

## The Influence of Religiosity and Transparency on Production Factors of Sharecrops and Sharecropping Contract in East Java

Suyoto Arief<sup>1</sup>, Adib Susilo<sup>2</sup>, Achmad Fajaruddin<sup>3</sup>

<sup>1</sup>Fakultas Syariah, UNIDA Gontor, Jalan Raya Siman, Ponorogo 63471, Indonesia, suyotoarief1@gmail.com

<sup>2</sup>Fakultas Ekonomi dan Manajemen, UNIDA Gontor, Jalan Raya Siman, Ponorogo 63471, Indonesia, adib.susilo27@gmail.com

<sup>3</sup>Fakultas Ekonomi dan Manajemen, UNIDA Gontor, Jalan Raya Siman, Ponorogo 63471, Indonesia, fajaruddin.21@gmail.com

**Abstract.** This paper seeks the relations between the religiosity and the transparency to the production factors usage in the land crops cultivation as well as the effect of production factor to the sharecropping contract in East Java. The method employs in this study is Structural Equation Modelling (SEM) with the respondent of the research is 400 farmers from the 8 counties in East Java. The result shows that religiosity and transparency have positives and significant effect to the production factors usage in the cultivation of the land crops in East Java with the p-value respectively 0.008 for religiosity to production factors and 0.001 for transparency to production factors. Meanwhile, the influence of production factors to the sharecropping contract is positive and significant with p-value about 0.001. Furthermore, the R-square of production factors is about 0.907 which mean 90.7% of production factors variable is explained by religiosity and transparency variables while the rest of it is explained by other variables out of this research. Meanwhile, the sharecropping contracts R-square is about 0.629 which means 62.9% of sharecropping contracts variable is explained by production factors variable while the rest of it about 37.1% is explained by other variables out of this research.

**Keywords:** Production factors, religiosity, sharecropping contracts, transparency.

**Abstrak.** Tulisan ini bertujuan untuk mencari hubungan antara religiositas dan transparansi terhadap penggunaan faktor produksi dalam budidaya tanaman darat serta pengaruh faktor produksi terhadap kontrak bagi hasil di Jawa Timur. Metode yang digunakan dalam penelitian ini adalah Structural Equation Modelling (SEM) dengan 400 responden penelitian dari 8 kabupaten di Jawa Timur. Hasil analisis menunjukkan bahwa religiositas dan transparansi berpengaruh positif dan signifikan terhadap penggunaan faktor produksi dalam budidaya tanaman darat di Jawa Timur dengan p-value masing-masing 0.008 untuk religiositas terhadap faktor produksi dan 0.001 untuk transparansi terhadap faktor produksi. Sedangkan pengaruh faktor produksi terhadap kontrak bagi hasil adalah positif dan signifikan dengan p-value sebesar 0.001. Selanjutnya R-square faktor produksi sebesar 0.907 yang berarti 90.7% variabel faktor produksi dijelaskan oleh variabel religiositas dan transparansi sedangkan sisanya dijelaskan oleh variabel lain yang tidak diteliti dalam penelitian ini. Sementara itu, R-square kontrak bagi hasil sebesar 0.629 yang berarti 62.9% variabel kontrak bagi hasil dijelaskan oleh variabel faktor produksi sementara sisanya sebesar 37.1% dijelaskan oleh variabel lain yang tidak diteliti dalam penelitian ini.

**Kata kunci:** Faktor produksi, religiositas, sharecropping contract, transparansi.

## INTRODUCTION

Indonesia is one of the agrarian countries in Asia with a fairly large production in the agricultural sector. The agricultural sector in Indonesia, especially food crop agriculture, still provides a large enough contribution, similarly, the agricultural sector in the province of East Java as one widest land crop and high rice productivity. With one of the jargons, namely food security, it is not surprising that the agricultural sector is one of the sectors that the government pays attention to meet food needs in Indonesia and can even become a source of state income from exports (Lailatussyukriah, 2015; Suratha, 2015). There are various types of agricultural and plantation products that are excellent for

Indonesia's exports to foreign countries such as cacao, tobacco, rice, palm oil, rubber, tea, and coffee (Parmadi et al., 2018). East Java as one of the provinces that has a high agricultural land and farming household population has an important role in sustaining and supporting the food security program especially during the Covid-19 pandemic recently (Samanhudi, 2020; Wardah and Niswah, 2021).

East Java is the province with the largest agricultural land area in Indonesia which is around 1,702,462 ha with an average production of 9,580,934 tons of rice in 2019. Furthermore, the agricultural sector is one of the largest contributors to GDP as illustrated in the table below:

Table 1 Indonesia's GDP by industry on 2015-2019 prices (in billion)

No	Industry	2018	2019
1	Agriculture	Rp 1,900,803.6	Rp 2,013,626.9
2	Mining and Quarrying	Rp 1,198,987.1	Rp 1,149,913.5
3	Manufacture	Rp 2,947,450.8	Rp 3,119,617.3
4	Electricity and Gas	Rp 176,640.3	Rp 185,115.3
5	Water Supply and Waste Management	Rp 10,024.2	Rp 10,736.3
6	Construction	Rp 1,562,297	Rp 1,701,741.2
7	Wholesale and Retail	Rp 1,931,818.7	Rp 2,060,772.6
8	Transportation and Storage	Rp 797,846.9	Rp 881,662.6
9	Food Services	Rp 412,709.7	Rp 440,267.7
10	Information and Communication	Rp 558,938.0	Rp 626,424.7
11	Financial Services	Rp 616,315.1	Rp 671,356.0
12	Real Estate	Rp 406,013.7	Rp 439,367.1
13	Business Activities	Rp 267,094.0	Rp 304,285.5
14	Public Administration	Rp 542,028.7	Rp 572,456.9
15	Educational Services	Rp 481,724.3	Rp 522,745.5
16	Health Services	Rp 158,063.6	Rp 174,801.7
17	Other Services	Rp 268,625.8	Rp 308,839.6
<b>Total</b>		<b>Rp 14,838,311.5</b>	<b>Rp 15,833,943.4</b>

Source: BPS, 2020.

Based on the Table 1 above, agriculture is the third highest GDP contributor in Indonesia. Moreover, there is an increase of GDP in agricultural sector from Rp 1,900,803.6 billion in 2018 to Rp 2,013,626.9 billion in 2019 while mining sector experiencing a decline of GDP from 2018 to 2019. This is proof that the agricultural sector in Indonesia plays a strategic role in creating income for the majority of the Indonesian (Sihombing, 2021; Wahyuningtias, 2021). Moreover, agriculture sector in Indonesia is the first guard for food security in the Covid-19 disease pandemic period (Muslim et al., 2020).

