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LAND MARKETS AND TRANSACTION COSTS FOLLOWING INSTITUTIONAL STRENGTHENING: A PRE-POST EVALUATION IN MONGOLIA

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Abstract

Interventions to strengthen land tenure that focus on institutional and technology improvements at a national level or in a limited number of urban/provincial areas do not lend themselves to rigorous impact evaluations, as there is often no feasible counterfactual. Correspondingly, most quantitative research on land tenure has focused on measuring indicators and outcomes at the household or community level. The analysis of land administration and bank loan data is notably absent from empirical studies to-date. This study seeks to fill this evidence gap and build the knowledge base on the effectiveness of national level land administration and capacity building interventions by presenting the endline performance evaluation findings of a Millennium Challenge Account (MCA) Mongolia land registry strengthening project. This working paper presents preliminary endline findings on the expected outcomes, primarily improved land markets, access to credit, and women's empowerment. We rely on the qualitative data sources and structured key informant interviews that are currently available to the research team.

Key Words: Institutional strengthening, Land administration, Land markets, Land registration

1) Introduction

Though urbanization also occurred in the 20th century in Mongolia, an increasing number of rural Mongolians have been migrating to cities since 2000, leaving behind their traditional nomadic lifestyle in search of greater opportunities. According to UNICEF, between 2000 and 2013 the percent of the population living in urban areas in Mongolia increased from 57% to 70%. This rapid urbanization of cities such as Ulaanbaatar, Erdenet and Darkhan, which have limited available and affordable housing, has led poor migrants to dwell in unplanned and underdeveloped peri-urban settlements, known as “ger areas” (Figure 1). The continued growth of ger areas highlights the need for stronger property rights regulations, improved municipal land use planning, and a more streamlined and accessible pathway to land and property ownership.

MCC sought to increase property transaction expediency issues with focused support to the registry system for national land administration and institutional strengthening. The registry strengthening component of the Millennium Challenge Account (MCA) Mongolia Property Rights Project (PRP, 2008-2013) consisted of institutional strengthening activities, such as training and coordination support, decentralization and physical infrastructure upgrading, and technology and procedural strengthening. The key goals of these activities were to decrease the time and cost of registering land and property in Mongolia by increasing government capacity to process and record these transactions efficiently. By making the process of registering land and property easier and less costly, the project also expected to encourage investment in these assets and expand the use of mortgages and collateralized lending, increasing transaction volume. Our study uses administrative and survey data, combined with comprehensive qualitative data, to assess whether these outcomes have occurred.

Interventions similar to this MCC project are standard programming packages for many land formalization or administration projects and have been implemented in a variety of contexts (Burns et al 2006). However, there is little rigorous analysis to-date of the efficacy of this programming. There is a dearth of rigorous evidence on the efficacy of land administration interventions (Lisher et al 2017, Lisher 2018). High level interventions that focus on institutional and technology improvements at a national level or in a limited number of urban/provincial areas do not lend themselves to rigorous impact evaluations, as there is often no feasible counterfactual. Correspondingly, most quantitative research on land tenure has focused on measuring indicators

and outcomes at the household or community level. The analysis of land administration and bank loan data is notably absent from empirical studies to-date.

This study will help fill this evidence gap and build the knowledge base on the effectiveness of national level land administration and capacity building interventions by presenting the endline performance evaluation findings of a land registry strengthening project. The evaluation represents an important contribution to land tenure research, as it relies on land administrative data, banking customer surveys, and financial data. Using a mixed method approach, it links quantitative analysis of the aforementioned sources with structured and open-ended key informant interviews with key beneficiaries and focus groups with community members to assess whether the registry system project achieved its anticipated outcomes of increasing property transaction expediency.

This working paper presents preliminary endline findings. We rely on the qualitative data sources and structured key informant interviews that are currently available to the research team. The data collection for administrative data, banking customer surveys, and financial data is still underway, and findings from the analysis of those sources will be integrated into future iterations of the paper.

The findings of this study are of relevance to land tenure researchers and policy makers, as they aim to shed light on potentially broadly applicable questions of the benefits and costs of systematic digitization of land and property data for different stakeholders, the efficacy of different technology innovations to decrease the time and costs associated with land and property registration, and the gendered impacts of these activities.

The paper is structured as follows: Section 2 provides background and context. Section 3 presents the program intervention under evaluation. Section 4 describes methods, data sources, and expected outcomes. Sections 5 and 6 contain our findings on key outcomes and discussion. Section 7 concludes the paper with next steps.

2) Background

Under Mongolian law, all Mongolian citizens, regardless of age, are entitled to acquire a parcel of land for free one time in their lives. The size of the parcel that the government will allocate depends upon the location, and in the ger districts of Ulaanbaatar (UB), citizens may apply for parcels of 0.07 hectares. Land ownership and rights are defined under the Law on Allocation of Land to

Citizens of Mongolia, passed in 2002. This law was first amended in 2005 to allow each household to have one parcel of land free of charge and then amended again in 2008 to allow every citizen to own one parcel of land free of charge. The free provision of land was set to expire in 2012 but has been extended to 2018. In addition to legislation governing land ownership, the Government of Mongolia (GoM) passed a law on property ownership that governs ownership registration, capitalization of property, and property's relationship to the land.

Most ger area residents live on informally settled land plots (known as *hashaas* in Mongolian), which means they lack formal addresses and land and property rights. Disputes over overlapping boundaries are common, and documenting and affirming property rights by GoM has been a challenge. The issue is further complicated by the existence of the two independent, and potentially competing, land-related agencies that have purview over land registration. Since these agencies do not have a universal platform to share information, citizens must first visit the Administration for Land Administration and Management, Geodesy and Cartography (ALAMGaC) to verify that the land they want to register is not already claimed or does not have an existing land conflict. After verification, they must then apply for a governor's certificate of land ownership. Finally, registrants apply for a land title at the General Authority for State Registration (GASR). This requires multiple trips to several agencies. In some provinces (known as *aimags*), these agency offices are not located near one another, demanding more time and effort from citizens to complete the process. Furthermore, central GASR offices experienced a large volume of residents trying to complete their land transactions since 2002, leading to overcrowding and bottlenecks in the workload given the volume of applications and insufficient number of registry officers. Due to several factors, including frustrations with the demands of this lengthy process and ignorance of the distinction between the governor's ownership certificate and the full property title, many applicants declined to pursue full registration after obtaining the governor's certificate. MCA's registry system project, which we describe in the next section, was designed to address these challenges and improve the national property registration system.

