

The Relationship of Community Empowerment and Social Capital towards Production Capacity of Agricultural Product in Indonesia

Dr. (can). Nuraini¹, Assoc.Prof.Dr. Choirul Saleh². Dr. Wike³. Assoc. Prof Dr. Dr. Bambang Slamet Riyadi^{4*}

^{1,2,3}*Universitas Brawijaya. Faculty of Administrative Sciences. Jalan MT, Haryono No. 163 Malang City, East Java, Indonesia.*

⁴*Universitas Nasional, Faculty of Law. Jakarta and Lecturer in Doctoral Program of Law. Universitas Jayabaya Jakarta. Indonesia; E-mail: bambang.s.riyadi@jayabaya.ac.id*

Abstracts: This research aimed to predict and analyze the effects of community empowerment and social capital on production capacity of rice (paddy) in Indonesia. This research was very significant due to the ontological level and sociological level for improving production capacity. The problem was studied using a quantitative research method. Data were collected through survey questionnaires to 100 farmers in Indonesia and related documentation. Data were analyzed statistically by using Partial Least Square (PLS). The results were as follows: community empowerment positively affected production capacity, community empowerment positively affected social capital, social capital positively affected production capacity; and social capital fully mediated the relationship between community empowerment on production capacity. This result provides a recommendation for academicians and practitioners in making better development and implementation for improving production capacity.

Keywords: Community Empowerment, Social Capital, Production Capacity.

1. INTRODUCTION

The growing interest in agriculture needs to be sustained with more targeted capacity building activities from relevant government agencies and groups to specifically promote and produce more agribusiness entrepreneurs, especially youth and women, through a number of systematic education and mentoring programs with incentives prepared in a systematic way. Mature and sustainable training modalities and innovative training modalities supported by a social safety net system will be critical to sustain interest in agriculture. Policies that support trade must be designed to simultaneously support productive agricultural systems that ensure food security in the region (Gregorio & Ancog, 2020). An analysis of the elements, resources and capacities of agricultural production, shows that agricultural production units must adopt strategies that enable them to achieve growth rates that help address inequality and the problems of hunger and poverty in the world (Perez, Molina, Gomez, Antunez, & Martinez, 2019). Agricultural productivity through awareness raising, capacity building and provision of up-to-date information on input supply, drought early warning, climate change adaptation strategies, weather forecasts, access to markets and loans. Therefore, there is a significant need to improve the quality and outreach of extension services. Most of the information used by smallholder farmers, who are generally illiterate and lack skills, is through oral explanation and personal experience. Consequently, they need to be exposed to field trials and demonstration training. Therefore, it is suggested that future interventions in promoting should demonstrate the economic, social and environmental benefits of implementing them at the local level. The extension service conducts farmer-led pilots for meaningful farmer engagement, learning, adoption and adaptation at the local level (Myeni, Moeletsi, Thavhana, Randela, & Mokoena, 2019). Based on the results of research conducted in Asia, Africa, and also Latin America above, it shows that it is important to do community empowerment in the agricultural sector in increasing rice production to advance the agricultural sector.

The agricultural sector in Indonesia is still considered a space for the common people. Approximately half of the Indonesian people work in the agricultural sector. This is a concern for the government, especially the Ministry of

Agriculture to make various efforts to foster agricultural business actors. Agriculture in Indonesia still provides a very broad economic space for the people, especially the small and medium people if properly empowered. Agriculture is a sector that is always needed by humans, especially due to the large number of consumers in Indonesia. Farmers continue to innovate not only to dominate the market in Indonesia, but also to export certain commodities. However, farming communities are often faced with various complex problems sometimes resulting in huge losses. These problems come up every year and the Government has to immediately find a solution to solve them. Prosperity is reflected in the fulfillment of basic needs and increased purchasing power. Several factors that influence poverty in rural areas are related to indicators of farmer welfare, wages received by farm workers, inflation, and per capita income. The farmer's exchange rate is an indicator of farmer's welfare. The farmer exchange rate is the ratio between the price index received by farmers and the price index paid by farmers expressed as a percentage. Agriculture in a narrow sense is people's farming, namely family farming, where the main production is rice. While agriculture in a broad sense includes smallholder agriculture, plantations, animal husbandry, fisheries and forestry. Agriculture is also an activity of utilizing biological resources by humans to produce food, industrial raw materials or energy sources, as well as to manage their environment. Humans need energy to maintain their body's resistance. Rice is one of the staple foods that is easy to process and serve, delicious, as well as contains a high energy value, providing a big impact on body activity or health. Rice is a food ingredient that produces rice (Irham & Mulyo, 2016).

