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## **Tenure Security for Indonesia's Urban Poor : a socio-legal study on land, decentralisation, and the rule of law in Bandung**

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## 8.1 INTRODUCTION

As discussed in Chapter 1, according to the dominant approach to the provision of tenure security to the urban poor, referred to as the 'functional approach', land registration can be functional in fulfilling various development goals. To shortly repeat this line of reasoning, formal landholders are believed to enjoy legal tenure security and thus perceive to have less possibility of involuntary removal than informal landholders, and if involuntary removal occurs, they have a greater possibility to receive proper compensation. Furthermore, it is suggested that land registration could contribute to, for instance, housing consolidation. After all, it is likely that landholders who perceive to have less risk of involuntary removal invest more in their land than if they perceive this risk to be higher. Land registration may also enable the land market and improve access to credit. The land certificate makes land easy to transfer and can be used as a collateral. Housing consolidation, an enabled land market and improved access to credit may in turn contribute to slum eradication, poverty alleviation, and social justice.

Although land registration programmes continue to be implemented in (urban) Indonesia on a large scale, few evaluations have been conducted on the effects of land registration with regard to perceived tenure security, housing consolidation, enabled land markets, and access to credit. The existing research consists of two World Bank assigned evaluations of the Land Administration Project (LAP) by Hardjono (1999) and Smeru (2002), already discussed in Chapter 4, and an independent study by Winayanti and Lang (2002).<sup>2</sup> The studies give valuable insights into the effects of land registration and alternatives on perceived tenure security and housing consolidation, but all three have methodological limitations. First, one could question whether the effects of the LAP would be discernible immediately after (Hardjono 1999) or just three years after (Smeru 2002) the programme was implemented; particularly with regard to housing consolidation, which requires significant financial resources. Second, the study by Winay-

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1 I wish to express my gratitude to Jean-Louis van Gelder, who assisted me with the analysis of the survey data. An earlier version of this chapter was published as Reerink, G.O. & J.L. van Gelder (2010), 'Land Titling, Perceived Tenure Security, and Housing Consolidation in the Kampongs of Bandung, Indonesia', *Habitat International* 34(1), p. 78-85.

2 The study by Winayanti and Lang (2002) was based on qualitative research in the low-income kampung Penas Tanggul, in City-Quarter Cipinang Besar Selatan in East Jakarta.

anti and Lang (2002) concentrated on a single kampong, which may or may not have been representative of the broader situation. The studies by Hardjono and Winayanti and Lang were also entirely qualitative, and lacked a statistical basis to assess accurately the significance of any apparent impacts of land registration on perceived tenure security and housing consolidation. Although Smeru (2002) did conduct a more representative and quantitative study, as in Hardjono's (1999) study no distinction was made between semi-formal and informal tenure, thus ignoring potential differences in effects of land registration on these two tenure categories.

The present chapter builds on the studies mentioned above, examining the relations between tenure category, perceived tenure security and housing consolidation using the results of the survey that was conducted in seven kampongs in Bandung.<sup>3</sup> It thus assesses whether land registration and particularly land registration programmes, in their present set-up, strengthen the perceived tenure security of kampong dwellers and contribute to housing consolidation.

The chapter is divided into five sections. The next section discusses the perceived tenure security of Bandung's urban poor by looking at their perceived legitimacy of tenure, their perceived possibility of involuntary removal, and their perceived possibility to receive compensation entitled to. Section 8.3 focuses on the changed perceptions of tenure security since the end of the New Order. The correlations between tenure category, perceived tenure security, and housing consolidation are assessed in Section 8.4, after which the chapter concludes.

## 8.2 TENURE STATUS AND PERCEIVED TENURE SECURITY

In relation to the effects of land registration on perceived tenure security, the two World Bank assigned evaluations are rather positive. According to Hardjono (1999), participants of the LAP "almost invariably said that they feel more secure about their rights to land." This perception could be related in large part to a decrease in 'external' threats: participants argued that "there is now no possibility of [them] being evicted from their land against their will for development projects of any kind" (Hardjono 1999:30). According to Smeru (2002), about 70 per cent of the participants believed that they now enjoyed greater tenure security, "as a land certificate now recognises their ownership rights" (Smeru 2002:25-6).

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3 Participants with formal tenure included landholders who had registered their land through a land registration programme and who had registered their land themselves. As all survey results discussed in this chapter were identical for both these categories of participants, they were combined into a single category.

Winayanti and Lang (2002) argue that perceived tenure security does not always have to be based on property title, but that there are alternatives. The semi-formal and informal landholders in the kampong in East Jakarta where they conducted their research perceived their tenure to be relatively secure because of a government policy of condoning non-formal tenure and providing public services, in conjunction with a high level and unity of community organisation and the support that landholders received from civil society groups. Yet, despite having *de facto* tenure security, these landholders were still hoping for legal recognition to further strengthen their tenure security (Winayanti & Lang 2002).