3) Program Intervention and Expected Outcomes

To address challenges associated with expanding informal settlements in Mongolia's urban areas and to expand access to credit, the registry strengthening component of the PRP focused on streamlining the complex and time-consuming process of privatizing and registering land and property rights.

The first key component of the registry strengthening component of the PRP was physical infrastructure upgrading and decentralization, during which the GASR central office in UB City was refurbished and four new registration offices were opened in districts within the city. By providing additional service locations within UB City, the project aimed to reduce the travel and wait time associated with registering immovable property. Eight regional offices were also improved to remove hazardous materials and improve infrastructure. These offices were linked by a fiber optic network to create safer, more accessible, and more user-friendly environments for citizens. Figure 2 presents a map of these PRP-supported areas. The project also supported IT infrastructure upgrading through the development and deployment of a new software program to register land and immovable property (the electronic Property Registration System, or ePRS), digitization of all existing property files in the project, and extensive training for GoM staff to use these new tools and improve transaction processing.

Secondly, to increase the capacity of GASR to provide efficient services in a cost-effective and accountable manner, the project worked to improve business processes by streamlining the operational and administrative functions of the Agency and strengthening financial and human resources capacity. The project supported the development of a Strategy and Sustainability Plan as well as an Annual Business Plan and Operations Process Manual, curriculum and training materials and delivered numerous trainings. The project also sponsored a Study Tour to enhance understanding of International Best Practices in land administration and property registration.

Third, as part of its efforts to improve service delivery to citizens seeking to register claims to land, the project also trained Land Market Specialists (LMS) at ALAMGaC. LMS received training that enabled them to advise families and individuals who had settled informally in ger districts about the process of hashaa plot registration and privatization. The LMS staff also received training on the use of GPS and satellite imagery and on gender equality and women's property rights, however,

this component of Compact activities started only in the 3rd year of the project and so did not have a great deal of time to take hold. This training was designed to enhance the staff's capacity to support women and men in the complex registration process and to enhance the accuracy of cadastral mapping efforts. The project also designed and implemented awareness-raising campaigns to highlight the benefits associated with women registering real property claims in their own names.

Additionally, the project supported efforts to improve Mongolia's legal environment by creating a commission of stakeholders and technical experts who identified barriers to a more efficient land and property privatization system and gaps in the existing legal framework that created ambiguities or bottlenecks in the process. The Commission made a set of recommendations to improve the legal and institutional environment. The project used these recommendations as a basis for developing draft amendments to key laws and regulations, including a revised draft of the Law on Registration of Immovable Property Rights, a set of draft policies and a proposal for future organizational options. Enacting recommended legislative amendments was substantially delayed, and legal adoption did not take place until 2018.

Together, these efforts were designed to reduce the time and costs associated with citizens' registration of land and property rights and issuance of private land titles in eight of Mongolia's regional centers and the capital city of Ulaanbaatar. This increase in efficiency was hoped to be bolstered by not only streamlining land administration operational policies and procedures, but also interventions clarifying existing land rights and boundaries to provide the land offices with a clearer land cadaster. Other key expected outcomes included expanded land registration and increased secondary transaction volume through investment in land and expanded access to credit based on the use of land and immovable property as collateral. The program's gender interventions were expected to increase women's land ownership (including co-ownership) and increase women's access to collateralized credit.

Once digitized, the GASR and the GoM integrated property registrations records into other data access initiatives, beginning with a program to introduce kiosk machines to improve public access to government service by the Communications and Information Technology Agency that was developed concurrently with the digitization and ePRS activities in 2013. Through these kiosks (Figure 3), currently in 110 locations in Ulaanbaatar and other aimag provincial centers, citizens

can now obtain various government services through a self-serve user interface, including property ownership inquiries via link to the property registration database. Starting in 2013 kiosks offered the “Immovable Property Inquiry”, and in December 12, 2017, they began offering the “Ownership Right Inquiry”. Kiosk references documents are printed on secure paper and certified by a GASR QR code. The authenticity of the kiosk-generated document can be verified by visiting a website and inputting the document number or scanning the QR code. Additionally, a publicly available app allows users to verify the date a person obtained reference information. In 2017, total of 115,085 references were provided by kiosks¹. The kiosk references are viewed as the same as a validated paper reference paper references issued and stamped by a State Registrar.

The KHUR information exchange system is a recent joint product of the Communications and Information Technology Authority of Mongolia and Mongolian National Data Center to make state records more accessible to citizens and trusted parties like banks. This technology allows the loan officer to load an applicant’s property reference information directly to their console via a scan of the applicant’s fingerprint. A pilot of this system began in Golomt banks in Spring 2018 and has quickly expanded to other banks². While not an output of the PRP, the KHUR system and the above-mentioned kiosks comprise follow-on programs made possible by the PRP’s support to shift property registration to an electronic system.

4) Methodology

In addition to tracking project outputs, as described above, this mixed methods performance evaluation uses pre-post measures along a number of indicators to test for program effects. This methodology combines administrative data analysis with pre-post analysis of two rounds of survey data of banking customers, collected in 2013, prior to key program interventions, and in 2018, approximately 5 years after the end of the program. Secondary data on bank loan portfolios (the numbers of loans and loan values supported by mortgages or other guarantees of immovable property and land over the last ten years and some characteristics of these loans, such as type of loan, interest rate, average term, average default rate) complements this survey data. The study also collected and harnesses rich qualitative data from registry office users, key population

¹ According to an undated GASR press release provided to the evaluation team.

² <https://montsame.mn/en/read/14427>

subgroups, and main project stakeholders to add detailed context information and augment understanding of mechanisms.

