



# Analysis Of Institutional System On The Welfare Of Organic Rice Farmers In Lumajang District

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**Abstract:** This study was conducted by the researcher because the researcher saw the low level of farmer welfare which is due to the absence of a good agricultural institutional system, such as in Lumajang Regency. Lumajang district has two rice farming areas that switched from non-organic to organic, namely Candipuro and Jatiroto sub-districts. The government focuses on providing interventions to rice farmer groups in these two sub-districts from nursery to sales. The focus of this research is to analyze the institutional system on the welfare of organic rice farmers in Lumajang district. This research is a qualitative study with a phenomenological approach. The targets in this research are key informants, namely the Head of the Agriculture Office of Lumajang District and the Head of the Trade Office of Lumajang District. The main informants included the Director of PD Semeru, POKTAN/GAPOKTAN, and farmers. Additional informants included farm shops. The results of the study found that based on the rules of the game in the institutional system of organic rice farmers in Lumajang District, it can be said that it already has rules of the game as a guideline for the implementation of organic rice farmer management and problems due to disciplinary factors that are not implemented. In addition, the organizational system is still experiencing problems. The problem is not the implementation of the institutional decree that has been made, the sense of belonging to the organization from policy makers in the region and stakeholders, the participation of members in building institutions is still said to be minimal.

**Kata kunci:** kesejahteraan petani, kelembagaan.

## I. INTRODUCTION

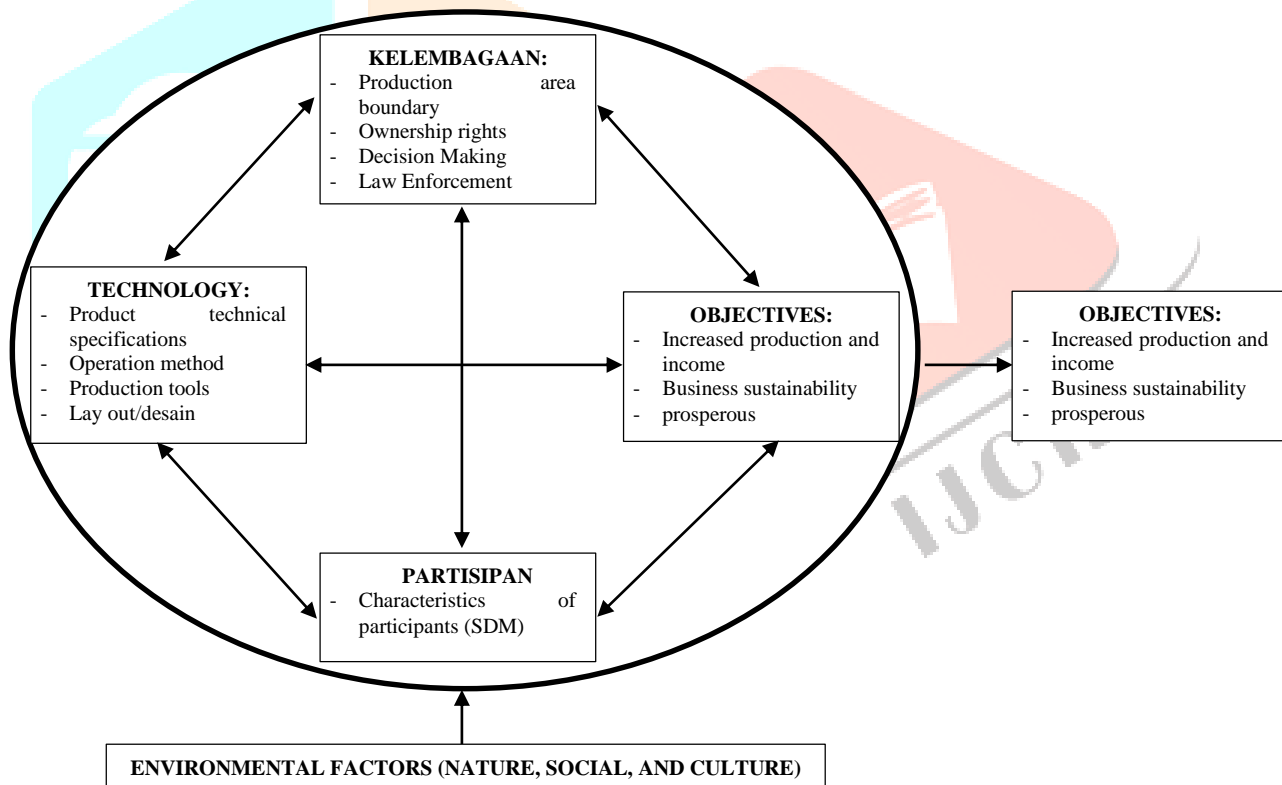
The welfare of farmers in Indonesia has decreased every year, which can be seen from the results of the Farmer Exchange Rate (NTP) survey from 103.01% in 2019 to 101.69% in 2020. The decline in the number of farmers' welfare can show that the welfare of farmers in Indonesia is still relatively low, where this is due to several things including environmental factors such as rainfall, slope, soil fertility level. Other factors include human resources, funds and funding, and technology including production equipment, regional infrastructure design, and the presence or absence of a Standard Operation Procedure (SOP). (Ananta). Overcoming this problem, institutionalization is one way to get out of the low welfare of farmers, seeing that East Java Province is one of the regions with a vibrant and developed farmer group institution. Members and administrators play a role and interact well with each other for mutual progress. One of the regions that has implemented agricultural institutions is Lumajang District. The Regent and the Forkopinda of Lumajang District have launched the transition of non-organic farming to organic farming by 2020. This is the government's breakthrough in increasing economic growth in Lumajang district. Organic farming has advantages such as a higher selling price compared to the operational costs incurred by farmers, so that later the income of farmers will be much higher, which will automatically increase the profit of farmers and increase the welfare level of farmers. In addition, organic rice is also more suitable for the current trend of life because it is considered healthier. As preliminary research conducted by researchers. The Lumajang district government tried this agricultural

