INTRODUCTION

Because of unequal land distribution and increasing populations, land issues have become significant, serious topics, particularly for developing countries. In addition, bad governance has caused land-related problems. Internationally, bad governance in relation to land issues is now considered a burning issue. The World Bank reported that land services were among the most corrupt types of services (15% of users had to pay bribes), following police (24%) and court services (18%).

Indonesia is an agrarian country. Its land-based economy contributes significantly to the Indonesian people’s welfare. It is an archipelago in Southeast Asia, comprising approximately 17,508 islands that spread across the equator. Land systems are the fundament of development reflecting each society’s cultural and social values. The Indonesian Constitution (1945) determined that land (earth), water, and natural resources would be controlled by the State. The resources should be utilized in a manner to ensure people’s welfare. This is achieved primarily through the Basic Agrarian Law (BAL). The BAL forms the legal foundation of many governmental regulations, presidential decrees, ministerial decrees, and so on.

Based on the BAL and the President’s Decree, the National Land Agency (Badan Pertanahan Nasional (“BPN”) was established as the State institution that maintains sole responsibility to register land and guarantee the legal ownership of land. BPN has established a policy to provide community services focused on the management and acceleration of land development. The new policy aims to improve Land Offices’ overall efficiency, productivity, and quality of service to communities in service areas.

The Land Office Computerization (“LOC”) program, a type of community service, was introduced to accelerate land registration. However, BPN registered only one-third of all privately owned land parcels (OECD 2012). This slow progress in land registration has made it difficult for community members to cope with rapid increases in land transactions. It has also caused critical constraints to members’ access to credit and investments.

The World Bank observed that land registration costs have significantly affected the acceleration of land registration, particularly in developing countries. To implement and accelerate the registration process for all land parcels in Indonesia, BPN has attempted to provide a variety of programs designed to fit local needs and conditions. Because costs might become
obstacles to accelerated land registration, some land registration programs did not charge fees for land registration. However, some other projects charged fees. No-cost projects were provided to people who were less able to pay fees.

The agricultural sector has become one of the target sectors of a land titling project developed by the Indonesian National Land Agency (BPN). BPN is an institution that supports poverty alleviation programs, especially in rural areas. Agricultural production helps provide food for the population in both rural and urban areas. However, the agricultural sector has been faced with shrinking amounts of farmland and a lack of working capital for farming. As a result, most people who reside in rural areas are trapped by poverty.

Land titling aims to not only help residents secure land tenure rights but also help invest rights with land as credit collateral. When land can function as collateral, it enhances farmer’s bargaining power with banks. Another purpose of this project is to protect agricultural land scheduled for conversion. Indonesia possesses limited amounts of agricultural land. Land area equals only 0.23 ha per capita, which is equivalent to one-third of the world’s average land area. This amount is similar to per capita land area in Italy and Germany (OECD 2012). The draft version of the Strategic Plan of the Ministry of Agriculture for 2010–2014 estimated that the conversion rate of paddy fields into non-agricultural land was 187,719.7 ha/year between 1999 and 2002. In total, it amounted to 563,159 ha. Moreover, according to an agricultural census conducted by the Ministry of Agriculture (“MAF”), over a three-year period, 600 thousand hectares were converted. One alternative solution to this problem would be the provision of land right titles in the agricultural sector. Because agricultural land newly titled by BPN cannot be converted into different land uses for the next five years, a land titling project might reduce the speed of land conversion.

The provision of land title registrations without charging fees would provide strong incentives for farmers to register their land. In theory, the target number of land parcels to be registered will be easily achieved. However, in practice, the Indonesian project experienced some difficulties. During the first season of the fiscal year, prior to conducting project activities, the Indonesian National Land Agency (BPN) determined the target number of results that had to be achieved annually by the project. For instance, the government expected to register as many as 8,065 land parcels in 2010 and between 23,000 and 25,000 land parcels in 2011.