As a matter of fact, East Java is one of big three provinces with largest harvested land area and the highest productivity of crops. With total food production reaching 9,580,934 tons, it is not surprising that East Java is one of the provinces that prepared for the food security program (Badan Pusat Statistik, 2020). Furthermore, the current condition of the Covid-19 pandemic that has not subsided is troubling the community where food needs are basic needs (Workie et al., 2020). As one of the provinces with a high amount of food production, East Java is no doubt able to prepare the basic needs of the community with the potential for food security (Darma et al., 2020; Rozaki, 2020).

The success of East Java in providing the crops for food security program is inseparable from the factors that affecting to the production of the crops which also lead to the sharecrop to gain the

welfare of the farmer (Merlinda et al., 2021). The production factors that have been use for the productivity of the crop land also affected to the behaviour of the farmer and the landowner in the processing of the crop land (Molaei, 2019; Wahyuningsih et al., 2021).

East Java with the religious culture and the large number of 'pesantren' (Islamic Boarding School) impacting to the society behaviour through Islamic religious teaches (Bosra and Umiarso, 2020; Kurniawan and Syifauddin, 2021). Moreover, religious approach that affect to a person's behaviour is easy to be accepted in the farmer households (Sok et al., 2021). In addition, transparency aspect in the sharecrop contract in East Java is part of the traditional agriculture product that also has been blended in the Islamic religious teaches as the as a result of the struggles of previous religious figures and leaders (Wahyuni, 2013).

Some research found that religiosity aspect has an impact on the usage of production factors for example Islamic teaching taught that any production should attend to halal aspects whether in it's the substance (its nature) or due to others aspects. In the contract of muzara'ah or sharecrops occurred the same as well. It is because halal material would impact to the nature of the cultivation of the crops. In the same context, transparency of the land area, soil fertility, farm labour employed, and so on would affect to production factors. Indeed, production factors investigated in several researches influenced to sharecrops. Indirectly, religiosity and transparency would affect to sharecrops through its production factors. Therefore, this paper is aimed to seek the relation between the religiosity and transparency aspect to the usage of production factor in crop land cultivation and how the result of it would affect to the sharecrop as well.

## LITEARTURE REVIEW

### Sharecrop

The discussion on sharecropping in Indonesia is often to discuss in the aspect of the legal basis of it or the implementation of the sharia contract in sharecropping. For example, the practice of sharecropping agreements in rice fields cooperation management that has been carried out by the community or farmers is reviewed for conformity with the contract or Islamic law principles (Damayanti, 2019; Ghoni et al., 2020; Habibie, 2019; Munfariah and Saka, 2020). On the other hand, sharecropping contract has been tested on its influence on the welfare of the farmer and the landowner, which is proven that sharecropping with Islamic contract influences the welfare between the farmer and the landowner (Haryati, 2019; Jannah et al., 2018).

Sharecrop referred in this study is Islamic sharecrop whether it is *muzara'ah*, *mukhabarah*, or *musaqah* as the first and the second is for harvesting and cultivating contract while the different of both contracts is in the seed procurement, the third is for plantation management. The practice of agricultural contract has been exemplified by the apostle as a legal basis in the implementation of contracts for the management and processing of agricultural land (Kartiko, 2019). The concept of Islamic sharecrop (*muzara'ah*, *mukhabarah*, or *musaqah*) also has been adapted to the culture of the local farmer. In east Java Islamic sharecrops could be adapted to *maro*, *mertelu*, *mrapat* as research shows that the implementation of Islamic practice has been succeeded to the local culture of sharecrop (Malik et al., 2018; Nugraha, 2016; Priyadi and Shidiqie, 2015; Purwanto et al., 2020; Wahyuni, 2013).

Meanwhile, there are several factors that influenced the sharecropping, for example, the socio-economics factor of the contract parties whether the farmers, tenants, or the landowner. There are also production factors that are affected by the cost as well as the land quality. Moreover, transparency of the contract implementation has been tested to influence sharecropping as well (Arief and Susilo, 2019). On the other hand, religiosity is one factor that able to affect the behaviour of the farmer in sharecropping on his transparency behaviour as well as his production behaviour (Rosidin et al.,

2021).

### **Religiosity**

On the other hand, some variables would affect to the production factors that lead its impact to sharecrop or the revenue sharing of the crops. For example, religiosity would affect a person in to production factor in its usage, its halal, as well as the ethics. In short, religiosity would affect a person economic behaviour whether in consumption or in production (Bawono, 2017; Mustikowati and Wilujeng, 2020). There are 5 dimensions of religiosity that would effect of a persons' behaviour in his daily activity, including the choses or usage of production factors in sharecrops. The 5 dimensions has been tested as a critic to the dimension of Christian religiosity level measurement; there are ritual, devotion, experience, knowledge, and consequence (El-Menouar, 2014). Meanwhile in this research the dimension that would be tested as the measurement is religious belief, ritual, experience, and knowledge (Alim, 2021).

### **Transparency**

The discussions of transparency in sharecrop related as well to the factor of production that agreed by two parties in sharecrop contract. Some research shows that transparency would affect to the validity of the contract agreement (Fuoli and Hommerberg, 2015). There is no doubt that the openness of the two parties in the agreement of sharecropping contract would bond both of them in each responsibility as well as the revenue sharing of the harvest. In addition, informative behaviour that each party informing and accessing all aspect needed in the contract would be brought them to the mutual satisfaction at the end (Iswahyudi et al., 2017). Moreover, sharecrop contract that has transparency would contributes to the persistent attractiveness of sharecropping (Mukhamedova and Pomfret, 2019).

### **Production Factor**

Some research found that production factor would effect on the amount of profit-sharing in sharecrop and lead to the equality and optimalization farmer income (Sutiknjo and Artini, 2020). Meanwhile, factor of production would affect to the productivity of the soil. For example, the usage of the fertilizer, land area, the usage of quality seeds, and pesticide would affect to the productivity of the soil in order to achieve competitive share profit of the crops both landowner and the farmer (Susanti et al., 2018). The high the production factor the high the costs incurred by each parties. Therefore, the greater the costs incurred by one of the parties, both farmers and land owners, the greater the share of agricultural yields obtained (Muin, 2017; Ren et al., 2019).

