Land Administration and Economic Development: A Case Study of Property Formalization in Chulachuli Village of Eastern Nepal

Gandhi SUBEDI, Nepal and Peter WYATT, UK

Key Words: Land Administration, Property Formalization, Land Rights, Economic Development

SUMMARY

Economic development is one of the common goals of many developing countries like Nepal. The nature of policy adopted by the government to distribute land to its people and associated property rights affect the level of economic performance. Land administration and associated systems are the mechanisms that translate such policies into practice. This paper aims to investigate how land administration supports the goal of economic development based on case study of property formalization program in the Chulachuli village of Eastern Nepal. A questionnaire, in-depth interviews with landowners and relevant land professionals and field observation techniques were used to investigate perceptions and practice of land formalization. Most of the respondents perceive that their land rights are more secure after formalization and the land administration organizations play crucial role in securing those rights. The property rights are found to be positively correlated with the land value, investment and income when land rights are formally recognized, the use value, collateral value and exchange value of land is increased, landowners are able to access credit from the institutional sector and investment and income are also increased. Thus, after property formalization, landowners are benefitted from using highest form of property rights, reliance from higher interest rate, and increased land price and income. The land administration institutions play crucial role in property formalization, management of land information and registration of transactions. The investment of government in this sector could be justified from the benefits it received from increased revenue and production which supported to fulfil their goal of economic development. Its contribution in attaining the goal of distributive justice is also a matter of study.
1. INTRODUCTION

Economic development is one of the common goals of many developing countries like Nepal. The nature of policy adopted by the government to distribute land to its people and associated property rights affect the level of economic performance. The fundamental issues of distribution and management of land are determined by land policy. Land administration and associated systems are the mechanisms that translate such policies into practice. This paper aims to investigate how land administration supports in achieving the goal of economic development.

2. LAND ADMINISTRATION AND PROPERTY RIGHTS

Restructuring property rights is one of the ways of increasing the efficiency of resources. Posner (1973) argues that the function of property rights is to create incentive to use resources efficiently. He considers universality, exclusiveness and transferability as three characteristics of an ‘efficient’ set of property rights. In this connection, Reeve (1986) observes, “[...] this analysis does not claim that all property rights in the world have the function of promoting efficiency.” He recommends, “if you wish to promote efficiency, structure property rights to achieve that result”. So, the restructuring of property rights may lead to a more efficient use of resources.

Individualization of property rights is considered to be one of the means of increasing production from land. According to the land tenure theories, it contributes to the economic development of a country in a number of ways. Nkwae (2006), citing the works of a group of institutional economists such as Demsetz (1967), Alchian and Demsetz (1973), Johnson (1972) and Ault and Rutman (1979) describes that individualization, titling and registration is a prerequisite to land development and improvement as well as management of land-related conflicts. He further argues that the individual private property rights paradigm is the gateway to successful land development and improvement, increasing credit opportunities, and promotion of land markets. Platteau (1996) also discusses two types of effects of land titling: first, the static effect resulting from the chances of land consolidation and more efficient cropping choices; and second, the dynamic effect resulting from increased willingness and ability to invest. Likewise, Feder, Onchan et al. (1988) develop a conceptual framework for economics of land registration in the context of rural Thailand in which two sources of linkage between titles and economic performance are highlighted, namely the effect of titles in enhancing tenure security, and the role of titles in collateral arrangements and facilitating access to institutional credit. Similarly, Smith (2005), referring to the neo-classical model, argues that productivity would be higher when tenure becomes more secure and individualized via three effects: greater investment demand, greater credit supply and
greater aggregate production. The above discussion shows that there are essentially three types of effect of land titling; efficient use of land resources, willingness and ability to invest and access to credit.

The property rights institutions are the rules of the game and the land administration organizations are its players. As argued by North (1990), “the purpose of the rules is to define the game is played. But the objective of the team with the set of rules is to win the game [...]”. The objective of providing property rights is to provide happiness and increase efficiency and the task of the land administration organizations is to facilitate it. The restructuring of property rights as well as the efficiency of land administration services are equally important in increasing the level of economic performance of land resources. As opined by de Soto (2001), “secured private property rights and a good land administration system can mobilize the hidden capital from land [...]”. Similarly, according to the land administration theory, land administration functions support in sustainable development (Williamson et. al., 2010). However, there is lack of empirical research that clearly shows a link between land administration and economic development. This paper aims to fulfil this gap of knowledge based on the case study of property formalization program in Chulachuli village of Eastern Nepal.