All of the above studies used a single indicator to assess the perceived tenure security of the different types of landholders in kampongs. To get a better understanding of the correlations between tenure status and perceived tenure security, in the current research we considered the differences of perceived tenure security between the three tenure categories by using three indicators: we asked respondent landholders about perceived legitimacy of tenure, perceived possibility of involuntary removal, and perceived possibility to receive proper compensation. We also asked them about changed perceptions of tenure security since the end of the New Order. What follows is a discussion of the results.

### 8.2.1 *Perceived legitimacy of tenure*

The first indicator of perceived tenure security refers to the perceived legitimacy of tenure – that is, whether landholders think that the authorities agree with them residing on the land they occupy. Participants' responses to this question are presented in Table 8.1, and indicate that a higher percentage of both formal and semi-formal landholders believed that the authorities agreed with their residence than did informal landholders (90 per cent for formal and semi-formal landholders versus 70 per cent for informal landholders).<sup>4</sup> The results indicate that landholders falling into a legally stronger tenure category have stronger convictions that the authorities agree with their residence, while landholders with informal tenure are less confident of agreement, and more likely reply 'maybe agrees'. Yet it is noteworthy that a large majority of informal landholders still thought that the authorities agreed with their residence, and that the difference between formal and semi-formal households is negligible.

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4 Results from the Chi-square test indicate that, with respect to perceptions about government agreement (that government agreed with residence, maybe agreed, or did not agree), relative frequencies of the three answers were significantly different between tenure categories ( $\chi^2 = 27.142$ ,  $df = 4$ ,  $p < .001$ ).

Table 8.1 Do the authorities agree that you reside on this land?

Agreement of authorities	Formal tenure <sup>a</sup>	Semi-formal tenure <sup>b</sup>	Informal tenure <sup>c</sup>
Yes	88.9%	91.6%	70.1%
Maybe	7.1%	5.3%	26.4%
No	4.0%	3.2%	3.5%

Note: <sup>a</sup> n = 100, <sup>b</sup> n = 95, <sup>c</sup> n = 145

Participants who reported that the authorities agreed with their residence were asked why they believed this to be the case. As Table 8.2 shows, the possession of land related documentation was the primary reason given by most formal landholders (91.2 per cent). The possession of such documentation was also mentioned as a primary reason given by a large percentage of semi-formal (66.7 per cent) and, surprisingly, informal landholders (47.2 per cent). For semi-formal and informal landholders, the length of occupation (which according to Winayanti and Lang can contribute to *de facto* tenure security) was another important reason to believe that the authorities agreed with their residence (around one third of the respondents). Servicing (another factor often assumed to contribute to *de facto* security) was much less frequently mentioned (less than 5 per cent of respondents across tenure categories).

Table 8.2 Why do you believe the authorities agree with you residing on this land?

Reason	Formal tenure <sup>a</sup>	Semi-formal tenure <sup>b</sup>	Informal tenure <sup>c</sup>
Because I have land related documentation	91.2%	66.7%	47.2%
Because I have been occupying this land for a long time	4.4%	31.1%	36.8%
Because the authorities provide public services	3.3%	2.2%	4.7%
Other	1.1%	0%	11.3%

Note: <sup>a</sup> n = 91, <sup>b</sup> n = 90, <sup>c</sup> n = 106

### 8.2.2 Perceived possibility of involuntary removal

As a second indicator, participants were asked whether they believed there was a possibility of involuntary removal within the next five years. As Table 8.3 shows, both formal and semi-formal landholders perceived a possibility of involuntary removal, but much less often than did informal land-

holders.<sup>5</sup> It should however be noted that more than 76 per cent of the informal landholders perceived no possibility of involuntary removal within the next five years, despite their informality.

Table 8.3 Is there a possibility of involuntary removal within the next 5 years?

	Formal tenure <sup>a</sup>	Semi-formal tenure <sup>b</sup>	Informal tenure <sup>c</sup>
Possibility	5.3%	6.9%	23.6%
No possibility	94.7%	93.1%	76.4%

Note: <sup>a</sup>  $n = 100$ , <sup>b</sup>  $n = 95$ , <sup>c</sup>  $n = 145$

We asked those landholders who thought involuntary removal was possible to specify what they believed might cause it. Land clearance by the state for development in the public interest was most often mentioned by all types of landholders. In addition, land clearance by developers was mentioned by several semi-formal landholders, and land clearance (by authorities) for occupying land without permission from the title holder was mentioned by several informal landholders. These findings demonstrate that involuntary removal is perceived by landholders from all tenure categories to be driven primarily by the state.