The empowerment of farmers in Indonesia is regulated in Law Number 19 of 2013 concerning the Protection and Empowerment of Farmers. The empowerment of farmers is by increasing the ability of farmers to carry out better farming activities through education and training, counseling and mentoring, development of systems and facilities for marketing agricultural products, consolidation and guarantee of agricultural land area, ease of access to knowledge, technology and information and strengthening of institutions. The empowerment of farmers in the Minister of Agriculture Regulation No. 82 of 2013 can also be carried out through training and counseling activities with a farmer group approach. Farmers' groups are farmers grouped based on common interests, similarities in social, economic and resource conditions, similarities in commodities, and friendship. This group aims to improve and develop members' businesses. A farmer group is an institution at the farmer level formed to organize farmers in farming. Production theory explains the technical relationship between input and output. Inputs are goods and services needed in the production process, and outputs are goods or services produced from a production process. Besides, the production process is a process of changing inputs into outputs, increasing the value of these goods. Farmers as executors expect maximum rice production results to obtain large income. Therefore, farmers use land area, seeds, fertilizer labor, and other production facilities to obtain the expected production results. Production technically is a process of utilizing available resources with the hope of obtaining maximum results from all the processes that have been carried out. Basically, production is intended to meet all human needs. As the need increases, it is necessary to increase or expand production, both in quantity and quality (Hartatik & Adiningsih, 2003).

According to Law Number 19 Article 3 of 2013 concerning Protection and Empowerment of Farmers, the empowerment of farmers has the following objectives; a. To realizing the sovereignty and independence of Farmers in order to increase the level of welfare, quality, and a better life; b. To provide agricultural infrastructure and facilities needed in developing farming businesses; c. To provide certainty of Farming Business; d. To protect Farmers from price fluctuations, high-cost economic practices, and crop failures; e. To improve the ability and capacity of Farmers and Farmer Institutions in carrying out productive, advanced, modern and sustainable Farming Businesses; f. To develop Agricultural financing institutions that serve the interests of Farming Businesses. The typology of agriculture in Indonesia is people's agriculture, namely agriculture cultivated by the people. The agricultural products, such as rice, corn, sago, sweet potatoes, beans, and soybeans are harvested by out by farming and gardening. Paddy fields are used to grow rice. The various types of rice fields include irrigated and non-irrigated rice fields. Irrigated rice fields have irrigation system with water sources from artificial lakes (dams) flowing to the rice fields. Non-irrigated rice fields consist of 1). rainfed rice fields are fields having, irrigation system with water source from rain and the planting is adjusted to the rainy season, 2). Lebak rice fields, it is located on the right and left of the river where land is lower than the river, 3). Bencah (tidal) rice fields, it is located near swamps or river estuaries, and 4) upland rancah (gora) rice fields, which are made of bunds, fences and terraces. Therefore, according to the law above, the state or government is responsible for the welfare of farmers. The protection carried

out is expected to run according to the plan or those clearly written in the regulation because farmers are currently a group vulnerable to changing times.

There are some previous studies about the human resource management and its implication resulting in inputs for making better regulation and policy (Toruan, Gusti, & Riyadi, 2023), the implementation of performance accountability system for government institution resulting in better regulation on implementation of performance accountability system (Priyambodo, Wijaya, Wike, Sujarwoto, & Riyadi, 2023a), Performance Accountability System For Government Agency resulting in inputs for making better regulation (Priyambodo, Wijaya, Wike, Sujarwoto, & Riyadi, 2023b), transformational Leadership, Technology Adoption, and Public Service providing significant positive effect on Job Competency (Purbiantari, Zauhar, Suryadi, Hermawan, & Riyadi, 2023b), leadership and service categorized into several themes useful for improving police policy and practice (Purbiantari, Zauhar, Suryadi, Hermawan, & Riyadi, 2023a), user satisfaction providing a positive and significant effect on Organizational Performance (Sinulingga et al., 2023). Other previous studies analyze the Critical Success Factors (CSF) of Public Private Partnership (PPP) Indonesia and the results are categorized into several themes useful for improving policy (Syahrudin, Wijaya, Suryono, & Riyadi, 2023), Innovative Climate mediates effect of transformational leadership on Innovative work behavior and workplace spirituality mediates effect of information technology on innovative work behavior (Susilo, Astuti, Arifin, Mawardi, & Riyadi, 2023), and collaboration between civilians and military in Indonesia have to be involved the related institutions and should be conducted for making better regulation (Tjahjono, Suryono, Riyanto, Amin, & Riyadi, 2023).