transition in Candipuro and Jatiroto sub-districts, where these two sub-districts are the largest rice farms in Lumajang district. The government provided interventions for organic rice farmers and observed and compared farmers' income before and after the intervention. The intervention starts from seed selection to sales. The government provides counseling on how to choose seeds, make organic compost fertilizer, planting, and the government takes part in the sale of organic rice. Sales are distributed to organic shops or markets in the Lumajang area and outside Lumajang district. However, this sale turns out to be a problem because there are only a few organic shops, while the production cannot be accepted entirely. Based on the above problems, researchers feel the need to conduct deeper research to maximize the overall production of rice farmers so that all can be marketed, so that farmers' income increases, organic rice farming is sustainable, and farmers can live prosperously. The researcher focuses on the research objectives, namely analyzing the institutional system on the welfare of organic rice farmers in Lumajang District

## II. LITERATUR RIVIEW

Institutional Institutions are rules in an organization or community group to help its members to interact with each other in order to achieve a desired goal.<sup>1</sup> Two types of institutions, namely the first, as a rule of the game, which means that the institution is a set of rules that limit all activities of members and administrators to achieve organizational goals, the second is an institution as an organization, which means that the institution can describe economic activities that have been coordinated through administrative or command mechanisms.<sup>4</sup>

Sistem kelembagaan petani digambarkan seperti dibawah ini:



Sumber: Zakaria, 2019

A goal is something that a group or organization wants to achieve through a series of activities. Technology is a set of ideas, tools, procedures, and ways to manage resources so that the benefits generated are higher. Environmentally sound resource management will achieve conditions of economic growth, equity and environmental conservation. The technology used must be compatible with the characteristics of the participants and the environment so that it can provide benefits in a sustainable manner. Environmental factors, are factors that determine the performance of an organization but are not controlled by the organization. These include rainfall, slope, soil fertility, market products, regional infrastructure, government policies, and social environment. Diversity, is a series to develop farmers' adaptability and innovation to changes in technology and rules of the game in order to achieve common goals in certain situations, conditions and environments.