3. PROPERTY FORMALIZATION IN CHULACHULI, NEPAL

Formalization of property rights remained a decade long problem and the reason of conflict in Chulachuli village of Ilam district, eastern Nepal. Adjudication of land had been started in this area in 1970s. However, the government declared the area as a Green Belt and decided to evacuate settlement offering some amount of land in neighbouring districts as compensation. The landowners denied the offer claiming that the compensation was inappropriate. In the mean time, more people migrated from the hilly region and settled on the government land. So the problem escalated rather than being solved.

The government tried to solve the problem by forming several commissions to negotiate with the inhabitants. Until the restoration of democracy in 1990, the government had continued its policy of evacuating the land but the democratic government formed in 1991 and later adopted the policy to register the land under the name of respective settlers. The 23rd commission called ‘Chulachuli Area Informal Settlement Problem Solving Committee (CAISPSC)’ formed in 2008 formalized land and distribute the land ownership certificates to owners.

The committee sources informed that 5,152 landowners applied to register land under their name (CAISPSC, 2010). The committee evaluated the evidence and decided to register the land under the names of 4,918 landowners. Until the mid-July, 2010, Land Title Certificates of 3,943 landowners were prepared. 395 landowners were randomly selected of which 381 landowners could be contacted for the purpose of administering a questionnaire survey. Indepth interviews were also undertaken with the key respondents, and the land registration process was observed. Informal discussions and documentation analysis are the other methods applied to collect data.

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4. IMPACT OF TENURE SECURITY

Property formalization changes the property rights situation. Registration of land is actually the registration of property rights to land. The respondents were asked about the available rights and risks associated with their land before and after formalization. Almost all of the 381 respondents believe that they have rights of ownership, rights to sale and transfer their property, access to institutional loan and lease their property after formalization of property which was not available before formalization. One of the local political leader and member of the Informal Settlement Committee also agreed that they are enjoying full property rights now. In his words, “ownership right, right to mortgage, right of transactions, including the access to government facilities are established after having Land Ownership Certificate. [...] So, we achieve the full property rights.” Similarly, the risks associated with land are found to be significantly reduced after registration of land as around 96 and 94 percent of the respondents believe that prior to formalization, there were risks of aggression from other people and acquisition from government without fair compensation respectively. Almost all of the respondents (98 percent) perceived no fear of aggression and 84 percent believe that the government will not take their land without fair compensation after formalization. The data also shows that almost all (99 percent) of the respondents opined that property rights are secured after registration of land.

Thus, the respondents are enjoying higher level of property rights and the associated risks are reduced remarkably after property formalization indicating a higher level of land tenure security which is one of the determinants of economic development. Its impact on land use, access to credit, land price, investment and income is discussed below which shows how land tenure security supports in economic development.

4.1. Land Use

The land of the Chulachuli area is mainly used for the residential and agricultural purposes. The data shows that there is no significant change in land use as the proportion of respondents using land for shelter just increased from 91 to 92 percent; using land for agriculture decreased from 98 to 89 percent and that of using land for commercial purposes increased from 4 to 9 percent. It only shows that the trend of using land for agriculture decreased but increased for commercial land use. However, there is significant change in the type of accommodation and pattern of agriculture. The data shows that around 20 percent of respondents either constructed new houses or renovated their original houses after registration. Similarly, 29 percent of additional respondents adopted new techniques of farming, 20 percent started cash cropping and 14 percent more respondents planted trees after formalization. Thus, once the land is registered, the landowner can use the land in his own way which affects on the pattern of land use.

4.2. Access to Credit

One of the major changes resulting from the registration of land is access to institutional credit. The respondents from the Chulachuli village mainly used their personal savings and
money borrowed from the local sources for their investment. The data shows that before registration 92 percent of respondents used personal saving and 68 percent borrowed from local lenders and some of them had borrowed from both. However, none of them used bank credit since they did not have access on it. The right to apply for loan from the banking sector is established when the land is registered.

