

# Transparency as a Solution for Uncertainty in Land Privatization - A Pilot Study for Mongolia

Naranchimeg BAGDAI, Mongolia, Anne van der VEEN, Paul van der MOLEN and  
Arbind TULADHAR, the Netherlands

**Key words:** Land Privatization, Transition, Uncertainty, Transparency

## ABSTRACT

Land privatization has been initiated in many transition countries, to provide individual land ownership rights to citizens, in order to enhance access to land, which also facilitates a socio-economic development of the country. However, such markets do not emerge automatically; it requires a transparent institutional and legal infrastructure that is still lacking in land administration, because of uncertainty. The critical question in this paper is how to respond to such a high level of uncertainty and how to reduce it.

This paper reviews the theory of uncertainty, which leads to a novel conclusion that the transparency is the key to understand uncertainty and it is a solution for the implementation of the land privatization law successfully under uncertainty. A pilot study in Mongolia investigated that the current processes for land privatization are incomplete and slow, with many steps, lack of coordination between stakeholders and considerable duplication. We found that the degree of uncertainty, as experienced by citizens and officials is high, which hampers a successful implementation of the new land privatization law.

An analysis of ‘transparency’ reveals that two elements are crucial for process design: access to information and participation, while the existence of corruption is considered as an indicator when transparency is missing. We hypothesized that “*Transparent processes can promote an effective implementation of land privatization law under uncertainty*”. As many countries face uncertainty with respect to land privatization processes, approaching uncertainty through the key-elements that constitute transparency is an important for them, as it is for Mongolia.

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## 1. INTRODUCTION

Modern land administration systems in developing nations should facilitate in achieving Millennium Development Goals (MDGs) as proposed by the United Nations (UN)<sup>1</sup>. Issues such as tenure security, pro-poor land management, and good governance in land administration are all key issues to be advocated in the process of reaching such goals (Enemark 2007). Transition countries are facing a wide range of uncertainties in the establishment and implementation of land administration systems to achieve these goals. In general, much of the uncertainty exist where transparency is missing (Walker, Harremoes et al. 2003; Hood and Heald 2006). One of the ways to deal with uncertainty is increasing transparency and it is an innovative approach to respond to uncertainty (Cooney and Lang 2007; Schultz 2008).

Globally, international bodies such as GTZ, UN/ECE, UN/HABITAT, FIG, ADB and practitioners in general have recognized that the development of transparency is an essential tool to improve effectiveness and efficiency of land management/land administration systems in developing nations. Many researchers have stated that transparency is a vital condition for the allocation of resources (Bellver and Kaufmann 2005; Hood and Heald 2006) and that lack of transparency in privatization process can lead poverty and inequality (Nixson and Walters 2006). This argument is fundamental to implement the land privatization law successfully under uncertainty (Deininger 2003; Swinnen and Vranken 2005; Ho and Spoor 2006; Lerman and Shagaida 2007). However, so far, little rigor analysis on how transparency have affected land privatization when uncertainty is involved.

The purposes of this study were to: develop a research hypothesis and identify the key elements and indicators to test this hypothesis. In this context, the paper first discusses theory on uncertainty and transparency to find out their relationship, which is fundamental to identify specific key elements with respect to transparency such as access to information, participation and corruption. The existence of corruption regarding these processes can be considered as a secondary element of lack of sufficient transparency. In result, a research hypothesis is developed as follows: *“Transparent processes can promote an effective implementation of land privatization law under uncertainty”*. Secondly, current legal and institutional aspects in Mongolia are analyzed to support the development of research hypothesis empirically. This paper argues that transparency supports the improvement of effectiveness and efficiency of the implementation of land privatization and the reduction of uncertainty on the emergent phenomenon by developing new processes on land privatization within –for Mongolia- the context of the National Land Information System (NLIS) conceptual model. Finally, the

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<sup>1</sup> <http://www.un.org/millenniumgoals/>

specific indicators are developed, which can be the rationales to be used to test the research hypothesis.

## **2. THEORETICAL BACKGROUND**

Uncertainty is a well known concept in information system research (Arun and Hindi 2000) and also in other disciplines, such as water and natural resources management (Asselt 2000; Refsgaard, van der Sluijs et al. 2007), engineering system planning and design and in decision-making processes (Walker, Harremoes et al. 2003). Land administration practice, like other disciplines, must also recognize rigorously that much of the uncertainty negatively affects the success of information systems and processes. This section provides a general theoretical background on uncertainty and transparency, and their relationships. Furthermore, a discussion of the findings leads to the main issues of access to information and participation, which appear to be the key elements to describe transparency for the implementation of land privatization under uncertainty. The problem of corruption is then discussed as another element that is a negative impact of non-transparency, but that at the same time enhances the uncertainty level.