### **Hypotheses Development**

#### ***Religiosity affecting the behaviour in the usage of production factors***

Several studies have proven that a person's religiosity will affect his behavior in daily activities, including farming activities, such as how he uses production factors for processing his cultivated land, as well as halal aspects of the production factors that he uses whether its fertilizer, water and so on. Indeed, the religiosity aspect would affect in how the contract of sharecrop including the production factor of it through Islamic sharecropping contract or *muzara'ah* contract (Priyadi and Shidiqie, 2015). Moreover, the practice of it depend as well to the culture that affected by religious teaches as well (Nurmadany, 2016). In addition, religiosity has a significant affect to usage of production factor in Islamic sharecropping contract (Arief and Susilo, 2019). Therefore, the hypothesis could be formulated as follow:

H1: Religiosity has a significant impact to production factor usage in sharecropping contract

### ***Transparency affecting the production factors***

As stated before, transparency would contribute to the persistent attractiveness of sharecropping. Indeed, transparency in the usage of production factors would affect sharecrop as well. Therefore, there would be connection or correlation between the transparencies to the usage of the production factors that lead to the satisfaction of the parties in sharecropping contract. Moreover, transparency is a part of important aspect to the cultural contract that has been affected by the religious teaches (Malik et al., 2018; Wahyuni, 2013). Therefore, based on statement the hypothesis could be formulated as follow:

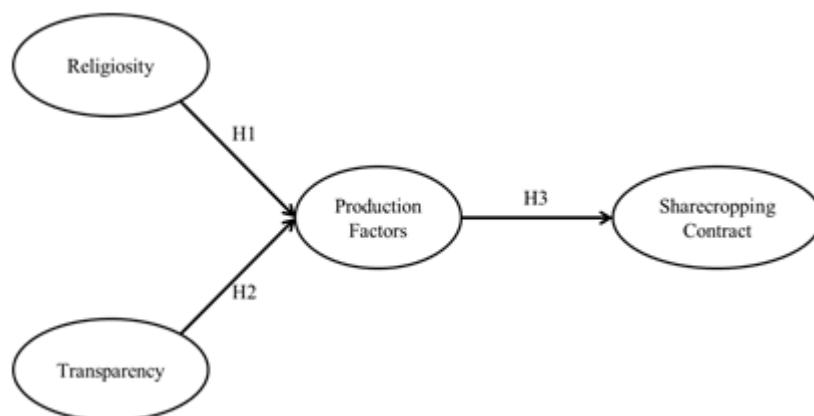
H2: Transparency has a significant impact to the usage of the production factors of sharecropping contract

### ***Production factors affecting the sharecrops***

There are several production factors that would affect to the productivity of the crops field which in turn would impact to the amount of the revenue sharing both parties – landowner and farmer. The factor could be the area of land cultivated, the use of seeds, fertilizers, the number of farm laborers, the use of pesticides, to the use of agricultural equipment. All of the aspects have been tested in several research would affect to sharecrops contracts which the usage of production factors would determine the amount of profit-sharing received by both parties which indeed accordance with the Islamic sharecropping contract. Therefore, the hypothesis could be formulated as follow:

H3: Production factors usage has a significant impact on sharecropping contract

Based on the hypothesis formulated above, the proposed model of this study could be figured as bellow:



Source: Author, 2022.

Figure 1 The research framework of the study

## **METHOD**

### **Data**

The type of data used in this study is primary data which obtained from farmers in East Java from 8 counties. The survey then distributed to the farmer in Lamongan, Ngawi, Jember, Bangkalan, Bojonegoro, Magetan, Kediri, and Banyuwangi. The respondent of the survey is a farmer in those counties. The required sample size is between 200 and 400 that considered as sufficient on average for good results (Hair et al., 2010). It is also suggested at least 200 for every statistical analysis (Hoe, 2008).

In this research, slovin equation was employed to determine the sample size with normal data

distribution approach. Meanwhile, total population from 8 counties is 2,105,544 farmers. Based on the minimum sample size requirement and the slovin formula calculation through the population from the 8 counties, the sample size is about 399.924 or 400 sample size with an accuracy rate of 95% or 5% error (0.05)

**Model Development**

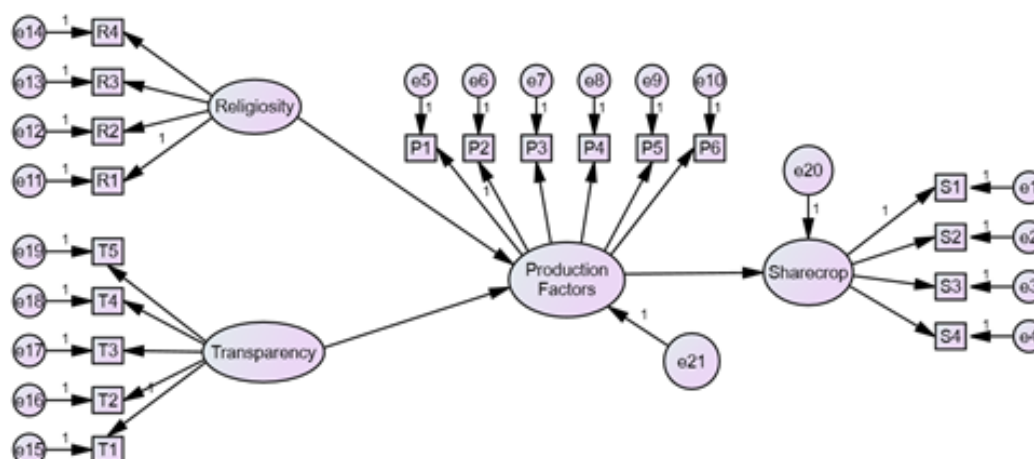
The model of Islamic sharecropping contract composed of 4 important parts led in 3 hypotheses to be tested. The hypotheses obtained from the prospective linkage expected between the models to the sharecropping contract in East Java. SEM model in this paper comprises of 2 latent exogenous variables namely, religiosity (X1) and transparency (X2), as well as two latent endogenous variables namely, production factors usage (Y1) and sharecropping contract (Y2). Table below shows the comprehensive of the latent variables in this study.

