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Community trust and decisions in the conversion of agricultural land (Case study: Mulyoagung Village, Indonesia)

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Abstract. Urbanization is caused by a drastic increase in population in an area, thus spurring high demand for space or land, leading to land conversion. The phenomenon of land conversion in rural areas is a reciprocal relationship between urban and rural areas influencing the spread of urbanization to rural areas. Mulyoagung Village, one of the villages in Malang, experiencing significant agricultural land conversion. This research aims to identify the classification of area based on the land conversion. Discussion also made on the beliefs and the demographics that played a role in influencing decisions regarding land conversion. The result revealed that Mulyoagung Village is a secondary rural peri-urban classification located between Malang City and Batu City, experienced a conversion of 24.01% of non-built-up land to built-up land within a period of 20 years (2002-2022). The conversion led to a change from initially rural fringe to urban-rural fringe. This results also supported by SEM-PLS analysis which showed that community demographics are the central construct influencing the decision of farming communities to convert their agricultural land.

Keywords: Agriculture; Conversion; Economy; Land

1. Introduction

The development of urbanization integrated with rural-urban development is a global phenomenon increasingly receiving special attention in the 21st century. This urbanization involves complex interactions between land resources and development aspects in rural and

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urban areas. According to Chena, one of the main consequences of urbanization, which triggers drastic population growth in certain areas, is the high demand for land [1]. This request could result in conflicts of interest related to land use involving various sectors. In some cases, the growth of urbanization can significantly impact rural areas adjacent to large cities, resulting in massive conversion of agricultural land. This land conversion changes agricultural land into residential land, trade, services, tourism, industry, or other infrastructure, with a major impact on productive lands that were once a source of livelihood for rural communities.

The interactions that occur between urban and rural areas have a major impact on the spread of urbanization to rural areas, which in turn influence overall regional spatial planning [2]. The phenomenon of land conversion that occurs in rural areas is one of the most important aspects of the reciprocal relationship between urban and rural areas that influence rural areas themselves [3]. This land conversion not only has an impact on physical changes to the area, but also has significant social, economic and environmental consequences [4]. In some cases, degradation of rural areas occurs as a result of continuous land conversion, which causes a reduction in rural areas as a whole. Therefore, it is very important to achieve sustainable urban-rural integration, as one way to achieve sustainable development goals, as stipulated in the Sustainable Development Goals (SDGs) [5].

Indonesia is one of the countries that faces serious challenges in terms of land conversion, especially in the agricultural context. Law Number 41 of 2009 concerning Sustainable Food Agricultural Land Protection defines land conversion as a change in land use from a food agricultural function to another function, either partially or completely, which can be temporary or permanent, and has both specific and general implications. The conversion of agricultural land that occurs in Indonesia includes the conversion of agricultural land into residential land use, trade, services, tourism, industry and infrastructure. Data from the Indonesian Central Statistics Agency (BPS) in 2019 shows that the area of agricultural land in this country has decreased by 7.65% in the past 10 years. During this period, the area of agricultural land decreased from 8.07 million hectares in 2009 to 7.46 million hectares in 2019. According to Yuliana, this reduction in agricultural land area had a significant impact, including the potential for natural disasters due to the degradation of water catchment areas and food instability. Apart from that, conversion of agricultural land in strategically located areas can also trigger progressive land conversion on surrounding land. This is caused by the domino effect of development on land that has undergone conversion, which can increase the availability of infrastructure, land prices, and stimulate local communities to sell their land [6].

For example, Dau District in Malang Regency, East Java Province, Indonesia, is one of the areas experiencing urban growth or a phenomenon often called Urban Sprawl. Dau District is located between two large cities, namely Malang City and Batu City, and as a result, this area is experiencing significant urban encroachment. Data shows that the area of built-up land in Dau District increased by 26% or the equivalent of 438.19 hectares between 2013 and 2019. In addition, land conversion also occurred by 5.7% during that period [7]. This Urban Sprawl

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brings a number of negative impacts, such as increasing levels of pollutants in the water and air around the environment, unstructured development, the need for greater space for infrastructure, the potential for the development of slums and illegal areas, lack of centralized city planning, and area growth. fast commercial. Malang Regency Regional Spatial Planning (RTRW) Number 3 of 2010 states that Dau District is included in the development area surrounding Malang City, so land changes in this area are predicted to continue.