Farmer institutional capacity, according to Anantanyu (2019) in Zakaria, can be achieved by looking at four indicators, namely: a. The institutional objectives of the farmer group are achieved, meaning: the clarity of objectives, the suitability of objectives with the needs of members, and the level of fulfillment of members' needs by the institution is high. b. The functions and roles of the institution are running, including: the ability to obtain, organize, maintain, and mobilize information, labor, capital, and materials, as well as the ability to manage conflict; c. The existence of institutional innovativeness, including: the role of leadership in the institution, the leadership function in the institution is running. Institutional innovativeness, including: the existence of leadership roles in the institution, leadership functions in the institution, the existence of values that underlie cooperation, the division of roles of members, the pattern of authority in the institution, the commitment of members to the institution, available sources of funding, available physical facilities, the quality of resources. members are adequate, and the existence of appropriate technology. d. Institutional sustainability, including: good member sentiment, high member awareness, member cohesiveness, great member trust, available external assistance, two-way communication patterns between members, and cooperation with other parties.<sup>3</sup>

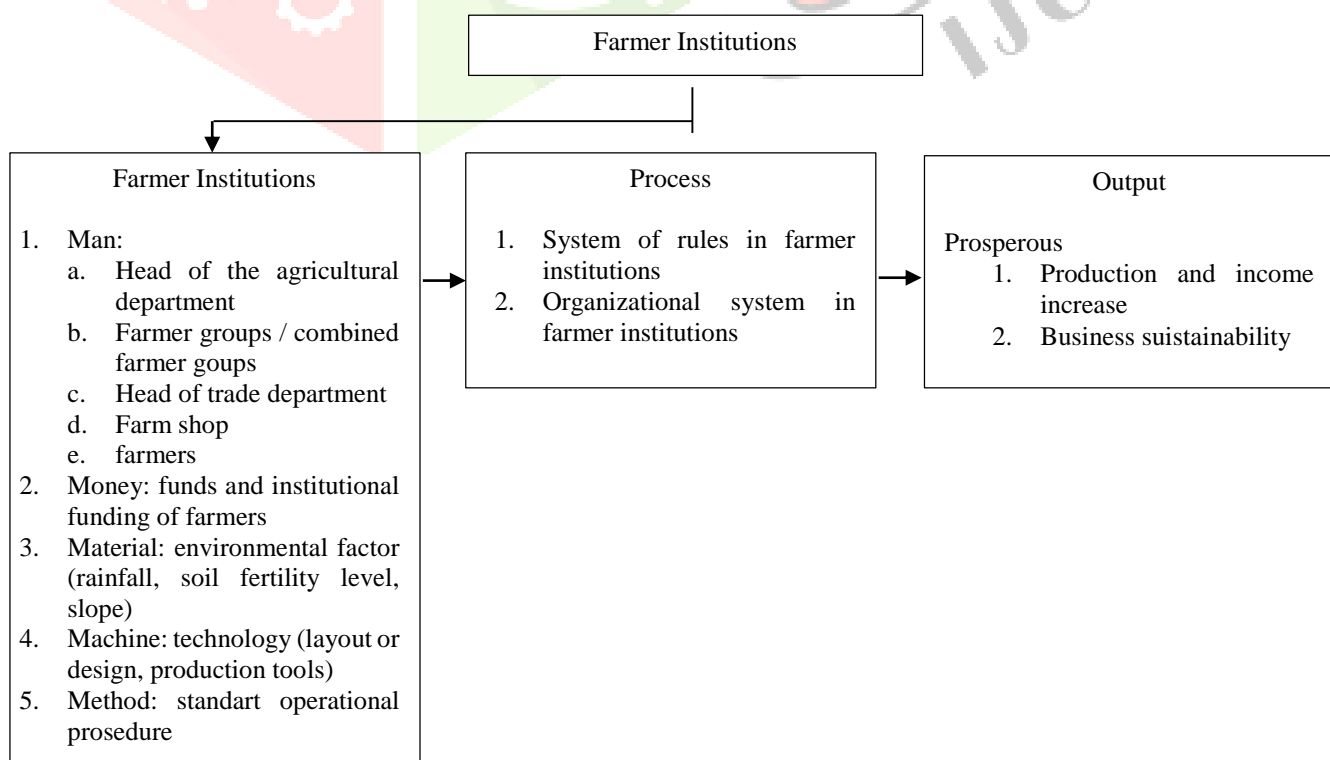
### System Theory

The system is an entity that strives to maintain its existence by carrying out mutually beneficial relationships with its elements to achieve goals. The system consists of a number of interacting components, which means working together to form a single unit. Each subsystem has the properties of the system to carry out a certain function and affect the overall system process. The parts of the system include, input, process, output, impact, feedback, and environment, where all of these are interconnected and affect each other.<sup>3</sup>

- a. System Input (Input) Input is a subsystem that will provide all input for the functioning of a system.
- b. System Processing (Process) Process is an activity that functions to convert an input into an expected result of the system.
- c. System Output Output is the result obtained from a process. Output is the result of data that is processed and classified into useful outputs or information.
- d. Impact (Outcome) Impact is the result of the system, which occurs relatively long in time. Impact is a direct or indirect effect or consequence resulting from the achievement of the objectives of a program in the form of benefits and impacts of the program.

### Theoretical framework

This study uses a modified scheme of farmer institutional systems by Pakpahan, 1990, which is integrated with Ludwig von Bertalanfy's general system theory