Indonesia has the assurance that efforts to uphold the rule of law and the rule of justice will be made in line with the state constitution and regulations to maintain checks and balances (Hermanto & Riyadi, 2020; Riyadi, 2017; Riyadi, Atmoredjo, & Sukisno, 2020). Even the conclusion of proceedings is evidence of Indonesia's weak attitude toward offenders in terms of law enforcement. The magnitude of the conflict of interest means that settlements are often based on political bargaining, abuse of power and interests. The state must continue to exercise control over Indonesia's abundant natural resources (Riyadi, 2020b, 2020a; Riyadi, Wibowo, & Susanti, 2020). Along with cooperation, competence, and performance, more research is still required into the causes, processes, and results of conflict management. Intrapersonal, interpersonal, production, and political malfeasance are resulted in financial and social losses. Both sides will require intervention. Performance, capability, and partnership are all interconnected. Partnership and performance relationships must be thoroughly mediated by capability. Capability, cooperation, and information exchange must be regulated by conflict resolution if they are to be successful and have a significant influence. Job satisfaction has a positive and significant impact on work performance (Feriyanto, Assery, Saleh, & Suryaningsum, 2017; Hendriarti, Othman, Arif, Assery, & Jamal, 2022; Saleh, Assery, & Dzakiyullah, 2018; Saleh, Assery, Sabihaini, & Suryaningsum, 2017; Tannady et al., 2022).

The domain of empowerment for farmers includes aspects of: 1. Production, which concerns joint decisions on agricultural products to be cultivated and produced; 2. Resources, which are not only in terms of ownership, but also in terms of access to resources and decision-making power in relation to productive use of resources; 3. Income, which relates to the ability to regulate and control the utilization of income; 4. Leadership, regarding relations with members, and the convenience of members to convey aspirations in farmer organizations; And 5. Time, which concerns the ability to use and allocate time for work and rest. Based on these five domains, the first domain, which is production implies the importance of production in empowering farmers. What is meant by rice production is the amount of output or rice yields from farmers' land planted with rice during one growing season, measured in kilograms (kg). Productivity is the ability of a factor of production, such as land area to obtain production per hectare. Several factors are generally needed in rice production, such as labor, land area and various raw materials in each production process carried out (Alkire, Roche, & Seth, 2013).

Provision of agricultural land for food is currently facing pressure due to competition with other sectors as a result of economic and population growth. This condition leads to the problem of decreasing land area due to conversion to non-agricultural uses. This land conversion also occurs in paddy fields, which are the main land resources for agriculture. Absorption of agricultural labor increased by around 5 million in 2020, but the agricultural sector became disguised unemployment, that is, they worked but did not increase agricultural productivity. This is

because the agricultural sector accommodates workers who are laid off from other sectors and also adds new labor forces entering the agriculture sector. The role of agriculture began to decline because workers began to leave the agricultural sector. The increased number of people engaged in offices and industry is an indication of the rise of the non-agricultural economic sector, declining the share and economics of agriculture. Food crop products that Indonesia still imports to fulfill domestic needs indicate Indonesia's failure as an agrarian country in the agricultural sector. It is evidenced by the Central Bureau of Statistics, where Indonesia also imports rice. The various agricultural problems above contribute to almost all regions of Indonesia that rely on the agricultural sector.

Referring to the problem, the research questions: Does Community Empowerment affect Production Capacity? Does Community Empowerment affect Social Capital Social? Does Social Capital affect Production Capacity? Does Social Capital mediate the relationship between Community Empowerment and Production Capacity?

2. LITERATURE REVIEW

2.1. Production Capacity

Productivity improvements in the agricultural industry can be attributed to new technologies, mechanization, greater chemical use, specialization, and government initiatives that encourage output maximization. In many parts of the world, sustainable agriculture is a topic of great interest and vigorous debate. The majority of agriculturalists concur that the idea of sustainable agriculture is crucial to the survival of our biosphere and its rapidly expanding human population. Production capacity is the maximum production result that can be produced in a certain time unit. The definition of capacity has three perspectives: 1. Design capacity shows maximum output under ideal conditions where there are no scheduling conflicts, no defective products, and routine maintenance; 2. Effective Capacity shows the maximum output at a certain level of operation. In general, the effective capacity is lower than the design capacity; 3. Actual capacity shows the actual output that a production facility can produce. Actual capacity should try to be the same as effective capacity (Corrado & Matthey, 1997).

The capacity building process is related to the strategy for managing inputs and processes in achieving optimal output, as well as organizing feedback as a corrective step in the next stage. The strategy for organizing input relates to the institution's ability to provide various types and quantities and quality of human and non-human resources so that they are ready to be used when needed. The strategy of managing the process relates to the ability of the organization to design, process and develop a set of policies, organizational structure, and management. The strategy for managing feedback is related to the organization's ability to make continuous improvements through evaluating the results that have been achieved, and studying weaknesses or deficiencies that exist in inputs, processes, and taking real improvement actions by making various environmental adjustments that occur (Hall, Sulaiman, Clark, & Yoganand, 2003; Pujo, Sofhani, Gunawan, & Syamsudin, 2018).