One of the villages in Dau District, namely Mulyoagung Village, is an interesting example in the context of agricultural land conversion. These villages have urban characteristics with certain characteristics that define secondary peri-urban areas, including land use, health facilities, population density, birth rates, death rates, heterogeneity, and livelihoods. Secondary peri-urban rural is a transition zone that combines rural and urban characteristics in aspects of land use, social conditions and demographics (Hardiyanti et al 2018; Yunus, 2008). Apart from that, Mulyoagung Village is also known to have experienced a reduction in agricultural land of -57% or a decrease of around 67 hectares in the 6 year period (2013-2019). This significant change is supported by reports that this village has a strategic location, which has high potential for land conversion (Fandalia et al 2023). In fact, a preliminary survey conducted showed that agricultural land in village areas often changes function, especially to housing, trade and services. This decrease in agricultural land area is not only a statistical figure, but also has a domino effect on increasing the number of road infrastructure and encouraging the entry of investors from outside the village, which can also result in an increase in the rate of land conversion. This is increasingly complex because most of the land in Mulyoagung Village is owned by individuals who have ownership rights over the land.

In the context of land conversion that is currently occurring in Mulyoagung Village, the role of agricultural community demographics and their beliefs is very important. The demographics of agricultural communities include various aspects such as age, education, employment, and income [8,9]. This demographic data provides an idea of who is involved in agriculture in this village and how these demographics may change influence land conversion decisions. The beliefs of farming communities, on the other hand, include the values and beliefs that shape their views about agricultural land and the environment [10,11]. Likewise, confidence in the role of government and policy, as well as awareness of the environmental impacts of land conversion [12–14]. These beliefs play an important role in shaping people's preferences and priorities for agricultural land. It is important to understand the relationship between the demographics of agricultural communities and their beliefs on land conversion decisions. These factors do not stand alone, but interact with each other and shape the community's perspective on agricultural land. For example, a young farmer with higher education may be more likely to see land conversion as a good economic opportunity, while an older farmer with strong traditional values may be more focused on maintaining cultural heritage and agricultural sustainability [15]. In this context, government policies and educational approaches that take into account sustainability and environmental values can influence how farming communities make decisions about land conversion.

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This research will provide deeper insight into how these factors are interrelated in the context of agricultural land conversion and how community decisions can shape the future of the region. Thus, this research aims to dig deeper and understand the relationship between demographics, farming community beliefs, and land conversion decisions in Mulyoagung Village as a relevant case study in the context of sustainable development.

2. Metode

2.1. Population and sample

The sample in this study used a purposive sampling technique [16], because the entire population was relatively small and had special characteristics (land owners) that were relevant to the research. Therefore, the samples in this study were land owners in Dermo Hamlet and Jetak Ngasri Hamlet, both landowners who converted their land and those who did not convert their land. So, we got a sample size of 110 from the two hamlets that were the location of the study area for this research.

2.2. Study area

Mulyoagung Village, Dau District, Malang Regency, Indonesia is one of the villages that experiences significant land conversion every year. This village consists of five hamlets, including Sengkaling Hamlet, Jetis Hamlet, Dermo Hamlet, Jetak Lor Hamlet, and Jetak Ngasri Hamlet. Dermo Hamlet and Jetak Ngasri Hamlet are the hamlets that experienced the greatest land conversion. These two hamlets have very strategic locations, so they have high potential for land conversion. Because the location of Dermo Hamlet and Jetak Ngasri Hamlet is very strategic, namely next to Landungsari Village where Tribuana University is located, University Muhammadiyah Malang, Gajayana University and Lowokwaru District contain Brawijaya University, Malang State University and Merdeka University Campus 2. The existence of these campuses attracts students from various regions to live near their destination campuses. One of the domicile destinations for students and migrant residents for rent and boarding houses is the Dermo Hamlet and Jetak Ngasri Hamlet areas. Apart from that, students at these campuses tend to choose cafes in the two hamlets. Because the location of these two hamlets is very strategic towards Malang City and Batu City, as well as educational facilities. Jetak Ngasri Hamlet and Dermo Hamlet are experiencing the Urban Sprawl phenomenon with the condition of Malang City's boundaries increasingly expanding.

