Technical Analysis And Values Of Fathonah, Amanah, Shidiq And Tabligh (FAST) In Production Factors Management

Dewi Fatmasari, Waridin Waridin, Akhmad Syakir Kurnia

Abstract: This study aims to technically analyze the production factors that affect the productivity of sweet potato farming in Kuningan Regency, and analyze farmer's behavior, namely how to apply the values of fathonah, amanah, shidiq and tabligh (FAST) based on Islamic values in managing production factors and their effects on the productivity of sweet potato farming. The empirical model used based on the Augmented Solow Model incorporates Human capital elements in the endogenous production function model. To interact between the values of FAST with variables of land, capital and labor so that it will be seen how increasing farm productivity will increase with the presence of variables that can strengthen these interactions. Therefore, the authors include the values of FAST into each production factor (land, capital and labor). The results revealed that the factors of land production, capital and labor had a positive and significant effect on the productivity of sweet potato farming, while the number of family dependents had a positive but not significant effect on the productivity of sweet potato farming in Kuningan Regency. The values of FAST have a positive and significant effect on farm productivity through increasing land management, capital and labor capacity, however trustworthy values have a positive but not significant effect on farm productivity through increasing labor management capacity.

Keywords: Augmented Solow Model; Production Factor; Farming Productivity; Fathonah; Amanah; Shidiq; Tabligh.

1. INTRODUCTION

West Java residents who depend partly on the agricultural sector, the existing agricultural potential must be utilized properly, where the development must be adapted to the potential that exists in the region. One of the food commodities that develops in West Java is sweet potato. Sweet potato commodities play an important role because they have many benefits and added value. Sweet potato is a potential producer of carbohydrates (as an energy source) and can be used as an alternative food source (other than rice), an ingredient in making feed and industrial materials. The largest area of distribution of the three sweet potato commodity centers in West Java Province, among others, is Garut Regency, Kuningan Regency and Bogor Regency. The biggest sweet potato production in West Java is Garut Regency where the largest production in 2013 was 178,770 tons. Kuningan Regency was the second largest sweet potato producer in West Java in 2013 which was 118,267 tons, then in 2014 it was 146,054 tons and in 2015 decreased by 137,296 tons. The agricultural development in the future faces a variety of increasingly difficult and complex challenges. The progress of agriculture depends on the strength and willingness of the entire community to develop superior commodities in order to increase the income of farmers. Kuningan Regency as the second largest contribution after Garut Regency in the production of Sweet Potatoes in West Java Province. BPS (2017) has a prospect in Kuningan Regency so there needs to be an understanding that prioritizes management seriously towards production factors which are used as inputs in farming management. Daniel (2004) explains that there are three factors of production, namely land, capital, and labor. These factors of production must be combined by farmers to obtain production or income in farming. Each of these production factors has a different function but has relevance to one another. If one factor is not available, the production process will not work. Farmers must maximize their production so that production costs can be reduced as low as possible, so that farming is efficient and profitable. It is efficient because farmers must seek the smallest use of inputs (land, labor and capital) to obtain (income) as much as possible. In addition, farmers are also faced with the problem of low farming productivity due to limited land and knowledge possessed by farmers, besides that farmers are also lack of technical skills in dealing with various obstacles faced in managing farming. The solution to these problems is only a solution that is of a technical nature without incorporating cultural problems concerning the behavior of farmers based on the values that develop in the community. Jalil (2013) stated that there was a naturalistic paradigm and was analyzed qualitatively that spirituality formation was formed from physiological, cognitive, psychological, sociological and anthropological factors with the potential of faith, these elements synergized with certain valences in the potential integrative diversity to shape spirituality. Arsyad (2005) how social capital influences economic development. He highlighted the existence of deliberation, honesty, willingness to sacrifice, having high integrity towards morals is a very important aspect in social capital. Several economists have analyzed the role of religion or culture on economic variables and their impact on economic growth, including how the role of Islam in economic behavior is because in addition to secular contributions, economic development is not only purely economic, but its success depends on the actual application of Islamic law and ethics (Abdelrahman, 2018), a similar study was also conducted by Guiso-Sapienza and Zingales(2003). – harusnya Guiso duluan kan 2003One of the cultural aspects faced by farmers is concerning religious values as a law that is able to overcome various problems. In this case, the farmer as a human being is

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also called an economic creature (man?), because naturally he will need goods and services throughout his life. To fulfill this need, he will consider rationally based on adat, ethics and other social institutions as a platform between people in realizing their own personal interests. For this reason, it is necessary to have clear and correct rules of the game in accordance with the Islamic Shari'a known as Fiqh in Muamalat. Likewise, in the management of production factors must follow the same rules that regulate the relationship between humans and humans and all their actions are interconnected ie any activity is permitted unless there are provisions that prohibit it (Ghulam, 2016). Likewise with agricultural business as an effort that can not be separated from ethics that can affect the behavior of farmers in increasing farm productivity, therefore efforts to improve the productivity of sweet potato business need attention. Productivity can be seen in relation to individual personality characteristics that appear in the form of mental attitudes that contain the desires and efforts of individuals in their attempt to improve their quality of life. Characteristics of a person's personality is largely determined by understanding the religious values he adheres to. The implementation of religious values is very necessary in the development of farming, because having the characteristics of a strong religious value will be an added value in itself. Islamic rules as tangible religious values in the functioning of Islam and Islamic Shari'a as rules of thought and principles of charity (measure of action) in all farming activities. Kuningan Regency is one of the areas where the majority of the population is Muslim, the joints of people's lives are inseparable from the values of Islam that have been deeply entrenched, where the religious aspects found from religious activities are every morning before the sunrise. Then the activity works to earn a living and in the afternoon the activities of the farmers stop and attend the evening prayer in mosque, sometimes continue to listen to preaching program that have become the culture of the community. The rhythm of the life of the people in the area is continuous between life for a living and religious life, this is in line with Weber (1958)'s thinking, namely that there is integration between religious values and the economy. However, nowadays the values of Islam are starting to fade among the farmers. Based on the field survey, religious activities carried out in the form of routine recitation and prayer activities in congregations are rarely followed by some farmers because farmers spend their time on agricultural activities, in farmer-oriented agricultural land management activities that tend to prioritize profit. While aspects of Islamic values that become the rules of farmers in behaving are neglected. The harmonious combination between rational and irrational values, namely between ideas, religious doctrine and the impulse of material necessity that find and reinforce each other, is in line with Weber's thoughts which try to establish 'structural transformation' as well as structural crossings between two fields namely religion and economics. Therefore, the management of farming is influenced not only by the technical aspects but also the behavioral aspects of the farmers in managing farming.