### **2.1 Uncertainty and transparency**

In general, much of the uncertainty exist where transparency is missing (Hood and Heald 2006) and there is a demand to increase transparency in decision-making processes when uncertainty is involved (Walker, Harremoes et al. 2003). The definition of uncertainty varies among different scientific disciplines and varies depending on their discipline (Refsgaard, van der Sluijs et al. 2007). However, in complex, interdependent decision-making environments, - such as land administration- there is always considerable uncertainty (Walker, Harremoes et al. 2003). Particularly in transition countries, uncertainties might increase in terms of complexity of institutional arrangements and changes, legal and technical issues in relation to land rights and –in Mongolia- NLIS. Barry (2002) explains that in those countries land management (e.g. the cadastral system) is implemented in an uncertain, changing situation and has to serve within a complex social, political, legal, physical, technological and economical environment. Moreover, Barry proposes to analyze the cadastral systems in uncertain situation by using soft system approach as he did in South Africa. However, the question how to deal with a high level of uncertainty in land administration systems still remains unsolved.

Schultz (2008) and Kristin (2006) argue that increasing transparency is one of the ways to deal with uncertainty and it is innovative approach to respond to uncertainty. Kristin (2006) emphasizes that greater transparency related to the availability of perfect information, which leads security and decrease the livelihood of conflict by reducing uncertainty. That means security is also an important factor when private property concept is introduced in transition countries under uncertainty. In addition to these challenges, Schultz (2008) argues for “adaptive collaborative management in forest policy”, in which agencies and public work together to set goals when there is scientific uncertainty; and such involvement of the public would greatly increase transparency and serve trust between scientists, the public and decision

makers. Although, Dillen (1998) and Geraats (2006) highlight that transparency has become one of the main features of monetary policymaking during the last decade, and it reduces uncertainty, which leads to a more efficient policy and better service to citizens providing more information. Notably, a character of uncertainty in land administration is very similar with ‘epistemic’<sup>2</sup> uncertainty. This kind of uncertainty includes limited and inaccurate data, incomplete knowledge, measurement errors, imperfect models, and subjective judgment (Cooney and Lang 2007) and it is reducible by more studies, comprising research and data collection (Refsgaard, van der Sluijs et al. 2007). However, theory shows that there is a strong relationship between uncertainty and transparency.

“What is transparency then”? Transparency is a mixed and complex concept and difficult to deal with. However, for this paper, “transparency” is considered as a concept that all decisions and land information are available to the general public and the increase of the clarity about government rules, regulations, decisions<sup>3</sup> and procedures. Bellver and Kaufmann (2005) argue that the idea of transparency is that it improves the allocation of resources, makes government more accountable, undermines the power of special interest, and thus leads to improvements in their policies and institutions. Many researchers highlight that transparency is a vital concept for the allocation of resources (Bellver and Kaufmann 2005; Hood and Heald 2006), which is fundamental to implement land privatization law successfully (Deininger 2003; Swinnen and Vranken 2005; Ho and Spoor 2006; Lerman and Shagaida 2007). However, the complexity of current incomplete processes and ambiguous strategy has given a high impact to the implementation of new laws in opaque systems with uncertainty. Land administration systems are therefore, required to be transparent in terms of tenure security, equal distribution of land, accuracy, quality, timeless, correctness and consistency of land information as available for all users and other stakeholders.

Building on these results in social science, this paper argues that a transparent system including processes and data can promote an effective and efficient implementation of land privatization law under uncertainty. This leads to the novel conclusion that in general the approach to reducing uncertainty in land administration is through the concept of transparency.

## **2.2 Access to information and disclosure**

Piotrowski (2007) argues that individuals differ in their level of demand for transparency and vary with which information they want to access. However, it is difficult to measure the demand for transparency. A general principle of transparency indicates that access to information is essential to the allocation of land resources. Deininger (2003) states that information accessibility plays an important role for the successful implementation of a land privatization law, and for example it is obvious that -in terms of tenure security- landowners and possessors should have the right to access their property information held by land offices. Another issue is how to legalize the right of access to information and how it can be guaranteed by law. Bellver and Kaufmann (2005) state that countries, which adopted the

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<sup>2</sup> See definition from Warker (2003) and Refsgaard (2007) for more information on “epistemic”.

<sup>3</sup> <http://www.transparency.org>, last accessed in November 2008.

Freedom of Information<sup>4</sup> (FOI) laws, are the ones where citizens enjoy greater voice and are able to demand the enforce of such laws and vice versa. A similar argument has been put forward by many researchers (Rosset 2001; Cashin and McGrath 2006; Lerman and Shagaida 2007) namely that the land market requires reliable, transparent information; and -in the past-even restrictions on land use and ownership have not been transparent.