2.3. Analysis techniques

First, identification of regional character resulting from land use analysis. First, identify existing land use in 2002 and 2022 using SHP (shapefile) data in ArcGIS software. Then the land is classified into built-up and non-built-up land. Built-up land includes house buildings, while non-built land includes gardens, fields and rice fields. The percentage of built-up land can be determined by dividing the built-up land area by the total land area, whereas the percentage of non-built land by dividing the unbuilt land area by the total land area. The percentage results for each land use are then compared with the reference for zone division in an area according to Yunus (2000). The region is divided into 5 zones, namely rural area,

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rural fringe, urban rural fringe, urban fringe, and urban area. A description of each zone is presented in Table 1.

Table 1. Division of urban and rural zones.

The percentage category is seen from the area of agricultural land	
95-100%	Rural area
>75%	Rural fringe
25-75%	Urban rural fringe
<25%	Urban fringe
0-5%	Urban area

Second, SEM-PLS analysis was carried out [17,18], the questionnaire was chosen as the research instrument used to obtain demographic and decision data public on land conversion. The questionnaire contains statements from a total of 10 indicator statement items with answer choices in a Likert scale range of five answer choices. Apart from that, interviews were also conducted regarding the condition of land conversion in Mulyoagung Village. In order to describe the demographic model and confidence in land conversion decisions, the SEM-PLS analysis technique was used. Through this analysis technique, it can be seen what demographic indicators can influence decisions regarding land conversion in Mulyoagung Village. SEM-PLS analysis consists of two stages, namely outer model and inner model. In this analysis, demographic variables, beliefs and decisions regarding land conversion are referred to as latent variables or constructs. Demographic variables consist of four indicators/manifest variables, including age, income, education, and number of family members; The trust variable consists of four indicators/manifest variables, including; trust in neighbors, trust in community leaders, trust in fellow farmers, trust in village officials, trust in land use policies; while the decision variable regarding land conversion contains the choice of people who work as farmers in the answer choice yes or no regarding land conversion.

3. Result and discussion

3.1. Distribution of questionnaire respondents results

Apart from the results of interviews regarding the conditions of the study area, a questionnaire was also conducted which was used as input in the SEM-PLS analysis. Based on the results of the questionnaire distributed to 110 respondents, results were obtained for the distribution of answers for each indicator. Indicator measurement is based on a 1-5 Likert scale with parameters adjusted to demographic conditions and a 1-5 Likert scale containing answer choices of strongly disagree to strongly agree to measure the trust of the farming community. Then to measure the decision indicators regarding land conversion with the answer option yes or no.

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Tabel 2. Distribution of respondent questionnaire results.

Variable	Indicator	Parameter	Answer Distribution	(%)
Demographics (D)	Age (D1)	>65	14	13%
		61-65	30	27%
		56-60	36	33%
		51-55	20	18%
		<50	10	9%
	Income (D2)	<Rp500.001	1	1%
		Rp500.000-Rp1.000.000	14	13%
		Rp1000.001-Rp1500.000	21	19%
		Rp1500.001-Rp2000.000	52	47%
		>Rp2.000.000	22	20%
	Education (D3)	No school	3	3%
		SD	84	76%
		JUNIOR HIGH SCHOOL	13	12%
		SMA	8	7%
		DIPLOMA	2	2%
	Number of family members (D4)	5	4	4%
		4	55	50%
		3	24	22%
		2	23	21%
		1	4	4%
Belief (K)	trust in neighbors (T1)	1	0	0%
		2	0	0%
		3	0	0%
		4	68	62%
		5	42	38%
	trust in public figures (T2)	1	0	0%
		2	0	0%
		3	2	2%
		4	51	46%
		5	57	52%
	trust in fellow farmers (T3)	1	0	0%
		2	0	0%
		3	5	5%
		4	73	66%

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Variable	Indicator	Parameter	Answer Distribution	(%)
		5	32	29%
	trust in village apparatus (T4)	1	0	0%
		2	0	0%
		3	6	5%
		4	49	45%
		5	55	50%
	confidence in land use policies (T5)	1	0	0%
		2	0	0%
		3	1	1%
		4	63	57%
		5	46	42%
Decision-Making (DM)	No	1	60	55%
	Yes	2	50	45%

The results in Table 2 show that the majority of farmers are aged 56-60 years with a percentage of 33%, with a primary school education level of 76%. The majority of jobs held as farmers have an income of IDR 1500,001-IDR 2000,000 with a percentage of 47%. although some exceed >Rp. 2,000,000, it is only 20%. Based on the results of interviews, in existing conditions the average farmer has a land area of only 150-200 m^2 with an income of ± IDR 1,500,000 per month. The current condition is that there are around 10 farming communities who have land >2,000 m^2 with an income of IDR 5,000,000 per month. Apart from that, farming communities who have land <500 m^2 on average rent out their land to be used as cafes by people outside the village. Land rental prices differ, depending on the function and location of the land. Usually, if it is rented it becomes a cafe with rental prices from 500 m^2 range Rp. 10-30 million per year.