New technologies, mechanizations, increase in chemical uses, specialization, and government policies that supported maximizing production are all contributed to an increase in agriculture productivity. Agriculture is quite vulnerable to climate change and its repercussions. For intellectuals, researchers, conservationists, and decision-makers, maintaining sustainable ecological balance and ensuring access to food are significant concerns. Sustainable farming should be viewed as an eco-system approach where soil, water, plants, and other living things coexist peacefully with a healthy equilibrium of food chains and their associated energy balances. In order to sustain considerable increases in agricultural production through the efficient use of land and other resources, as well as to improve individual economic returns and contribute to both economic development and quality of life, it is important to address environmental challenges related to natural resource management. It is crucial to employ cutting-edge technology to maintain sustainable agriculture and production. These technologies should be employed to protect the environment by conserving resources and preserving the environment through the use of better varieties, advanced irrigation systems, and enhanced soil quality. The costs incurred for these modifications are enormous, despite the fact that they have reduced many risks in agriculture and have had many positive consequences. The loss of topsoil, the contamination of groundwater, the demise of family farms, the continued disregard for the lives and working conditions of farm laborers, the increased cost of production, and the

breakdown of the social and economic structure in rural areas are some of the most prominent among these risks. (Abubakar & Attanda, 2013).

In many parts of the world, there is a heated debate about sustainable agriculture, which is a very interesting topic. The argument centers on several definitions of sustainable agriculture. Sustainable agriculture is described as a system that, over time, enhances the environment's quality and the resource base on which agriculture depends, meets the basic needs of human beings for food and fiber, is economically sustainable, and enhances the standard of living for farmers and society at large. Numerous definitions have been given to this remark, but the idea of agricultural sustainability has not changed. A dedication to supplying humans with food and fiber while also enhancing the standard of living for farmers and society at large is another definition of sustainable agriculture. There isn't a clear-cut, widely-accepted definition of sustainable agriculture as a result. This is thus because sustainable agriculture is frequently viewed as a management philosophy rather than a specific technique of practice, and whether one accepts or rejects any definition depends on their personal set of values. The majority of agricultural specialists concur, however, that the idea of sustainable agriculture is crucial to the survival of our biosphere and its expanding human population. An key issue to public policy is sustainability, which depends on a combined focus on environmental change and its effects on people, the earth, and profits (Abubakar & Attanda, 2013).

Rice production is the total output or yield of rice from farmer's land planted with rice during one growing season, measured in kilograms (kg) unit. Productivity is the ability of a factor of production to obtain production per hectare. Rice production in general also requires various factors of production, such as labor, land area, and various raw materials in each production process. Without production activities, various human needs cannot be fulfilled. Progress in terms of running production has to do with living standards. The purpose of production is to achieve prosperity for human needs. In production activities, there are parties involved, including the first party having role to produce goods and services known as producers. Besides, the second party has role to consume goods and services, known as consumers. Therefore, production goals can also be seen specifically from the point of view of the interests of the parties involved. For producers, the purpose of production is to increase profits and maintain the sustainability of a company. Meanwhile for the community or consumers, the purpose of production is to provide various goods and services to satisfy their daily needs (Chauhan, Mohapatra, & Pandey, 2006; Pingali & Xuan, 1992; Sinha & Talati, 2007; Yodkhum, Sampattagul, & Gheewala, 2018).

2.2. Community Empowerment

The concept of empowerment emphasizes that people acquire sufficient skills, knowledge, and power to influence their lives and the lives of others they care about. An understanding of the concept of empowerment cannot be separated from an understanding of the cycle of empowerment itself, because in essence, empowerment is a continuous effort to position people to be more proactive in determining the direction of progress in their own community. This means that empowerment programs cannot only be carried out in one cycle and stop at a certain stage, but must be continuous and the quality continues to increase from one stage to the next (Tsey, Harvey, Gibson, & Pearson, 2009).

There are 7 stages of the community empowerment cycle describing the process of individual and community efforts to follow the journey towards higher individual and job achievement and satisfaction. The first stage is the desire of the community itself to change for the better. In the second stage, the community is expected to be able to let go of obstacles or factors that are resistance to progress within themselves and their communities. In the third stage, people are expected to have received additional freedom and feel they have a responsibility in developing themselves and their community. The fourth stage is an effort to develop roles and broader boundaries of responsibility, this is also related to interest and motivation to do a better job. The fifth stage is that the real results of empowerment begin to appear, where an increase in a greater sense of belonging results in better performance outcomes. The sixth stage is that there has been a change in behavior and impression of him, where success in improving performance can increase psychological feelings above the previous position. And the seventh stage is that people who have succeeded in empowering themselves feel challenged for greater efforts to

get better results (Wilson, 1996).

Community empowerment is a concept of economic development that encapsulates social values. It reflects the new paradigm of development, which is "people-centered, participatory, empowering and sustainable". According to the operationalization process, the idea of empowerment has two tendencies, namely: first, the primary tendency, namely the tendency for the process to give or transfer some power, strength, or ability to the community or individuals to become more empowered. This process can also be complemented by efforts to build material assets to support the development of their independence through the organization; and secondly, secondary tendencies, namely tendencies that emphasize the process of providing stimulation, encouraging or motivating individuals to have the ability or empowerment to determine what is their life choice through a dialogue process (Chambers, 1995).