## **2.3 Participation**

Institutions are the humanly devised constraints that structure human interaction (North 1990) and legitimacy is attained when legality, participation and representation is guaranteed (Veen 2006). Tuladhar (2004) has emphasized that institutional arrangements, cooperation and communication between organizations and other concerned parties, are a key issue for the development and implementation of new processes. Participation encourages high interactions between various parties involved in carrying out the processes with certainties for the emergent results and encourages increasing transparency. When many stakeholders (including citizens) are involved in the processes, interaction and coordination between them and their role is important in order to make the processes more transparent and effective. However, the land privatization activities involve many government organizations, private sectors and citizens; and participation is an essential issue for implementation of new land privatization law in a successful way. North (1990) states that institutions reduce uncertainty by providing a structure of everyday life. As stated in the Bogor Declaration (1996) the linkage and coordination between authorities, which are responsible to maintain records on the ownership, value and use of land, is extremely important.

## **2.4 Corruption**

The practical experience in many countries is that corruption exists where there is lack of transparency and by consequence it creates more uncertainty. There is a strong relationship between transparency and corruption. History shows that it is intricate to distinguish between these two issues. Transparency, integrity, anti-corruption in the land sector needs more attention and possible measures should be tested in real life situations (Molen and Tuladhar 2007). Corruption becomes powerful especially when the private property concept is introduced in opaque environment. Moreover, UN-HABITAT (2007) observes that land offices are amongst the most corrupt institutions in most countries that lack of transparency<sup>3</sup>. There is strong perception at international level that transparency in government decision making and public policy implementation reduces uncertainty and can help inhibit corruption among public officials. Unfortunately, corruption is increasingly prevalent in Mongolia and reared its head in the process of privatizing public land (USAID 2005). By consequence, land rights are allocated in a highly non-transparent mode.

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<sup>4</sup> See [www.freedominfo.org](http://www.freedominfo.org)

### **3. STUDY AREAS AND METHODS**

In order to come to grips with the situation in Mongolia, a specific research design was a qualitative in nature. Qualitative research methods are designed to help researchers understand people and the social and cultural context in which they live and such approach helps to understand the context of land information systems and processes (Avison and Fitzgerald 1988; Myers 2002). Principally, research hypothesis developed from theory (Babbie 2003) on uncertainty/transparency, and it is supported by empirical data. A pilot study was carried out in Mongolia end of the year 2007. Its aim was to support a research working hypothesis as well as indicators with empirical evidence. Mongolia occupies an ecological transition zone in Central Asia where the Siberian taiga forest, Central Asian steppe, the Altai Mountains and the Gobi desert meet. Mongolia has a land area of 1.567 million square km with an estimated population of 3.0 million people. In this research, three main study areas were selected at different administrative levels: a) National level; Ulaanbaatar city; b) Provincial level (called ‘aimag’); Ovorkhangai aimag (central part of Mongolia); and Municipal level (called ‘soum’); KharKhorin soum (within Ovorkhangai province).

An analysis was carried out from different sources: literature review, documents, archival records, interviews, and direct observations, and supported with other sources of evidence such as newspaper and internet. Extensive literature survey was done to find out the relationship between the concept of uncertainty and transparency. In order to know landowners and possessors perceptions of land privatization law, collection of data at different administrative level was pursued. In addition, qualitative interview was held with 17 heads of provincial land offices out of 22 local provincial land offices, which is supported by “Cadastral survey and land registration” ADB project. Although, we have managed to collect a relevant statistical data and information on the implementation and progress of land privatization law in Mongolia, by help of land privatization specialists of ALAGaC. The general question for the interviews with land owners and possessors at different administrative level was “Are you satisfied with the land administration service?” In total 395 landowners and possessors responded to this question at national, provincial and municipal level. The result of analysis assisted in better understanding of the perception of landowners and possessors on emergent phenomenon and how current land administration services behave to the new land privatization law.

### **4. ANALYSIS AND RESULTS ON LAND PRIVATIZATION IN MONGOLIA**

In this section, the results of the pilot study are presented to show the general state of the implementation progress of land privatization with respect to the legal and institutional issues and to find out is there any complexity to implement the law successfully.

#### **4.1 Legal issue/Implementation progress of Land Privatization Law**

Land privatization has been a fundamental part of the radical restructuring of social, economic and political institutions during the transition from central planning to market oriented

economies in Central and Eastern Europe as well as in some African, Asian and Latin American countries (Deininger 2003). Mongolia is not the only case. The major problem is how existing land administration systems should be able to cope with the new legal arrangements, especially when the system is complex. A transparent system and procedures on private land property rights is valuable to the citizens and vice versa. In this line, Nixon and Walters (2006) investigates the implication of land privatization to a society such in Mongolia and how the emerging pattern of poverty and inequality has been changed through privatization. He concludes that in any future mass privatization, for example, the privatization of land, a very much higher priority must be given to transparency. The process of transferring from planned-economy to market-economy requires extensive land market development and the introduction of private land ownership. Therefore, in the case of Mongolia, the government believes that the land law reform, especially the creation of private land ownership, would lead to better economic development and better livelihood for its citizens. The government of Mongolia has given a high priority to strengthening the land reform policy, by extending rights of land, creating legal conditions that give guarantees to citizens, economic entities and organizations to own, possess and use land, as well as to attract foreign investment. Understanding of a private ownership concept by Mongolians has been a new phenomenon, after a long history of socialist regime. One of the key elements within the land reform policy is land privatization. A new Land Law was introduced to the Mongolians in 2002, with the purpose of expanding rights for possession (GOM 2002). Within the concept of the new Land Law in order to regulate land ownership, the Mongolian Parliament approved a Land Privatization Law in June 2002. In result, the number of private owners is increasing in all levels, but its economic circulation or use is not efficient and hence privatization has not succeeded to the level that government expected (Batsukh 2005). Land shall be allocated to Mongolian citizens for the following purposes and sizes (Table 1): for family purpose; and for commercial purpose (not for pasture land).