To provide an initial assessment of the program effect, this working paper analyzes structured key informant interviews (KII) with GASR registrars and loan officers. FGDs with other key citizen subgroups and land market actors – such as residents engaging in land transactions, women, ger area residents, loan officers, and real estate agents – were analyzed to determine program performance across a number of evaluation indicators centered on citizen experience with the land administration system. We also utilize FGDs to assess whether the project raised citizen awareness of land and property registration processes and of women’s legal rights to land.

a) Data Sources

This working paper draws upon primary and secondary quantitative and qualitative data from three key sources:

1. Structured KIIs with GASR registrars (N=104);
2. Structured KIIs with loan officers (N=100); and,
3. Focus group discussions with key beneficiaries, subgroups, and stakeholders, such as residents engaging in land transactions, women, ger area residents, loan officers, and real estate agents (N=18).

i) Quantitative Data

Structured KIIs (104) were collected with all GASR registrars employed at each district and province office within the MCA project area (Ulaanbaatar, Erdenet, Darkhan, Arvaikheer, Uliastai, Khovd, Zuunmod, Undurkhaan and Choibalsan) to understand the effects of the PRP infrastructure and capacity building interventions, including ePRS, as comprehensively as possible. Another 100 structured KIIs were collected with loan officers in Ulaanbaatar to understand the effects of registry strengthening on the lending process and general trends in the lending environment.

ii) Qualitative Data

Three to four FGDs with subgroups of interest were conducted in each of the four districts covered by the decentralization activities in Ulaanbaatar: with women, with residents engaging in land transactions (both men and women), with ger area residents (both men and women)³, with loan

³ FGD were conducted with ger area residents only in the two targeted districts that have the largest population

officers (both men and women). Four FGD were also conducted with real estate agents focusing in 1) low to medium and in 2) high socioeconomic status areas to better understand how the real property market has changed, what kinds of investments people are making in property, and perceptions of how mortgage markets and land-based lending markets are evolving.

Three of these subgroups were selected for inclusion in the follow-up evaluation because they were specifically targeted as subgroups of interest to the PRP: women, residents engaging in land transactions, and ger area residents. The final two subgroups – loan officers and real estate agents – were selected to provide more nuanced information on one of the main research questions—whether the PRP led to changes in demand for land.

b) Outcomes

Following from the intervention and expected project outcomes described in Section 3, above, our study examines the following key performance outcomes:

- Processing time of eight key transactions⁴ by the property registry;
- Cost of eight key transactions at the property registry;
- Land transaction volume, as measured by registry transaction volume and perceptions of land market actors such as loan officers and real estate agents;
- Access to credit; and,
- Women’s empowerment.

5) Findings

This section presents preliminary qualitative findings for the key outcomes outlined above. Overall, there is strong qualitative evidence that the PRP achieved its objectives of improved land markets, increased access to credit, and women’s empowerment. Our confidence in the results is bolstered by the corroboration of citizen findings with KII results from land administration and banking officials.

living in ger areas.

⁴ 1) Registration of ownership rights of immovable property, 2) Registration of ownership rights of land, 3) Buying, selling, or subdividing property, 4) Gifting property, 5) Inheriting property, 6) Registering a mortgage, 7) Registration of assets as collateral (Land or Property), 8) Reference letter of immovable property.

a) Improved land markets

i) Transaction Time

Across all respondents and data sources, the evaluation finds a general consensus that transaction times have reduced due to PRP and that this positive development is driven mainly by the kiosk self-service system. Registrars held divided opinions about the net change to the number of steps during transaction processing, as they reported some reductions in steps (notably removing the requirement to sign the final certificate) but also increases due to the addition of steps related to scanning the application documents.

For transaction costs and time, we find consistent evidence across all categories of citizen subgroup FGD respondents (women, ger residents, citizens engaging in land transactions) that there have been significant reductions in the length, cost, and travel times associated with property registration. The average length of the process for document issuance is estimated, at present, around 2-3 days on average (7 days max), versus 14-21 days (max 3-4 months) prior to the MCC project. This reduction in process time is driven by a simplified application process that requires fewer documents, decentralization of the registration department to the districts, the introduction of the electronic kiosk for accessing reference letters, increased citizen knowledge of land and property procedures and more expedited document processing (better customer service) from the GASR side.

For new land and property registration as well as ownership transfers, most GASR registrar structured KII respondents agreed that processing time has decreased. Table 1 illustrates these results across key indicators. For both first time registration and subsequent land transfers, the majority of registrars stated that the decreased processing times are due to the ability to conduct work electronically. Overall a majority of GASR registrar respondents agreed that the PRP changes decreased or significantly decreased first time registration processing times (59%, 41), and almost half of registrars reported seeing a decrease or significant decrease in the time it takes the GASR office to approve other transactions during their tenure (40%, 41). Around a third of registrars said that the decreases were due to increased availability of some services in kiosks (31%, 20). Table 1 also lists all reasons enumerated by registrars for reduced processing times. Qualitative responses from registrars on improved processing times emphasized better customer service and reduced time to handle transactions. One interviewee said, “For customers, waiting

time reduced because of less overcrowding. For state registrars, [the] manual tasks [were] reduced. In the past, state senior registrars used to sign signatures on certificate of immovable property. However, this step was removed.”

As described above, the most important visible improvement that decreases the time and cost for some services (notably obtaining a reference letter of land or property) and reduces crowding in registry offices is the self-service kiosk stations. Most registrars are also now familiar with the ability of applicants to obtain a property reference letter via the self-service kiosk system (92%, 96). In line with the familiarity of the self-service kiosk system, the majority of registrars report that applying at kiosks is the most common way that a reference letter is obtained (84%, 87) with only 12% (21) reporting that applicants come to GASR offices.

Improvements in the process due to the kiosk system are consistently cited by users as the most user-friendly aspect of the system. For example, one focus group respondent explains,

“Now, it’s nice that you can just get a queue number and get the service. Now, even you can even get a reference from the kiosk machine using your finger prints. If the property is collateralized for loan, the reference shows it in the back of the reference. That service is nice, just using your finger print,” (Woman, Baganuur) .

Similarly, loan officers felt that new property information systems reduced both time and cost for the loan application process. The ability to obtain a reference letter at a self-service kiosk was uniformly lauded for saving time. One loan officer compared kiosk experiences with GASR visits in the districts, “This machine [self-serve kiosk] is a great. Now, these, such as Dunkingarav, etc., one stop service, instead of districts. Those are really good... Also, the ambience is very good; [the locations] have big areas.”

Nevertheless, some findings suggest that while progress has been made in how GASR functions, there is still room for improvement. In particular, some respondents noted that the electronic system was not always reliable and could sometimes be slow to respond. One loan officer stated,

“Personally, I think that even though the registration process became online or electronic, it still is slow and speed is quite low due to obtaining data from the database. I understood that it takes a long time to obtain data. The system used by banks is very fast. At first, I thought that their electronic system was similar to our system. Certainly, they scan and save scanned documents in such a large database. The database must be huge due to keeping a lot of information.”

