual farmer students about environmental and sustainable agricultural practices through social learning and dissemination of knowledge. [17] interpreting perception as a process when individuals organize and interpret sensory impressions that will be used by individuals to give meaning to their environment. The description of the perception of social sustainability in determining critical land agricultural commodities in midland Welang watersheed of Pasuruan Regency is shown in table 1.

3.1. Conformity with Community Aspiration

Social perception of the research variable indicators is the respondent's interpretation of the Conformity with Community Aspirations variable, which is shown in Table 1. as many as 84 people (56.0%) stated 'Agree' on the statement "Communication (routine meetings of farmer group) went smoothly" meaning often implemented and many follow it. However, there were 25 people (16.7%) who answered 'Disagree'. The reality in the field, respondents think that farmer groups are still lacking in holding meetings which are usually once a month and the frequency of meetings should be changed to at least 2 times a month.

The social perception gave the answer 'Agree' to the statement "The meeting to determine plant cultivation also involved representatives of the Agriculture Service and actively provided assistance/counseling" as many as 95 people (63.3%) and even 5 people (3.3%) answered 'Very Agree' to the statement, it means that the role of the relevant agencies as an extension of the Pasuruan Regency Government is very large in efforts to empower farming communities. This meeting serves as a medium for gathering as well as discussions between farmers and the department in overcoming various challenges such as the scarcity of fertilizers, price fluctuations, marketing, and capital constraints. Table 1. also shows that as many as 75 people (50.0%) stated 'Agree' to the statement "After a mutual agreement has been reached in determining the type of commodity to be cultivated, all members of the farmer group are carried out". This explains that the collective agreement in plant cultivation is a mutual agreement. As much as 103 people (68.7%) in the mediumland of Pasuruan Regency, gave the statement 'Agree' on the item "Each individual farmer is given the same opportunity to have an opinion in determining crop cultivation". The people of the lowlands of the Welang watershed still think that democracy needs to be implemented in deliberation and free speech is the right of everyone, not just the heads and administrators of farmer groups or even local community leaders. Describes that the lowland people, even though they are affected by the rapid development of urban life, still consider freedom of speech and opinion to be open to anyone. Freedom of expression does not run linearly with mutual agreement in cultivation and the consideration is an economic factor. However, agricultural extension workers as well as farmer group administrators try to direct the planting of sweet potatoes or peanuts, with the aim of reducing crop failure losses due to planthoppers and rats.

Accumulatively, the average value of all community perceptions gives a high rating to the statement "Each individual farmer is given the same opportunity to have an opinion (ask and provide advice/input) to determine crop cultivation" which means to determine the leading commodity of critical land agriculture in the medium plains and watersheds. Welang can be done during regular community meetings, where each member is given the same opportunity to have an opinion (ask and give suggestions) including to determine the cultivation of plants.

3.2. Employment

The agricultural sector is the dominant sector of employment in the Welang watershed, Pasuruan Regency. Table 1. shows the social perception of the variable indicator of Labor Application. A total of 107 people (71.3%) stated 'Agree' on the statement "Most of the farmers in your area have good farming skills" meaning that farmers in the middle plains of the Welang watershed have skills from the early stages of cultivating land to harvesting. These skills are largely based on the experience of their predecessors, whether they are parents and friends or family relatives. However, findings in the field revealed that these cultivation skills have not been matched with actions that lead to land conservation. This is evidenced by the large number of forest land clearing into agricultural areas for seasonal crops that are prone to causing landslides and erosion, due to the slope, relatively high rainfall and unstable soil. In addition, many farmers are suspected of still using chemical fertilizers and pesticides excessively in pursuit of a fast and profitable harvest.

Social perception is known to give the statement 'Agree' the most other is the statement "The existence of farmers who until now survive because farming is profitable" as many as 106 people (70.7%). This explains the rational considerations of the people of the Welang watershed, their agricultural activities are profit-oriented. However, not a few also gave the statement 'Disagree' as many as 13 people (8.7%). The main reason is climate change, and the weather is often difficult to predict. Farmers are often faced with high rainfall intensity accompanied by increased pest and plant disease disturbances. In addition, there are interesting statements that are observed, namely many farmers who answered 'Disagree' to the statement "The existence of farmers who have survived because there are no other jobs", as many as 69 people (46.0%). These farmers argue that even though job offers leave their villages to work in cities, they still ignore them. According to them, agriculture is a job that has been passed down from generation to generation and has been sufficient for the needs of the family so that it needs to be maintained. These young farmers then gradually replaced their parents who were no longer strong in farming and some were even still walking hand in hand, sharing tasks and responsibilities so that the benefits could be enjoyed together. Medium-land farmers who can be called urban farming farmers are rice fields that are cultivated on the outskirts of highways, as well as other public facilities and even survive in the midst of the crush of rampant settlements or housing. Their land can still be a mainstay in helping the family's economy.