According to the results of Indonesian land registration activities, 4,146 land parcels were registered in 2009, 22,833 land parcels were registered in 2010, and 17,137 land parcels were registered in 2011. The targets for the expected numbers of registered land parcels were not achieved, and therefore, the program struggled to achieve these targets. The advantage of performing no-charge land registration for an agricultural project was expected to provide a good incentive that would accelerate land registration. However, this expectation was irrelevant a significant gap exists between the targets and the numbers of registrations achieved.

There may be many faults in the land registration process. In Indonesia, the public believes that land services involve very poor, non-transparent, unfair, and unclear procedures (Hamka et al. 2012:182). A study that evaluated the PRONA project conducted in Palu City, Central Sulawesi, revealed that government activities during the land rights registration process failed to achieve maximum effects. Rural communities were unsatisfied with the registration services provided by the PRONA project (Gidion, 2010:79).

This research tried to figure out how is the public satisfaction towards BPN’s service quality in Polewali Mandar district. The objectives of this research are to assess the public satisfaction towards the implementation of this land titling project, and to examine to what extent the relationship between the service quality of Badan Pertanahan Nasional (BPN) and farmers satisfaction in Polewali Mandar.

**RESEARCH METHOD**

This research is the sort of explanatory research with the quantitative approach. It seeks to explain the relationship between variables through hypothesis testing, whereas the data used in general form of the figures calculated by statistical tests.

Hypothesis of this research are:

**a. Hypothesis 1 (H1)**: Assurance, Time, Cost, and Product have significant impact on Public Satisfaction Simultaneously

**b. Hypothesis 2 (H2)**: Assurance, Time, Cost, and Product have significant impact on
Public Satisfaction towards Land Titling Project for Agricultural Sector (Sultrawijaya, et al.)

Data Collection Method

The data used in this study were collected from a survey of farmers who registered their land through an agricultural project conducted in Polewali Mandar, as well as on interviews conducted with BPN officials involved in that project. Eighty-nine respondents from nine villages were interviewed to assess the farmers’ satisfaction levels with the agricultural project.

Data Analysis

The analysis is conducted as Multiple Single Regression and used to determine how the influence of factors provided by the public servant (BPN-RI) on the level of community satisfaction in the implementation of land rights titling. Four factors are defined that affect the satisfaction of community in the implementation of land rights titling are Assurance, Time, Cost and Product Quality. The equation:

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + \varepsilon \]

Where:
- \( Y \) = Public Satisfaction
- \( a \) = Intercept
- \( b \) = Regression coefficient
- \( X_1 \) = Assurance
- \( X_2 \) = Time
- \( X_3 \) = Cost
- \( X_4 \) = Product
- \( \varepsilon \) = Residual

RESULT AND DISCUSSION

Field research was performed in Polewali Mandar because this district was the government’s target area for the agricultural project.

The poverty rate is relatively high. Agriculture is the most important economic sector. In 2011, the population of Polewali Mandar was 401,272. It is the most densely populated West Sulawesi province. Population density in this district equals 198 people per Km². The population conditions in Polewali Mandar District are shown in Table 1.

Table 1. Population Conditions in Polewali Mandar District in 2011

<table>
<thead>
<tr>
<th>No.</th>
<th>Condition</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Population (people)</td>
<td>401,272</td>
</tr>
<tr>
<td>2.</td>
<td>Total number of households (household)</td>
<td>89,092</td>
</tr>
<tr>
<td>3.</td>
<td>Population density (people/km²)</td>
<td>198</td>
</tr>
<tr>
<td>4.</td>
<td>Total living in poverty (people)</td>
<td>84,070</td>
</tr>
<tr>
<td>5.</td>
<td>Population growth rate (%)</td>
<td>1.43</td>
</tr>
<tr>
<td>6.</td>
<td>Average number of family members (people/household)</td>
<td>5</td>
</tr>
</tbody>
</table>


The Gross Regional Domestic Product (“GRDP”) and other economic elements for this district increased gradually, as shown in Table 2 below.