FAST nya mana?
Based on the literature gap above, several research problems are formulated as follows:
1) What is the influence of the soil on the productivity of sweet potato farming?
2) How does the capital affect the productivity of sweet potato farming?
3) What is the effect of labor on the productivity of sweet potato farming?
4) What is the influence of the number of family dependents on the productivity of sweet potato farming?
5) Do the values of Fathonah, Amanah, Shidiq and Tabligh (FAST) have a positive effect on farm productivity through increasing land management capacity?
6) Do the values of Fathonah, Amanah, Shidiq and Tabligh (FAST) have a positive effect on farm productivity through increasing capital management capacity?
7) Do the values of Fathonah, Amanah, Shidiq and Tabligh (FAST) have a positive effect on farm productivity through increasing labor management capacity?

To address these research problems, the study aimed to to analyze land, capital, labor force and number of dependents on farm productivity and whether FAST values can strengthen the influence of land, capital and labor to farm productivity. In details this study aims to:
1) Analyzing the influence of land on the productivity of sweet potato farming in Kuningan Regency.
2) Analyzing the influence of capital on the productivity of sweet potato farming in Kuningan Regency.
3) Analyzing the effect of labor on the productivity of sweet potato farming in Kuningan Regency.
4) Analyzing the effect of the number of family dependents on the productivity of sweet potato farming in Kuningan Regency.
5) Analyzing whether the values of Fathonah, Amanah, Shidiq and Tabligh (FAST) have a positive effect on farm productivity through increasing land management capacity.
6) Analyzing whether the values of Fathonah, Amanah, Shidiq and Tabligh (FAST) have a positive effect on farm productivity through increasing capital management capacity.
7) Analyzing whether the values of Fathonah, Amanah, Shidiq and Tabligh (FAST) have a positive effect on farm productivity through increasing labor management capacity.

2. PRODUCTION FACTORS MANAGEMENT IN AGRICULTURE

a. Endogen Production Function
The endogenous production function is a production function formed by incorporating human capital as input, with the basis of the Cobb-Douglas production function with Harrod-neutral (ie labor augmenting) the Augmented Solow Model and also the endogenous growth theory. Endogenous Growth Theory initially developed two branches of thought that relied on the importance of human resources as the main key in the economy, that is:
1. Thought that believes that knowledge stock is the main source for increasing economic productivity.
2. Thought that emphasizes the importance of learning by doing and human capital with the introduction of new things (which are external) in the economy is a driving factor for
increasing economic productivity.

The first thought was raised and developed by Romer et al. (1990), in developing his theory, Romer placed the stock of knowledge as one of the increasing factors of production, so that the growth rate could continue to be improved in accordance with the ability of each country to increase and create knowledge stocks. The second thought (learning theory) was put forward by Lucas (1988) through a model of accumulation of human capital. Learning theory includes elements of externalities contained in the increase in capital in the production process. Increasing capital will increase the stock of public knowledge, so that the whole production process on a scale that is increasing return to scale. Barro & Robert J (2004) argue that economic growth is also determined by religious activities. The most interesting result is that economic growth depends on the degree of trust in the religion they embrace. The level of trust in religion is determined by attendance in religious activities. According to Barro (2003) religious beliefs have a positive relationship with economic growth. Perkins (2001) confirms that economic development is very dependent on two types of improvements, namely improvements in the level of community knowledge and improvements in the form of efforts to remove development barriers such as customs, beliefs and traditional thinking, improvements in education, advances in science knowledge. Becker (1962) argues that the theory of human capital has become the thinking of many parties in line with the success of humanity in controlling the level of population growth, responding to Malthus's concern that there will be a disaster for humanity if the population continues to grow. The theory of human capital basically addresses the process of formulating forms of investment that can be invested in humans, because humans are recognized as one of the resources needed in the production of goods and services in the economy. Based on Mankiw's growth theory, Romer and Weil (1992) who believe that the growth theory of Solow is less precise in predicting magnitude. MRW explained that saving and population growth play too large a role in the Solow model. Therefore, MRW corrects the Neoclassical Solow theory by including elements of human capital in the Solow growth model. This theory incorporates the element of human capital as an influential element of growth correcting the early Solow model which assumes Human Capital as an exogenous element. In this case, Human capital is assumed to play the same role as physical capital. By including human capital as input with the Cobb-Douglas production function base with Harrod-neutral (ie labor augmenting) the Augmented Solow Model is written as follows (Mankiw et al., 1992).

\[ Y_t = F(K_t^\alpha, L_t^\beta) \]

Where \( Y \) is output is a function of physical capital \( K \) and human capital denoted by \( H \) and \( A \) is Technology and \( L \) is labor. The exponent \( \alpha, \beta \) and \( 1-\alpha - \beta \) measure the elasticity of output to each input. MRW assumes \( \alpha + \beta < 1 \). In the Solow model, population and growth rates of technology grow at exogenous levels \( n \) and \( g \) respectively, while capital depreciates at the level of \( \delta \). If denoted physical investment and human capital as \( sk \) and \( sh \). And \( y = \frac{Y}{A} \cdot k = \frac{K}{AL} \) and \( h = \frac{H}{AL} \).