#	Location	Size of land / ha /
1	Capital City	up to 0.07
2	Centers of aimags	up to 0.35
3	Center of soums or villages	up to 0.50

**Table 1;** Size of land to be allocated to citizens (GOM 2002)

The law allows every Mongolian family (not individual citizens, see hereafter) together, to own a piece of land free once in their life for their family purposes. Companies, other legal entities, such as profit or non-profit entities, non-Mongolian or business entities with full or foreign investment, cannot own land in this Law. The most recent government decision made in May 2008, however, extended the duration of the family-privatization process up to 5 years with a remarkable change that now every individual Mongolian citizen can own a small piece of land. In this regard, every member of family has right to own a piece of land. Due to the lack of proper land use planning, there is no information available to potential landowners, where the possibilities are for owning a piece of land. Quantitative data collected during the pilot and the number of registered lands as a property, indicates a slow process of land privatization. Only 31% of the estimated number of families obtained the required governor decision on the allocation of private land at national level. At the city level, only 20% of the

total estimated private lands are registered as property by end 2007. In total 558,065 families were recorded as private land owners for family purpose, and statistics of 2007 show that in total 174,016 families obtained governor decision during the last 5 years and out of this number only 22,274 family lands were registered as private property. The registered number of private properties is too low to indicate land market developments in Mongolia.

*Interview with officials, land owners and possessors in different administrative level*

The results of interviews demonstrate that in -comparing with local level-, a complicated, bureaucratic land administration system exists in Ulaanbaatar<sup>6</sup> (UB). During the pilot study, we observed that people or citizens are exhausted to visit land related offices in UB city. Land officials and landowners indicate that the lack of advertisement on the implementation of land privatization law. There is not sufficient publicity and information available on procedures and land privatization activities to make people understand the significance of ownership of land right in the future. Interviews with local officers show that land privatization activities are going slow, particularly at the local level. They expressed that there are no specific guidelines to implement the law at the local level. The major question is described in Table 2. In the municipality level 91 (53%) landowners and possessors were satisfied in great and moderate level with the existing land administration service, but that it is only 33 (28%) in city level. The result summarizes that landowners and possessors are generally less confident 'not satisfied' with the current land administration service (about 62%).

**Table 2: Are you satisfied with land administration service?**

			Are you satisfied with land administration service?			Total
			great extend	moderate extend	not happy at all	
level of observation	National level	Count	4	29	84	117
		% within level of observation	3,4%	24,8%	71,8%	100,0%
	Provincial level	Count	14	14	78	106
		% within level of observation	13,2%	13,2%	73,6%	100,0%
	Municipality level	Count	7	84	81	172
		% within level of observation	4,1%	48,8%	47,1%	100,0%
Total		Count	25	127	243	395
		% of Total	6,3%	32,2%	61,5%	100,0%

#### 4.2 Illegal distribution of land under possession right

When the first Land law was passed in the Mongolian Parliament in 1995, well informed people started to fight for large pieces of land on a good location. Land grabbing greatly accelerated after the land privatization law came into force in 2003. Unfortunately, government is managing land allocation process in a "non-transparent" fashion that is undermining their stated goal (Myers and Peter 2004). Now -in UB city- it is difficult to possess or use a piece of land for commercial purposes or for summer cottage, because most of the valuable land is already occupied. For example, playgrounds for children, green areas, sport areas for the schools, and common lands do not exist anymore and they have been replaced by constructions such as bars, night clubs, restaurants, hotels and apartments. This

creates violation of civil rights. For the ordinary citizens, the procedures for applying land, where and how much is still not clear. Some examples illustrated below to show the current status and what the nature of the conflicts between people and organizations are in real life situation. Figure 1 shows illegal size of land in peri-urban area. It is very common to see now large empty fenced pieces of land in Mongolia. The next example demonstrates a conflict between a Korean company and the local citizens at Gachuurt settlement area. It is not clear how the Korean company managed to obtain 50 ha land illegally to build a golf course area near a source of drinking water for UB city. Local people established “Gachuurt” movement



**Figure 1;** A large piece of illegal land in the peri-urban area of UB city

against this action in order to protect the beautiful nature of landscape. The Ministry of Nature and Environment (MNE) approved temporary decision to stop the activity of Korean company at Gachuurt area. The “Gachuurt” movement stated that if the related organization will not make any right decision on that matter, they will move to the next step of protest. Figure 2 shows the result of a conflict between the city property office (CPO) and the ecological education centre (EEC). In 1990 when the CPO allocated the land to the EEC the parcel was 40 ha, but during the last 18 years it has been reduced to 0.9 ha. The process is still uncertain for them how it is done.