An additional reason for the choice of Polewali Mandar is that the district is a relatively new district created under decentralization policies. Its economic and agricultural development is essential to the establishment of a sustainable and autonomous local economy.

Table 2. Economy of Polewali Mandar District (2009–2011)

<table>
<thead>
<tr>
<th>Condition</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRDP (IDR in billion)</td>
<td>1,297.34</td>
<td>1,428.75</td>
<td>1,567.12</td>
</tr>
<tr>
<td>Income Per capita (IDR in thousand)</td>
<td>7,169.85</td>
<td>8,467.28</td>
<td>9,718.67</td>
</tr>
<tr>
<td>Regional Minimum Wage (IDR in thousand/month)</td>
<td>909</td>
<td>1,006</td>
<td>1,127</td>
</tr>
<tr>
<td>Inflation (%)</td>
<td>10.66</td>
<td>18.45</td>
<td>6.00</td>
</tr>
<tr>
<td>Economy growth (%)</td>
<td>5.41</td>
<td>10.55</td>
<td>9.68</td>
</tr>
</tbody>
</table>

Source: Bappeda Polewali Mandar, 2012.

Until 2012, the Polewali Mandar Land Office had registered only approximately 10% of the District’s area. The Land Office has issued 89,161 land certificates. Meanwhile, agricultural project only conducted in 2010 covered 500 parcels. (as seen on table 3)
In principle, the stages of Agricultural Project implementation are the same phase of the systematic land registration. Procedure / stage of the systematic registration under Article 46 to Article 72, Regulation of Minister of State for Agrarian Affairs / Head of BPN No. 3 of 1997 on the Implementation Regulation PP No. 24 of 1997 about Land Registration. This stage is also applied in the stages of implementation Agricultural Project.

Statistical calculations analysis in this research use SPSS Version 20. level of satisfaction in this study was determined by variable: Assurance, Time, Cost and Product. From the results of data calculation, obtained by multiple linear regression models as follows:

\[ Y = 5.528 + 0.085X_1 + 0.467X_2 + 0.255X_3 + 0.074X_4 + \epsilon \]

Dependent variable in this regression model is Public Satisfaction, while independent variables are assurance (X1), Time (X2), Cost (X3), and product (X4).

There are two hypotheses that would be tested using multiple regression. These test aims to investigate the effect of assurance variable (X1), time (X2), cost (X3) and product (X4) towards public satisfaction (Y), in addition, dominant variable testing will be conducted to know factor that most influence significantly to the public satisfaction.

**Simultaneous Influence**

The result of first hypothesis test indicates that assurance, time, cost and product variable have effect towards public satisfaction simultaneously. Research results support Kotler and Keller (2012) statement that satisfaction not only depends on quality of service but also the utility of the product.

Moreover, this research also verifies Zeithaml-Parasuraman-Berry (1988) asserted that service quality has a significant impact towards public satisfaction.

<table>
<thead>
<tr>
<th>Sub District</th>
<th>Village</th>
<th>Number of Land Titles</th>
<th>Total Area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binuang</td>
<td>Mirring</td>
<td>75</td>
<td>252,844</td>
</tr>
<tr>
<td></td>
<td>Kuajang</td>
<td>50</td>
<td>208,512</td>
</tr>
<tr>
<td>Polewali</td>
<td>Darma</td>
<td>75</td>
<td>262,772</td>
</tr>
<tr>
<td>Matakali</td>
<td>Barumbung</td>
<td>50</td>
<td>184,760</td>
</tr>
<tr>
<td>Luyo</td>
<td>Mambu</td>
<td>75</td>
<td>258,380</td>
</tr>
<tr>
<td></td>
<td>Baru</td>
<td>80</td>
<td>267,435</td>
</tr>
<tr>
<td>Wonomulyo</td>
<td>Bumiayu</td>
<td>45</td>
<td>121,506</td>
</tr>
<tr>
<td>Campalagian</td>
<td>Katumbangan</td>
<td>30</td>
<td>194,957</td>
</tr>
<tr>
<td></td>
<td>Botto</td>
<td>20</td>
<td>92,526</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>500</strong></td>
<td><strong>1,848,692</strong></td>
</tr>
</tbody>
</table>

Source: Land Office of Polewali Mandar, 2011.