Apart from demographic conditions, the beliefs of the farming community are also studied. This trust is seen from trust in neighbors, trust in fellow farmers, trust in community leaders, trust in village officials, trust in land use policies. The results can be concluded that the trust of the farming community is in good condition. Likewise, the decision of the farming community regarding land conversion is that 55% of the community is not willing to change their land. However, 45% of people are willing to change their land, this shows that the difference is not too significant. Farmerowner land that does not agree to be converted because agricultural land is inherited from parents, and they feel they have an obligation to pass it on to their children and grandchildren from generation to generation; farming as the only job that can be done to make ends meet; productive agricultural land and agricultural products capable of meeting daily needs; and the location of agricultural land is less strategic, so that if it is rented out the rental price is cheap.

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3.2. Existing conditions of land use conversion

Based on the results of a preliminary survey conducted in September 2023, the results showed that farming communities who own land <500 m^2 tend to sell and rent out their land to use as cafes with the main consideration that they will get more profits than using it for agricultural land. Likewise, along with the increasing selling price of land, until now in 2023 the price of land is one m^2 reaching IDR 5,000,000-IDR 7,000,000. Land prices are increasing, especially in strategic locations on main roads, reaching IDR 7,000,000 per meter. Apart from that, several factors cause land conversion, including:

a. Renting out agricultural land to use as a cafe is more profitable from an economic perspective, especially for farmers who don't have a large amount of land (Figure 5).
b. Crops often fail due to weather factors, operational costs for land cultivation are high while the selling value of agricultural products is low, as seen in Figure 1.
c. The majority of farmers are elderly, who feel that as they get older, they have less potential to continue working as farmers. So, they chose to rent out agricultural land to build a cafe temporarily for 10-20 years.
d. There are personal needs such as renovating/building a house, buying a vehicle, and school costs which are increasing and it is not enough to only rely on agricultural products.
e. Most of the current generation (farmers' children) are no longer interested in working in agriculture, so farming is no longer a job that is passed down from generation to generation.
f. The productivity of agricultural land is less, so it is unable to meet daily needs (farmers who have land <500 meters^2).
g. Productive agricultural land with a strategic location will usually be maintained. However, most of the land is no longer productive and the location is strategic and suitable for use by trade and service businesses. Usually, farmers are more tempted to rent out land with greater profits than agricultural produce (Figure 2, 3 and 4).

Figure 1. Unproductive agricultural land.

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Figure 2. Productive agricultural land

Figure 3. Condition of agricultural land that is still maintained on the main road (left) and agricultural land that has been converted into a cafe building (right).

Figure 4. Cafe concept with a rear view of agricultural land.

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Figure 5. Almost every cafe is located on the right and left of the main village road.

3.3. Land use analysis

In 2002, the percentage of undeveloped land in Jetak Ngasri Hamlet and Dermo Hamlet was 89.65%. Meanwhile, the percentage of built-up land in Jetak Ngasri Hamlet and Dermo Hamlet in 2002 was 10.35%. In more detail, land use in Jetak Ngasri Hamlet and Dermo Hamlet is shown in Table 3. If identified according to Yunus' theory (2000), the areas of Jetak Ngasri Hamlet and Dermo Hamlet are included as rural fringe or village outskirts.

Table 3. Land use in Jetak Ngasri Hamlet and Dermo Hamlet in 2002.

Land Use	Area in 2002 (Ha)	Percentage
land is not built up		89.65%
	106.44	
Garden	2.46	
Farm	2.16	
Rice Field	101.82	
Land built up	12.29	10.35%
Total	118.73	100%

Meanwhile, 20 years later in 2022, land use in Jetak Ngasri Hamlet and Dermo Hamlet has changed rapidly (Figure 6). Based on the results of the analysis, it was found that the percentage of non-built-up land in Jetak Ngasri Hamlet and Dermo Hamlet in 2022 was 65.64%. Meanwhile, the percentage of built-up land in the two hamlets in 2022 will be 34.36% (Table 4). These characteristics are classified as urban rural fringe according to Yunus (2000).