In terms of the number of steps, GASR registrar opinions were divided on whether the overall number of steps for processing various transactions has increased, decreased, or stayed the same. Most report that the number of steps has stayed the same (58%, 60), while 22% (23) report they have decreased⁵, and 18% (19) report they have increased. Table 1 includes these reports of changes to transaction steps broken out by transaction type. Trends for other types of transactions generally mirror those described above.

Efficiency increases due to workflow improvements were perceptible to outside users engaging with GASR. One loan officer FGD participant also described time saving improvements through additional coordination with GASR, “Before, when we needed to free a [registered] collateral [at] GASR, we had to handwrite something down. If there was a mistake, or an error in syntax, they [GASR] would send it back immediately. Nowadays, we have a unified standard with our bank and don't face the previous problems...Previously, we used two or three written official letters depending on the errors on the documents. Now, it is fine.”

However, a few respondents did reference increased tasks because of scanning into the electronic database. For example, one registrar mentioned, “In the past, I used to receive applications and then print certificates. Now manual tasks [have] increased because I have to receive applications, scan and process/approve applications, print certificates, and then scan certificates.”

ii) Transaction Costs

As a result of PRP, individuals have experienced two primary forms of cost savings: 1) reduced time waiting (or paying for a spot) in long queues for GASR, and 2) travel time savings facilitated by a ‘one-stop shop’ at GASR, compared to the previous system which often required multiple visits to 2-3 different offices with long travel times in-between. Before the program, citizens often had to wait in a long queue at GASR offices, and given the complexity of the documentation required, many often had to repeat the process for incomplete or inaccurate applications. As one woman from Baganuur explained,

“Before 2010, it was difficult to travel to the city because of long travel times and three trips required for property registration. We would first visit multiple government organizations – get the

⁵ Please see the registrar quote at the top of the preceding page for an example of a step that has been removed.

ownership certificate from land office, then visit the capital city office, then make the cadastral map. And then the immovable property was a separate process. There were three or four stages.”

Citizens do generally report that informal bribes are still used to conduct business at GASR, such as bribes for registration officers for expedited reference letters (especially when a loan is needed). However, the scope of favors and bribes has reduced because the process is easier.

From the service provider perspective, we do not see a change in official administrative transaction costs in the GASR registrar data (Table 1). Most registrars reported no change to the overall costs for processing transactions (73%, 76), although a quarter agreed that overall costs for processing transactions have decreased (25%, 26). Of that quarter, there was a fairly even split as to what the main cause of the change, from 34% reported law/policy changes (10), 31% (9) reporting the ability to process transactions electronically, and 21% (6) reported increased availability of some services through kiosks. Registrars resoundingly reported no changes in administrative fees, with 82%-95% agreement for all listed transaction types. On transactions of all types, almost nobody reported increased fees, so the remaining 3-10%, depending on the transaction, of responses reported decreases.

iii) Transaction Volume

(1) First Time Registration

This working paper lacks strong qualitative data to speak to whether the PRP may have resulted in increased first time registration of land and immovable property, and the administrative GASR data will cover this outcome more comprehensively in the full evaluation report. Anecdotally, advocacy by the PRP expanding the use of land as collateral for credit may have contributed to policy changes by banks that broadened the use of land as collateral and made registration of land more appealing to citizens. While first time registration is expected to continue for the next decade, in the post-project environment several challenges to the process do persist, as described below.

Some loan officers report that, in their experience, the number of people registering their land for the first time and obtaining a certificate ownership has increased. They attribute this change to the fact that there has been an increase in banks accepting land as collateral. One loan officer explained, “...if land is not accepted as collateral at a bank, people will not pursue formal land titles and make arduous attempt to obtain land certificates. For example, a person who has a land that is located on the outskirts of a district or is too far may not make arduous attempt to obtain

formal land title or land certificate. Thus, people seek land certificates of ownership because banks are accepting lands as collateral.”

This observation is only partially supported by the experience of registrars. Registrars did feel that fewer people were abandoning the first time registration process before completing it. One registrar articulated, “Processing first time registration of land and immovable property electronically saves a lot of time. For citizens, it [is] shorter to complete registration or transaction process[es] at the registry. In the past, people used to quit [the] transaction process or abandon collecting/gathering all required documents.” However, only 16% of registrars (11) cited an increase in the number of first-time land and property registrations as a major change in first time registration of land and immovable property in the past five years.

First time land registration difficulties do persist. Rather than within GASR, respondents report that the biggest obstacles to first time registration and property ownership center on the land office and the issue of incomplete cadastral maps and difficult bureaucratic process. Summarizing a consistent finding across the focus group discussions, one participant said, “State Registration is quite reasonable. The land department is full of red tape. Extremely bureaucratic,” (Woman, Songino Khairkhan).

FGD respondents highlight several problems, including an overlapping cadaster, the high cost and extensive travel times required for securing a cadastral map, the fence requirement, and zoning restrictions (power lines). One respondent summarized,

“The reasons why the rest of households (in MCC project) couldn’t get a certificate are that the cadastral map overlapped with another household, blocked entrance and exit, or there was a mountain peak and flood area. It is impossible to get the rights for the land that the land office hasn’t accepted....Then the poor households can’t afford 50000 MNT for the cadastral map.” (Residents engaging in land transactions, Chingeltei).

These findings are consistent across women, ger residents, and those involved in land transactions. Several FGD participants explained that they still have not been able to receive the ownership certificate for land that they have been living on for decades. As one woman in Chingeltei explained,

"There are many things to talk about the land office. For example, someone built a fence on my daughter's land and the cadastral maps are overlapped. It hasn't been resolved for 7-8 years. We couldn't find the owner of the overlapped land. There are disputes about the land offices, such as bribes in land offices. We're going through a lot to get the ownership rights."

Several real estate agents also discussed persistent challenges related to incomplete first time registration, most commonly having a certificate to possess the land rather than an ownership certificate. They enumerated the difficulties in trying to work on obtaining the needed records:

"In ger areas, there isn't a problem if they have an ownership right certificate. But if they have a possession right certificate, that will lead to problems, such as the cadastral map that they possess is different from cadastral map at land office. Then again, the land office tells them 'get this again', and also this would not be confirmed. Then maybe after 2 months, we tell them to renew the cadaster again."