### III. RESEARCH METHODOLOGY

This type of research is qualitative research with a case study approach. Researchers tried to observe from the angle of why and how to the reality of the problems found in the implementation of organic rice farmer institutions in Lumajang District. The approach used in this research is a phenomenological approach, where researchers go directly to observe and analyze the phenomena that occur in organic rice farmer institutions in Lumajang District as an effort to improve farmers' welfare.

#### 3.1 Population and Sample

The key informants in this study were the Head of the Agriculture Office of Lumajang District and the Head of the Trade Office of Lumajang District. The main informants included the director of PD Semeru, farmer groups/combine farmer groups, and farmers. There were also additional informants, namely farm shops.

#### 3.2 Data and Sources of Data

The data in this study include primary and secondary data. Secondary data include marketing prices, land area, production costs and yields, number of farmers, farmer groups, and institutions obtained from the Lumajang District Agriculture Office. Primary data includes the results of in-depth interviews, documentation and observations conducted by researchers with research informants.

#### 3.3 Data Collection Techniques and Instruments

This research technique uses observation techniques where researchers are not directly involved in the activities of the research subjects but rather researchers only observe the social interactions they create, both with fellow research subjects and with outsiders, in-depth interviews, namely interview techniques conducted by researchers to informants related to the institutional system of organic rice farmers in Lumajang Regency, and documentation in the form of images, photos, voice recordings during interviews that can support the results of the research.

#### 3.4 Data Presentation and Analysis Techniques

##### 3.4.1 Data Presentation Technique

The data is presented in the form of word descriptions and direct quotes from research informants, then linked to existing theories.

##### 3.4.2 Data Analysis

Analisis data dengan metode analisis interaktif, Dimana pada tahap awal proses analisis data menggunakan model Data analysis using the interactive analysis method, where in the initial stage of the data analysis process using an interactive model is to reduce data. Data reduction by compiling codes in this case is sorting out the parts of the data that need to be coded on each question in each informant's answer. Data reduction activities by coding can be carried out through fairly strict data selection, summarizing, and classifying data into a broader and easier to understand pattern. The next stage is for researchers to present the data through a summary so that it is easy to understand and verify or draw conclusions.