Table 4. Land use in Jetak Ngasri Hamlet and Dermo Hamlet in 2022.

Land Use	Area in 2002 (Ha)	Percentage
land is not built up	113.60	65.64%
Garden	1.50	
Farm	3.72	
Ricefield	69.35	
Land built up	39.04	34.36%
Total	118.73	100%

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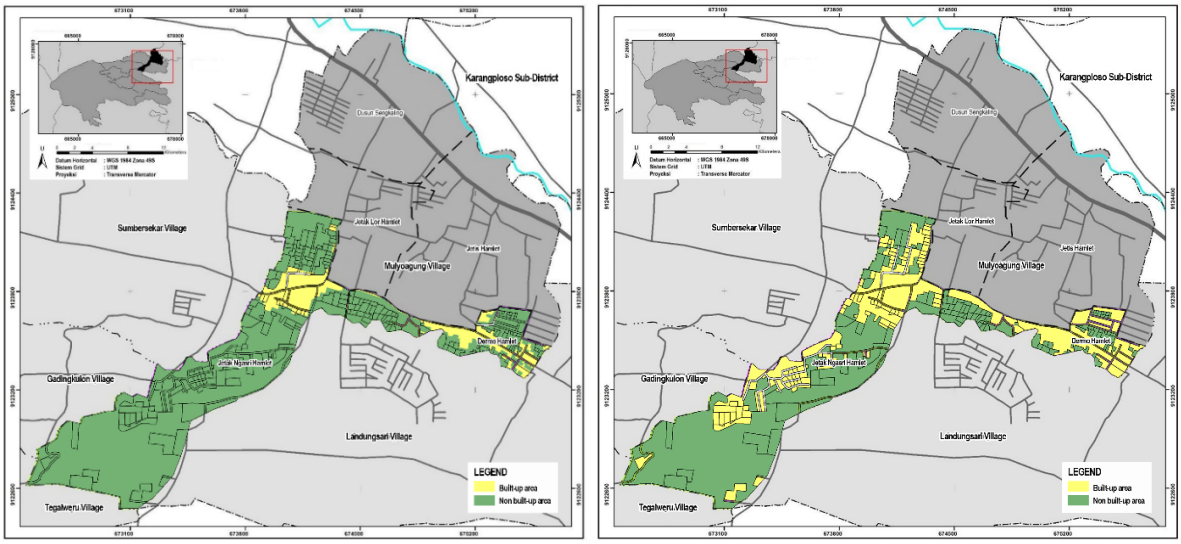
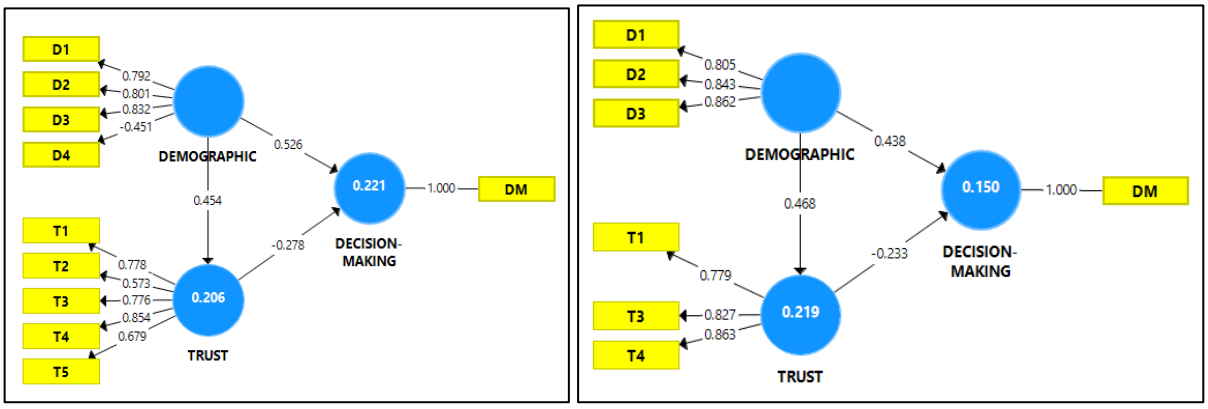


Figure 6. Map of land use changes in Jetak Ngasri Hamlet and Dermo Hamlet 2002-2022.