According to registrars, the primary challenges to speeding up the land registration process are a lack of registry/cadastral information (45%, 47), followed by slow administrative processes (13%, 13). Some registrars had specific ideas for improvement to overcome primary challenges to registration, often related to better integrating services with the Land Department. One interviewee suggested, "The Land Department and the property registry need to have one integrated information database system. Due to lack of land information, duplication of address or land allocation occurs frequently and there are many problems with accuracy of cadastral maps." Real estate agents echoed this need to merge the current property information systems:

"Frequently, the land [being sold] may already have an owner who acquired the land through a different channel outside of the governor's declaration and who obtained a certificate. It creates an overlapping of land titles and disputes arise...There should be a unified information database to manage sales on land under or outside the governor's decision."

Registrars often realized the government was already working to improve this issue: "I think the amendment to the law will be helpful. According to the revised law, there will be one certificate for land title and immovable property ownership (recognition of land and immovable property on land as a single unit for registration)."

However, many individuals in FGDs listed continuing concerns about corruption in the system, the future and sustainability of land planning, and their children's ability to claim land in the future,

given increasing scarcity of land. There is a lack of confidence in land planning and concerns that future generations will not have access to land due to increasing land scarcity and the electronic system's issuance of new land in remote areas with no infrastructure. One FGD participant noted, "The places which are issued by the electronic [privatization system] are in remote areas and the infrastructure is poor. So no one will be moved to those places. That's the reason why I don't try to acquire my certificate of land. No one will be moved to there if the infrastructure won't be developed," (Women, Baganuur).

Analogously, when asked how loan officers could facilitate more active land markets, several loan officers noted that privatized lands in poor locations without infrastructure are not good quality and cannot be used as collateral. One loan officer FGD participant lamented,

"People were allocated with lands, which are far away. Areas without infrastructure development, electricity and in where no households have settled. If you go outside and see the north side, there are many black and black things such as wheels or other things are put on plots of lands. Ah, they say that they have obtained ownership of those lands. They are owners in accordance with certificates. Nevertheless, people have no opportunities of using lands and residing on the lands because there are no infrastructure development and the well at least and electricity, right. That is why it is difficult to accept those lands as collateral and value. The government just allocated 0.07 hectares of land to each citizen; however, those lands cannot be assets for citizens."

The FGD transcripts with citizens are filled with discussions attributing difficulty in the land system to corruption within the system that allows those with wealth and connections to access land closer to the city and/or infrastructure. Citizens express a desire for greater transparency about how the electronic transaction process for land distribution works. There is strong demand for development and infrastructure beyond Ulaanbaatar in the remote areas where land is being distributed. One participant intoned,

"I am not confident [in the land administration system]. Because the state issues land in remote areas and people cannot use it. I don't know what kind of people can obtain land where is so close. Maybe the places which is closer are issued for people who paid the bribe. People like me cannot be issued that kind of land," (Women, Baganuur).

(2) Secondary Transactions

Overall, respondents note increases in the numbers of land and property transfers during and after the study period. The main reason cited for this trend is the increases in land registration over time,

as opposed to the transaction processing improvements under evaluation. As shown in Table 1, a majority of registrars report that the number of people making land and property transactions has increased or significantly increased (80%, 83). The majority agreed that the most important cause of the change is increased demand for follow-on transactions now that people have official title to their registered land and property (73%, 61), with a minority reporting increased demands for loans/mortgages (17%, 14). Very few credit the easier transaction process described above (5%, 4).

The character of land and immovable property markets in Mongolia remain different, mainly due to persistent challenges of transacting in land (boundary disputes, etc.) and sensitive market for land that varies depending on location. Other challenges include low land values, lack of infrastructure development, and sellers lacking the proper records about their parcels. In contrast, many actors consider immovable property sales, particularly of apartments, to be more predictable.

(a) Land

One notable result that is linked to a PRP output/outcome is a reduction in the informal or black market system for land transfers. Importantly, citizen FGD respondents indicate that acquiring land through an informal market is no longer possible due to the online registration system, which inhibits the transfer of owner names. One participant recounted, “It is rare that the transactions conducted in that way. The reason why is that the GASR document should be notarized after it is transferred to district office... It is impossible when the documents are notarized.” The formal system is also seen to be guaranteed and more reliable for passing land on to their children.

Despite gains in the use of the formal system to transact in land, respondents do still report cases of ‘acquaintances’ going through informal route and then finding out at registration that the land they bought belongs to someone else. Real estate agents also agreed that because buying and selling land – even with formal ownership – is not an easy process, there a “black economy” for land still exists. They also note that elites may attempt to abuse the formal system by acquiring and trading land they have registered in the name of someone else:

“Land is definitely a black economy, so that it is unknown that the land title is registered in whose name and who owns the land. For example, a person who has big connection/acquaintance bought a land and the price of the land is several billion MNT. The person bought and registered the land in someone’s name, whom [he/she] does not have immediate relationship with, [such as] his/her

driver or secretary whom he/she knows. Even the driver or the secretary does not know that the person has bought and registered a land title in their names. Then, the person tries to sell the land.”

In general, because of the wide availability of land in Mongolia, the activity level of the post-registration land sale market often appears to depend on location and the ability to combine multiple hashaa plots. In addition to proximity to the city center, location along roads or rivers increases the desirability of land. One real estate agent FGD participant emphasized that if they do sell hashaa plots, they are those that are more desirable:

“Lands, [the parcels that] we sell or buy, are located along the arterial roads and near to infrastructure development and the prices of those lands are 200 or 300 million MNT at least. Otherwise, it is very rare that there are houses in hashaa plots or lands on outskirts of the city [that we sell]. Out of 20 or 30 transactions, one is a house in hashaa plot that is located near to water.”

As described in the preceding section on first time registration, loan officers concurred that the lack of development on many allocated lands makes them worth little:

“In a household, each member owns land... They have limited opportunities because of valueless land and lack of infrastructure development. The most important thing is to increase the value and price of land, to increase the value for the person.”

Real estate agents reveal that one common strategy to circumvent low land values is transact parcels through amalgamation – if these parcels are located in a desirable area. A number of real estate agents mentioned that it is common for buyers/sellers to purchase several smaller plots of land in one area and then sell a larger plot for a higher price, particularly those that have more information and connections. One real estate agent participating in a FGD noted,

“Those people [that have information and connections] obtain ownership of... lands in good location. They register 10-20 numbers of land [parcels] that are 0.07 hectares in size in their names. Then, they sell the big lands by subdividing into small sizes and make money from selling lands at higher price in the market.”

Families can also cooperate to merge parcels to facilitate sale and increase the value. One real estate agent explained,

“Relatives buy bunch of 0.07 hectares of lands. Unless they sell their plots of lands by merging, it is difficult. Ah, there is a little chance of selling those lands. At most, the price of land is 5 million

MNT. Ah, however, for example, people who have these kinds of lands do not turn to us and arrive at our office.”