The respondents had to pay very high interest rate while borrowing from the local lenders. As shown in Table 1, the majority of respondents (61 percent) pay from 20 to 30 percent interest and around one-third (31 percent) pay from 30 to 40 percent to the local lenders. However, the proportion of respondents paying less than 20 percent interest is only 9 percent.

Table 1: Rate of interest while borrowing from the local lenders

<table>
<thead>
<tr>
<th>Interest Rate (percent)</th>
<th>Respondents</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>11-20</td>
<td>29</td>
<td>8</td>
</tr>
<tr>
<td>21-30</td>
<td>232</td>
<td>61</td>
</tr>
<tr>
<td>31-40</td>
<td>117</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>381</td>
<td>100</td>
</tr>
</tbody>
</table>

The average interest rate charged by the banking sector is around 15 percent, significantly lower than the rates charged by local lenders. Thus, the right to apply for bank credit is now established and landowners have reduced their reliance on local lenders and their high interest rate. One of the local political leaders also observed, “There was no chance of getting loan from any of the government institutions. For the purpose of animal husbandry or agriculture, we had to borrow personally from the local lenders who used to charge intolerable rate. The people had to pay from 36 percent to 60 percent interest to them. Now the situation is changed.”

Thus, land can be used as collateral once it is registered and can get access to cheaper interest rate than borrowing from local lenders. It provides opportunity to invest more on productive activities.

4.3. Land Price

The price of land in the study area has increased after registration of land. As shown in Table 2, 89 percent of respondents replied that average price of per kattha¹ of their land was less than Rs. 100 thousand and rest of them described that it was between Rs. 101 to 200 thousand before registration. After registration, half of the respondents replied that average price of per kattha of land ranges between Rs. 101 to 200 and 44 percent considered the price as Rs. 201 to 300 thousand. Average investment per kattha of land per annum before formalization was Rs. 61 thousands which increased by 323 percent to Rs. 196 thousands after formalization.

¹ Unit of land measurement practiced in Nepal equal to 338 square metre

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The increase in land price was mentioned by the interviewees too. One of the local political leaders observed that the land price increased tremendously after registration of land. In his words, “the land which was really hard to sell in Rs. 50 thousand in the past, [...] one plot of land is sold in the morning at my presence in Rs. 400 thousand per kattha.” Land Revenue Office, Ilam has also increased the minimum valuation of land of the study area substantially after registration. Accordingly, for the year 2007/08, the minimum valuation of highest categories of land in Chulachuli village was Rs. 4,732 per square metre (Land Revenue Office, Ilam, 2007). However, the valuation of highest categories of land used for steward is Rs. 10,400 per square metre and that of agricultural land is Rs. 40,560 for the year 2011/12 (Land Revenue Office, Ilam, 2011).

So, there is a significant increase in the land price after registration of land. It increases the wealth of the landowner, amount of credit provided by the bank and revenue of the government.

4.4. Investment and Income

Table 3 presents the average investment and income per kattha of land before and after formalization. The table shows that an overwhelming majority of the respondents (95 percent) used to spend up to Rs. 5 thousand per kattha per annum before registration of land. After registration, the number of respondents investing up to five thousand decreased to 66 percent and that of investing 6 to 10 thousand increased to 32 percent. Average investment per kattha of land per annum before formalization was Rs. 3.2 thousands which increased by 70 percent to Rs. 4.6 thousands after formalization. Also, 95 percent of the respondents observed that they had felt obstruction in long-term investment prior to formalization of property.

Table 1: Average Investment and income per kattha of land before and after registration

<table>
<thead>
<tr>
<th>Amount (in Rs. ,000)</th>
<th>Investment</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before Settlement</td>
<td>After Settlement</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>0-100</td>
<td>340</td>
<td>89</td>
</tr>
<tr>
<td>101-200</td>
<td>41</td>
<td>11</td>
</tr>
<tr>
<td>201-300</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>301-400</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total</td>
<td>381</td>
<td>100</td>
</tr>
</tbody>
</table>

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The table also shows that around two thirds (66 percent) of the respondents used to earn up to Rs. 5 thousand and around one-third (33 percent) of them earn Rs. 6 to 10 thousand per annum from per kattha of land on average before settlement. However, the proportion of respondents earning more than Rs. 10 thousand was negligible. On the other hand, the percentage of respondents earning up to Rs. 5 thousand decreased to 42 percent and that earning from Rs. 6 to 10 thousand increased to 32 percent after formalization. It is also worth noting that 8 percent and 6 percent of the respondents earned Rs. 11 to 15 and 16 to 20 thousand respectively after settlement. In total, average income per kattha of land per annum before formalization was Rs. 4.6 thousands which increased by 70 percent to Rs. 6.6 thousands after formalization.

