THE IMPACT OF FARMERS' LAND PROPERTY RIGHTS AWARENESS, RISK ATTITUDE, AND LAND ACQUISITION INTENTIONS ON LAND ACQUISITION POLICY

[1]WANGXIANGZHUO, [2]NOR ASHIKIN MOHAMED YUSOF, [3]SITI HASLIAH SALLEH

[1,2,3]Razak Faculty Of Technology And Informatics, Unversiti Teknologi Malaysia, Kuala Lumpur ,Malaysia
[1]Faculty of Public Administration, Hengshui University, Hebei Province, China
E-mail: [1]wangxiangzhuo@graduate.utm.my, [2]ashikin.kl@utm.my, [3]sitihasliah@utm.my

Abstract - This research investigated the effect of farmers' perceptions of land ownership(PPR), risk attitudes(R.A.), their willingness to accept land acquisition(LEI) toward Land expropriation policy(LEP). This research was conducted in rural areas of Hebei Province, China. The sample of this research were 110 farmers taken in random sampling through an online surveying method. The method of data collecting from each variable used the questionnaires, and data analysis used the Path Analysis Technique which was calculated by Smart PLS software. The research findings derived conclusions that (1) PPR, R.A. and LEI have significant effect on LEP, and (2)PPR and R.A. have significant effect on LEI. Based on those findings we recommend that the government should raise farmers' awareness of land property rights, provide fair and transparent compensation for land acquisition, and take measures to reduce the risk of land acquisition.These policy influences contribute to balance the interests of farmers and the government and promote social stability and sustainable development in rural areas.

Keywords - Perceptions of Land Property Rights(PPR), Risk Attitudes (R.A.), Land Expropriation Intentions (LEI), Land Expropriation policy(LEP).

I. INTRODUCTION

In China, Land expropriation is an important policy and economic activity , particularly in rural areas, as it is a key means for the government to achieve urbanization and economic development goals. Local governments have expanded the spatial boundaries of cities by expropriating large amounts of rural land for urban construction purposes. However, due to issues such as unfair compensation and lack of transparency(Li et al ,2019;Qi et al ,2015), the legitimate rights and interests of farmers are often violated, leading to widespread social concerns and disputes (Yu,2010). Some scholars found that although the state stipulates that rural land is collectively owned, it is still influenced by various factors such as law, economics, culture, and tradition(Qian,1997; Wang&Zhang , 2010; Jin, 2011). The farmers' perception of land property rights may affect their views and decisions on land expropriation(Tang & Zhu,2013).

In this context, exploring the impact of farmers' perception of land property rights, risk attitudes, and land acquisition intention on land acquisition policies is of great significance for understanding the social psychological mechanisms of land acquisition, and promoting the improvement and perfection of the land acquisition system. However, existing research mostly involves qualitative analysis and lacks in-depth exploration of the impact of cognition, attitudes, and intentions on land acquisition policies. This research has certain theoretical and practical significance for promoting social stability and sustainable development in rural areas.

II. THEORETICALREVIEW

LEP

Farmers' willingness and risk attitudes towards land acquisition can affect Land acquisition policies. (Zhang, 2014; Zhang, 2018). Jiang(2017) conducted a social evaluation by measuring farmers' satisfaction with compensation policies, and the research results showed that farmers were more willing to be acquired when facing fair and reasonable compensation. Government management often involves the protection of farmers' procedural rights during the land acquisition process, such as the right to be informed, participate, and supervise. The lack of these rights can easily lead to mass petitions and cause intense social conflicts.

PPR and LEP

Li & Xie (2013) defined farmers' land property rights perception as their awareness of contracting rights, transfer rights, use rights, revenue rights, and disposal rights of agricultural land. They pointed out that the higher the level of farmers' land property rights cognition, the more proactive their behavior in transferring agricultural land. Zhong & Hu (2018) defined farmers' cognition of land ownership as their awareness of the ownership subject of the land, including state ownership, collective ownership, state-collective co-ownership, and farmers' ownership. They found that farmers' land ownership cognition still tended to be "nationalized," with a higher willingness to transfer land, and significant regional differences. The differences in farmers' cognition of land directly lead to differences in land

expropriation decision-making behavior (Tang & Zhu, 2013).