**Figure 2;** Land conflicts

#### 4.3 Organizational issue/Agency of Land Affairs Geodesy & Cartography (ALAGaC)

Even when the technical and legal aspects are well taken care of, bad organizational arrangements will still be a great problem (Zevenbergen 2002). Well defined institutional frameworks are the key to success or failure of privatization programs in transition (Simoneti,

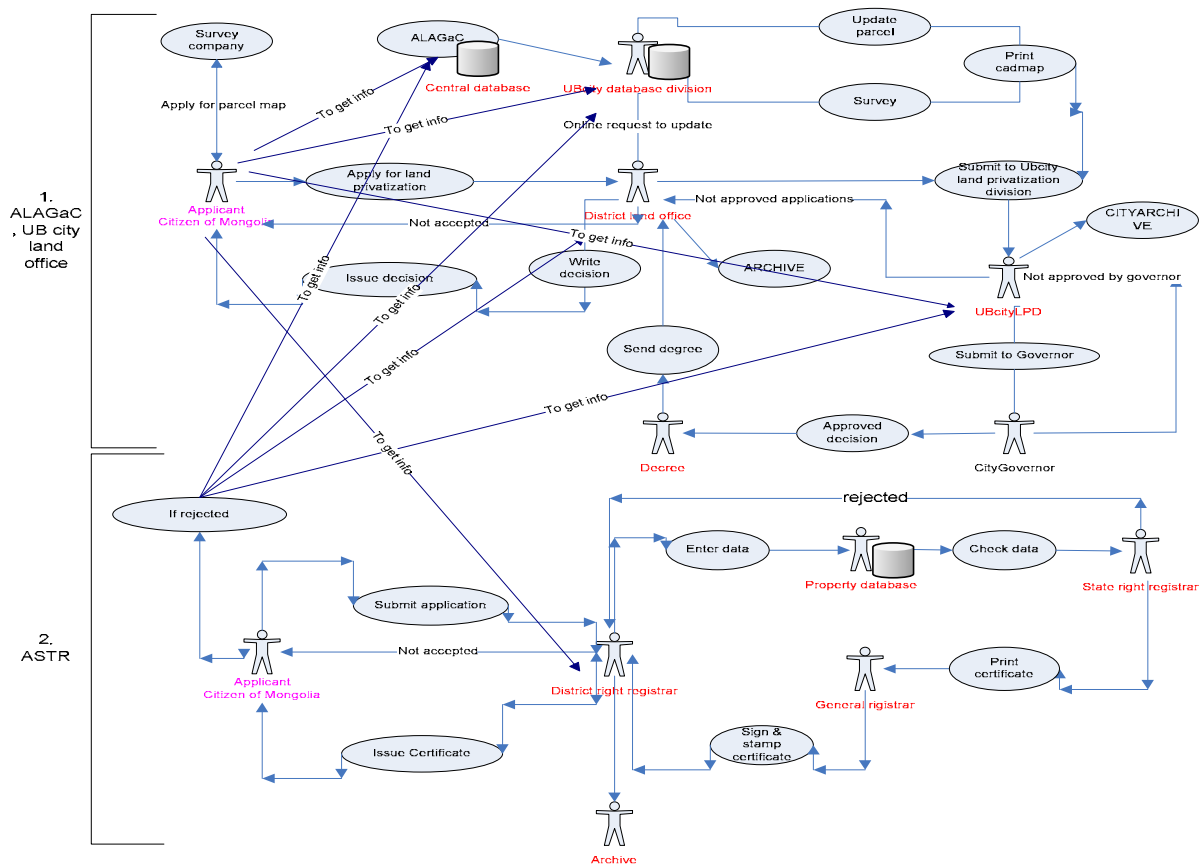
Damijan et al. 2005). Institutional problems were also among the most difficult to resolve in the establishment and maintenance of the NLIS in Mongolia (Bagdai 1999). Three ministries have been involved with the land administration activities: the Ministry of Nature and Environment (MNE), the Ministry of Infrastructure Development (MID) and the Ministry of Justice (MOJ). At the beginning of 2002 -in order to implement the new Land Law and Land Privatization Law-, the Government took a decision to improve land related organizational structures. The ALAGaC was established according to the Decree No162 of the Government of Mongolia dated August 14, 2002. There are considerable advantages in having main functions (land management, geodesy and cartography, real property registration) administered by a single agency. Unfortunately, the new agency of ALAGaC was reorganized again after three years, because a new Governmental decision taken in August 2006 regarding to the ALAGaC; the property registration department became separated from ALAGaC and again became an independent agency called State Registry of Titles (ASRT) under the MCUD. History of organizational changes shows that institutional issue is uncertain in Mongolia. In addition, land organization ranks in third from 15 top governmental organizations in Mongolia by level of bureaucracy<sup>5</sup>.