### IV. RESULTS AND DISCUSSION

#### SDM in the Institutional System on the Welfare of Organic Rice Farmers in Lumajang District

The characteristics and quality of human resources of organic rice farmers are very diverse, this can be seen based on the variables of age, education, land area, and income of farmers Organic Rice Farmers in Lumajang District which includes non-productive age (>64 years) reached 12%. that farmers with non-productive age are more in Organic Rice Farmers in Lumajang District The number of farmers with non-productive age (elderly), because they feel they are still strong, have to work to earn income, and there is no regeneration of farmers. In line with the results of the following interview by informant 3:

"The total number of organic rice farmers in Lumajang district is 35 people, spread across several sub-districts, the average age is 50-55 years. The older ones are also many people, the current generation of our children are many who do not want to be farmers, there are many losses, the future is not guaranteed."

SDM in the implementation of the institutional system of organic rice farmers in Lumajang district when viewed from the monitoring function, it is still not running well. Organic rice farmers must always be monitored by ICS (Internal Culture System) but not optimally because based on the results of interviews with informants ICS works only before certification, so the monitoring process does not run optimally. In addition, we must encourage this system to run at all times. Farmers really hope that starting from tillage, ICS will start recording whether the Standard Operating Procedure is running well, it should be controlled regularly by ICS. In application, the monitoring system carried out by ICS has not functioned properly, which has an impact on the quality of organic rice produced by rice farmers in Lumajang district. The role of the ICS is not followed by the Field Extension Officers who only go down when explaining certification. Whereas organic knowledge in organic rice cultivation not all farmers understand the information thoroughly.

Problems related to human resources for organic rice farmer institutions also occur in several areas in Lumajang district. This problem occurs in organic rice areas in Jatiroto sub-district, Banyuputih sub-district, Randuagung sub-district, Sukodono subdistrict, Karangbendo sub-district. Organic rice farmers in the process of quality control rely on their ICS. In fact, ICS almost never conducts monitoring. Farmers never know when ICS is coming. Assistance activities are only carried out in Jatiroto, finally other sub-districts do not understand. The process of brainstorming and socialization as a whole has not been carried out by ICS so that the risk of organics in rice plants is increasingly risky. As in the interview with informant 1 as in the following quote:

"This organic area is not 1 village, jatiroto settifikat gapoktan kec jatroto, the location of farmers is in banyuputih kidul, randuagung, sukodono, there is in karangbebdo, 27 but 1 naunagn area jatiroto. Friends rely on the ICS. In fact, we don't know when it will come, only one or two people know. Indeed, the assistants in Jatiroto, finally those in Sukodono do not understand sometimes, but farmers routinely meet with the ICS without being accompanied by PPLs, but then the PPLs are not followed. That's what happens".

### **Funding in the Institutional System on the Welfare of Organic Rice Farmers in Lumajang District**

The funding aspect of organic rice farmer institutionalization in Lumajang district comes from the Lumajang district budget. The Agriculture Office has always budgeted the funding of organic rice farmer institutions starting from 2019 in the DPA. The budget provided by the agriculture office is related to organic certification licenses and surveillance honorarium. Farmer certification licenses are paid every 3 years with a budget of Rp.85,000,000. while the budget for surveillance honorarium is paid annually at Rp. 75,000,000. as stated by the following key informant:

"To be honest, this is the 6th year of certification of organic rice farmers who are not yet independent, every year we have surveillance certification. So far they are not independent so they are supported by the agency. Until the 6th year this is still continuing. For surveillance of 2 groups, the budget is 75 million per year, for certification 85 million. Certification every 3 years, surveillance every year."