3.3. Uniqueness

The uniqueness of agricultural products can be said to be difficult to find even if it is necessary to compare one area to another. Agricultural products have a unique appearance starting from the shape, physical appearance, to the taste if it can be consumed, which is then used as a perspective on the uniqueness of location-specific agricultural products. The element of uniqueness or distinctiveness is the competitiveness of an agricultural product that will provide a high selling value, especially now that the trend of public consumption really appreciates the element of creativity that makes an agricultural product different due to geographical indications of different commodities [22].

The main agricultural commodity found is corn. Corn is an agricultural product that represents the temperate plains, especially baby corn. Table 1. is a description of the uniqueness variable. 72 people (48.0%) of medium plains stated 'Disagree' to the statement "There are plant commodities in your area that are unique compared to other areas". However, there is an interesting thing, namely the social perception of stating 'Agree' on the statement "Maintaining plant cultivation with unique location specifications because the selling price is high" as many as 55 people (36.7%). In addition, as many as 87 people (58.0%) also stated 'Agree' to the statement "Preserving crop commodities with unique location specifications supports the concept of sustainable agriculture". Corn is the second food crop commodity that has the highest yield productivity in Pasuruan Regency after rice. Pasuruan Regency contributes corn production to support the economy up to the provincial level. So that Pasuruan Regency is one of the regencies that supports food security and is one of the largest food barns in East Java. This increase in productivity was caused by several factors, including the support for the Hybrid Corn development program for farmers through the assistance of subsidized urea seeds and fertilizers through the government budget. On the other hand, the Pasuruan Regency Agriculture Service organizes activities to control plant-disturbing organisms from an early age through the Plant Pest Control Field School. In addition to corn fields that can be harvested up to 3 times a year, there are also farmers who plant alternately, for example rice-paddy-corn. The high production of corn commodities, apart from consumption, is also known to have a high absorption of animal feed manufacturers so that sustainability is essentially seen as very important.

3.4. Local and Export Market Potential

According to the typology, the distribution of markets in Pasuruan Regency can be divided into two, namely village markets and regional markets. The village market is a market that is owned and managed by the local village government, usually its services only cover the local village and its surroundings. While the regional market is a market that is owned and managed by the district government, usually its services cover a wider area, namely the sub-district or district scale. There are 15 village markets in Pasuruan Regency spread over 10 sub-districts. This market has various capacities with various types of merchandise. The number of traders in the 10 markets is 2,556 people, with 909 stalls, 678 stalls and 853 stalls. There are 15 regional markets in Pasuruan Regency spread over 15 sub-districts managed by 6 Technical Implementation Units (UPT).

Social perception of the potential variables of local and export markets shows that as many as 94 people (62.7%) stated 'Agree' to the statement "Agricultural production in your area sells in traditional markets spread throughout the district. Pasuruan". The agricultural products of the Welang watershed have a relatively good local market potential, they can compete as well as corn which gets high absorption from the livestock industry and other processed industries. In line with these findings, Table 1. also shows that as many as 103 people (68.7%) of respondents agreed to state 'Agree' in responding to the statement "Plant commodities in your area have the potential to continue to be developed", meaning that any commodity that is being carried out by farmers is believed to have potential, feasible and can meet market demand.

On the other hand, 87 respondents (58.0%) responded 'Disagree' to the statement "So far there has been socialization related to assistance related to partnering with exporters" because the exporters with a limited number who are willing to support and are reluctant to partner so that agricultural products can be difficult to penetrate foreign or export markets. Another perception was also given with the statement 'Disagree', namely "Agricultural production in your area has the opportunity to be marketed abroad (exports)" as many as 74 (49.3) answered that way. Most of the respondents are pessimistic about the role of exporters who have minimal cooperation with farmer groups and related agencies, so they perceive it as difficult to penetrate the export market. The cumulative average value of the highest local and export market potential variables in the statement "Agricultural production in your area sells in traditional markets spread throughout the Pasuruan Regency" with a value of 3.80, meaning that the agricultural potential worth

selling can be observed from the behavior of the product in the market. local/traditional as the smallest unit of product distribution even though they still face problems that lack of assistance from related agencies in partnering with exporters in marketing agricultural products abroad. [19] conveyed that the current era of free markets both at the local, national and global market levels is only commodities that are cultivated efficiently in terms of technology and socio-economics and have comparative and competitive advantages that will be able to compete sustainably with the same commodities from other regions.