#### 4.3.1 Land privatization process in UB city

A citizen can apply for privatization by making an application on the appropriate forms with related documents to the land division of their local land district or soum office to get a “governor decision”. Citizens go from one office to another with documents in hard copy and it might be changed -parcel map- by request of different organizations. The majority of people

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<sup>5</sup> <http://www.olloo.mn/>, in total 1311 citizens voted by time accessed in December 2008

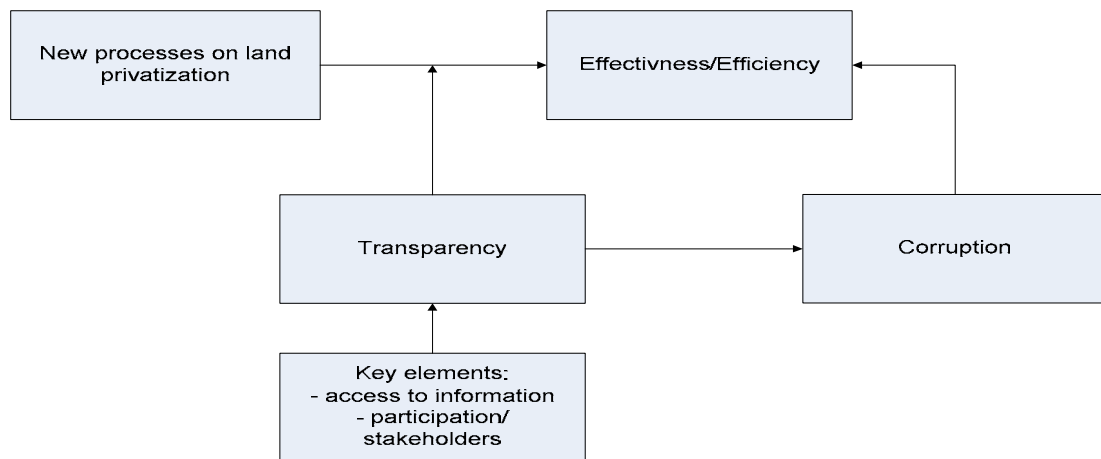


**Figure 3;** Privatization process at UB city (by year 2007)

are a land possessor, who hold a small piece of land under possession right and the law allows transferring their possession right to ownership right that can be used as collateral. During the pilot we observed that the land allocation process is not clear for citizens, because dependent on purpose and subject there are different steps and procedures. As an example, the registration process of land ownership right for a family purpose by a citizen at UB city is illustrated in Figure 3. The first big step is to get a “governor decision”; next one is to register land rights at ASRT. The land allocation process is not clear for citizens and the lack of land use planning makes potential landowners exhausted of their visits to all the various land offices, in order to acquire a small piece of land for ownership “where and how and how much”.

## 5. FINDING EVIDENCE FOR REDUCING UNCERTAINTY

The above pilot study shows that the transparency/uncertainty moderates the relationship between new land privatization processes and effectiveness and efficiency of the land administration system (Figure 4). Specified indicators within the key elements access to information, participation/stakeholders and corruption to assess level of transparency with respect to land privatization described below in detail with following indicators.



**Figure 4;** Research model

*a) Access to information*

The main goal of the element is to assist in the understanding of the complexity of the existing situation in more specific indicators in terms of time, procedure and information availability for landowners and possessors and how land rights are secured in relation to the implementation of land privatization law in Mongolia. In addition, information should not only be available to the public, but it should also be accurate, complete, and of good quality. The element on access to information will cover the following indicators:

- 1) information availability for the landowners and possessors to own or possess piece of land from land office (how, where, how much);
- 2) citizens have a right of access to own (personal) parcel information;
- 3) steps of existing procedures in order to privatize and to possess land (transaction time, cost and bureaucracy);
- 4) administrative procedures (technical) and organization supporting openness (service standard, archive, register, information services and digital services);
- 5) providing information to the public/publicity ;
- 6) accuracy and quality on land information;
- 7) human and technical capacity in relation to the service;
- 8) policy or legal document on the provision of access to information;
- 9) and land disputes and appeals situation and procedure (some additional statistical data will be collected to find out proportion of land disputes in court cases).

*b) Participation/Main stakeholders*

The aim of this element is to find out who the related users and stakeholders are and what their demand and supply of land information in relation to the development of new processes on land privatization; and help to come across there is any complexity or difficulty between ALAGaC and other stakeholders. The following indicators of the participation are listed below:

- 1) the identification of stakeholders at different administrative levels;
- 2) the main role of stakeholders in land privatization process;
- 3) land information demand for daily service (which kind of information the users need, how get it, and what are difficulties);

- 4) supply of information to ALAGaC;
- 5) complexity on transfer of personal information and conflict with land office;
- 6) legal document and regulation on the provision of information security between the agencies;
- 7) and some relevant statistical data will be collected from stakeholders.