This is in line with the following statement of informant 1:

"In the future, one district certification is enough, not two, so it's okay if we call it Gapoktan kec Candipuro but the organic members are all districts. Surveillance certification is getting wider and wider. In Jatiroto, it's only 5 hectares, plus the conversion, it's about 11 hectares, Candipuro started with 13 hectares and ended up with 28 hectares, and it used to be up to 50 hectares. This means that every additional area, for example, an area below 10 officers is only 1, but if it is more than 10, there is more than 1 surveyor, so if it is 50 hectares, there are 5 surveyors. The Department's RKA ends up being burdened..."

The statement states that there is no efficiency in budgeting, organic rice farmers between Gapoktan are still not well organized. The independence of organic rice farmers in Lumajang district is only limited to the cash contributions of the Gapoktan which are only used for the purpose of dealing with light needs, such as contributions for the purchase of materials needed to make natural fertilizers. Organic rice farmers are very dependent on the selling price of organic rice which is still far from competitors in other areas, the increase in conventional rice prices is not followed by an increase in the price of organic rice, making the financial condition of rice farmers increasingly plummeting as stated by informant 1 in the following quote:

"The price this year is not the same, conventional 9000, organic can be 20,000, now conventional 15000 organic remains 20 thousand, want to raise it, it will not sell. Another district Banyuwangi has dared to 25. ..."

### **Materials in the Institutional System on the Welfare of Organic Rice Farmers in Lumajang district**

The material aspects of the institutional system of organic rice farmers in Lumajang district include three things: environmental factors of rainfall, slope, and soil fertility. Fertility is influenced by several factors including the influence of long-term volcanic ash. As stated by the key informant in the following quote:

"The environmental factor is actually very supportive of the development of organic rice, especially the Candipuro area, Penanggal Sumber Mujur, indeed the superiority of water from the source to the rice fields. The weather is very supportive, the area of Sumbermujur and Penanggal is more elevated, it affects the age of the plant longer, in the city 105 in Penanggal can be 125, so that 1 year only 2x planting, and suitable for such conditions is indeed for the development of organic rice. Water, weather, soil, long-term volcanic ash influence and other environmental factors are very good. They always show good results"

Social factors that are also a problem were also raised by the main informant:

"Fertility must be here, the left and right like to destroy the boundaries, if I pager mas. Indeed, you have to really choose the flow of water so that the water that flows into the rice fields does not contain chemicals, usually detergents, pampers, soap, so I made a water filter."

### **Machines in the Institutional System on the Welfare of Organic Rice Farmers in Lumajang district**

The aspect of technology fulfillment in supporting organic rice farming in Lumajang district can still be said to be not in accordance with the needs of farmers and the management environment of organic rice farming. This is shown through the following quote from the interview with informant 3:

"The technology here is terraced land, the tools are imported which are not suitable, the planting tools are also not suitable here. Government aid tools. The sak aid is also not suitable. The good thing is that the plastic is compacted, well even the assistance from UNEJ is good."

Based on the informants' statements, the current technology is not suitable with the existing environmental conditions including the facilities and infrastructure that have been procured and fulfilled by the local government. The mismatch shows that the existing organizational system is still not strong so that in the aspect of determining policies through planning the fulfillment of facilities does not match the conditions in the field related to the management of organic rice farming in Lumajang District. Facilities and infrastructure such as functioning equipment are also missing according to informant 4:

"I want to build my own machine, mas, with a packaging area, this tractor used to be an aid, it was not repaired and did not function on my land, it was not used but many were lost. There are many poktan that are not used but sometimes the machines are lost"

### **Method in Institutional System on the Welfare of Organic Rice Farmers in Lumajang district**

The method in this case is more focused on standard operating procedures as a supporting document for the management of the institutional system which will have an impact on the workflow / rules of the game that will be carried out in the institution of organic rice farmers in Lumajang District. The standard operating procedure currently exists, according to the following quote from the interview with informant 2:

"The last SOP is in 2021, this Organic is in 2022, the obstacles are not experienced directly but if I look at it, we are positioned as sales, from the market side, yes, if the position of our farmers is still sales, we are only given finished goods to sell. The margin is very small. That's the problem"