The point notation (.) indicates the addition of \( k \) and \( h \). The above point notation indicates the addition of \( k \) determined by the size of the physical investment component and the point notation indicates the addition of \( h \) determined by the size of the human capital component. In this case, the Islamic values inherent in the human capital is the portion of income invested in physical capital. So if you want to rise, the portion of income for physical investment must be increased. Is the portion of income invested in human capital. and if you want to rise, the portion of income for the human capital must be increased. Is depreciation, population growth, and technological development. Assuming that human capital accumulates in the same way as physical capital and depreciates at the same level. Then, the production functions are as follows:

\[ y(t) = k(t)^\alpha h(t)^\beta \]

The steady stage follows the Mankiw model. Romer and Weil (1992) Steady state is a condition when there is no capital accumulation or at = 0 and = 0 so that physical capital and human capital are in steady state (and formulated):

\[ y^* = s_k \frac{n+g}{1-a-\beta} \]

By entering equations (5) and (6) into equation (7), the per capita output in steady state is written. Equation 8 explains that the level of accumulation of physical capital and human capital can influence the steady state level of output per effective worker. The equation also explicitly shows that output per effective workforce is determined by investment in physical capital and human capital where one unit of output \( y \) can be transformed into one unit of physical capital (\( k^* \)) or one unit of human capital (\( h^* \)) at the same depreciation rate, is measuring the elasticity of output to each input \( \alpha + \beta < 1 \) because each - each factor of production is decreasing in the long run. When transformed in the form of logarithms:

\[ \ln Y^{(t)} = A(t) \ln y + \frac{\alpha}{1-\alpha-\beta} \ln(s_k, y) - \frac{\alpha+\beta}{1-\alpha-\beta} \ln(n + g) + \frac{\beta}{1-\alpha-\beta} \ln \]

1. Human Capital

Individual dimensions see productivity in relation to individual personality characteristics that appear in the form of mental attitudes and contain the meanings of the desires and efforts of individuals who always try to improve the quality of their lives. While the organizational dimension sees productivity within the framework of the technical relationship between inputs and outputs. Therefore, in this view, the level of productivity is not only seen from the quantity aspect but also the quality aspects of the product as well as the producing
labor. Human capital is also a very important factor and plays a key role in economic growth. Economic growth is influenced by the accumulation of physical capital and accumulation of human capital. Both types of capital are important factors that determine Stern's economic growth (2006) stating that the accumulation of physical capital and human capital are determinants of growth. Human capital is now seen as the main growth engine that has a role to drive and encourage economic growth. The importance of human capital in economic growth has prompted a number of development economists to focus their studies on the role of human capital. There is research on the relationship between production related to human capital, including Fuente & Angel (2000), saying that there is a positive and significant relationship between human capital and output. Another study related to human capital is Temple (1999), Bassanini et al. (2002) state that the duration of education will affect the increase in GDP per capita by 6%. Research from De la Fuente & Ciccone (2003) shows that in supporting human capital growth has a greater role in explaining productivity differentials between countries. Also supported by research by Nelson et al. (1966) and Funke & Strulik (2000) which show that the process of adopting technological developments from one country to another is strongly influenced by human capital. However, the results of the study are contradictory to the previous research of Renelt & Levine (1992), namely in cross-country analysis, real education did not have a significant impact on economic growth. Besides that according to Benhabib & Spiegel (1994) human capital as a factor of production within the Cobb Douglas framework was found to be insignificant in explaining the growth of GDP per capita. Romer (1990) that Human capital affects total factor productivity seen in two aspects: first, human capital affects the second level of innovation, human capital affects the rate of diffusion of technology. Likewise with research conducted by Dessus (2001) concluded that when the quantity of education increases, the quality of education decreases. Research conducted by Bils & Klenow (2000) states that education has a very weak causality towards growth. From the results of statistical calculations show the regression significance between growth and human capital factors may arise from variables outside the model. Pritchett (2001) in his research stated that there are 3 (three) main factors that cause education as human capital does not affect economic growth. First, policies from the government can be quite contrary to reality. Second, marginal returns to education can decline rapidly as compensation for the supply of educated labor is expanding while the demand for educated labor is stagnant. Third, the quality of education can be so low that the length of school is not able to create human capital. Benhabib (1994) describes the direct and positive relationship between the quality of education and economic growth. The inconsistency that occurs between output and human capital is caused by a positive correlation or strong correlation between the education level of workers and wages but there is no correlation between the level of education of workers and productivity. In other words, wage differences between levels of education do not reflect actual productivity differences. This is because the labor market cannot absorb educated labor, so the wages received by educated labor with non educated labor are not much different. This explains why workers receive benefits and investments in education but at the same time an increase in the number of human resources has little effect on overall productivity. So that at the aggregate level, human capital's contribution to the economy is very small or even insignificant.

2. FAST Values

Islam is a very integral and comprehensive religion, it also regulates all aspects of life. Islam is the religion of Allah revealed on this earth and is unique, according to Antonio (2001) Its uniqueness is Islam as a sharia-oriented religion that has a comprehensive nature and universal nature. A comprehensive Islamic meaningful sharia encapsulates all aspects of human life, both religious (ritual) and social (muamalah). In the rules of Islamic Sharia, Islam demands and directs Muslims to act according to what is permitted and forbidden by Allah SWT. In Islamic Sharia the principles of ethics consist of three basic concepts namely right and wrong, justice and divine power and freedom and human responsibility (Sulaeman et al., 2019). Likewise in carrying out economic activities. According to Wan-Hamat, et al (2013) Ethics (morality) is a set of Islamic moral values that have been advocated deeply in the Qur'an and fulfilled by the Prophet Muhammad during his lifetime. In Islam work is a very important element so that according to Islamic values one who works must devote all of his abilities so that he can achieve success for himself, society and for life in society and more specifically for life in the hereafter (Yousep, 2001). According to Marri et al (2013) that in Islam profit is an assessment to measure efficiency, Islam gives priority to economic activities carried out must be based on ethics namely trust, justice, honesty, mutual respect, belief, truth, tolerance, forgiveness, and obligation. Metwally (1995) gives the reason that in Islamic teachings, individual and community behavior is controlled towards how to meet needs and use existing resources. In Islam it is stated that the available resources are sufficient and therefore, with their skills, humans are required to prosper the world as well as worshiping their Lord. Economics thus, is a science and system whose duty is to utilize available and sufficient resources in order to meet the needs of the community in the context of mutual benefit. Soewardi (2001) states that Mc Clelland's theory of "achievement motivation" as a whip of modernization. Husin (2011) in his research explained that Budi-Islam is a source of Malay development in Malaysia and has an important role in determining the ideas of progress and action by Malay people. The formation of mind is a natural process, and it is further strengthened by Malay customs and the environment which is influenced by values inspired by the sea and the 'spirit' of rice. Budi and Islam both have the same principle. Interaction from mind. Islam and geographical influence caused Malay people who were very honorable. Values such as compromise, respect, cooperation, tolerance, forgiveness, humility, and patience are values that are embedded in the Malay community in carrying out their activities including in economic activities.