Overall real estate agents felt that land sales were difficult and often avoided them due to the potential for them to encounter complications and stall. One participant expressed, “Generally, land is not that easy. We are little bit afraid of selling or buying land process because there are many behind-the-scenes problems.” One challenge in lands sales is people privatizing land they have little interest in and then lacking the necessary information about it when they go to sell it. One real estate agent FGD participant noted,

“Some people want to sell 0.07 hectares of lands on which they have obtained land certificate. However, they do not know the exact location of their lands when they tell us the location of lands...If they want the lands to be sold by us, we have to know the location in order to sell the lands. When I ask whether fence has been built on the land or not, they say ‘I got cadastral map done and obtained land certificates by telling the approximate location, and now I don’t know it well.’ We cannot work with this kind of situation so that I say them that I cannot work.”

Another difficulty noted was an imbalance of supply and demand of sellers and buyers. As one participant articulated, “Demand is less and supply is more. The number of people who are about to sell is higher. Ah, the number of people who are about to buy is low. There is a challenge to find them.”

(b) Immovable Property

Immovable property transfers are perceived to be a simpler process than transacting in land, and one piece of the ease in transacting in immovable property is likely the land administration system improvements by the PRP. For example, one real estate agent explained, “It is easy to sell or buy immovable property. There are one-point service centers...processing transactions of immovable property is faster than land processing...it is processed within the same day.” A potential reason for this relative ease of processing immovable property transfers as compared to land transfers could be that immovable property transactions do not have the same cadastral records challenges that some land parcels have.

Real estate agents universally agree that buying and selling apartments is easier than buying or selling land. Another agent confirmed, “our work finishes when a seller hands all documents to a

buyer and then a buyer registers property in his/her name and when a buyer is told to obtain property certificates few days later...our work virtually finishes at notaries.”

Additionally, respondents believe that immovable property market activity at least temporarily increased during the PRP. While the PRP likely contributed to this change, the main reason they cite for this uptick is the increase in financing for purchasing immovable property from the government mortgage subsidy program that occurred during the study period. When asked to describe the changes in real estate over the years, one real estate agent described the increase in apartment ownership after 2013, specifically regarding the 8% loan: “In 2013, it was the highest [point] in the real estate sector. The 8% loan was launched in 2013. What is more, the value of immovable property was high. Now it is stable. At that time, the demand was also high. Now it has become tidier...”

b) Access to credit

i) Lending Process

Around half of loan officers reported decreased processing times for mortgage loans and non-mortgage loans, mostly due to process improvements internally within the bank, with half also reporting efficiency improvements due to kiosk/KHUR systems. For citizens, results are mixed for improvements to the mortgage and consumer loan process. What was in the manageable interest of the PRP seems to have improved the situation.

Specifically, for mortgage loans, of the loan officers who have been administering bank loans (either in this position or another) since 2013, 47% reported that the average processing time for a mortgage loan has decreased (30) while 45% report no change (29). For non-mortgage loans, roughly half of loan officers report the processing time has decreased in the past five years (53%, 34), as do loan officers with fewer than five years of experience (53%, 19) with the rest reporting no change (41%, 26 and 44%, 16, respectively). Table 2 presents these results.

Of those loan officers that reported decreased processing time for mortgage loans, 81% (38) attributed the change to process improvements internally within the bank; 55% (26) to efficiency improvements due to kiosk/KHUR systems, and 28% (13) reported that the change is due to more complete applications submitted/customers faster to complete their application requirements. For non-mortgage loans, this decrease in processing time is primary attributed to internal process

improvements at the bank (89%, 47), as well as efficiency improvements due to the kiosk/KHUR systems (40%, 21). Table 2 includes all reasons enumerated for these perceived changes.

Broadly, 86% (83) of loan officers responded either that at least half (if not more) of all loan applicants obtain a property reference letter via the self-service kiosk system. When asked how much they agree or disagree that new property information systems led to changes in time or cost to the loan application process, 96% (89) agreed or strongly agreed that obtaining a property reference letter via the self-service kiosk system reduced the time it takes to apply for a loan. Similarly, 87% (84) agreed or strongly agreed that the new property information systems reduced the cost of the loan application process, and 95% agreed that it improved customer service (92). Table 2 also outlines these results, as well as those described below.

For one set of citizen FGD respondents, we hear a significant improvement in the loan application process due to the ability to obtain documents via the self-service kiosk and fast processing times. One participant voiced,

"There are no difficulties [in the loan application process] after this project was implemented. The documents get done directly, they get done here, the officials distribute them to us at khoroo. I think even the time we spent was reduced...It was easy for me. I got loan within only one day. I obtained references from the kiosk, then went to GASR. The collateral contract was ready within one hour. It was easy." (Women, Baganuur).

In accordance with the importance of the self-service kiosks, out of the half of the loan officers that answered the question (51), 55% (33) said either that no one, or less than 25% of loan applicants, obtain a property reference letter via the onsite KHUR information sharing system. This data point likely reflects the incomplete rollout of the KHUR system to banks at the time of data collection.

Loan officers did anecdotally report decreases to the time it takes for applicants to get loans due to the new KHUR system, though. One loan officer explained,

"...we can view all information including whether a customer has ongoing loan, when he/she obtained ownership of immovable property, former owners of immovable property and whether a former owner sold a property or gifted a property...the registration system, information system and electronic network...customers have less challenges or troubles."

The KHUR system does not allow loan officers to access an applicant's information when the applicant is not present, and loan officers do not have the ability to make record changes (for example, to register an asset as collateral), but loan officers emphasized that the KHUR system does allow applicants to more quickly access the information they need during their appointment at the bank, instead of making many trips to gather documents. One officer described the new system,

“For us, there isn't much difference. The main thing is that for correspondents, it is very easy. They do not need to go to the khoroo to take reference letter, do not need to go to company to take social security, and do not need to get reference of marriage. Collateral reference needed before and after, become taken at the time. On the other side, it became terribly easy.”

When asked to choose the primary current challenge to speeding up the loan application process, the most common response was incomplete applications (30%, 30). Table 2 lists all of the less common reasons cited. Officers report that very few applicants have all the necessary documents for a mortgage loan prior to visiting the bank. A third of loan officers report that half or more applicants for non-mortgage loans have their documents ready, which is more than the mortgage loan applicants. Incomplete applications are reported by a 1/3 of loan officers as the primary reason for slow application processes, with low rates of other reasons. This is a marked change over time, where officers with 10 or more years of experience had much higher reported rates of incomplete applications then compared to now.