And the results of interviews with key informants:

"There are 30 hectares here, but only 14 hectares have registered for certification"

Based on the informant's statement, it is explained that the Standard Operating Procedure already exists and has been implemented. However, there are still problems related to the application in the field and there are

still some rules that should exist but currently do not exist, such as those related to the certification process for organic rice farmers in the field, the problem is not only there, there are other problems that arise as a result of the availability of rules that are not comprehensive, such as the results of interviews with informants 4 below:

"Now, if there is an obligatory request, they still store it at their homes. Because we are constrained in capital to buy grain from farmers, until we gather people from farmers."

The above problems are in line with the research of Cut Muftia Keumala, and Zamzami Zainuddin, 2018 on Farmer Welfare Indicators Through Farmer Exchange Rate (NTP) and Sharia financing as a Solution which states that three problems that can threaten the welfare of farmers over the ineffectiveness of credit / lending are interest-based loans, inequality between borrowers and lenders and lack of loans to the agricultural sector because it is considered high risk. Financing problems cause difficulty in accessing production costs so that there is a decrease in the level of productivity and a decrease in the exchange rate of farmers, so that there is a decrease in the level of welfare of farmers. In addition, this condition is also in line with the research of Mansoor Ahmed Koondher, Amanullah, Ghulam Rasool Lakhan, Siraj Ahmed Channa, Habibullah Magsi, Jing Wang, Naseer Ahmed Channa, 2020 on Credit constraints and rural farmers' welfare in an agrarian economy with the results showing that credit constraints have a negative impact on farmers' welfare and income. Better welfare can only be achieved if credit is given to farmers who have credit constraints.

### **Analyzing the processing aspect of the system (process) in the form of a system of rules of the game in the institutional system on the welfare of organic rice farmers in Lumajang district**

The Institutional System of Organic Rice Farmers in Lumajang District not only has the rules of the game but at this time it can be said that it has been running and has been implemented to the entire management of organic rice farming. In this case, the rules of the game / procedures for managing the institutional system have been carried out, which includes the core organizational structure and several supporting elements, such as the ICS, Institutional Supervisors and as in the following excerpt from an interview with a key informant:

"So in organic, it is a patent organization, so organic farmer groups must have an organizational structure, so Candipuro Organic is on behalf of farmer groups, there is an organic structure, there must be an organic PJ or chairman, the chairman is assisted by ICS and Admin and there is an organic commission team so for example the ICS supervision reguler does it, when the ICS works and supervises farmer groups, there are findings, the findings are reported to the commission to be decided. So the system is like that, one of the items assessed by LSO is the organization, ICS, supervisor"

The quote explains that the organizational structure in the institution that houses organic rice farmers in Lumajang District already exists and has been implemented, which in addition to the internal structure also has a supporting element that acts as a controlling aspect in the implementation of this institution. The supporting structure is divided into 2 (two) namely ICS, Supervisor.

Although there is already a core structure and also a supporting structure in the organic rice farmer institution in Lumajang District, the shortcoming is that it is still not followed by the implementation of a written document that will later be used as a reference/guideline. This is as explained in the following quote:

"The village government has no role, we were initially independent, we thought about health. People in the past did not have chemicals, how come they were healthy, initially there were 4 people desperate to use organic. Only for their own consumption. The area is only ¼ hectare. Then there was a response from the agency. There was a program, I was invited to training and I was told to develop it in the environment, at first we sold it individually, then there were markets in Kediri and Surabaya. Then there was a policy from the district, ASN used to be obliged to buy organic, then because the product was still lacking, we finally sold it outside, we closed it. In the past, if there was an MOU, I was brave, my friends said I didn't need the regent's program, then in 2018 the regent Pak Toriq. The cooperation with PD Semeru is chaotic. Semeru warehouse and SOP are not qualified. What is sold to ASN I don't know if it's our product or not. In 2024 our customers will be offered again. Cooperation with Semeru should be forever. In fact, the PD is not committed at all. In the past, the request was 1 month and a half tons, so to cover that, we sold everything we deposited. I don't know if PD Semeru is not committed, I proposed an MOU, but my friends said that the

important thing is that the rice sells above average. 2016 was the beginning of organic mas. The land expansion was 300 hectares. Then it was developed for the people here. Pesticides are completely 0, mas.”