To be able to carry out the duties of worship and the Caliph properly and correctly: then Allah SWT has given instructions to follow the example of the Messenger of Allah according to Q. Al Ahzab (33): 21 "Verily there is in (the) Messenger of Allah a good example for you (ie) for those who wish (mercy) Allah and (coming ) the Day of Judgment and he calls many Gods ". Hafiduddin (2003) says that Islamic organizational culture is.

Implementation of the values exemplified by Rasullullah
sourced from Islamic teachings, namely: Shidiq, Istdiqomah, Fathohah, Trustful, and Tablig. One of the tasks of the apostle is to be the best model that must be imitated by humans in order to obtain salvation (salamah) in the world and the hereafter. Because this is in harmony with the words of the Prophet which means "Indeed I was sent to perfect noble character" (included in Shahih Bukhari). Then it is confirmed by Allah SWT in QS. Al-Qalam: 4 through His word which means: "And truly you (Muhammad) are truly noble manners". and in QS. Al-Ahzab: 21 which means "Verily there is in (the self) the Messenger of Allah a good example for you (ie) for those who wish (mercy) Allah and (the coming of) the Day of Judgment and he mentions Allah". From one hadith and the two verses above can be extracted. that the Prophet Muhammad was the ideal model in all behavior. including in it economic and business behavior which should be emulated and implemented by every human being. especially economic and business actors. The Prophet Muhammad has 4 (four) traits which are often used as a basis in everyday human activities including economic and business activities because in addition to the leadership field he is also very experienced in the trade and other fields. (Al-Diwan: 2003): First, Siddiq (true, honest, valid). Ideally this trait can be a vision of every human life. From this siddiq character, derivative concepts will emerge, namely effectiveness and efficiency. Effectiveness is intended to achieve the right and correct goals, while efficiency is doing activities correctly and frugally, meaning using techniques and methods that do not cause kemubadziran. Second, trust (responsibility, trustworthy, credibility). If this nature is implemented in practice, it will form a credible person and have a responsible attitude. The collectivity of each individual with high credibility and responsibility can create a strong society. The mandate has a fundamental position in economic and business activities, because without credibility and responsibility in behaving. then the economic and business life will be unstable. Third, fathohah (intelligence, wisdom, professionalism, intellect). This trait can be used as a strategy in life. Because to reach ma’rifahullah (know God through verses and signs of his greatness). Every individual must be optimist about all the potential that has been given by him. The most valuable potential that differentiates humans from other beings and is only bestowed upon humans is al-‘aqlu (intellectuality). The implication of this trait in economic and business activities is that all economic activity must be carried out with knowledge or intelligence and optimization of all potential minds (al-‘aqlu) that exist to achieve goals. Having high credibility and responsibility is not enough in carrying out economic life and doing business. But if it is equipped with smart mind and professionalism, it will be easier to run (the concept of “work hard and smart”). Fourth, tabligh (communicative, transparency, marketable), is a soft skill that must be possessed by every human being because every religious person carries the responsibility of delivering (da’wah). The nature of tabligh in economics and business lowers the principles of communication (personal, interpersonal) such as sales, marketing, advertising, mass opinion formation, and so forth. (Rafiki & Wahab 2013). explained that there is a relationship between Islamic practice and company performance. dimensions of Islamic practices namely business experience, Islamic motivation, Islamic business training, Islamic education and halal strategies. Companies that implement sharia business practices can have a positive impact on the company’s growth. There is a positive relationship from business experience, company age and Islamic value will increase sales growth. Anshori (2015) explained the implementation of Islamic Values at PT Freeport. Relationship with employee behavior and welfare. Emphasizing the importance of Islamic generalization behavior that is not directly related to management, but it is influenced by interests and the environment. The application of Islamic values in business management at PT Freeport Indonesia is related to aspects of honesty, justice aspects, aspects of openness, and aspects of partnership that create a positive impact on employee behavior. The application of Islamic values will form a culture that has a good work ethic. Omar et al. (2015) in his research explained the effect of applying the value of Islam to economic development in Malaysia. His research is based on Neoclassical economic growth with the aggregate production function (APF). His research also applied the cointegration concept to find out the effects of Islamic values on economic development. The values of Islam have contributed to the financial system in Malaysia, the financial system that uses Islamic law has caused an increase in GDP in Malaysia. Hakimi & Shafluai (2015) examined the lives of farmers in Malaysia and the problems of farmers in developing unemployed farms. In addition, this study also explains how Islamic microfinance solutions meet the capital needs of farmers.