According to the concept of community empowerment, people who live and work in a community are in the best position to comprehend its particular conditions, strengths, and shortcomings, Giving people and groups a chance to have a seat in the table of decision-making procedures that directly impact their lives aims to change power dynamics and promote inclusiveness. Increased resilience, social cohesiveness, and sustainable development are outcomes of empowered communities because they feel more ownership, responsibility, and agency (Friedmann, 1992; Hulme & Turner, 1990).

Increased ability, influence, and control of individuals and groups within a community to take action and make choices that have an impact on their life is referred to as community empowerment. It entails giving community members the tools they need to actively participate, collaborate, and make decisions for themselves in order to identify and address their needs, goals, and challenges. A bottom-up strategy, called community empowerment, prioritizes local expertise, assets, and goals. It emphasizes the value of independence, teamwork, and locally driven solutions. Communities are strengthened when individuals and groups are given the power to actively shape their own destinies. This encourages sustainable growth, improves well-being, and fosters a deeper sense of community identity (Bevir, 2007; Shardlow, 1998).

Community empowerment acknowledges that a community's residents and employees are best placed to comprehend its particular conditions, strengths, and shortcomings. Giving individuals and groups a chance to have a seat in the table decision-making processes that directly impacts their lives aims to change power dynamics and promote inclusiveness. Communities that have more agency, ownership, and responsibility are more resilient, have stronger social bonds, and experience sustained growth. An important component of community empowerment (Friedmann, 1992; Hulme & Turner, 1990) are Participation, Knowledge and Skill Building, Collaboration and Networking, Access to Resources, and Social Action. The achievement of increased rice production through appropriate agricultural empowerment is the achievement of implementation in a process towards the desired direction, which can be applied through an approach divided as follows: 1. Enabling, is a process of creating conditions so that society can develop as well as possible. So that people who are hampered must be freed so that there are no obstacles from the potential that exists in the community; 2. Strengthening, to solve a problem that exists in the community, the community must be given the strengthening of knowledge and abilities. So that people will feel confident in their abilities and thereby create an independent society; 3. Protection, there is protection for a weak group against a strong group so as to avoid unequal competition; 4. Support, namely the existence of support for the community to be able to carry out their roles and duties. Empowerment itself must provide support to the community so that they can carry out their duties and not feel marginalized; and 5. Maintenance, maintaining a balanced condition so that each individual believes they have the potential to develop themselves better.

2.3. Social Capital

Social capital is an old idea, but it began to be discussed in academic circles in the 1990s. In recent years, its significance in explaining economic and social issues has grown. The last ten years have seen a significant increase in the body of literature on the theoretical and empirical elements of social capital. It is generally

understood as a shared set of institutions, networks, social relations, norms, values and beliefs that promote cooperation and group action for mutual benefit. It is a complex multidimensional idea with multiple dimensions, measurement types and levels. Structure and cognition, bonds, bridges and connectors, strong and weak, horizontal and vertical, are examples of common types of social capital. In a social perspective, it can be monitored and analyzed at the individual, group, and macro levels, as well as at the micro, meso, and macro levels in a geographical perspective. Although there are some objections to the use of the term "capital" in relation to social capital, this term qualifies as a form of capital because of the properties of social capital, including its ability to appear as an explanatory variable in the production function, accumulation over time, capacity to improve economic performance, investments with expected future returns, convertibility, and maintenance requirements. In order to provide a widely accepted definition and measure of indicators that can explicitly break down and measure their impact on the overall development process, more empirical research and field testing of concepts is needed. More investment in its development, sound social policy-making, and sustainable development all benefit from a better conceptualization and operationalization of social capital theory (Bhandari & Yasunobu, 2009).

In the last two decades, social capital has become a major paradigm across a spectrum of social science fields. However, the acceptance of it by many social science disciplines has resulted in several, often conflicting, conceptions of social capital. Since scientists have included statements about its potential uses, where it lives, and how its service capacity might be altered, certain inconsistencies in the definition of social capital can be explained. The use of the social capital metaphor emphasizes the many significant characteristics of social capital, such as service potential, longevity, adaptability, substitutability, opportunities for decay (maintenance), dependability, capacity to generate other forms of capital, and investment. opportunity (divestment) (Robison, Schmid, & Siles, 2002).