3.4. Analysis SEM

The first stage of SEM-PLS evaluation is carried out at the outer model or measurement model evaluation stage. At this stage, all indicators are linked to their respective latent variables. In this study, the demographic latent variable along with four indicators; trust latent variable along with hand indicator; and the latent variable for decisions regarding land conversion consists of one indicator. Figure 4 and 5 show the outer and inner model.



(a) (b)

Figure 4. Outer model Stage 1 (a) dan Stage 2 (b).

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Table 5. Results of Stage 2 validity and reliability evaluation.

Indicator	OL (>0.7)	CA (>0.6)	CR (>0.6)	AVE (>0.5)
D1	0.805	0.787	0.876	0.701
D2	0.843			
D3	0.862			
DM	1.000	1.000	1.000	1.000
T1	0.779			
T3	0.827			
T4	0.863	0.763	0.863	0.678

Evaluation of the outer model is carried out by evaluating the results of running the PLS algorithm, then evaluating it using predetermined validity and reliability test standards. The evaluation of the outer model consists of two stages, in the first stage (a) running is carried out resulting in that the D4 indicator does not meet the validity test standards and reliability because it has an outer loading value of less than 0.7 (-0.451). So, the D4 indicator is deleted or discarded in the model. Likewise, the indicators T1 (0.573) and T5 (0.679) must also be removed in the model. Next, a second run (b) was carried out, resulting in that all indicators met the validity test standards and reliability can be seen in Table 5. It can be concluded from the results of the outer model analysis that the indicators D1; D2; D3; DM; T1; T3; T4 are declared valid and reliable, which means they can measure or reflect the constructs in the model.

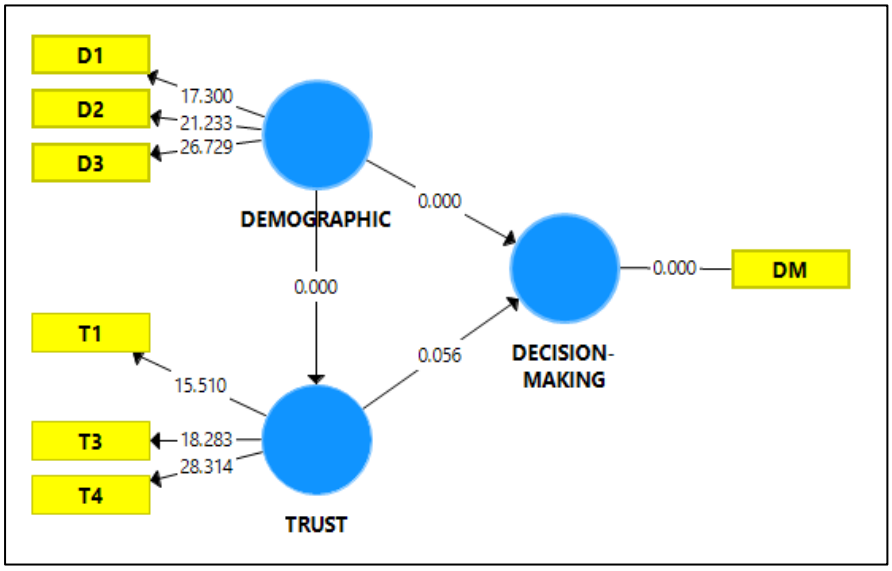

Figure 5. Inner model.

The results of the second stage of running the outer model are then used for the evaluation stage of the inner model or structural model. Inner model evaluation is a test of the

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significance of the influence between the constructs hypothesized in the model. Evaluation of the inner model refers to the R value2, F2, Q2, and hypothesis testing. R test results2 shows that the demographic construct is included in the weak model in contributing to decisions regarding land conversion with the R value2 decision-making (0.150<0.25 (weak)). Likewise constructs demographics included in a model that is weak in contributing to the beliefs of the farming community. Results of R2 This shows that decisions regarding the conversion of agricultural land are not only influenced by demographic variables and trust variables, moreover there are other factors outside research that were not examined in this study. Next, the F results2 shows how the influence between the constructs in the structural order model, the influence of the demographic construct on the decision construct regarding land conversion has a strong influence (0.176>0.150). Likewise, the demographic construct towards the trust construct (0.281>0.150). In addition, to prove and validate the model is based on the Construct Cross Validated Redundancy value (Q2). These results can be obtained by running blindfolding. The result that Q value2 (0.116>0), which means that the demographic structural model construct and decisions regarding land conversion are declared models that have accurate predictive relevance. Likewise, the demographic and trust structural model values have accurate predictive relevance (0.145>0).