### 8.2.3 Perceived possibility to receive compensation entitled to

As a final indicator, participants were asked whether in case of involuntary removal, they believed they would receive the compensation *assumed* to be entitled to according to law. As Table 8.4 shows, a higher percentage of formal landholders perceived they would receive such compensation than semi-formal and informal landholders.<sup>6</sup> It should however be noted that more than 89 per cent of semi-formal and 87 per cent of the informal landholders also perceived to receive such compensation.

Table 8.4 In case of involuntary removal, would you receive the compensation entitled to according to law?

	Formal tenure <sup>a</sup>	Semi-formal tenure <sup>b</sup>	Informal tenure <sup>c</sup>
Yes	98 %	89.4 %	87.2 %
No	2 %	10.6 %	12.8 %

Note: <sup>a</sup>  $n = 100$ , <sup>b</sup>  $n = 94$ , <sup>c</sup>  $n = 141$

5 Results of the Chi-square test indicate that the difference in perceived security between tenure categories is significant ( $\chi^2 = 19.908$ ,  $df = 2$   $p < .001$ ).

6 Results of the Chi-square test indicate that the difference in perceived security between tenure categories is significant ( $\chi^2 = 8.771$ ,  $df = 2$   $p < .001$ ).

Notably, the survey also reveals that landholders have wrong assumptions about the compensation they are entitled to according to law. A high percentage of semi-formal (87 per cent) and even informal landholders (44.1 per cent) believed that they were entitled to full compensation for land and buildings. However, as discussed in Chapter 6, in case of land clearance for development in the public interest, the first category of landholders are only entitled to up to 90 per cent of the compensation received by formal landholders and as for the second category of landholders, the determination of compensation is at the discretion of the Mayor. Their perceived tenure security is thus further strengthened by a lack of knowledge about formal compensation rates.

### 8.3 CHANGED PERCEPTIONS OF TENURE SECURITY SINCE THE END OF THE NEW ORDER

The survey also included questions on participants' changed perceptions of tenure security since the end of the New Order. So participants were asked how according to them, the possibility of involuntary removal and the possibility to receive proper compensation had changed since the end of the New Order. As Table 8.5 shows, of all categories of landholders most believed the possibility of involuntary removal was still the same. However, they had a tendency to believe that this possibility had become bigger.

*Table 8.5 How has the possibility of involuntary removal changed since end of New Order?*

	<b>Formal tenure<sup>a</sup></b>	<b>Semi-formal tenure<sup>b</sup></b>	<b>Informal tenure<sup>c</sup></b>
Possibility is smaller	16 %	14.6 %	14.4 %
Possibility is the same	43.6 %	48.3 %	46.2 %
Possibility is bigger	40.4 %	37.1 %	39.4 %

*Note:* <sup>a</sup>  $n = 94$ , <sup>b</sup>  $n = 89$ , <sup>c</sup>  $n = 132$

As Table 8.6 shows, at the same time all categories of landholders believed the possibility to receive proper compensation in case of involuntary removal had become bigger.

*Table 8.6 How has the possibility to receive proper compensation changed since end of the New Order?*

	<b>Formal tenure<sup>a</sup></b>	<b>Semi-formal tenure<sup>b</sup></b>	<b>Informal tenure<sup>c</sup></b>
Possibility is smaller	7.3 %	3.2 %	9.6 %
Possibility is same	37.5 %	38.3 %	48.6 %
Possibility is bigger	55.2 %	58.5 %	41.8 %

*Note:* <sup>a</sup>  $n = 96$ , <sup>b</sup>  $n = 94$ , <sup>c</sup>  $n = 146$

#### 8.4 HOUSING CONSOLIDATION

To investigate whether investment in housing (as indicated by the level of housing consolidation) was associated with tenure status, we tested for differences in the means of housing consolidation scores between tenure categories. Housing consolidation was measured on the basis of a composite score which represented the quality of the three defining elements of a dwelling; namely the floor, the walls and roof. For each element a three-point index of consolidation was used, with a score of 1 indicating low consolidation, and 3 representing high. The scores were combined into a composite score that could range from 3 (indicating low consolidation) to 9 (indicating high consolidation).

As Table 8.7 shows, there were differences in levels of housing consolidation between the different tenure categories.<sup>7</sup> The results confirm the findings discussed in Chapter 2, namely that in general, houses in kampongs in Bandung are already reasonably consolidated. At the same time a distinction can be made between houses of formal, semi-formal, and informal landholders. Landholders in formal tenure situations lived in more consolidated housing than informal landholders.<sup>8</sup> There were, however, no significant differences in degree of housing consolidation between formal and semi-formal landholders. The difference between semi-formal and informal landholders was marginally significant.<sup>9</sup>

The question rises whether these differences in degree of housing consolidation between tenure categories cannot be explained by other factors, such as differences in household income. There were indeed such differences. Formal landholders had significantly higher incomes than informal