### **Analyze the aspects of processing system (process) in the form of organizational system in the institutional system on the welfare of organic rice farmers in Lumajang district.**

The implementation of the institutional system of organic rice farmers in general experiences obstacles related to the implementation of the organization that only has a decree but the decree does not function properly in accordance with the job description and functions that should be carried out. This condition refers to the following excerpts of interview results by informant 1 and key informants:

"The decree is already there and clear, but the implementation is not running and is only limited to the decree. The document is called the Quality System Document and is the responsibility of ICS.

Administratively, many do not understand, many institutional rules do not know what is important technically, when going from conventional to organic, at least 2 years. Land conversion and cultivation must have dropped to 7 tons, can get 3 tons or even 2 tons, after that the longer it is, the healthier the soil environment and the gradual increase in production, the longer it is as usual the standard again. The longer the more tonnage"

Based on the quote above, it is clear that by not running the institutional decree that has been made with only a decree, the principles of the institutional organization system cannot be implemented, of course, in the aspects of jurisdictional boundaries, property rights, and rules of representation.

In this case, the boundary of authority aspect does not work, which will result in the absence of guidance regarding what policies and strategies need to be done to overcome the problems that will occur when the organic farmers under this institution appear, so that when this is not resolved, it will result in a decrease in the productivity of organic rice farming in Lumajang District. In addition, the unclear strategic direction in the organizational planning aspect resulted in unclear programs, activities and efforts that need to be done in the future to improve the welfare of organic rice farmers. The property right aspect is related to the sense of ownership of the organization from local policy makers and related stakeholders, which is still lacking, which can lead to the lack of organization of the institution so that it seems that the existing groups only prioritize the interests of their respective groups, which affects the competition and leverage of organic farmers' production in Lumajang District. Furthermore, the rule of representation aspect related to the participation of members in building institutions is still said to be minimal, it can be seen in the quote above that administratively there are still many members who still do not understand the flow and rules that exist and only know technically in the field. This clearly shows that the organizational system in this organic rice farmer institution is still experiencing problems. The application of the rule of representation is in line with the research of Yupadee Methamontri, Takuji W. Tsusaka, Farhad Zulfiqar, Vimolwan Yukongdi, Avishek Datta, 2022 with the title Factors influencing participation in collective marketing through organic rice farmer groups in northeast Thailand which states that relatively high levels of social, economic, institutional, and environmental benefits arising from participation in groups in particular, environmental benefits are higher than other types of benefits.

## **IV. CONCLUSION**

- Welfare of Organic Rice Farmers in Lumajang district Human resources of organic rice farmers in Lumajang district include farmers of non-productive age and dominate. The majority of farmers have a high school or vocational high school education and own land that falls into the smallholder category.
- The funding aspect of organic rice farmer institutions in Lumajang district is sourced from the Lumajang district budget. The problem with this aspect of funding for farmers' welfare is the lack of other sources of funding to support agricultural governance.
- There are no problems with rainfall, slope and soil fertility. Adaptive strategies need to be developed for farmers who are technically unable to utilize environmental conditions.
- The aspect of technology fulfillment in supporting organic rice farming in Lumajang district is still not in accordance with the needs of farmers and the environment.



- There are still problems related to the implementation of SOPs in the field and there are still some rules that should exist but currently do not exist, especially related to SOPs for farmer certification, agricultural capital.
- The rules of the game in the institutional system of organic rice farmers in Lumajang district can be said to already have rules of the game as guidelines for the implementation of organic rice farmer management and problems due to disciplinary factors that are not implemented.

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