Table 2 Developed indicators production factors usage effect in sharecropping contracts

Religiosity (X1)	Transparency (X2)
Belief (R1)	Openness (T1)
Ritual (R2)	Disclosures (T2)
Experience (R3)	Informative (T3)
Knowledge (R4)	Honesty (T4)
	Accessibility (T5)
Production factors (Y1)	Sharecropping contract (Y2)
Capital (P1)	Traditional contract (S1)
Laborship (P2)	Muzara'ah contract (S2)
Technology (P3)	Mukhabarah contract (S3)
Fertilizer usage (P4)	Musaqah contract (S4)
Seeds (P5)	
Pesticide (P6)	

Source: Author, 2022.

The comprehensive of SEM model of this study is shown on the figure below which shows the influence of religiosity and transparency in production factors usage in sharecropping and it effects to the sharecropping contract.



Source: Author, 2022.

Figure 2 Developed models of exogenous and endogenous variables

## Measurement and Structural Model

The two primary components of the SEM are the combination of factor analysis and path analysis. Factor analysis divided in to 2 analysis, Exploratory Factor Analysis (EFA) as validity and reliability as well as Confirmatory Factor Analysis (CFA) as measurement model. Meanwhile, structural model analysis is the path analysis of the study. As stated before that CFA is to test the validity and reliability of the factor while the CFA is a model to examines the connections and demonstrates cause relationship between the variables. In estimating the latent variable value, the EFA and CFA uses the causal relationship to require several measured indices.

In CFA and SEM there are comprised in 5 phases: 1) Specification; 2) Identification; 3) Estimation; 4) Goodness of Fit Test; and 5) Re-specification. The specification of the model consists of translating the verbal hypothesis into a sequence of equations previously displayed as a path diagram.

## RESULTS AND DISCUSSION

### Measurement Model Using CFA

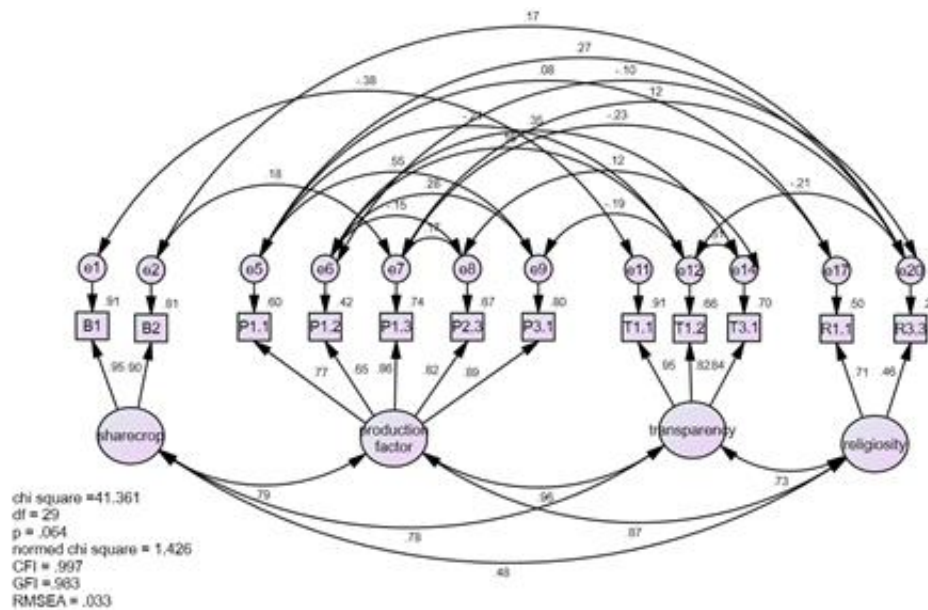
The first measurement test through CFA shows some loading factors that should be deleted due to low level of loading factor value that would affect to the analysis. Therefore, those variables should be deleted and further analysis could be continued. Moreover, for achieving goodness of fit statistic for measurement model some report deployed such as CFI, GFI, RMSEA, CMIN/DF or normed chi square and p-value in specific range which describe in table below:

Table 3 Cut-off value goodness of fit for absolute fit indices

No	Goodness of fit	Cut-off value
1	Chi Square/ $\chi^2$	The smaller or the lower, the better
2	p-value	> 0.05
3	Normed Chi Square (CMIN/ DF)	< 2
4	Goodness of Fit Index (GFI)	$\geq 0.9$
5	Comparative Fit Index (CFI)	$\geq 0.9$
6	Root Mean Square Error of Approximation (RMSEA)	< 0.08

Source: Sarwono, 2010.

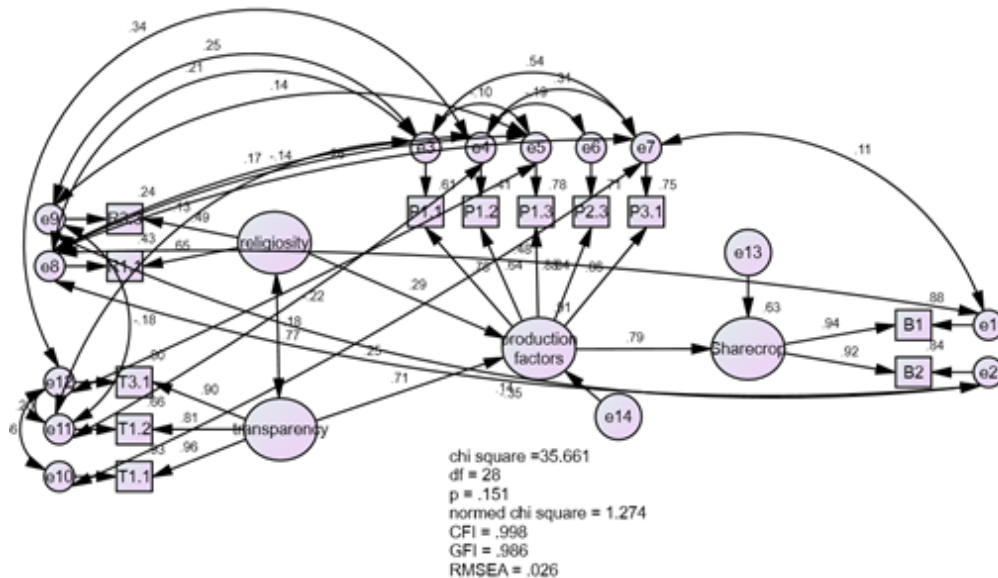
The goodness of fit from Table 3 above is used for path model which show the strong relation between variables and factors. Path measurmenet model is depicted in the Figure 3. The Figure 3 below illustrates the previous 19 proposed factors has been reduced since only 12 factors from each variable is significantly explain the 4 latent variables. From the perspective of fit indices values, the result of CFA as measurement models shows the goodness of fit indices where the  $\chi^2$  is about 41.361 with an insignificant p-value about 0.064 while the CMIN/DF showed the value less than 2 (1.426) following with the GFI and CFI respectively 0.983 and 0.997 and RMSEA 0.33 which below 0.08. Therefore, it can be stated that the CFA measurement model is model fitted and could be continued for further analysis or SEM analysis.