Social capital refers to the networks of relationships, trust, and social norms that exist within a community or society. There are forms of social capital, including bonding, bridging, and linking social capital (Claridge, 2018). Bonding social capital is a form of social capital referring to the connections and relationships between individuals who share similar characteristics, such as family members, close friends, or members of the same social group. Bonding social capital strengthens social cohesion within a specific community or group. Bridging social capital refers to connections and relationships between individuals or groups from diverse backgrounds, communities, or social networks. It involves building connections across different social groups and fostering diversity, tolerance, and cooperation. Bridging social capital helps to create a broader sense of community and promotes social integration. Linking social capital refers to connections and relationships between individuals or groups in positions of power or authority and those who have fewer resources or opportunities. It involves bridging gaps between different social strata, such as connecting citizens with government officials, or individuals with access to resources with those in need. Linking social capital facilitates access to resources, information, and support for marginalized or disadvantaged groups.

Social capital has several benefits for individuals and communities. It can promote social support, trust, and reciprocity, leading to increased cooperation, collaboration, and collective action. Social capital can also facilitate the flow of information, resources, and opportunities, which can improve economic development, educational outcomes, and overall well-being. Furthermore, social capital has been linked to better health outcomes, reduced crime rates, and increased civic engagement. Building and maintaining social capital requires active participation, trust-building, and nurturing relationships within communities. Organizations, governments, and individuals can contribute to the development of social capital by fostering inclusive environments, supporting community initiatives, promoting social networks, and encouraging civic engagement (Lin, 2017).

Social capital in its development has received much attention from sociologists. Some experts' views have become a reference for research on social capital and the formulation of the definition of social capital itself. Social capital is the amount of resources, actual or virtual that gather in an individual or group because it has a long-lasting network of mutual acquaintances and recognition which is more or less institutionalized. Based on this definition, it shows that the lowest elements in social capital include actual resources and virtual resources, networks and relationships that respect or pay attention to each other. Furthermore, Bourdieu explained that

economic gain or social benefit in the context of social capital is not merely something that is actually economic in nature, but also something that is reducible to economic profit. So that social capital can be applied to various needs, but the most is for community empowerment efforts. This is because social capital is one of the important factors that determine the economic growth of the community, without harmony and synergistic cooperation it will be increasingly difficult for the development of the community's economy. Bourdieu's view of social capital follows principles in the tradition of economic sociology, an approach that believes that social life is believed to have a hierarchical structure that places certain actors with a strong influence in utilizing resources and certain other actors as marginalized. In addition, his views also tend to follow the tradition of criticism and put forward asymmetric relations (Bourdieu, 1992).

2.4. Hypotheses Development

Based on the above explanation, the hypotheses are: Community Empowerment positively affects Production Capacity (H1). Community Empowerment positively affects Social Capital (H2). Social Capital positively affects Production Capacity (H3). Social Capital mediates the relationship between Community Empowerment and Production Capacity (H4). And those hypotheses can be drawn as Figure 1 Conceptual Model as follows.

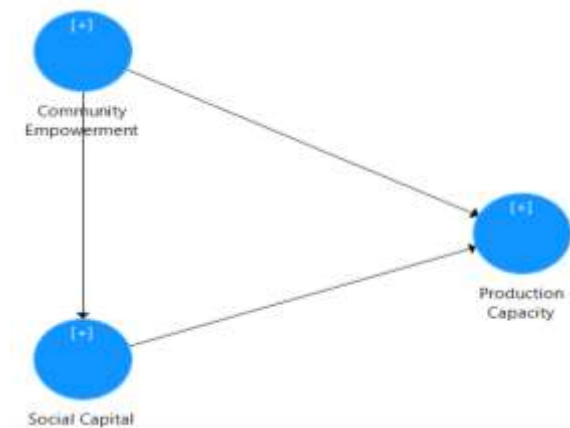


Figure 1. Conceptual Model

3. METHODOLOGY

The approach used in this research was quantitative, a study of problems in the form of current facts from a population. The aim was to test hypotheses or answer questions relating to the current status of the subject under study. This research was based on a hypothetical-deductive approach to propose a research model and used quantitative predictive methods to test the research model integrating 3 variables and to predict the relationship between variables. There are 3 latent variables studied measured through indicators. Community Empowerment was measured by 5 indicators, such as possibility, strengthening, protection, support, and maintenance. Social Capital was measured by 3 indicators, such as social bounding, social bridging, and social linking. Production Capacity was measured by 4 indicators, such as infrastructure, agricultural, commodity, and marketing. Based on the hypotheses development and all variables measured, a research model was developed using a smartPLS application as presented in Figure 2 below.