R. A. and LEP

Land expropriation compensation has to some extent properly handled the lives of farmers after losing their land, but also brought risks to farmers (Wen, 2021). Slovic (1987) categorized risks into two main factors: perceived risks and unknown risks. Xu (2023) defined the risk of land expropriation as indicators such as farmers' income, employment, social security and compensation satisfaction, as well as environmental pollution caused by construction. As the perceived risk level varies among farmers, their response measures will also differ. The stronger the perceived risk, the more inclined they are to take measures to cope with it (Wang & Guan, 2019). Due to the uncertainty of land expropriation, farmers' risk-avoidance attitudes can increase their willingness to participate in agricultural insurance (Shang et al., 2020).

LEI and LEP

In China, Land expropriation refers to the act of forcibly acquiring land owned by collectives or individuals by the government and land management authorities in accordance with legal procedures, in order to meet the needs of public interest. According to the Land Administration Law(LAR), the state nationalizes the land in accordance with the law, and the land use right is changed. The state should take measures to arrange for the production and living of displaced farmers and pay compensation fees.Farmers' intention to expropriate agricultural land is an important reflection of the potential demand and supply in the land market. In many references, terms such as "land expropriation intention,""land expropriation willingness," or "land expropriation attitude" are used with similar meanings. It is generally defined as "the willingness of farmers to sell their land in exchange for compensation for land expropriation provided by the government" (Wen, 2021; Qi et al, 2015).Land acquisition intention directly affects the formulation and adjustment of land acquisition policies(Shang et al, 2020).

PPR and LEI

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R.A. and LEI

Land expropriation compensation has to some extent properly handled the lives of farmers after losing their land, but also brought risks to farmers (Wen, 2021). Slovic (1987) categorized risks into two main factors: perceived risks and unknown risks. Xu (2023) defined the risk of land expropriation as indicators such as farmers' income, employment, social security and compensation satisfaction, as well as environmental pollution caused by construction. As the perceived risk level varies among farmers, their response measures will also differ. The stronger the perceived risk, the more inclined they are to take measures to cope with it (Wang & Guan, 2019). Due to the uncertainty of land expropriation, farmers' risk-avoidance attitudes can increase their willingness to participate in agricultural insurance (Shang et al., 2020).

According to the above theoretical overview, a research framework can be developed as shown below.

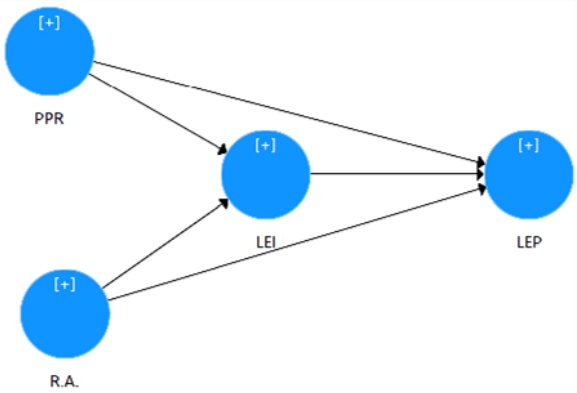


Figure 1: The Research Framework of Land Expropriation Policy

According to this research framework, the following research hypotheses can be derived:

1. There is a direct effect of PPR on LEP.
2. There is a direct effect of R.A. on LEP.
3. There is a direct effect of LEP on LEP.
4. There is a direct effect of PPR on LEI.
5. There is a direct effect of R.A. on LEI.
6. There is a non-direct effect of PPR on LEP through LEI
7. There is a non-direct effect of R.A.on LEP through LEI.

The research findings that comparing the direct effect and non-direct effect will determine which strategy is more effective in improving LEI from direct PPR or from R.A. through PPR, and from non-direct LEP.