Time variable’s mean is the lowest one, while the product is the highest one. It is indicates that benefits of the product is the most prominent activity, at the same time, time factor in the implementation of this project should be improved compared with other factors in the implementation of this land titling project in Polewali Mandar regency.
Partial Influence

The result of second hypothesis test indicates that all independent variables, has effect towards public satisfaction not only simultaneously, but also partially.

Table 6. Hypothesis (H2) Testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assurance (X1)</td>
<td>t = 3,094</td>
<td>Accepted</td>
</tr>
<tr>
<td>Public Satisfaction (Y)</td>
<td>t_{table} = 1,663</td>
<td>Partially</td>
</tr>
<tr>
<td>Time (X2)</td>
<td>t = 7,794</td>
<td>Accepted</td>
</tr>
<tr>
<td>Public Satisfaction (Y)</td>
<td>t_{table} = 1,663</td>
<td>Partially</td>
</tr>
<tr>
<td>Cost (X3)</td>
<td>t = 3,889</td>
<td>Accepted</td>
</tr>
<tr>
<td>Public Satisfaction (Y)</td>
<td>t_{table} = 1,663</td>
<td>Partially</td>
</tr>
<tr>
<td>Product (X4)</td>
<td>t = 1,817</td>
<td>Accepted</td>
</tr>
<tr>
<td>Public Satisfaction (Y)</td>
<td>t_{table} = 1,663</td>
<td>Partially</td>
</tr>
</tbody>
</table>

Source: Author (Based on Data Research)

a. Assurance

Assurance variables have a significant positive effect to the public satisfaction variable. This is in line with Zeithaml et al. (1990) statement that assurance factor, knowledge and courtesy of employees and their ability to inspire trust and confidence, influence public satisfaction. Other researchers, Mittal and Lassar in Bougoure & Lee (2009) state that personalization assurance, which refers to the social content of interaction between service employees, and their customers determined community satisfaction. Farmer relatively agree that officers who conduct this land titling project have competence and ability to run their job, and they are polite and courtesy, although some of farmers neutral with this statement. In the phases of elucidation, collecting physical data (Survey, Measurement and Mapping of Land Parcels), collecting and checking juridical data and issuance of land rights title, respondents tend to agree that officers are trustworthy when conducted these activities. In the activities deal with conversion affirmation, recognition of rights, and entitlements, recording rights, respondents tend to abstain in their statement. This opinion due to they don’t know exactly what should officers do in these activities. they believe that BPN officers are trained one. However, they feel ashamed if they come to land office to ask their land title, the only asked in village office.

b. Time

Time variables have a significant positive effect to the public satisfaction variable. Giannocarro et al. (2008) explanation that times influence public satisfaction. Community tends to be satisfied with service given by BPN. It contradicted with previous research conducted by Gidion (2010). He stated that the time needed to carry out land registration activities for too long.

Time was detected as dominant factors towards public satisfaction. However, this variable has the lowest mean among other factor in this regression model. Farmers do not know the exact standard operation procedures in terms of time completion in many phases of land titling project. However, some farmers said that in this land titling project, the completion time relatively faster than when they register their land sporadically.

Elucidation is the only phase that most farmers agree that conducted accordance with the schedule. For other activities, there are contradictory answer between village that relatively close to land office or capital city and village located in remote area. The first village relatively agree that these activities conduct properly and punctually accordance with definite time. However, the latter stated that officers always delayed these activities with various reason, namely they have to run same activities in another village, they still waiting for the equipment of this activities. Precisely in collecting juridical data, farmers have to add their data several time. This is because sometimes they filled the form incorrectly or insufficiently.