Table 8.7 Household income and housing consolidation

	Legal tenure category		
	Formal tenure <sup>a</sup>	Semi-formal tenure <sup>b</sup>	Informal tenure <sup>c</sup>
Housing consolidation <sup>1</sup> M (SD)	8.78 (.52) *	8.56 (.80) */**	8.32 (1.00) **
Household income (x 1,000) <sup>2</sup> M (SD)	1.730 (1.461) *	1.401 (1.211) */**	1.256 (1.255) **

Note: <sup>a</sup> n = 100, <sup>b</sup> n = 95, <sup>c</sup> n = 145 <sup>1</sup> Rated as a score from 3 to 9, with 3 representing the lowest level of consolidation and 9 representing the highest; <sup>2</sup> Household income in Indonesian Rupiahs (Rp. 10,000 ≈ USD 1); \*, \*\* Means in the same row that do not share a superscript asterisk differ at p < .01.

7  $F(2, 337) = 9.420, p < .001$ .

8 Tukey's HSD,  $p < .001$ .

9  $p = .071$ .

landholders, but again no significant differences in income were found between formal and semi-formal landholders, nor between semi-formal and informal landholders.<sup>10</sup>

As a final step in the analysis we employed a regression analysis, using legal tenure category, perceived possibility of involuntary removal, and household income as predictors of housing consolidation, to be able to determine the unique contribution of each predictor to levels of housing consolidation (Table 8.8).<sup>11</sup>

*Table 8.8 Regression of tenure category, perceived possibility of involuntary removal, household income on housing consolidation*

Predictor variables	B	SE B	β
Tenure category	.18	.12	.10
– Formal vs. semi-formal			
– Formal vs. informal	.37	.11	.22**
Perceived possibility involuntary removal	.32	.12	.14*
Household income	.07	.00	.15**

*Note.*  $R = .30$ ,  $R^2 = .09$ ,  $SE (.82)$ ; \*  $p < .05$ , \*\*  $p < .01$

For tenure category, the regression analysis confirms the findings presented in Table 8.7: dwellers with formal tenure live in significantly more consolidated dwellings than do informal dwellers, but again no difference was found between formal and semi-formal dwellers. Therefore, formal landholders can be differentiated from informal landholders with respect to their level of investment in housing, but there were no such differences between formal and semi-formal landholders. The results also show the perceived possibility of involuntary removal is an independent indicator of housing consolidation that is not explained by legal category. At the same time the effect for tenure category on housing consolidation cannot be explained by differences in household income between tenure categories. In other words, formal landholders may invest more in their housing than informal landholders because of differences in tenure category, while irrespective of tenure category, landholders enjoying perceived tenure security and/or having (relatively) high household incomes may invest more in their housing than landholders enjoying less or no perceived tenure security and/or having lower household incomes.

10 An analysis of variance (ANOVA) test demonstrated that these differences were significant ( $F(2,337) = 3.939$ ,  $p < .05$ ). To examine potential differences between particular categories, post-hoc tests using Tukey's HSD were employed. The results revealed significant differences in income only between the formal and informal tenure categories ( $p < .05$ ).

11 Due to its categorical nature, tenure status was dummy-coded.

## 8.5 CONCLUSION

This chapter assessed to what extent formal, semi-formal, and informal landholders in kampongs in Bandung enjoy perceived tenure security and looked at the effect of land registration (through land registration programmes) on housing consolidation. Registration programmes generally operate under the assumption that landholders with property title enjoy greater tenure security than landholders dealing with 'extra-legal' tenure situations, and as a result are also more willing to invest in their housing.

The perceived tenure security of landholders with a property title was higher than that of informal landholders. However, no such differences were found between landholders with title and semi-formal landholders. These findings, in combination with the observations that semi-formal (and informal) dwellers often cited their land related documentation and length of residence as reasons for the legitimacy of their tenure, support the idea that perceived tenure security is enhanced not only by land registration, but also by increasing *de facto* tenure security.

The perceived tenure security of landholders has changed since the end of the New Order. Of all categories of landholders most believed the possibility of involuntary removal was still the same. Another large minority of landholders believed that this possibility had become bigger. At the same time of all categories of landholders most believed the possibility to receive proper compensation in case of involuntary removal had become bigger, with another large minority believing this possibility was still the same.

Several factors uniquely contribute to housing consolidation. Tenure category is a significant independent predictor. Landholders with formal tenure lived in somewhat more consolidated dwellings than those with informal tenure. But again, no significant differences were found between formal and semi-formal landholders. Perceived possibility of involuntary removal *and* household income are also significant independent predictors of housing consolidation. In other words, kampong dwellers with formal or semi-formal tenure, who enjoy a high level of perceived tenure security and/or have a high household income tend to invest more into their housing than those with informal tenure, who enjoy a lower level of perceived tenure security and/or have a lower income.