So there is a significant increase in investment made by the landowners and their income after registration of land. Increase in investment and income at the household level. It increases the amount of investment and income at the national level as well.

4.5. Correlation of land price, investment and income with property rights

It is evident that land-related investment, income and land value has increased after land registration. So, a bivariate correlation analysis was employed to determine whether there is any correlation of these variables with the land rights. The correlation coefficients between land rights, and investment, income and land value are 0.219, 0.199 and 0.685 respectively which are significant at 1 percent level of significance. In addition, a one-way analysis of variance was undertaken in order to identify whether the variations in these variables are significant.

It indicates that willingness to and ability of investment resulted from formalization of property rights has positive impact on investment, income and land value. Ultimately, it increases national income and revenue.

4.6. Revenue Generation

Registration of land paves the ways to collect tax from the land. Once the land is registered, land tax can be levied on it. In addition, transactions of land can be registered in the land registry and transaction fees can also be collected.

Land tax was the main source of income in Nepal in the past. The revenue estimate for the first budget of Nepal presented in Fiscal Year 1951/52 was Rs. 30.5 million of which 9.4 million was expected to collect from land tax (Pant, 1956). The highest amount of land tax collected by the government is Rs. 10 million which was collected in 1980/81. The authority...
to collect this tax is now delivered to local government since 1995 which is one of their main sources of income.

Registration fee paid during the registration of transaction is another source of income for the government. It constitutes around 4 percent of total revenue. In 1978, the Government of Nepal enacted the Land Revenue Act was enacted initially in 27 districts the enactment of which completed in all districts in 1995 after completion of cadastral survey. During this period, most of the privately own land came into the formal sector and the transactions started to register in the Land Revenue Offices established in accordance with this Act. In 1978/79, only Rs. 5.46 million was collected as registration fee. The amount of this fee increased tremendously after property formalization and reached to Rs. 6,056.6 million in 2009/10 which is more than 1,100 times higher than that of 1978/79. Thus, registration of land is one of the sources of government revenue which is increased after property formalization. On the other hand, total expenditure of the Ministry of Land Reform and Management of Nepal is around Rs. 1.5 billion which indicates that the Ministry can save more than Rs. 4 billion annually from registration fee alone. On top of this, Ministry receives revenue in other title as well. Likewise, total cost of running informal settlement program in Chulachuli area during 2007/08-2009/10 was Rs. 9,368,897 whereas revenue collected by the committee during that period was Rs. 22,580,233 (CAISPSC, 2010). Thus, revenue generated by the land sector is much higher than that of money the government had to spend on it.

Thus, from the above discussion, it is clear that once the land is registered, property rights of landowner will be secured. The use value, collateral value and exchange value of land are increased after registration as landowners can use their land on their own way, can borrow from bank in a cheaper interest rate using land as collateral and can sell their land in a higher price. Similarly, investment and income are increased significantly after registration. The results of correlation also show that land value, investment and income are positively correlated with property rights. In addition, the revenue of the government is increased after registration which outweighs the costs. It clearly indicates that property formalization has positive impact on economic development.

5. ROLE OF LAND GOVERNANCE

The above section shows that registration of property rights has a positive impact on land use, land price, investment and income. As stated earlier, property rights are the rules of the game and the land administration organizations are the players of the game. So, the respondents were also asked about the role of land administration on economic development. An overwhelming majority of the respondents from the selected case study area argued that the land administration functions protect property rights in a number of ways. An overwhelming majority of respondents believe that these organizations protect property rights by surveying and mapping the land, registering land, providing land information, managing land records and by providing required evidences respectively. Similarly, 94 percent of them consider that the role of land administration organizations is higher than that of any other organization in this regard.
The interviewees also opined that good land governance can contribute to the economic development of a country like Nepal. One of the university lecturers argued that efficient land administration fosters the transferability of land and access to credit which in turn increases the revenue required for overall economic development. In his words, “the efficiency of land administration system contributes to the economic development. Transferability of land and access to credit makes the land market perfect then the government can create revenue and helps in overall economic development.”