3.5. Cost, Technological, and Institutional Barriers

Agricultural problems are limited adoption of technology at the farm level and building institutions in the agricultural sector. Institutions are not only concerned with on-farm business, but are also closely related to the off-farm aspects without ignoring cost barriers. The ability of farmers to finance farming is very limited so that the productivity achieved is still below the potential productivity standard.

Based on Table 1. it is known that social perception has the highest frequency of answering 'Agree' to the statement "Farmers feel constraints in capital, especially to meet production costs" with a value of 91 people (60.7%). Farmer's capital is an absolute requirement to start agricultural cultivation, but farmers in the middle plains of the Welang watershed still have limited capital. Respondents, as many as 31 people (20.7%) also 'Agree' on the statement "Farmers who are members of farmer groups (POKTAN) have difficulty obtaining funds from cooperatives or bank loans". There are still a few farmer groups on the plains of the Welang watershed that manage legal entities. Through legal entities, farmers get easy capital loans from banks and cooperatives. The findings of the study provide a recommendation that various loan platforms should be offered to farmer groups that has a legal entity, both local government budget and private banks and the mechanism for obtaining them is easy in addition to increasing financial literacy for them through socialization and counseling.

The perception of the people of the mediumlands (25 people/16.7%) implies a condition "Insights of information and technology provided by Mantri Tani or extension workers to farmers are still difficult to understand and apply". Mantri Tani or agricultural extension workers have the heavy task of providing technical assistance which has not been fully understood by farmers, so they often fail to put it into practice. This response becomes a reference for the relevant agencies that the extension worker assigned needs an evaluation of both the material and the method of delivering the information. Social perception also gave the statement 'Agree' (83 people/55.3%) to the statement 'Cost, technological and institutional barriers will make it difficult to achieve the concept of sustainable agriculture'. After the respondents were given a situational understanding of the direction of this research, they were of the view that leading agricultural commodities were difficult to determine when there were problems with costs, technology and institutions. In aggregate, the arithmetic mean has the highest value (3.62) in the statement 'Cost, technological and institutional barriers will make it difficult to achieve the concept of sustainable agriculture', meaning that the higher the existing barriers, both costs, technology and institutions, make it difficult for leading agricultural commodities to be developed for production. towards sustainable agriculture or in another sense social sustainability can be realized by reducing all the obstacles faced, especially costs, technology and institutions so that it is easy to determine superior agricultural commodities.

4. Conclusions

Sustainability means maintaining a goal over a long period, in the context of agriculture, the management of agricultural resources to meet changing human needs while maintaining or improving the quality of the environment and conserving natural resources. Social sustainability relates to the quality of life of those who work and live on agriculture and the surrounding community. Perception as a process to understand and be aware of the surrounding world and awareness of the experience of something can be in the form of seeing, hearing, feeling, or reacting by distinguishing objects or events that occur in the surrounding environment. Perception serves as a medium that connects individuals with their environment. Without the perception, the individual will not have experience and without the perception of social life will not happen.

The social perception of agricultural activities in the midland needs to be explored based on the experiences and perceptions of all involved, either directly or indirectly, from the agricultural activity itself. The perception of social sustainability in determining agricultural commodities for critical land in the Welang Watershed on the parameters of conformity with community aspirations places the statement that there is an equal opportunity to have an opinion in determining crop cultivation during the meeting. When viewed from the parameters of labor absorption, social sustainability obtained interesting findings, namely that many expressed their disagreement with the statement of the existence of farmers who survived because there were no other jobs. Therefore, agriculture is a work that has been passed down from generation to generation and has been sufficient for his family's needs so that it needs to be maintained. Perceptions of social sustainability in determining agricultural commodities for critical land in the Welang watershed on the uniqueness parameter illustrate that most of them do not agree that maize commodity in their area is unique compared to other areas. However, the social's perception of the potential variables of local and export markets shows that stakeholders agree that agricultural production, especially corn, is sold in traditional markets spread throughout the district. even that corn commodities get high absorption from the livestock industry and other processed industries. In addition, it can be concluded that capital is a classic problem and applies to domestic agriculture until now. This study provides additional support from empirical studies with the perception that farmers feel constraints in capital, especially to meet production costs, even though farmer capital is an absolute requirement for the agricultural cultivation process. The research carried out can be known to produce good perceptions, especially the parameters of labor absorption and conformity with the community's aspirations as important social characteristics in an effort to determine the superior commodities of critical land agriculture.

On the other hand, the lowest perception or lack of consideration is the potential of local and export markets because of the difficulty of establishing cooperation with exporters and the limited support of local governments that must find solutions in an effort to realize social sustainability in the future.

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