3. Farming Productivity
Productivity contains an understanding of the comparison between the results achieved with the overall resources used. The concept of productivity can be seen from two dimensions. namely individual dimensions and organizational dimensions. Individual dimensions see productivity in relation to individual personality characteristics that appear in the form of mental attitudes that contain the desires and efforts of individuals who are always trying to improve the quality of their lives. While the organizational dimension sees productivity within the framework of the technical relationship between inputs and outputs. Therefore in this view the increase in productivity is not only seen from the aspect of quantity, but it can also be seen from the aspect of quality. Associated with agricultural productivity especially farming productivity, efforts to increase productivity are not only measured through agricultural land management but also take into account other aspects that affect productivity itself such as farmer business management, institutional support and aspects of farmers themselves concerning psychological factors, factors capital, land, mastery of cultivation, policies and management factors (managerial farmers) in managing farming are very important. Someone with high creativity will be better able to manage farming well. In other words according to Suratiyah (2006) management as a resource is very much influenced by the "human capital" of the farming manager which in turn will determine the success of a farm. The concept of productivity can be seen from two dimensions, namely individual dimensions and organizational dimensions. Individual dimensions see productivity in relation to individual personality characteristics that appear in the form of mental attitudes that contain the desires and efforts of individuals who are always trying to improve the quality of their lives. While the organizational dimension sees productivity within the framework of the technical relationship between inputs and outputs. Therefore in this view the increase in
productivity is not only seen from the aspect of quantity, but it can also be seen from the aspect of quality. Associated with agricultural productivity, especially farming productivity, efforts to increase productivity are not only measured through agricultural land management but also take into account other aspects that affect productivity itself such as farmer business management, institutional support and aspects of farmers themselves concerning the behavioral factors of farmers.

3. DESCRIPTIVE METHODOLOGY WITH VERIFICATION METHOD

Based on the purpose of the study, then the research method that will be used in this research is descriptive method and verification method. Descriptive methods are used to describe or describe the factors of land production, capital, labor and FAST values in sweet potato farming in Kuningan Regency. The verification method is used to explain the influence of land production factors, capital, labor and FAST values on the productivity of sweet potato farming. The population in this study were sweet potato farmers in the sweet potato center area in Kuningan Regency, namely: Cilimus, Jalaksana, Japara, Pancalang, Kramatmulya, Sindangagung, Cipicung and Cigandamekar Subdistricts which numbered 8,428.00 farmers. To determine the sample size used Slovin formula with an error rate of 5% obtained a sample of 382 people. The sampling technique used in this study is Proportional Random Sampling. Sampling is carried out in proportion by taking subjects from each strata or each region determined by the number of subjects in each strata or region (Arikunto, 2006). By using the Proportional Random Sampling technique, the number of samples is obtained using the following formula (Sugiyono, 2010).

<table>
<thead>
<tr>
<th>Number of Research Samples</th>
<th>Sub-District</th>
<th>Sample Population</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Pancalang</td>
<td>432/8428 x 382</td>
</tr>
<tr>
<td>2</td>
<td>Cigandamekar</td>
<td>967/8428 x 382</td>
</tr>
<tr>
<td>3</td>
<td>Cilimus</td>
<td>1970/8428 x 382</td>
</tr>
<tr>
<td>4</td>
<td>Japara</td>
<td>363/8428 x 382</td>
</tr>
<tr>
<td>5</td>
<td>Jalaksana</td>
<td>2404/8428 x 382</td>
</tr>
<tr>
<td>6</td>
<td>Kramatmulya</td>
<td>1043/8428 x 382</td>
</tr>
<tr>
<td>7</td>
<td>Sindangagung</td>
<td>370/8428 x 382</td>
</tr>
<tr>
<td>8</td>
<td>Cipicung</td>
<td>879/8428 x 382</td>
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</tbody>
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<table>
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<th>Population</th>
<th>8428.00</th>
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Research variable
The independent variable in this study is that the land in this study is the area of land used per activity to grow sweet potatoes in hectares, capital is the nominal nominal consisting of money (in rupiah) which is used for labor financing in one harvest and supply production materials, namely the nominal amount consisting of money (in rupiah) used for the purchase of production materials in one harvest period, laborers, namely the number of family workers and non-farmer families used per activity in one planting and outpouring of farming productivity (HOK), Number of Family Dependents is the total number of family members that must be borne in one family in units of people and Fathona’s Values means smart, Amanah can be used, Shidiq, honest, and Tablig. The variable that succeeded in this study was the productivity of Sweet Potato farming which was the result of the input with the input of sweet potato farming.

Empirical Model
A model based on Augmented Solow as recommended by equation (2.1). Mankiw et al (1992) corrected the Neoclassical Solow theory by including uns Human capital in the endogenous production function model. This theory includes human capital as not supported by productivity. With the transformation of the form as in equation 9 are the following:

\[ \ln \frac{Y(t)}{L(t)} = A(0) + gt + \frac{\alpha}{1 - \alpha - \beta} \ln (s_k + \gamma) - \frac{\alpha + \beta}{1 - \alpha - \beta} \ln (\delta + n + g) \]

Assuming depreciation (\( \delta \)) is zero and constant technological development and the portion of income invested in physical capital (\( s_k \)) are identical to the addition of physical capital to physical capital investment, is the number of family dependents and the portion of income invested in human capital (\( h_k \)) identical to additional human capital from human capital physical capital investment. By taking parameters from equation (1) then equation (1) can be rewritten as follows:

\[ Y = \ln \frac{Y(t)}{L(t)} \]

\[ \rho_0 = A(0) + gt \]

\[ \rho_1 = \frac{\alpha}{1 - \alpha - \beta} \]

\[ \rho_2 = \frac{\alpha + \beta}{1 - \alpha - \beta} \]

\[ \rho_3 = \frac{\beta}{1 - \alpha - \beta} \]

\[ h = FAST \text{ (Fathona, Amanah, Shidiq, Tablig)} \]

\[ Y \text{ is farming productivity, is physical input consisting of land, capital, and labor, is human capital, which is inherent in the farmer (assuming the rate of deflation } \delta \text{ and technology is constant, then equation (2) can be explained and described as} \]

\[ Y = \rho_0 + \rho_1 (\varphi_1 \ln T_1 + \varphi_2 \ln M_1 + \varphi_3 \ln T_1 K_1) - \rho_2 \ln (n_i) + \rho_3 \ln FAST \]