### c) Corruption

The element of corruption supports the understanding of citizens (landowners and possessors) perception of corruption in organizations operating at different administrative levels in Mongolia and to understand the any harmful consequences for landowners and possessors. This element could comprise the indicators listed here:

- 1) degree of corruption before land privatization law approved;
- 2) degree of corruption after land privatization law approved;
- 3) illegal registration (one land many owners);
- 4) and anti-corruption policy and preliminary activities within agency.

## 6. CONCLUSIONS

The described theoretical background illustrates that the increasing transparency is the way to deal with situations of uncertainty and that it is an innovative approach to respond to uncertainty in land privatization. The pilot study summarizes that citizens and officials experience uncertainty on the land privatization processes because from an institutional and operational level the privatization process is complicated, especially in the capital, while at the local level processes are not settled yet. Unawareness of legal rights, lack of access to relevant information, and misuse of power are at stake, caused by non-transparent law and enforcement, while the misuse of power in itself exaggerates the uncertainty amongst the citizens. Citizens need information and a fast, simple service as well, which indicates transparency as an important factor during the land privatization in transition.

At this stage, it is too early to make conclusions on the effectiveness and efficiency of the existing land administration system in Mongolia, because the level of uncertainty is high, in terms of legal and institutional matters and at operational level the processes are non-transparent. Moreover, it is feasible that in case of such a high level of uncertainty, the existing land administration system can not be effective and efficient in the expected circumstances. Lack of coordination exists between different institutions and stakeholders, and no logical working procedures occur between them to provide information to the citizens. Landowners and possessors are generally less confident, 243 (62%) respondents answered to be “not satisfied at all” with the current services. From the result obtained, we conclude that the new land privatization law requires a transparent system, but at this period it is difficult to define the degree of transparency without further research. However, a research hypothesis is developed based on academic evidence and it is supported by empirical data: “*Transparent processes can promote an effective implementation of land privatization law under uncertainty*”. Access to information, participation and corruption are key elements to describe transparency in relation to land privatization in transition and specific indicators are identified to test hypothesis.

This study is limited by pilot data from Mongolia. There is a demand to study in other transition countries experiences to add valuable empirical data to strengthen the research hypothesis and to increase the reliability of the research. The development of transparent processes requires to testing the research hypothesis based on specified indicators and the outcome is expected to assist in defining the dilemma and source of uncertainty and to operate land privatization smoothly 'under uncertainty'. The study challenges in Mongolian situation, and it is expected that other countries in transition going through this process can benefit from this research.

## REFERENCES

- Arun and Hindi (2000). "The effects of development process modeling and task uncertainty on development quality performance." Information & Management **37**(6): 335-346.
- Asselt, M. B. A. v. (2000). Perspectives on Uncertainty and Risk: The PRIMA Approach to Decision Support. London, Kluwer Academic Publishers.
- Avison, D. E. and G. Fitzgerald (1988). Information systems development: methodologies, techniques and tools. Oxford etc., Blackwell Scientific.
- Babbie, E. (2003). practice of social research + the research writer CD - ROM. Victoria etc., Wadsworth.
- Bagdai, N. (1999). Strategic Views and Redesign of Cadastral Processes: a Case study in Mongolia. Enschede, ITC.
- Barry M, F. C. (2002). "Analysing cadastral systems in uncertain situations: A conceptual framework based on soft systems theory." International Journal of Geographical Information Science **16**(11): 23-40.
- Batsukh, S. (2005). Present day situation and future trends of Mongolia's land reform. "Land reform policy in transition economies" International conference. Ulaanbaatar.
- Bellver, A. and D. Kaufmann (2005). Transparenting Transparency. World Bank IMF conference.
- Cashin, S. M. and G. McGrath (2006). "Establishing a modern cadastral system within a transition country: Consequences for the Republic of Moldova." Land Use Policy **23**(4): 629-642.
- Cooney, R. and A. T. F. Lang (2007). "Taking Uncertainty Seriously: Adaptive Governance and International Trade." Eur J Int Law **18**(3): 523-551.
- Deininger, K. W. (2003). Land policies for growth and poverty reduction. Oxford etc. Washington, D.C., Oxford University Press, The World Bank.
- Dillen, H. and J. Nilsson (1998). Transparency, uncertainty and monetary policy. Reserve Bank of New Zealand Monetary Policy Workshop, Monetary Policy under Uncertainty. Wellington.
- Enemark, S. (2007). "UN Millennium Development Goals : relevance for geospatial community." GIS development: Asia Pacific Edition **11**: 48-50.
- Geraats, P. M. (2006). "Transparency of Monetary Policy: Theory and Practice " CESinfo Economic Studies **Vol 52**: 111-152.
- GOM (2002). Land Law of Mongolia Ulaanbaatar, Government of Mongolia.
- GOM (2002). Land Privatisation Law of Mongolia. Ulaanbaatar, Government of Mongolia.