Next, hypothesis testing is carried out by evaluating the constructs in the model which is carried out by running bootstrapping. The hypothesis test consists of three tests which are evaluated, namely if the path coefficient (original sample (O)) has a positive value, significance evaluation (T-Statistics > T-table 1.96 (5% significance), and significance evaluation (P-Value). < 0.05), then the research hypothesis is accepted. The results show that,

- H1 is accepted, which means that the influence of the demographic construct on decisions regarding land conversion is 43.8% positive and significant with T-Statistics > T-table (4,909>1.96) and P-Value (0.000<0.05).
- H2 is accepted, which means that the influence of the demographic construct on the trust of the farming community is 46.8% positive and significant with T-Statistics > T-table (7,452>1.96) and P-Value (0.000<0.05).
- H3 is rejected, which means that there is no influence of the construct of trust in the farming community on decisions regarding the conversion of agricultural land, 23.3% is declared negative and significant with T-Statistics > T-table (1.918>1.96) and P-Value (0.056<0.05).

3.5. Discussion

The results of the analysis show that there is a change in regional characteristics in Jetak Ngasri Hamlet and Dermo Hamlet, which was originally a rural fringe to become an urban rural fringe. This is because there is a tendency for land to change from non-built to built-up by 24 percent in just 20 years. This phenomenon also explains that the development of the Malang urban area is occurring rapidly, one of which is due to economic and social factors, especially the need for land to serve the activities of the people of Malang City itself, as well as students from outside Malang City.

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Based on existing conditions, the majority of new housing buildings in Jetak Ngasri Hamlet and Dermo Hamlet are cluster housing or student boarding houses. Apart from that, the trend of converting land into cafés is also seen on the main route in Jetak Ngasri Hamlet and Dermo Hamlet, especially on Jalan Raya Dermo. This café building is often visited by students for study activities, discussions, or just to hang out. This shows that the new buildings at the study location are intended to meet the housing needs of the community, especially students. The results of this research are in line with research from [19] regarding changes in land use around the Semarang State University (UNNES) campus where in the research it is explained that changes in land use around the campus area are dominated by the construction of facilities to support student academic activities which cause changes. massive land in the city of Semarang.

Apart from that, changes in characteristics in Jetak Ngasri Hamlet and Dermo Hamlet also indicate the urban sprawl phenomenon which is a consequence of urban development. Urban sprawl is defined as the phenomenon of urban development spreading to rural areas [20]. This phenomenon is caused by the city no longer being able to serve people's needs in terms of housing and facilities, so people tend to move to locations around the city for their living. Based on research from [21], there is a relationship between the urban sprawl phenomenon and the type of transportation used by students. Cities that do not accommodate students' transportation needs cause students to tend to use private vehicles. Therefore, distance is an overlooked factor in selecting a boarding house location. This condition causes boarding house owners to tend to develop boarding houses in locations far from campus. This is in accordance with existing conditions in Malang City, where students tend to use private vehicles and online motorcycle taxis [22].

The results of the SEM-PLS analysis show that demographics influence decisions regarding land conversion by 43.8%. Farmer demographics such as age, income and education indicate that apart from the need for house buildings and the location of the village close to educational facilities, it is also influenced by factors from the demographic conditions of the farming community itself. Existing conditions show that the majority of farmers are elderly and still in the productive age group (15-64 years). However, despite this, the survey results show that the majority of agricultural land owners are people elderly/people who are old. This shows that age is also a factor that influences people's decisions regarding land conversion. This is in line with [23], which shows that generally the farming community in this village has worked as farmers for generations from inherited land products.

Then the income factor, existing conditions show that the income of the people in Mulyoagung Villages farmers are still relatively low and below the minimum wage for Malang Regency (Rp3.268.275). This is also a factor that influences the decision to convert land, because the low income of farmers encourages people to look for land sources of livelihood and utilize or change the land, they own to increase income to meet their daily needs. According to [24], income is the most important factor influencing land conversion because the value of the harvest is low, which means the profits obtained are low. Apart from that, based on existing

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conditions, if you rent out your land to use as a cafe, the rental price exceeds the profits you get as a farmer.