In FGDs, loan officers indicated that the “[loan] process has changed, improved and is getting easier.” Several officers discussed that the loan application process used to be written by hand, but now the digitized application is much quicker and efficient to fill out as it is also available online.

Decreases in time for applicants to access their registration information appear to put more pressure on banks to make their internal loan approval process as quickly as possible. The loan officers discussed,

“Banks are competing with each other in terms of offering their customers loans as fast and easily as possible...Customers are selecting and going to banks, which promises easiest loan process. If loan products are similar among banks, they go to banks in which delivers good customer service and requires less loan documents.”

However, other citizen FGD respondents report that the pursuit of loans and mortgages is associated with a high rate of failure – and many find the process too daunting to attempt. A portion of respondents noted that they had tried and failed to secure a mortgage because of the cost, significant requirements, and complexity of the process. This divide in the successful participation in collateralized lending appears to be associated with the wealth and age of individuals. In particular, many noted that the banks viewed individuals over 55 and retired persons as too risky. Similarly, respondents complained that the bank loan process for securing a consumer loan with immovable property was difficult, especially for those with low pensions. One participant explained,

“Mortgage loan is a service for those who have money. Those who don’t have money like me cannot afford it. They rent their apartments and buy another apartment with their rent income. They bought apartment by collecting the monthly rent income.” (Residents engaging in land transactions, Chingeltei)

ii) Lending Trends

Overall, many loan officers report increases in mortgage and non-mortgage loans during the study period, though for mortgage loans the rollout of the 8% interest government loan subsidy program in 2013 is a key explanation for these fluctuations. Reluctance to accept some types of land as collateral remains a key barrier to increasing collateralized lending.

A third of loan officers 36% (23) report an increase in the use of mortgage loans to buy apartments compared to five years ago, though 45% (29) report no change (Table 2). Similarly, in FGDs, loan officers consistently acknowledged that mortgage loans increased in 2013. In fact, one loan officer reported that they often get requests to have cosigners removed from loan contracts because they would like to get an *additional* eight percent mortgage loan. However, households are only allowed one eight percent loan at a time. He described:

“Ninety percent of issued apartment loans have cosigners and loans applied by people alone are issued less frequently. Assuming that a wife has registered an apartment in her name by taking eight percent loan, a husband is impossible to take eight percent loan again. That is why many people want to remove their names from loan contracts... We don’t accept these requests and tell them that every household is allowed to take eight percent mortgage loan one time. This restriction aims to provide possibilities with more households and people.”

However, numerous loan officers also noted that “between 2013 and 2015, [mortgage loans] dramatically increased...after that they became stagnant.” This statement likely points to the subsequent barriers to accessing these loans or declining availability as this subsidy lost funding. The structured KII data partially confirms this, as 33% (21) of loan officers interviewed also respond that the number of mortgage loan applicants has decreased in the last five years, as presented in Table 2. Accordingly, another agent revealed, “The government has restricted giving the mortgage loan program. Nevertheless, enterprises have started offering 5-8% interest loans. Thus, buyers have many possibilities. It means that this is influencing buying [trends].”

Loan officers believe that adjusting bank regulations about down payments and maximum amounts could further increase mortgage lending. One officer explained the ways that loan requirements could be adjusted around down payments, specifically for down payments. He explained,

“Generally, most people who apply for loans are stuck in paying down payment. At that time, mortgage loan was initially 100% leasing and down payment was 0 MNT, so that people took loans by collateralizing their parents’ apartments. Due to this opportunity disappearing, people have had to prepare money for a down payment.”

Another suggestion was to increase the limit on loan amounts given the high apartment prices. One loan officer explained, “... the limit of loan size that is 100 million MNT must be increased given how high apartment price is. The requirements need to be reconsidered and revised like accepting land as collateral.”

While some real estate agents described numerous ways to obtain financing, others also reported that cash flow is limited, and apartments are more expensive than the general public can afford. Those that believe that cost and financing are not a barrier cite the large supply of new construction apartments and private sector solutions to the lack of available government-supported 8% mortgages. One agent explained,

“Due to supply in the market being high; construction companies are offering very pleasant conditions to citizens. Long-term loan, flexible payment terms, and barter exchanging goods for various assets. For middle class market people, it is very competitive for construction companies, so consumers are offered more pleasant conditions in 2017 and 2018, compared to what they were [offered] in 2013 and 2014 when the property bubble occurred.”

Other agents believe there is still an overall lack of financing and prices are too high: “Due to cash being scarce, most people suggest to barter, to take a 1-year lease, or to do a partial exchange by using cars because many people have assets for using as collateral that cost 20 or 30 million MNT. Generally, the number of people who are interested in bartering has increased.” Another agent postulated,

“It is inevitable because there is no law regulation, and construction companies sell their apartments for any random price they want to name. Now if you look into the prices of apartments, the residential apartment is very expensive. Thus, typical citizens cannot afford this type of apartment. New apartments are too expensive.”

Additionally, half of loan officers report that the number of non-mortgage loan applicants has increased since five years ago (Table 2 - the other half report no change). Reasons for the increase is banks offering more favorable terms (81%, 43) and economic growth (43%, 23). More experienced loan officers also report that the use of new apartments as collateral for non-mortgage loans has increased compared to the past five years. In the qualitative data, several loan officers noted that the types of loans people are applying for are changing in addition to the types of applicants. One officer reported, “with our bank, the number of people applying for business loans tends to increase. Because the market is improving too. The interest rate is decreasing.” Several officers suggested that applicants’ payment capabilities were increasing, likely due to an improving economy and fewer bank requirements for loan applications.

Loan officers also generally reported that land-based lending (both mortgage and non-mortgage loans) has been increasing in recent years as people have been obtaining their land certificates: “In the past, they had not obtained ownership of their lands, but in last five years, they received land certificates so that they were enabled to use them as collateral as well as they became aware of opportunities. Thus, it has relatively increased and it still increasing.”

While loans officers reported that banks have similar trends for how they lend, not all banks accept empty land as collateral. One loan officer confirmed that his bank only lends if there is existing immovable property on the land. Another loan officer noted that they while they do lend based on land alone, it would generally be a smaller loan and only “small businessmen or self-employed people who have their own businesses.” Loan officers provided further insight about the types of people who try to obtain credit or loans with using solely a plot of land. They suggested that these

individuals are generally from “middle-income class” and cannot afford to build on their land. These lending policies may be impeding some applicants from obtaining loans or may direct certain types of applicants to one bank versus another.