The land titling project delayed from due date, especially in collecting physical data (Survey, Measurement and Mapping of Land Parcels) because of lack of field equipment and field workers in conducting surveys and measurements. Farmers application also became of the causes why these land title activities delayed. Sometimes farmers have the different name between their identification card with the name in the applicant list. When officers request them to add another legal data, sometimes they refuse and asked the officer to change the data directly. By all means, it can be done because a land title is a legal product, each information on this land title must be supported by legal data. This case usually happened in village in the remote area.

On the stage of recording rights, some farmers assumed the time required to complete this job is too long. This is because some-
times they want to trace when their land rights might be completed, but officials could not give definite time. This activity requires the accuracy and precision, therefore requires a relatively long time. Lack of employee is still a major problem of this activity because employees have to do the double job.

On the stage of issuance of land rights title, some farmers assumed that time needed to complete this activity is too long. Interval between collecting data, both physical and juridical, and issuance of land title takes many months. Whereas collecting data conducted in the beginning of the years, Apparently, they obtained their land title at the end of years. Some village even received their land title in the thereafter year. They believe as long as officers implement these sequence chains correctly, they can receive that title earlier.

Still, lack of employee is a main problem of this activity. Amount of officials does not fit with the workload. Delays in paying local retribution, e.g BPHTB (Bea Perolehan Hak Tanah dan Bangu-nan), also is the reason why this activity conducted behind the schedule.

Obviously, Land titling project is a sequence chain activity, therefore, delayed in one activity will be results in overdue of the next activity. Therefore, issuance of land rights titled has the lowest mean because it is the accumulation of the delayed time in each project activity.

c. Cost

Cost variables have a significant positive effect to the public satisfaction variable. This statement supports Hanif et al (2010) who claimed that customers satisfied can be reached through charging fair tariffs. This land titling project is systematic one, so farmers no need to pay in this project.

Farmers tend to be satisfied with service given by BPN. It contradicted with previous research conducted by Gidion (2010). He stated that communities have to spend money to finance these activities, when these activities should be free of charge.

Farmers have to pay to village officers to register their name in the land titling project candidates list. Even tough this activity is free of charge and BPN forbids to charge payment for farmers. There is a punishment if they break the rules.

From the sequence chains of land titling project activity, apparently, elucidation is the only activity that farmers believe that it is free of charge activities. no one answered this statement with disagree in this activities.

Farmers answered deal with physical and juridical data announcement, and validation and conversion, affirmation, recognition of rights, and entitlements, also in recording of rights activities tend to abstain because farmers do not understand the cost of these activities. They paid in a small number and in order to be thanked. They think if they gave them money, the process could be faster than if they do not.

Some respondents have to pay to officers who conducted collecting physical data for buying cigarettes, and sometimes for cost of transportation because their office did not give them money for it. It has become a habit for the community to pay extra money for BPN officers when implemented this activity, because they believe if they do not pay, this activity could be slowly.

Hamka et al (2012) statement about Ethics Issues on Land Services Reformation in Indonesia argued that land service reform in Indonesia was not going well. Ethics is only limited as a discourse or just written in the law books. No implementation of principles of ethics such as transparency, accountability, and justice are always complaints by the people who deal with the land office.

However, a number of complaints in this project relatively lower than when they registered their land in sporadic ways. They believed in this land title project the cost of this project is cheaper than in sporadic one. Other factors that should be highlighted in this project are no reduction for local retribution, e.g. BPHTB. It makes peasant and poor farmers hard to register their land because they cannot pay this payment.

d. Product

Product variables have a significant positive effect to the public satisfaction variable. Lupiyadi (2001) states that product quality is one of major factor to determining level of satisfaction. Finding of this research also reinforce Placed and Adholla (1998) statement that Registration of land is more influence on security of land tenure rather than increase productivity. Most farmers strongly believe that land title gives security effect for their land. However, they tend to abstain with statement that land title increase their productivity. They assumed that land title have weak impact with their productivity and job opportunity. They argue that land title has a
weak impact towards productivity. In line with job opportunity, they tend to abstain in this point because some farmers argue that government servant is wealthier than a farmer. They sent his family members to get education hopefully they can work in another field of works, being a farmer is just a last option.