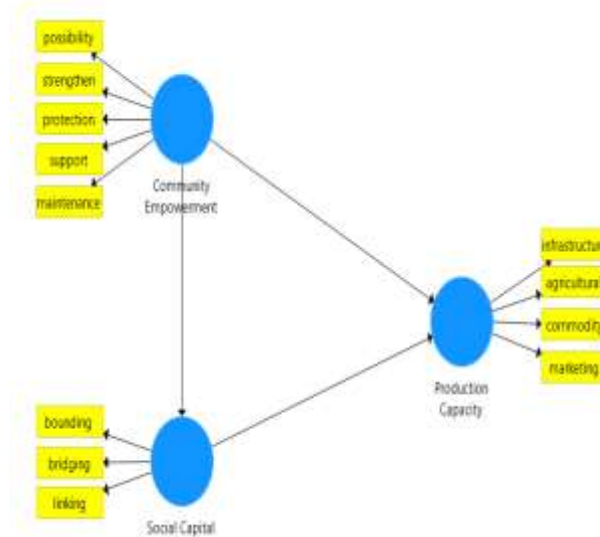


Figure 2. Research Model

Data were collected using simple questionnaire developed based on established measures for all variables using a five-point likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) and submitted electronically to 500 farmers in several villages in Indonesia. And 100 usable responses were obtained leading to response rate of 20%, which was in line with the research.

Data were analyzed using the Partial Least Square (PLS) and smartPLS version 3.0. Descriptive Statistics was conducted to explain characteristics of respondents and variables. Inductive Statistics was performed using Variance-Based Structural Equation Modelling. Path analysis employed Partial Least Square consists of 3 relationships. Outer-model specified the relationship between latent variable with its indicator (measurement model). Inner-model specified the relationship between latent variable (structural model) and weight relation in assessing latent variables to be estimated (Ringle, Wende, & Will, 2015).

Validity referred to the extent to which the precision and accuracy of a measuring instrument could measure a construct. Construct validity calculations were assessed by convergent validity and discriminant validity. Reliability referred to internal consistency of indicators of a construct, showing the degree to which, each indicator indicated a common latent factor. Reliability calculations were assessed by Cronbach's Alpha and Composite Reliability (Ringle et al., 2015).

If all indicators and variables have been declared valid and reliable and the model has a Goodness of Fit that meets the predictive relevance requirements, then a hypothesis test can be carried out. In testing the hypothesis, it can be seen from the value of the t-statistic and the probability value. The hypothesis testing used a probability or alpha value of 5% and the t-statistic value used was 1.96. Therefore, the criteria for accepting the hypothesis were when the t-statistic was > 1.96 and the p-value was <0.05. The mediation test for mediator variables (intervening variables) was assessed by comparing the direct effect to the indirect effect to assess which one had a greater role.

4. FINDINGS

4.1. Respondent Profile

The population in this study was village farmers in Indonesia. Samples were taken 100 village farmers by purposive sampling for specific aims that conducted community empowerment. Table 1 shows Respondents Profile included in this study were 90% of men and 10% of women, 50% of farmers with age ranged between 20-35 years and 50% of 36-50 years, had owned-land (70%) and had not owned-land (30%), and length of work as village

farmers of 2 years (50%) and 5 years (50%).

Table1 Respondents Profile of Village Farmers

Description	Percentage	Percentage
Farmers	Men = 90%	Women = 10%
Age	20-35 = 50%	36-50 = 50%
Land	Have = 70%	Not Have = 30%
Work	2 Years = 50%	5 Years = 50%

4.2. Outer Model Evaluation

Based on Figure 3, the R-square on Production Capacity was 0.425, which meant that 42.5% could be explained by the relevant dependent variables studied, namely Community Empowerment and Social Capital, while the remaining 57.5% was explained by other variables outside the research model.

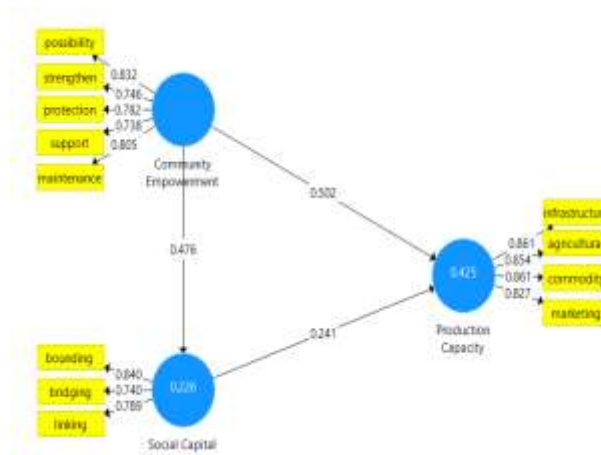


Figure 3. PLS Algorithm

Based on Figure 3, it can be evaluated the of Convergent Validity as outer loading and Discriminant Validity as AVE for all indicators that were declared valid due to > 0.70, and Average Variance Extracted (AVE) more than 0.5 (Ringle et al., 2015).

Based on Table 2, it could be evaluated the of Cronbach's Alpha and Composite Reliability for all variables that were declared reliable. Reliability of each variable that Cronbach's Alpha > 0.60 and Composite Reliability > 0.70 (Ringle et al., 2015).