- Ho, P. and M. Spoor (2006). "Whose land? The political economy of land titling in transitional economies." Land Use Policy **23**(4): 580-587.
- Hood, C. and D. Heald (2006). Transparency: The key to Better Governance? New York, Oxford University Press.
- Kristin, M. L. (2006). The Perils and Promise of Global Transparency, State University of New York press.
- Lerman, Z. and N. Shagaida (2007). "Land policies and agricultural land markets in Russia." Land Use Policy **24**(1): 14-23.
- Molen, P. v. d. and A. M. Tuladhar (2007). "Transparency in land administration : corruption is everywhere." GeoInformatics : magazine for surveying, mapping and GIS professionals **10**(4): 12-15.
- Myers, G. and E. H. Peter (2004). Property rights and land privatisation: Issues for success in Mongolia. USAID.
- Myers, M. D. (2002). Qualitative Research In Information Systems. London, Sage publications.
- Nixon, F. and B. Walters (2006). "Privatization, Income Distribution, and Poverty: The Mongolian Experience." World Development **34**(9): 1557-1579.
- North, D. C. (1990). Institutions, Institutional Change, and Economic Performance Cambridge, Cambridge University Press.
- Refsgaard, J. C., J. P. van der Sluijs, et al. (2007). "Uncertainty in the environmental modelling process - A framework and guidance." Environmental Modelling & Software **22**(11): 1543-1556.
- Rosset, P. (2001). "Resisting "Privatization" of Land Reform by the World Bank." Economic Justice News.
- Schultz, C. (2008). "Responding to scientific uncertainty in U.S. forest policy." Environmental Science & Policy **11**(3): 253-271.
- Simoneti, M., J. P. Damijan, et al. (2005). "Case-by-Case Versus mass privatization in transition economies: Initial owner and final seller effects on performance of firms in Slovenia." World Development **33**(10): 1603-1625.
- Suzanne J. Piotrowski, G. G. V. R. (2007). "Citizen Attitudes Toward Transparency in Local Government." The American Review of Public Administration.
- Swinnen, J. F. M. and L. Vranken (2005). The Development of Rural Land Markets in Transition Countries. FAO Workshop on "Land markets and Related Institutions in CEE". Nitra, Slovak Republic, FAO.
- Tuladhar, A. M. (2004). Parcel-based geo-information system: concepts and guidelines Enschede, ITC: 252.
- UN-FIG (1996). The Bogor Declaration on Cadastral Reform. Expert Meeting on Cadastre, Bogor, Indonesia.
- UN/HABITAT (2007). Expert group meeting : transparency in land administration : a capacity building agenda for Africa : Nairobi, Kenya, 29-31 January 2007 : draft final report. Nairobi, UN-HABITAT, ITC: 1-73.
- USAID (2005). Assessment of Corruption in Mongolia, Final Report. USA.
- Veen, v. d. (2006). Governance and spatial information, or what is a region? Geo - information technology within a public e-governance context : 4th executive seminar

for national mapping organisations. J. E. S. P.Y. Georgiadou. Enschede, The Netherlands.

Walker, W. E., P. Harremoes, et al. (2003). "Defining uncertainty a conceptual basis for uncertainty management in model-based decision support, " Integrated assessment Vol 4: 5-17.

Zevenbergen, J. A. (2002). Systems of land registration : aspects and effects. Netherlands Geodetic Commission NCG : Publications on Geodesy : New Series;51. Delft, Netherlands Geodetic Commission (NCG): 223.

## BIOGRAPHICAL NOTES

**Naranchimeg Bagdai** (Mongolia) is a PhD student at the Department of Urban and Regional Planning and Geo-Information Management (PGM), School of Land Administration at International Institute for Geo-Information Science and Earth Observation (ITC) in Enschede (NL).

**Anne van der Veen** is a professor of Governance and Spatial Integrated Assessment at ITC and Professor in Spatial Economics at University of Twente in Enschede (NL).

**Paul van der Molen** is currently director of Kadaster International and a professor at ITC in Enschede (NL).

**Arbind Man Tuladhar** is assistant professor at the ITC in Enschede (NL) and visiting professor in Land Administration at Chang'an University in Xi'an (China).

## CONTACTS

ITC

Department of Urban and Regional Planning and Geo-information Management (PGM)

P. O. Box 6

7500AA Enschede

THE NETHERLANDS

Email: [naranchimeg@itc.nl](mailto:naranchimeg@itc.nl); [veen@itc.nl](mailto:veen@itc.nl); [paul.vandermolen@kadaster.nl](mailto:paul.vandermolen@kadaster.nl); [tuladhar@itc.nl](mailto:tuladhar@itc.nl)