Moreover, farmers believe that they can get loan in order to increase their productivity and investment in land, in fact, their land title have not used properly. They only save their land title or certificate in their house and become sleeping assets. Another finding should be highlighted in this research is apparently, the recipients of this land titling project are not small-scale landholder farmers or peasant, whom this land titling project should be addressed. Some of the respondents are not farmers. Farmer only their side jobs or lease out or farming out their land.

Furthermore, land market and land value also the strong reason why farmer wants to register their land. They argue that if they want to sell they land, the buyers always ask whether their land has title or not. this land title also increase its price.

However, farmer still treats land title as ‘sleeping assets. They did not use their land title to get some loan, but they only keep their land titled in their house. It can be indicated that land reform purpose was fulfilled, but the assets’ reform did not run well.

This land titling project is one of BPN efforts to avoid agricultural land use conversion into another form of land use. However, there is an obstacle in this purpose because West Sulawesi did not have spatial planning yet. This means that some land registrations could not be implemented.

**Dominant Factor**

Compared with other variables, time variable is the most significant variable that influenced in public satisfaction. Giannocarro et al (2008) mentioned that “Timely delivery of requested service” as the most essential factor that influences their satisfaction with a received service. The performance level of this driver, consequently, must be maintained or improved.”

Although the value of the time variable mean is the lowest one (3,19), in fact, punctuality in the land titling process is more effective to give the principal contribution in the form of Polewali Mandar people’s satisfaction compared with other variables. Therefore, the precision of time should be the primary consideration by the NLA in order to improve community satisfaction deals with the implementation of land titling project in Polewali Mandar.

**CONCLUSION**

The conclusion, then, services provided by the government to the public in the activities of land titling project for agricultural sector is relatively maximized. Communities are relatively satisfied with the services provided by land registration officials in the implementation of land titling through agricultural project.

Moreover, all variables, namely assurance, time, cost and product variable has the effect towards public satisfaction not only simultaneously, but also partially. And time variable is the substantial one. Important factor in land titling activities are: served by competence and courtesy officials, a clear procedure, definite time and affordable cost.

Furthermore, community believed the benefits of the product. One of them increase their productivity by using their land titled as collateral to get some loan from financial institution. However, farmer still treats land title as ‘sleeping assets.

The main weaknesses of this study that need attention for similar research that will be done is relates to samples size. Another limitations are, (1) the results of this study cannot be generalized across another regency in Indonesia; (2) the results of this study may not have been representative of the whole population, due to a simple random sampling method was used to collect the data; (3) the study is only limited to Agricultural project and cannot be generalized across the different land titling project.

**Suggestion**

In the framework of the implementation of effective land titling project and efficiently, some recommendation are:

1. Land titling project for agricultural sector should be addressed for peasant or small-scale land holder in order to empower them to support their business.
2. Land titling for agricultural sector should be conducted continuously and sustainably. Additional budget for this program in order to increase the number of land that will be titled in this project seemingly needs to be done.
3. SOP should contain detail information in terms of cost and time consuming in each phase of land titling process. Moreover, the
implementation of Land Office Computerization (LOC) must be implemented properly.
4. The provision of reliable equipment to support the land rights registration officer in carrying out the activities of registration of land rights.
5. Last but not least, spatial site plan for West Sulawesi should be identified.

ACKNOWLEDGEMENT

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[7]. Head of BPN Instruction, Number 1, 2011 with respect to Standards of Land Service and Arrangements.