Source: Primary data (processed), 2022.

Figure 3 Path diagram measurement model

**Structural Equation Modeling of the Study**



Source: Primary data (processed), 2022.

Figure 4 Path diagram structural model

The fit indices from the sharecropping contracts in east java are illustrated in Figure 4. The result shows the fit indices in statistical perspective is 35.661 of  $\chi^2$ , 0.151 p-value which is insignificant, 1.274 of CMN/DF which is below 2, 0.998 of CFI and 0.986 of GFI as well as 0.026 of RMSEA which below 0.08. Based on the statistical perspective the structural models construct the appropriate structural model of sharecropping contracts.

Figure 4 presents the estimate of the structural coefficients for sharecropping contracts in East Java which is refer to the standardized regression of latent exogenous variables on it link to latent



endogenous variables. All path coefficients statistically are significant and positive direction. Meanwhile, the hypothesis test result is described in the table below:

Table 4 Hypothesis test result

Path	Hypothesis	p-value	Result
<b>Religiosity → Production factors</b>	H1	0.008	Supported
<b>Transparency → Production factors</b>	H2	0.001	Supported
<b>Production factors → sharecropping contract</b>	H3	0.001	Supported

Source: Primary data (processed), 2022.

Table 4 reported that all hypothesis formulated is supported, which means there are significant positive relations between religiosity and transparency with production factors and production factors significantly and positively influence sharecropping contracts of the farmer. It is showed that p-value of religiosity to production factors is 0.008 which is less than 0.05 means H1 is supported while p-value of transparency to production factors is 0.001 which is less than 0.05 means H2 is supported and p-value of production factors to sharecropping contracts is 0.001 which is less than 0.05 means H3 is supported as well.

In addition, the relation between exogenous (religiosity and transparency) variables that influence the endogenous variables is 0.765, while the r square of production factors is 0.907 or 90.7% of production factors variables explained by transparency and religiosity. On the other hand, r square of sharecropping contracts is 0.629 or 62.9% or sharecropping contracts variables is explained by production factors.

### **The Influence of Religiosity to Production Factors**

The influence of religiosity in production factors that have been used by the farmer for cultivating the land crops is proof that agreements and contracts of sharecropping in East Java have been adapted to Islamic sharecropping contracts, whether it is *muzara'ah*, *mukhabarah*, or *musaqah* (Anwar and Hariyati, 2017; Thaker et al., 2020; Yulianti et al., 2020). Moreover, farmer religiosity would affect the usage of production factors. This means the farmer would always only use the halal product for the production factors, for example, halal fertilize, halal seed, and so on. As well as the other aspect for cultivating the land crops are always considered by the farmer for halal aspect only (Silalahi et al., 2021; Sulaiman, 2020).

This study also confirms that religiosity significantly influences to all aspect of human life, including agricultural sector where religious farmers would consider what they use and act is halal. Arief and Susilo (2019) stated that religiosity has a significant impact to sharecropping as well as Priyadi and Siddiqie (2015) argued that Islamic sharecropping contract has been practiced by the farmer. In contrast, Nurmadany (2016) argued that most of the farmers more likely to employ agreement based on the local tradition. To sum up, based on the discussion is can be stated that this study confirms the previous study and proves even better that religiosity has a positive and significant impact to the production factors usage by the farmer in their agricultural activity.

### **The Influence of Transparency to Production Factors**

The usage of production factors would lead to the cost of production in agriculture sector. Indeed, the high cost of production would affect to the share obtained from sharecrop as well as would lead to the welfare of the farmer (Sembiring, 2020). Therefore, the usage of the production factor, the wide of land area that need to be cultivated, work force and indeed the determination of the share should be stated in the contract as part of the transparency (Wahyuni, 2013). Transparency is the most important thing in agricultural production sharing agreements, the amount of profit-sharing received by smallholders and land owners must be transparent, as well as transparency over land owned by land

owners, its size, quality, and including the burden of cultivation costs (Broad, 2020). Therefore, all aspects that needed to be cleared in the contract should be informed, opened, and to be disclosure to avoid unwanted things that cause the contract agreement to be invalid.

This study confirms the previous research that transparency is an important aspect in daily life especially for a Muslim and including in the agricultural sector. Arief and Susilo (2019) stated that transparency have a significant impact on the sharecropping contract. Jakku et al. (2019) also stated that transparency is part of trust aspect, especially in current digital era where the farmer should encourage themselves to adapt to the smart farming era. As a conclusion, this study confirms and justifies previous study that transparency has a significant influence to the production factors usage in land cultivation.

### **The Influence of Production Factors to Sharecropping Contracts**

The sharecropping contract that has been in force in the community is influenced by several factors. Moreover, the productivity of the crops is influenced a lot by the production factors (Akpan et al., 2018; Li et al., 2021). Meanwhile, the usage of production factors would lead to the determination of the sharecropping contract agreed by two parties both farmer and landowner. In addition, the religiosity of the farmer would affect to their attitude in sharecropping contract whether in the production factor usage or after the revenue sharing. The affect is the farmer or the land owner has a sense to share their wealth of income through zakah or wakaf. In other words, they are willing to or intent to pay zakah and contribute waqf or participate in other Islamic philanthropies or Islamic social finance (As Shadiqqy, 2019).

This study justifies previous researches that argued the influence of production factors in sharecrops. Rondhi and Adi (2018) stated that production factor would affect to sharecropping contract agreement. Yet, labour is the constraint of the factors of production faced in the management of agricultural land especially for the wide land areas that need to be cultivated. Novia and Satriani (2020) argued that production factors affect to the productivity of the paddy land which the most significant factor of production is the land crops. The production factors influence to the amount of the sharecrops which determined in the contracts. To sum up, this research justifies previous research that production factors usage influencing the sharecropping contracts and indeed the productivity of the land crops.