To better explain equation (3.9), the equation can be simplified and written as:

\[ Y = s_0 + s_1 \ln T_i + s_2 \ln M_i + s_3 \ln T_k - s_4 \ln n_k + s_5 \ln FAST \]
To interact between the values of Fathonah, Amanah, Shidiq and Tabligh (FAST) with variables Land, Capital and Labor so that it will be seen how increasing farm productivity will increase with the presence of variables that can strengthen these interactions. Therefore, the authors include the values of Fathonah, Amanah, Shidiq and Tabligh (FAST) Embodied into each Production Factor (Land, Capital and Labor), therefore to explain the relationship there needs to be an empirical model development as a model alternatives are as follows:

\[ Y = \gamma_0 + \gamma_1 \ln T_i + \gamma_2 \ln M_i + \gamma_3 \ln T_k + \gamma_4 \ln (T_i \cdot F) + \gamma_5 \ln (T_i \cdot A) + \gamma_6 \ln (T_i \cdot S) + \gamma_7 \ln (T_i \cdot T) + \gamma_8 \ln (M_i \cdot F) + \gamma_9 \ln (M_i \cdot A) + \gamma_{10} \ln (M_i \cdot S) + \gamma_{11} \ln (M_i \cdot T) + \gamma_{12} \ln (T_k \cdot F) + \gamma_{13} \ln (T_k \cdot A) + \gamma_{14} \ln (T_k \cdot S) + \gamma_{15} \ln (T_k \cdot T) + \varepsilon_i \]  

(11)

4. MODEL ESTIMATION RESULTS AND ANALYSIS

The results of the estimation model, the model estimation results are obtained as follows:

**Table 2. Model Estimation Results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>A</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>7,403</td>
<td>32,772</td>
<td>0,000</td>
</tr>
<tr>
<td>Soil</td>
<td>6,284</td>
<td>6,546</td>
<td>0,000</td>
</tr>
<tr>
<td>Capital</td>
<td>4,045</td>
<td>4,846</td>
<td>0,000</td>
</tr>
<tr>
<td>Labor</td>
<td>0,111</td>
<td>3,330</td>
<td>0,042</td>
</tr>
<tr>
<td>Family Dependents</td>
<td>0,244</td>
<td>0,310</td>
<td>0,191</td>
</tr>
<tr>
<td>TF</td>
<td>0,544</td>
<td>3,704</td>
<td>0,009</td>
</tr>
<tr>
<td>TA</td>
<td>0,167</td>
<td>3,710</td>
<td>0,028</td>
</tr>
<tr>
<td>TS</td>
<td>0,249</td>
<td>2,949</td>
<td>0,043</td>
</tr>
<tr>
<td>TT</td>
<td>0,636</td>
<td>2,027</td>
<td>0,043</td>
</tr>
<tr>
<td>MF</td>
<td>0,368</td>
<td>5,187</td>
<td>0,036</td>
</tr>
<tr>
<td>MA</td>
<td>0,745</td>
<td>2,066</td>
<td>0,040</td>
</tr>
<tr>
<td>MS</td>
<td>1,394</td>
<td>3,464</td>
<td>0,001</td>
</tr>
<tr>
<td>MT</td>
<td>0,005</td>
<td>3,017</td>
<td>0,006</td>
</tr>
<tr>
<td>TKF</td>
<td>0,095</td>
<td>4,746</td>
<td>0,046</td>
</tr>
<tr>
<td>TKA</td>
<td>0,149</td>
<td>1,415</td>
<td>0,158</td>
</tr>
<tr>
<td>TKS</td>
<td>0,038</td>
<td>5,329</td>
<td>0,042</td>
</tr>
<tr>
<td>TKT</td>
<td>0,023</td>
<td>3,179</td>
<td>0,008</td>
</tr>
</tbody>
</table>

Based on the table above, the multiple linear regression equation is as follows:

\[ Y = 7,403 + 6,284X_{1t} + 4,045X_{2t} + 0,111X_3 + 0,244X_4 + 0, 544X_5 + 0, 167X_6 + 0,249X_7 + 0,636X_8 + 0, 368X_9 + 0,745X_{10} + 1,394X_{11} + 0,005X_{12} + 0,095X_{13} + 0,149X_{14} + 0,038X_{15} + 0,023X_{16} \]
**Land Effect on the Productivity of Farmers’ Business**

Testing of the hypothesis of the influence of soil (X1) on farm productivity (Y) obtained statistical conclusions that land has a positive and significant effect on business productivity with a value of | tcount | = 6.546 and the probability value is 0.000, this means that the land has a positive and significant effect on the productivity of sweet potato farming. Based on the calculation obtained the regression coefficient number is equal to 6.284 which means that every 1 percent increase can increase productivity by 6.284 percent. Land measured by the area of agricultural land is a determinant in agricultural commodities. In general it is said, the more land area (cultivated / planted), the greater the amount of production produced by the land (Rohim, 2007). If more land ownership is in boxes with a narrow area of control, agricultural development efforts will be difficult. Land is a very important factor in agriculture because land is part of the surface of the earth that can be used as a place or land for farming, land can be a factory of agricultural products. (Kasryno, 1984) states that farmers who have large land tend to make technological changes, with the aim of increasing their farming productivity. Mburu et al (2014) argue that small farms tend to use land more intensively in an effort to reduce land constraints, this study shows that the relatively higher level of technical efficiency observed in small farms is largely due to the application of traditional soil storage techniques rather than use of modern storage technology. Setiawan et al (2015) stated that Farmers with a narrow area of land ownership would cause small income so that to meet food needs usually cultivate their land with short-term and more intensive goals without regard to the suitability of the land's capabilities. Soetiono (2006) the extent of agricultural land will affect the scale of business. Previous studies that supported were Kudaligama & Yanagida (2000), Musemwa et al (2013), Atala (2009), Mburu et al (2014), Eyavanti & Ratina (2001), Sukiyono (2004), Suphannachart & Warr (2011), Zhang (2014)