Education also plays an important role in farmers' decisions regarding land conversion, more than 50% of the community has a primary school education level. This shows that a relatively low level of education will trigger people to change the use of the land they own because they feel they have no other choice to work. Moreover, for people whose main livelihood is as farmers, relying on harvests to meet their daily needs will not be enough under current conditions. A low level of education also affects the income earned, so that if there are more profitable options for farming communities other than farming, they will be more easily tempted.

45% of respondents agreed to change their agricultural land into built-up land or rented out for business cafes. This existing condition is because people feel that agriculture is no longer profitable and the harvest is not enough to meet the cost of living which is increasingly expensive as time goes by. Apart from that, because of the strategic location of the village close to educational facilities, most of the agricultural land is rented out to build cafes on the land. People feel that by renting out their land, they will get additional income apart from relying on the results of agriculture. More than that, this is due to the reduced interest of the younger generation (farmers' children) in continuing the family farming business. This is different with 55% of respondents who do not agree to change the agricultural land they own. This existing condition is because people feel that agricultural land is a legacy passed down from generation to generation. Hereditary which must be protected and preserved, especially that the farming community maintains the land because farming is their main livelihood. For the people in Mulyoagung Village, farming is part of their identity as rural people. This is related to kinship relationships between farmers in the village. Apart from that, farmers also feel that agricultural land can be used as an investment in the future.

Farmers tend to trust the information and experience they get from their neighbors [25]. In this context, the age and education level of neighbors can also be influenced farmers' trust, as they may be more likely to listen to the advice and views of older or more educated neighbors. The age of the farming community is one of the key factors influence trust. Older farmers tend to view land conversion with a conservative perspective, often emphasizing the importance of maintaining agricultural traditions and environmental sustainability. Therefore, agriculture is seen as a cultural heritage that needs to be preserved for future generations. Older farmers may have strong trust in neighbors who have been involved in farming for a long time. Older age is also often associated with lower levels of education, which may make them more focused on the economic aspects of farming. On the other hand, younger farmers with higher levels of education may have better access to information and resources that enable them to consider sustainability aspects in land conversion decisions. Education level also has a significant impact. People with higher levels of education may be more aware of sustainability issues and environmental impacts that may arise from land conversion [26]. So, they will tend to consider these aspects in decision making. On the other hand, farming communities with

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lower levels of education may be less informed about sustainability issues and more likely to prioritize daily economic needs.

Likewise, a low level of education also influences the amount of income obtained from work [27]. This is in accordance with research results, where the majority of people have low incomes. Farming communities with low incomes tend to focus more on the economic aspects of their farming. So, they see land conversion as a way to increase income and achieve economic stability quickly and surely. In difficult economic situations, farming communities with low incomes may be more inclined to consider land conversion as an alternative source of income. On the other hand, farmers with higher incomes may have greater economic flexibility. They may be more likely to prioritize non-economic aspects such as sustainability and conservation of agricultural land. Farmers often share experiences and information among themselves. This trust creates an important communication channel and influence perception of land conversion. Likewise, with trust in village officials, farmers often interact with village officials in the licensing and regulatory process related to land conversion. Farmers who believe that village officials act with integrity and transparency tend to be more positive towards land conversion regulated by the village government.

4. Conclusions

Based on the results of the rural urban fringe classification analysis, it is known that the characteristics of the Dermo Hamlet and Jetak Ngasri Hamlet areas have experienced changes in the last 20 years. In 2002 the Jetak Hamlet areaI'm sorry and Dermo Hamlet has a Rural Fringe characteristic classification with details of 89.65% built-up land and 10.35% undeveloped land. Meanwhile, in 2022 the classification of the characteristics of the two hamlets will change to Urban Rural Fringe with details of 65.64% built-up land and 34.36% built-up land. These changes are due to land conversion dominated by land designated for rice fields being converted into cafes, and land designated for fields becoming housing/boarding houses. In addition, based on the results of the SEM-PLS analysis, it shows that, apart from the need for housing and current developments, the demographic conditions of the Mulyoagung Village community also play a role in influencing their decisions regarding moved agricultural land functions. Likewise, demographics influence the beliefs of the farming community, this will also shape the community's perspective on agricultural land. Overall, this research shows that there are many factors that cause conversion of agricultural land in rural areas, so it is hoped that the results of this research can be used as a basis for the government in determining policies related to land use in rural areas. It is like being faced with two choices, namely maintaining the sustainability of food and maintaining the sustainability of the lives of farming communities, both of which go hand in hand so that a strategy is needed to deal with both of these which can be done with further studies from the results of this research.

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