## **CONCLUSION**

Based on the analysis and discussion can be concluded that CFA as measurement models for this research shows that the goodness of fit indices where the  $\chi^2$  is about 41.361 with insignificant p-value about 0.064 while the CMIN/DF showed the value less than 2 (1.426) following with the GFI and CFI respectively 0.983 and 0.997 and RMSEA 0.33 which below 0.08. Therefore, it can be stated that model is fitted and could be continued for further analysis or SEM analysis. Meanwhile, the SEM analysis shows that the fit indices in statistical perspective is 35.661 of  $\chi^2$ , 0.151 p-value which is insignificant, 1.274 of CMN/DF which is below 2, 0.998 of CFI and 0.986 of GFI as well as 0.026 of RMSEA, which below 0.08. Based on the statistical perspective the structural models construct the appropriate structural model of sharecropping contracts.

Based on the hypothesis, religiosity and transparency respectively has a positives and significant impact on the production factors with p-value 0.008 for religiosity to production factor and 0.001 for transparency to production factor. Meanwhile, the production factor result shows the p-value of its relation to the sharecropping contract is about 0.001 which means production factors have a positive and significant impact to sharecropping contracts. Furthermore, the R-square for production factors is about 0.907 which means 90.7% production factors variables are explained by transparency and

religiosity. On the other hand, R-square of sharecropping contracts is 0.629 which means 62.9% of sharecropping contracts variables are explained by production factors.

This research shows that government should take an action by providing the tenant and landowner of the sharecrop a financial system through a bank or another financial institution. Moreover, the Islamic bank in Indonesia especially East Java able to take a chance in this portion due to the religiosity of the respondent significantly affects for their daily being. Otherwise, Islamic bank would lose their potential customer that owned religious spirit to use Islamic financing through Islamic bank.

## REFERENCES

- Akpan, S. B., Idiong, J. M., & Okon, U. E. (2018). Factors that influence total factor productivity of upland vegetable farmers in Oruk Anam local government area of Akwa Ibom State, Nigeria. *AKSU Journal of Agricultural Economics, Extension and Rural Development*, 1(1).
- Alim, S. (2021). Dimensi religiusitas dalam bisnis (studi pada pedagang kuliner di Pasar Beringharjo Yogyakarta). *EL-HIKAM: Jurnal Pendidikan Dan Kajian Keislaman*, 14(1).
- Anwar, M. K. & Hariyati, H. (2017). Economic perspective, cultural perspectives, and sharia perspective in revenue sharing for village economic empowerment (case study on Gaduh Culture in East Java). *AFEBI Islamic Finance and Economic Review*, 2(01), 25. <https://doi.org/10.47312/aifer.v2i01.61>.
- Arief, S. & Susilo, A. (2019). Faktor-faktor yang mempengaruhi pemilihan model bagi hasil pada sektor pertanian di wilayah karesidenan Madiun. *Falah: Jurnal Ekonomi Syariah*, 4(2), 202. <https://doi.org/10.22219/jes.v4i2.10091>.
- As Shadiqqy, M. (2019). Pengaruh pendapatan, religiusitas, jarak lokasi, tingkat pendidikan dan akses informasi terhadap minat masyarakat untuk berwakaf uang di Badan Wakaf Uang Tunai MUI DIY. *Panangkaran: Jurnal Penelitian Agama Dan Masyarakat*, 2(2), 249. <https://doi.org/10.14421/panangkaran.2018.0202-05>.
- Bawono, A. (2017). Kontribusi religiusitas dalam perilaku pengambilan keputusan konsumsi. *MUQTASID Jurnal Ekonomi dan Perbankan Syariah*, 2(1), 115. <https://doi.org/10.18326/muqtasid.v2i1.115-134>.
- Bosra, M., & Umiarso, U. (2020). Theological moderation in the Islamic boarding school (pesantren): Phenomenological prophetic social study in pesantren in East Java. *AKADEMIKA*, 25(1), 117–138. <https://doi.org/https://doi.org/10.32332/akademika.v25i1.2369>.
- [BPS] Badan Pusat Statistik. (2020). Statistik Indonesia 2020 Statistical Yearbook of Indonesia 2020. In *Statistical Yearbook of Indonesia* (Issue April).
- Broad, G. M. (2020). Know your indoor farmer: Square roots, techno-local food, and transparency as publicity. *American Behavioral Scientist*, 64(11), 1588–1606. <https://doi.org/10.1177/0002764220945349>.
- Damayanti, K. T. (2019). Perjanjian bagi hasil dalam kerjasama pengelolaan sawah di Desa Sungai Rasau dalam perspektif hukum ekonomi syariah. *Jurnal Intelektualita: Keislaman, Sosial dan Sains*, 8(1), 1–10. <https://doi.org/10.19109/intelektualita.v8i1.4222>.
- Darma, S., Pusriadi, T., Syaharuddin, Y., & Darma, D. C. (2020). Indonesia government's strategy for food security: During the covid-19 period. *International Journal of Advanced Science and Technology*, 29(4), 10338–10348.
- El-Menouar, Y. (2014). The five dimensions of Muslim religiosity: Results of an empirical study. *Methods, Data, Analyses (Mda)*, 8(1). <https://doi.org/https://doi.org/10.12758/mda.2014.003>.
- Fuoli, M. & Hommerberg, C. (2015). Optimising transparency, reliability and replicability: Annotation principles and inter-coder agreement in the quantification of evaluative expressions. *Corpora*, 10(3), 315–349. <https://doi.org/10.3366/cor.2015.0080>.
- Ghoni, A., Muhtadi, R., & Fudholi, M. (2020). The agricultural cooperation contract system and government authority on the wage mechanism from an Islamic perspective. *Ulumuna: Jurnal Studi Keislaman*, 6(1).
- Habibie, R. A. (2019). Tinjauan hukum Islam terhadap sistem kemitraan bagi hasil dari lahan plasma