**Capital Effect on Productivity of Farming**

From the results of statistical calculations, it can be concluded that capital (X2) has a positive and significant effect on farm productivity (Y) with a value of | tcount | at 4.846 and the probability value is 0.000, this means that capital has a positive and significant effect on the productivity of sweet potato farming. Based on the results of calculations obtained by the regression coefficient of 4.045, which means that each increase of 1 percent of capital can increase productivity by 4.045 percent. Capital is a very decisive factor in increasing farm productivity. Production or capital costs play a major role in sweet potato farming. Capital has a very strong influence and relationship, as demonstrated by Soetiono (2006). Production costs include factors that influence the productivity of sweet potato farming, this is because the cost of production is very important and essential in the cultivation of sweet potatoes. Availability of sufficient and timely capital is a very important element in agricultural activities (Hanafi, 2010). Therefore the cost of production or capital plays a major role in rice farming, has a very strong influence and relationship. According to Darsono & Ashari (2009), weak capital is still one of the problems faced by agricultural businesses. Based on the results of the study, most of the farmers obtained their own capital, which received very little capital from other parties or financial institutions, so this became a factor that caused a lack of farming capital, farmers still felt reluctant to borrow capital from financial institutions, as a solution for additional capital, Masuku & Xaba (2013), the results of his research show that the factors that greatly influence farming productivity are access to credit, as revealed by Nwaru & Onyenweaku (2006), credit is an important factor in rural production activities when the main drivers of economic development are capital and technology. The importance of credit is based on the fact that credit can increase farm operational size and resource productivity. In addition, credit can facilitate innovation adoption activities that can increase farm production and income resulting in capital formation. Capital is the overall current assets owned by the company or can also be intended as funds available to finance daily operational activities (Sawir, 2005). The results of the study supporting this research are Suphannachart & Warr (2011), Zhang (2014).

**Manpower Influence on Farming Productivity**

Based on the results of statistical calculations to determine the significance of the influence of labor (X3) on farm productivity (Y) used the t-test with the value | thitung | amounting to 3.330 and the probability value of 0.042, this means that labor has a positive and significant effect on the productivity of sweet potato farming. Based on the results of the calculation obtained by the number of regression coefficients of 0.111, which means that every increase of 1 percent of workdays (HOK) can increase productivity by 0.111 percent. This shows that the amount of production from one farm or one agricultural company is determined by the scale of business and productivity that can be obtained by one farming unit or agricultural company. The scale of farming can be determined by the large number of people living / trying in the agricultural sector (Mubyarto, 2001). Labor is one of the important production factors in the production process, including in the management of farming. Based on the results of the observation, the use of labor for each activity of sweet potato farming in Kunining Regency uses more labor from outside the family compared to workers from within the family. The scale of business will affect the size of the workforce needed and also determine the type of labor that is needed (Soekartawi, 2003). The use of labor can be expressed as an outpouring of labor, namely the amount of effective labor time used (Hasutti, 2007). In addition, Solow stated that output growth is determined by two main things, namely each production factor used (capital and labor). Another supportive study is Zhang (2014). Every business that is carried out including farming certainly requires labor, the pouring of labor is expressed by the outpouring of work which will affect the level of production, where labor is one of the factors of production used in carrying out the production process. In the process of production, the workforce receives income as remuneration from the effort that has been made, namely wages. According to Bowman (2013) the causative factor of labor market imperfections is the low wage level of labor in the agricultural sector, so that agricultural productivity also becomes low.

**Number of Family Dependents Effects on Farming Productivity**

Based on the results of statistical calculations to find out the significance of the number (X3) on farm productivity (Y), the t-test is used with the value | thitung | amounting to 0.310 and
the probability value of 0.191 this means that the number of family dependents has a positive but not significant effect on the productivity of sweet potato farming. The number of family dependents gives a positive influence because the number of family members will determine the level of outpouring of working hours from the results used because family members in working age are a source of labor so efforts to improve work skills and skills will be fulfilled, thus living standards will increase. Besides that with the increasing number of family members participating in the meal and living, it forced them to seek additional income (Wirosuharto, 1996). The results of the study on the number of family dependents have no significant effect on farm productivity because it is 0.310, indicating that an increase of 1 unit of family members only increases productivity by 0.310, because the number of family dependents is the number of family members borne by the household members, either it was siblings or non-siblings who lived in one house and had not worked. Rochaeni and Lokollo (2005), in their study stated that the working time of members of farmer households is mostly used for businesses that are non-agricultural in nature compared to those allocated for farming, because the income from non-farms is greater. So that the results of his research show that the outpouring of husband’s working time on non-farming negatively influences and gives an inelastic response to income, the State of Indonesia is a developing country where the population is large and most of them live in rural areas. People in rural areas have the view that having many children is a lot of fortune, thus means that children are an investment. Income is used to increase the number of children, but better increase in income is used to increase the quality of their children through education. So that there is an opportunity for children to get a better income than their parents in the future. Because the more the number of family members the greater the needs met. So that it can be concluded that people who have a large number of family dependents will increase the amount of income needed. The influence of the number of family dependents on productivity was also stated by Maltus and other classical economists who agreed that productivity growth allows an increase in output per person and thus supports rising living standards. The decline in productivity growth implies that the cost of living increases more slowly, or actually decreases (Lipsey, 1995). According to Bowman (2013) Low agricultural productivity is caused by low labor wage rates which have an impact on labor market imperfections, because according to him, more productive families are needed.