III. RESEARCH METHOD

The study is conducted in rural areas of Hebei province, China. A total of 110 farmers were randomly sampled using an online survey method. The research instrument used a questionnaire to measure farmers' willingness to participate in land expropriation, their perception of land property rights, risk perception, and implication of land expropriation policies in their region. Initially, each questionnaire had 15 items and was tested on 20 farmers. The item validity coefficient (correlation of item scores with total scores of each variable) was calculated using Pearson's product-moment correlation formula at a significance level of 0.05 (Nolan and Heinzen, 2012). Some items were dropped out, and the remaining valid items were used as questionnaires in this study, as described in the **Table 1** below.

Item	Initial sum of Items	Sum of Valid Items
LEP	15	10
LEI	15	10
PPR	15	10
R.A.	16	10

Table.1Questionnaire's Item Analysis Results

This study used Path Analysis Technique to investigate the direct and non-direct effects among research variables (Hair, Jr. et al., 2017) and analyzed the data using Smart PLS 3.0 program.

IV. RESEARCH FINGDING

Construct Reliability and Average Variance Extracted (AVE - measured the convergent validity) of each variable were calculated from the scores of 110 research samples using the PLS 3.0 program as described in **Table 2**. These findings indicate that each variable (construct) had high reliability coefficients (more than 0.700) and high convergent validity (AVE more than 0.500) (see Hair et al., 2017).

Variables	Cronbach's Alpha	CR	AVE
LEP	0.864	0.902	0.647
LEI	0.835	0.884	0.603
PPR	0.856	0.897	0.634
R.A.	0.735	0.862	0.603

Table 2 Construct Reliability and Validity

Variables	EP	LEI	PPR	R.A.
LEP	**0.887**			
LEI	0.511	**0.824**		
PPR	0.708	0.761	**0.805**	
R.A.	0.600	0.640	0.649	**0.802**

Table 3 Fornell-Larcker Criterion

Table 3 has a recommendation that bold and diagonal values should be higher in their constructs as compared to other constructs both horizontally and vertically (Fornell & Larcker, 1981). Hence, discriminant validity has been achieved (Fornell & Larcker, 1981). **Table 4** shows the results of cross-loadings.

Variables	LEP	LEI	PPR	R.A.
PR1	0.673	0.591	**0.852**	0.541
PR2	0.627	0.628	**0.732**	0.660
PR4	0.669	0.690	**0.836**	0.631
PR5	0.656	0.596	**0.759**	0.667
PR7	0.662	0.731	**0.803**	0.708
R1	0.670	0.759	0.639	**0.820**
R3	0.659	0.737	0.696	**0.793**
R4	0.666	0.695	0.703	**0.807**
R6	0.609	0.647	0.694	**0.778**
R7	0.611	0.668	0.717	**0.827**
EI	**0.779**	0.719	0.713	0.666
E2	**0.897**	0.777	0.739	0.540
E3	**0.812**	0.654	0.685	0.605
E4	**0.820**	0.680	0.714	0.714
E5	**0.798**	0.721	0.693	0.585
I1	0.701	**0.844**	0.712	0.723
I2	0.614	**0.721**	0.587	0.476
I3	0.623	**0.813**	0.654	0.543
I4	0.054	**0.769**	0.728	0.597
I5	0.412	**0.754**	0.397	0.458

Table.4. The results of the cross loadings

Table 4 recommends that bold values should be higher in their constructs as compared to the values of other constructs (Hair et al., 2011). Therefore, the results show that discriminant validity has been achieved using crossloadings. **Table 5** shows the results of the HTMT ratio.

Variables	LEI	LEP	PPR	R.A.
LEI				
LEP	0.743			
PPR	0.669	0.720		
R.A.	0.656	0.796	0.653	

Table 5.Heterotrait-Monotrait Ratio (HTMT)

The recommendation for the above table is that all values should be less than 0.90 as recommended by Henseler, Hubona, and Ray (2016). Hence, discriminant validity has been achieved using the HTMT ratio.