- sawit. *Jurisdictie*, 10(1), 109. <https://doi.org/10.18860/j.v10i1.6689>.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis* (7th ed.). Pearson Prentice Inc.
- Haryati, D. (2019). Pengaruh sistem bagi hasil terhadap kesejahteraan masyarakat petani kebun karet (studi kasus di Desa Galang Tinggi Kecamatan Banyuasin III). *Ekonomica Sharia*, 4(2), 43–50.
- Hoe, S. L. (2008). Issues and procedures in adopting structural equation modelling technique. *Journal of Quantitative Methods*, 3(1), 76–83.
- Iswahyudi, A., Triyuwono, I. & Achsin, M. (2017). Hubungan pemahaman akuntabilitas, transparansi, partisipasi, value for money dan good governance (Studi empiris pada SKPD di Kabupaten Lumajang). *Jurnal Ilmiah Akuntansi*, 1(2). <https://doi.org/10.23887/jia.v1i2.9992>.
- Jakku, E., Taylor, B., Fleming, A., Mason, C., Fielke, S., Sounness, C., & Thorburn, P. (2019). “If they don’t tell us what they do with it, why would we trust them?” Trust, transparency and benefit-sharing in smart farming. *NJAS - Wageningen Journal of Life Sciences*, 90–91(September 2018), 100285. <https://doi.org/10.1016/j.njas.2018.11.002>.
- Jannah, M., Yuningsih, I. & Adawiyah, R. (2018). Pengaruh sistem bagi hasil perkebunan kelapa sawit terhadap kesejahteraan masyarakat. *Jurnal Ekonomi Dan Bisnis*, 1(1), 1–8.
- Kartiko, A. (2019). Konsep bagi hasil dalam perspektif Islam. *Indonesian Interdisciplinary Journal of Sharia Economics (IJSE)*, 2(1), 1–19. <https://doi.org/10.31538/ijse.v2i1.268>.
- Kurniawan, E. & Syifauddin, M. (2021). Environmental knowledge, environmental value, and environmental behavior of santri at pesantren. *Turkish Journal of Computer and Mathematics Education*, 12(8), 235–247.
- Lailatussuyukriah. (2015). Indonesia dan konsepsi negara agraris. *Jurnal Seuneubok Lada*, 2(1), 1–8.
- Li, X., Wang, X. & Song, X. (2021). Impacts of agricultural capitalization on regional paddy field change: A production-factor substitution perspective. *International Journal of Environmental Research and Public Health*, 18(4), 1–18. <https://doi.org/10.3390/ijerph18041729>.
- Malik, M. K., Wahyuni, S., & Widodo, J. (2018). Sistem bagi hasil petani penyakap di Desa Krai Kecamatan Yosowilangun Kabupaten Lumajang. *JURNAL PENDIDIKAN EKONOMI: Jurnal Ilmiah Ilmu Pendidikan, Ilmu Ekonomi Dan Ilmu Sosial*, 12(1), 26. <https://doi.org/10.19184/jpe.v12i1.6466>.
- Merlinda, S., Qurrata, V. A., Yusida, E., Purnamasari, V., Seprillina, L., & Huang, W.-C. (2021). The neighborhood reinforcement method development model for improving community socio-economic conditions during the covid-19 pandemic. *Review of Integrative Business and Economics Research*, 10(1), 244–253.
- Molaei, H. (2019). Analysis of farmer behaviors in realizing household food security in Bangkalan Regency, Madura. *Journal of Management Information and Decision Sciences*, 22(2), 148–165.
- Muin, M. (2017). Pengaruh faktor produksi terhadap hasil produksi merica di Desa Era Baru Kecamatan Tellulimpoe Kabupaten Sinjai. *Jurnal Economix*, 5(2), 203–214. <https://ojs.unm.ac.id/economix/article/view/5374/3114>.
- Mukhamedova, N. & Pomfret, R. (2019). Why does sharecropping survive? Agrarian institutions and contract choice in Kazakhstan and Uzbekistan. *Comparative Economic Studies*, 61(4), 576–597. <https://doi.org/10.1057/s41294-019-00105-z>.
- Munfariah, S. U. & Saka, D. N. (2020). Implementasi teknik bagi hasil pada kerjasama antara petani bawang merah dengan pekerja ditinjau dari perspektif ekonomi Islam. *Qawānīn: Journal of Economic*, 4(2). <https://jurnal.iainkediri.ac.id/index.php/qawanin/article/view/2494>.
- Muslim, C., Dabukke, F. B. M., & Swastika, D. K. S. (2020). Dampak pandemi covid-19 terhadap kinerja subsektor tanaman pangan. *Dampak Pandemi Covid-19: Perspektif Adaptasi Dan Resilensi Ekonomi Pertanian*, 3, 47–60.
- Mustikowati, R. I. & Wilujeng, S. (2020). Religiusitas dan kewirausahaan: Faktor kritis dalam mencapai kinerja bisnis pada UKM di Kabupaten Malang. *Jurnal Studi Manajemen dan Bisnis*, 5(2), 86–94. <https://doi.org/10.21107/jsmb.v5i2.6659>.
- Novia, R. A. & Satriani, R. (2020). Pengaruh status penguasaan lahan terhadap produksi padi sawah tadah hujan di Kabupaten Banyumas. *Jurnal Agrica*, 13(1), 24–34. <https://doi.org/10.31289/agrica.v13i1.3318>.