Similarly, the Secretary of the Ministry of Land Reform and Management presented two-way model of development based on land: in one hand, discouraging fragmentation and provision of optimum holding, commercialisation of land and agriculture, innovative farming and uplifting the living standard of agriculture-based population contribute on Gross Domestic Product (GDP). On the other hand, improvement in the valuation system and the efficiency of land administration services increases the contribution from this sector. In his words, “[…] discouraging fragmentation, provision of optimum holding, commercialisation of land and agriculture, uplifting the living standard of agriculture-based population also contributes on GDP. […] This ministry is contributing to GDP by around 3/4 percent. We are contributing around Rs 5/6 billions in the central treasury and some amounts are collected in the local level as well. If we improve the valuation system and make the services more efficient and commercial, its contribution on GDP would be increased. […] Without giving priority on land, development is not possible.” So, he emphasized on proper management of land.

Likewise, the Director General of the Department of Land Reform and Management opined that progress of Nepal is not possible without the proper management of land, forest and water resources and economic progress will be attained by managing the land records, proper management of land, land valuation, land reform development, classification of land, and implementation of land use and land policy. In his words, “[…] The major source of property of Nepalese is land, it is the place for shelter, growing food and conduct business, and constructing factories, school, hospital, etc. all works require land, water and forest. This country could progress only through the proper management of Jal, Jungle, and Jamin [land, water and forest]. […] With coordination of other ministries and concerned authorities, we can uplift the country by proper management of natural gifts. The door of economic progress of this country may be opened by managing the land records, proper management of land, land valuation, land reform development, classification of land, land use are managed by means of land use and land policy through this ministry and department.”

He further mentioned that if the land administration services can be made more efficient, more revenue can be generated for which full support from the government is required. In his words, “we are now collecting around Rs. 6 billion revenue. If everything is fine, it could be doubled and even tripled. Our staffs would be efficient and provide the good governance, we could provide services from a single door; people would get efficient services, online services could be provided. If the government provided full support, we could achieve such goals within 10 year as mentioned in the strategic plan.” So he emphasized on the role of good land governance and showed his commitment to improve the status of governance.
Thus, from the above discussion, it is clear that efficiency of land administration services is essential for proper management of land resources which increase the production and revenue from one of the economies main asset.

6. JUSTIFICATION AND IMPLICATIONS

The government mainly contributes two things while formalizing property rights and establishing land administration system; firstly, it needs to transfer the land ownership in the name of people; secondly, it requires substantial investment in the adjudication process and land administration functions. Such contributions of the government could be justified from benefits it receives. As discussed earlier, revenue collected from registration fee outweighs the establishment as well as operation costs which can support for other expenditure of the government. Similarly, increase in household income ultimately increases the national income. So investment in land administration functions is lower than the revenue generated by these organizations which supports to economic development. It also supports in local development activities as the land tax collected by local authorities can be spent for the local purposes.

So, the establishment of land administration institutions and the formalization of property rights can be justified from the benefits it provides to individuals, society and the government.

This paper investigates property formalization program in Chulachuli village of Nepal and finds that it has a positive economic impact at the household and national level as well. Other areas of Nepal having similar problems and the countries where the property rights are yet to be formalized can also learn from these findings. Also, other developing countries can learn from these findings.

7. CONCLUSION

The policy of distribution and management of land aims to support the objectives of economic growth and distributive justice. Land administration and associated systems are the mechanisms that translate such policies into practice. The land administration functions provide security of land tenure by means of land adjudication, management and dissemination of land information, and registration of transactions. The evidence presented above clearly show that there is significant change in land use pattern and increase in land value, investment, income and revenue after establishment of land administration institutions and formalization of property rights.

After property formalization, landowners are benefitted from property rights they can enjoy, access to institutional credit and reliance from higher interest rate while borrowing personally, and increased land price and income. Local society will be benefitted from increase in land tax and possible infrastructure development after formalization of informal settlement. Likewise, the government is also benefitted from increased revenue and production which ultimately supported to attain their goal of economic development.
The land administration institutions play crucial role during property formalization, management of land information and registration of transactions. The investment of government in this sector could be justified in these grounds. Its contribution to the achievement of the goal of distributive justice is also a matter of study.

REFERENCES


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