**FAST Positive effect on farm productivity through increasing land management capacity**

Based on the estimation results of the calculation of the values of Fathonah, Amanah, Shidiq and Tabligh (FAST) in Table 6.1 shows the coefficient and significant value of each of them, Fathonah value has a coefficient of 0.368 and a significant number of 0.036, the implication is if farmers can use his intelligence or ability to manage the management of his capital efficiently and effectively and consider the benefits it will be able to increase farm productivity. The verse related to the value of Fathonah in managing capital is (Surah Al-Isra : 26-27, QS. Al-Furqon: 67, QS. Al-A'raf: 56, QS. Hud: 88, QS. Al-Maidah : 2, Al-Baqarah: 275 and 277) Trustworthy value with a coefficient value of 0.745 and a significant number of 0.40. The implication is that if the farmer keeps his mandate by using capital not for interests outside of his farming, separating between personal and business interests is also always keeping the trust by paying attention to Zakat, infaq and shodaqoh, then farming productivity can increase. Paragraph related to Amanah value in capital management is (Surah Al-Furqon: 67, Surah Al-Isro : 29, Al-Baqarah: 2,188, 254 and 267, QS. An-Nisa: 58, QS. Al-Isra : 26 and 27, QS. At-Tawbah: 103) The Shidiq value has a coefficient number of 1.394 and a significant number of 0.01. This shows that if the farmer honestly manages capital on the farm, that is, not freezing capital, is set aside for additional capital, using a profit-sharing principle can increase farm productivity. The verse related to the Shidiq value in capital management is (Q. Al-Baqarah: 188 and 261, QS. Al-Jumah: 10, QS. Yusuf: 47-49, QS. Al-Maidah: 2, QS.An-Nisa ' : 58,) Tabligh value has a coefficient number of 0.05 and a significant number of 0.06. The implication is that if the farmer expresses openly the benefits to the party in need, conveying correctly the conditions of his farming, it will encourage to increase farming productivity. The verse related to the value of Tabligh in the management of capital is (QS. At-Taubah: 119, QS. Ash-Syuro: 38, QS. Al-Maidah: 67)

**FAST Positive Effect On Farm Productivity Through Increasing Labor Management Capacity**

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Based on the estimation results of the values of Fathonah, Amanah, Shidiq and Tabligh (FAST) in table 6.1 shows the coefficient and significant value of each of them, Fathonah value has a coefficient number of 0.095 and a significant number of 0.046. The implication is that if farmers with the ability to participate in extension activities, technical guidance to improve farmers' abilities will increase farm productivity. The verse related to the value of Fathonah in managing labor is (Qs. Al-'Aaq: 1, Qs. Al-'Imron: 159, Qs. At-Taubah: 105, Qs. Al-Isro: 84, Qs. Al-Hashr : 18, Qs.Al-Maidah: 67). Trustworthy value with a coefficient value of 0.149 and a significant number of 0.158. This means that if farmers maintain the mandate by treating workers not as slaves, providing wages accordingly, as well as providing fair wages, they can increase farm productivity. The verse related to the Amanah value in managing labor is (Qs. Thoha: 29-32, Qs. An-Nahl: 90, Qs. Ar-Rahman: 60) The Shidiq value has a coefficient number of 0.3038 and a significant number of 0.042. This means that if honesty is always applied in the management of labor, including the existence of work agreements between farmers and workers, providing wages in accordance with their work and on time, this can encourage farmers to increase their farming productivity. The verse related to the Shidiq value in the management of labor is (Qs. An-Nahl: 91.97, Qs. Ar-Rahman: 60, Qs. An-Najm: 39-42, HR. Ibn Majah, HR Bukhari and Muslim, Surah Al-Maidah: 1, Qs al-Araf: 85) Tabligh value has a coefficient number of 0.23 and a significant number of 0.08. The implication is that if farmers always call for the use of time in work and stop working time at rest or prayer time arrives, also always receive criticism and suggestions in the development of farming, it will be able to increase farm productivity. The verse related to the value of Tabligh in the management of labor is (Qs. Maryam: 41-43, Qs Al Baqarah: 43, Qs. An-Nahl: 97, Qs. Al-Hujurat: 13, Q.S An-Nisa: 32) The process of integrating sharia norms and rules into economics is due to the view that life in the world cannot be separated from life in the hereafter. Everything must be balanced because the world is a rice field or an afterlife field. Profit (return) that will later be obtained by someone in the hereafter, depends on what he has invested in the world (Karim, 2007). All production activities are bound to the level of Islamic moral and technical values, production activities must also pay attention to aspects of benefit not only profit. Morals will underlie all economic activities, including economic production activities. According to (Qardhawi, 1997) morality is the main thing in production that must be considered by the Muslims, both individually and together, that is working in a field that is practiced by Allah SWT, and not beyond what is forbidden by Allah SWT.

5. CONCLUSIONS AND RECOMMENDATIONS
The factors of land production, capital and labor have a positive and significant effect on the productivity of sweet potato farming, while the number of family dependents has a positive but not significant effect on the productivity of sweet potato farming in Kuningan Regency. The values of Fathonah, Amanah, Shidiq and Tabligh (FAST) have a positive and significant effect on farm productivity through increasing land management, capital and labor capacity, however trustworthy values have a positive but not significant effect on farm productivity through increasing labor management capacity. The results of this study provide several alternative practical implications regarding the factors of production and implementation of Islamic values in the management of production factors. Sweet potato farming in Kuningan Regency has a high chance. because one of the sweet potato centers in West Java Province which in its development will certainly have implications for the high demand for sweet potatoes from the community. sweet potato processing industry and exporter, hence the need for the application of good cultivation techniques so as to increase the production of sweet potato farming. With the existence of economic globalization, of course it will have an impact on increasing business competition, including sweet potato farming as one of the industrial materials will be a potential in increasing the processing of sweet potato farming, so it is necessary to use appropriate technology so that sweet potato farming can compete with other businesses. In addition, there is also a need for a separate institution for sweet potato farming so that it can facilitate communication and coordination. Efforts made to increase the productivity of sweet potato farming are by creating added value of sweet potato farming through the development of processing sweet potato farming. For this reason, it is necessary to have funding support from the government in an effort to increase capital in developing sweet potato farming. Efforts to increase the productivity of sweet potato farming in addition to the technical aspects also from aspects of behavior. because this aspect is also very important in shaping the attitudes and behavior of farmers in managing farming, so that not only the profit aspects will be obtained but also the benefits. In connection with the research that has been done, in increasing understanding and practice of Islamic values there needs to be an increase in religious counseling and also the formation of a special Muslim council for farmers of sweet potato farming.

[1] REFERENCES