- Nugraha, J. P. (2016). Sistem muzara'ah sebagai alternatif pembiayaan pertanian di Indonesia. *Iqtishodia: Jurnal Ekonomi Syariah*, 1(2), 81–1003. <https://doi.org/https://doi.org/10.35897/iqtishodia.v1i2.66>.
- Nurmadany, R. (2016). Pelaksanaan perjanjian bagi hasil tanah pertanian antara pemilik tanah dan penggarap di Kabupaten Sleman. *E-Journal Univestas Atma Jaya (UAJY)*, 1–10.
- Parmadi, P., Emilia, E. & Zulgani, Z. (2018). Daya saing produk unggulan sektor pertanian Indonesia dalam hubungannya dengan pertumbuhan Ekonomi. *Jurnal Paradigma Ekonomika*, 13(2), 77–86. <https://doi.org/10.22437/paradigma.v13i2.6677>.
- Priyadi, U. & Shidiqie, J. S. A. (2015). Pelaksanaan perjanjian bagi hasil pertanian lahan sawah: Studi di Kecamatan Gamping, Kabupaten Sleman, Yogyakarta. *Millah*, 15(1), 101–116. <https://doi.org/10.20885/millah.vol15.iss1.art5>.
- Purwanto, A., Pramono, R., Asbari, M., Santoso, P. B., Wijayanti, L. M., Choi, C. H., & Putri, R. S. (2020). Studi eksploratif dampak pandemi covid-19 terhadap proses pembelajaran online di sekolah dasar. *EduPsyCouns: Journal of Education, Psychology and Counseling*, 2(1), 1–12. <https://ummaspul.e-journal.id/Edupsyscouns/article/view/397>.
- Ren, C., Liu, S., van Grinsven, H., Reis, S., Jin, S., Liu, H., & Gu, B. (2019). The impact of farm size on agricultural sustainability. *Journal of Cleaner Production*, 220(12), 357–367. <https://doi.org/10.1016/j.jclepro.2019.02.151>.
- Rondhi, M. & Hariyanto Adi, A. (2018). Pengaruh pola pemilikan lahan terhadap produksi, alokasi tenaga kerja, dan efisiensi usahatani padi. *AGRARIS: Journal of Agribusiness and Rural Development Research*, 4(2). <https://doi.org/10.18196/agr.4265>.
- Rosidin, Mardhatillah, M., Andriani, F., Fitriani, A., & Rohmanan, M. (2021). Individual and household economic recovery after the covid-19 through temporary waqf program. *Proceedings of the 2nd Annual Conference on Social Science and Humanities (ANCOSH 2020)*, 542 (Ancosh 2020), 278–284. <https://doi.org/10.2991/assehr.k.210413.064>.
- Rozaki, Z. (2020). Covid-19, agriculture, and food security in Indonesia. *Reviews in Agricultural Science*, 8, 243–260. [https://doi.org/10.7831/ras.8.0\\_243](https://doi.org/10.7831/ras.8.0_243).
- Samanhudi, S. (2020, Agustus). Peran dan strategi bidang pertanian dalam ketahanan pangan pada masa new normal pandemi covid-19. In *Prosiding Seminar Nasional Fakultas Pertanian UNS*, 4(1).
- Sarwono, Y. (2010). Pengertian dasar Structural Equation Modeling (SEM). *Jurnal Ilmiah Manajemen Bisnis Ukrida*, 10(3).
- Sembiring, R. A. (2020). Analisis produksi bunga dan kesejahteraan petani di Desa Raya Kecamatan Berastagi Kabupaten Tanah Karo. *Kumpulan Karya Ilmiah Mahasiswa Fakultas Sosial Sains*, 2(2).
- Sihombing, Y. (2021, Mei). Peran sektor pertanian terhadap perekonomian wilayah perdesaan dalam mengentaskan kemiskinan. In *Prosiding Seminar Nasional Fakultas Pertanian UNS*, 5(1), 936–945).
- Silalahi, S. A. F., Fachrurazi, F. & Fahham, A. M. (2021). Factors affecting intention to adopt halal practices: case study of Indonesian small and medium enterprises. *Journal of Islamic Marketing*. <https://doi.org/10.1108/JIMA-05-2020-0152>.
- Sok, J., Borges, J. R., Schmidt, P., & Ajzen, I. (2021). Farmer behaviour as reasoned action: A critical review of research with the theory of planned behaviour. *Journal of Agricultural Economics*, 72(2), 388–412. <https://doi.org/10.1111/1477-9552.12408>.
- Sulaiman, S. S. (2020). Regulating good agriculture practices (Gaps) in enhancing sustainability of halal food: Malaysian experience. *Malaysian Journal of Consumer and Family Economics*, 24(S2), 32–45.
- Suratha, I. K. (2015). Krisis petani berdampak pada ketahanan pangan di Indonesia. *Media Komunikasi Geografi*, 16(1), 67–80. <https://doi.org/http://dx.doi.org/10.23887/mkg.v16i1.10172>.
- Susanti, H., Budiraharjo, K. & Handayani, M. (2018). Analisis pengaruh faktor-faktor produksi terhadap produksi usahatani bawang merah di Kecamatan Wanasari Kabupaten Brebes. *Agrisocionomics: Jurnal Sosial Ekonomi Pertanian*, 2(1), 23.

- <https://doi.org/10.14710/agrisocionomics.v2i1.2673>.
- Sutiknjo, T. D. & Artini, W. (2020). Optimalisasi dan pemerataan pendapatan petani pada usahatani padi sistem bagi hasil. *Jurnal Agrinika : Jurnal Agroteknologi Dan Agribisnis*, 3(2), 92–106. <https://doi.org/10.30737/agrinika.v3i2.726>.
- Thaker, H. M. T., Khaliq, A., Sakaran, K. C., & Thaker, M. A. M. T. (2020). A discourse on the potential of crowdfunding and Islamic finance in the agricultural sector of East Java, Indonesia. *Jurnal Ekonomi & Keuangan Islam*, 6(1), 10–23. <https://doi.org/10.20885/jeki.vol6.iss1.art2>.
- Wahyuni, A. S. (2013). Penyesuaian konsep bagi hasil adat-syariah. *Jurnal Akuntansi Multiparadigma*. <https://doi.org/10.18202/jamal.2013.12.7210>.
- Wahyuningsih, P., Susilo, A. & Wisnujati, N. S. (2021). Farmers' attitude and rice added value based on agricultural mechanization in East Java of Indonesia. *Russian Journal of Agricultural and Socio-Economic Sciences*, 112(4), 110–120. <https://doi.org/10.18551/rjoas.2021-04.13>.
- Wahyuningtias, A. D. (2021). Analisis pengaruh sektor pertanian dan sektor perdagangan terhadap produk domestik regional bruto Kabupaten Magelang. *Journal of Economics Research and Policy Studies*, 1(1), 1–11. <https://doi.org/10.53088/jerps.v1i1.23>.
- Wardah, O. A. & Niswah, F. (2021). Strategi ketahanan pangan dalam program urban farming di masa pandemi covid-19 oleh Dinas Ketahanan Pangan dan Pertanian Kota Surabaya. *Publika*, 9(1), 145–160.
- Workie, E., Mackolil, J., Nyika, J., & Ramadas, S. (2020). Deciphering the impact of COVID-19 pandemic on food security, agriculture, and livelihoods: A review of the evidence from developing countries. *Current Research in Environmental Sustainability*, 2, 100014. <https://doi.org/10.1016/j.crsust.2020.100014>.
- Yulianti, R. T., Cahyati, S. K. & Anjellah, R. (2020). Islamising farming contracts in Indonesia: A study of the effects of the muzara'ah contract in rice field management and poverty alleviation in pati regency. *LIFEWAYS: International Journal of Society, Development and Environment in the Developing World*, 2(3), 7–18.