Table 2 Reliability of Variables

Variables	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Community Empowerment	0.841	0.887	0.611
Production Capacity	0.873	0.913	0.724
Social Capital	0.698	0.833	0.625

4.3. Inner Model Evaluation

Q-square was performed to generate a predictive relevance (Goodness of Fit) by using a Stone-Geisser test to find out relative influence of structural model on observation measurement for endogenous latent variables. Q-square = 1 – (1–R-square). Since the value of Q-square was positive and > 0.36, it indicated that the observed value had been well reconstructed and model had a strong predictive relevance (Ringle et al., 2015).

Later, it can be continued to test all hypotheses by performing PLS Bootstrapping from the smartPLS as shown in Figure 4 below:

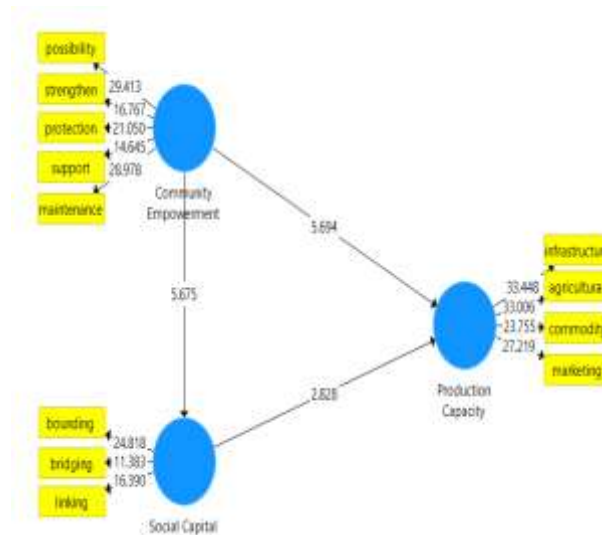


Figure 4. PLS Bootstrapping

It could be evaluated also by using significance level of 5%, the value of acceptance area $H_0 \pm 1.96$. If the value of T Statistics was greater than ± 1.96 then H_0 was rejected or alternative hypothesis was accepted, as per Table 3.

Table 3. Path, T-Statistics and P Values

Path Coefficients	Path	T	P
Community Empowerment -> Production Capacity	0.502	5.829	0.000
Community Empowerment -> Social Capital	0.476	5.293	0.000
Social Capital -> Production Capacity	0.241	3.007	0.003

	Path	T	P
Community Empowerment -> Social Capital -> Production Capacity	0.115	2.256	0.024

Community Empowerment had a significant positive effect on Production Capacity. Community Empowerment had a significant positive effect on Social Capital. Social Capital had a significant positive effect on Production Capacity. And Social Capital fully mediated the effect of Community Empowerment on Production Capacity.

DISCUSSION AND CONCLUSION

Based on various problems in the agricultural sector, it is necessary to make efforts to empower the agricultural sector community. Especially farmers of paddy, which is one of the important commodities in the food crop sub-sector in the agricultural sector, is a basic need for the people of Indonesia, which is then processed into rice. The role of farmers is not only limited to generating added value and providing employment, but also a commodity that is very influential on the stability of the national economy, especially disrupting the rate of inflation and political stability. The increase in rice prices, although relatively small, will have a sizable impact on rising inflation rates, because rice is consumed by almost all Indonesian people. Indonesia has a large number of people who work as farmers whose livelihoods depend on the agricultural sector, because the rice fields are quite extensive, so one of the sources of income is from paddy farming. Even so, the income of paddy rice farming has not been able to meet the needs of farmers and their families. The Central Statistics Agency (BPS) recorded the number of farmers as of 2019 reached 33.4 million people. Thus, the government still has a lot of work to do to improve the welfare of farmers. With the facts of this situation, it illustrates that agriculture in Indonesia requires a breakthrough or an innovation to improve the welfare of farmers. To overcome this problem, the government is fully responsible for helping to provide solutions. The government can also use its various institutions, especially those closest to farmers to find out the problems faced by farmers.

Based on the analysis and discussion of the research result above, it can be concluded that Community Empowerment had a significant positive effect on Production Capacity, Community Empowerment had a significant positive effect on Social Capital, Social Capital had a significant positive effect on Production Capacity, and Social Capital fully mediated the effect of Community Empowerment on Production Capacity.

The Implementation of Community Empowerment, Social Capital, and Production Capacity in Indonesia and its implication required policy and regulation needed to reach the best solution. It is suggested that the legislative and executive as the public officials making multi-policies and regulations should be involved in managing Community Empowerment, Social Capital, and Production Capacity.

The challenges for future agricultural development from the aspect of agricultural infrastructure and facilities include how to improve and build land and water infrastructure, open access to agricultural financing, cultivate farmers to use organic and inorganic fertilizers in a balanced manner, seek support for agricultural machinery to increase production and provide added value to farmers' income.

DATA AVAILABILITY STATEMENT

All relevant data are available in the article and the annexes.

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