Hypotheses	Path Coefficient	P Values	Results
1	0.215	0.041	Accept
2	0.498	0.000	Accept
3	0.21	0.038	Accept
4	0.402	0.000	Accept
5	0.511	0.000	Accept
6	(0.402)(0.21)=0.084	0.071	Rejected
7	(0.498)(0.21)=0.107	0.035	Accept

Table 6 . The Research Hypotheses Tested

Accepting the hypotheses that PPR directly affects LEP by research findings from Li & Xie (2013), Tang & Zhu, (2013),and from Zhong & Hu (2018). Accepting the hypothesis that R.A. had a direct effect on LEP had been supported by research findings from (Wen, 2021). , also from Xu (2023) and Wang & Guan, (2019). Accepting the hypothesis that LEI had a direct effect on LEP had been supported by research findings from Wen (2021, also from Qi et al. ,2015). Accepting the hypothesis that R.A. had a direct effect on LEI had been supported by research finding from Li & Xie (2013).

Moderating Effect	Estimate	P Values
R.A. -> LEI -> LEP	0.107	0.035
PPR -> LEI -> LEP	0.084	0.071

Table 7 The results of the moderation analysis

It has been shown in the Table 7 that LEI does moderate the effect of R.A. on LEP (0.107, p <0.05); however, LEI does not moderate the effect of PPR on LEP (0.107, p >0.05).

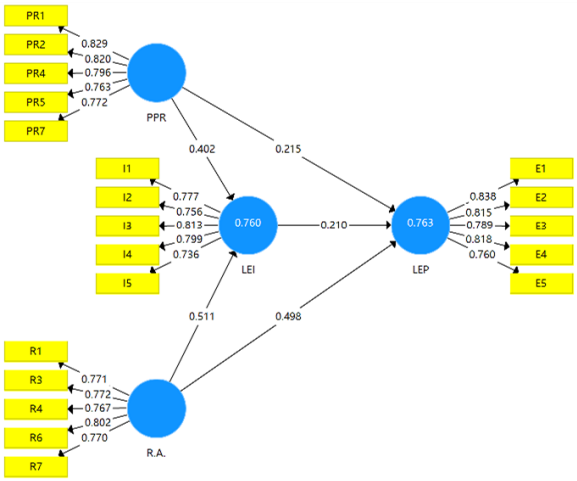


Fig.2 PLS Bootstrapping using SmartPLS version 3.0

V. CONCLUSION

The findings of the research suggest that strengthening farmers' perception of land ownership (PPR) and reducing risks associated with land acquisition (R.A.) are key factors in promoting the implementation of land acquisition policies. The study shows that PPR has a direct effect on both group LEP and LEI, indicating that enhancing farmers' awareness of land ownership directly influences their willingness to participate in land acquisition and the implementation of land policies. Similarly, R.A. has a direct impact on LEP and land acquisition intentions, indicating that reducing risks associated with land acquisition directly affects the implementation of land policies and increases farmers' willingness to participate.

Moreover, the study suggests that strengthening various dimensions of PPR and R.A. will have a significant impact on improving land acquisition policies. In addition, conducting basic land education programs can be an alternative to strengthening PPR, which can increase farmers' awareness of various land rights and facilitate the implementation of land acquisition policies.

Furthermore, the study shows that LEI has a direct impact on LEP, indicating that farmers' intentions to accept land acquisition directly affect the implementation of land policies. Strengthening various dimensions of the intention to accept land acquisition will also have a direct impact on land policies.

The study also indicates that the indirect effects of PPR and R.A. on LEP through LEI are slightly higher than the direct effects of PPR and R.A. on LEP. This suggests that LEI, as a mediator, is not obvious in regulating the impact of PPR and R.A. on LEP.

In conclusion, the study provides insights into the factors that influence the implementation of land acquisition policies and highlights the importance of strengthening farmers' perception of land ownership, reducing risks associated with land acquisition, and improving the intention to accept land acquisition. The findings suggest that policymakers should focus on enhancing farmers' awareness of land ownership and reducing risks associated with land acquisition to promote the implementation of land acquisition policies.

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