Additionally, some land remains too remote to have enough value to be accepted as collateral. Several loan officers suggested that one persistent problem in expanding access to credit is the low value of the land that is being allocated under the law on privatization. One officer stated,

“When going out of the city and seeing environment along the paved road, there are too many black poles, right. Small and small. Those are lands that are owned. Who will live there? Who will value those lands? How will those lands be valued? Who will accept those as collateral for what purpose if someone wants to take land-based credit? No pawn shop will accept those lands. Valueless and inexpensive, but those are [their] assets.”

Though minimal, several loan officers indicated that some households were able to buy apartments by using their house in their hashaa plots as collateral. “Sodon apartment allowed citizens to buy apartment in exchange for houses in hashaa plots and cars that were used to pay down payment. A lot of people moved into the apartment.” However, this was only the case in areas where land value is higher due to infrastructure development.

Officers suggested that if more people were able to use these properties as collateral for a down payment, many more people would be able to take out mortgage loans:

“If house in hashaa plot is accepted to use as collateral in terms of down payment of mortgage loan, a large number of people will be able to take mortgage loans. There are a lot of people who are interested in collateralizing their houses in hashaa plots in order to buy apartments. Average price of house in hashaa plot is 20 million MNT, and that is reasonable for a down payment. Not only for buying apartment, but also they will be able to collateralize their houses in hashaa plot which they own getting loans.”

c) Women’s empowerment

With respect to gender, the study found some evidence that women are registering land and obtaining credit in their names more frequently due to the PRP.

Table 3 displays the gender indicators from the structured interview with registrars. Out of registrars aware of the MCA-supported gender training, most (64%, 18) stated that the PRP has encouraged their office to engage more women. Out of all respondents in the GASR registrar

survey, around 40% agreed or strongly agreed that PRP activities contributed to their knowledge of land rights for women (38%, 40). In contrast, while FGD respondents were familiar with the Law on the Promotion of Gender Equality, there was very little acknowledgement among citizens of gender bias or problems specific to women in land administration. Citizens were generally dismissive of the question series pertaining to gender discrimination regarding land and property registration. The FGD respondents in the women's group pointed to Mongolia's system of matriarchy.

Nevertheless, most registrars agreed or strongly agreed that the number of women registering land in their own names has increased. Answers were similar when asked if increases occurred in the last five years (68%, 19) or in the last ten years (71%, 20). Out of the around 40% of registrars who were aware of the MCA-supported gender training (37%, 28), half agreed or strongly agreed that the gender component of the PRP specifically supported an increase in land registrations or transactions involving women (50%, 14). From their perspective, while several real estate agents reported that they feel that women are more involved in apartment transactions than men and that "women are knowledgeable about seeking or buying apartments, detailed things and stuff like that," others felt that most of their clients were men.

Similarly, half of registrars agreed that the gender component of the PRP increased the number of titles registered to women (50%, 14). More agreed or strongly agreed that the PRP is why they saw increases in women registering property in their own name, whether in the last five years (63%, 12) or in the last ten (65%, 11).

However, citizen FGD participants (male and female) listed several common reasons for the persistence of at least some individual versus joint titling. These relate to (1) the difficulty of transactions in the case of multiple owners (2) the decision for joint versus single titling as a 'family decision'.

Overall, many FGD respondents highlighted class and economic disparities versus gender inequality as the primary challenge to improving land administration. As one woman in Songino Khairkhan described,

"Currently, in our society, gender issues are relatively ok. Almost no discrimination based on men and women. Of course, there are sometimes problems that arise due to gender difference. Rather

than gender, it seems more powerful people to get the better lands. In my opinion, they passed a law that is not realistic. For people like us, it is impossible to get land. For instance, they said that 0.07 ha land will be owned by everyone in UB city, but the city does not have such large land area, because of population density. Through the internet, lucky ones get the land.”

Loan officers were divided on the percentage of loan applicants they estimated as female in the past year. Fifteen percent responded either that more than half or almost all applicants were female, compared to 61% that responded either that less than half or less than a quarter were female. Meanwhile, 24% thought the applications were half female and half male. Among loan officers with five or more years of experience, 42% saw this as an increase (27) while the rest reported no change (58%, 37). Table 4 presents these indicators from the structured interview with loan officers.

In FGDs, several loan officers reported that, “...in most cases, immovable property certificates are registered in men’s names.” While the actual property may be registered in men’s names, numerous loan officers noted that wives are often the ones fill out the actual loan applications, “wives take loans. They take their husbands and say ‘sign your signature’ because the ones who have jobs and own properties are men. However, women that own businesses are able to take out loans independently”. One loan officer suggests, “...regarding small-medium-sized business, women take loans. For example, women are the people who have simple and own workplace and run stable businesses.”

While loan officers in FGDs generally described equal treatment of women in the loan process, they gave some examples of how women are disproportionately impacted during the loan process. One officer describes, “Regarding this issue, retirement age is lower for women. A woman retires from her work when she is 55 years old. Our requirement that a loan applicant is eligible to take a loan until he/she retires from work may be related to this issue. Otherwise, there is not any gender related issue. It is less significant.” Several loan officers also noted that one bank funds loans specifically for women, but it is a foreign investment and not funded by the GoM.

6) Discussion

By providing the GoM with improved technology and capacity building, this intervention was designed to increase the accuracy, security, and efficiency in the processing of land records. In

turn, as more Mongolians are able to acquire and transfer formal rights to land and immovable property, those who are bankable and interested in a formal bank loan are expected to be able to better access commercial credit.

This study found compelling indications that the registry strengthening support led to pervasive and lasting decreases in registry transaction times. These decreases may also have translated into reduced time spent gathering documents for collateralized loan applications and in shorter wait times to receive an application decision. We also see evidence in the qualitative data that greater use of the formal system and reduced corruption are key outcomes that can be attributed to PRP.

By making the process of registering land and property easier and less costly, the project expected to encourage investment in these assets and expand the use of mortgages and collateralized lending. Accounts suggest that the number of mortgage and collateralized non-mortgage loan borrowers has risen steadily since 2013. However, attributing overall trends in lending surrounding the project would be difficult, largely because the introduction of the 8% mortgage subsidy program in Mongolia in 2013 and an associated sharp increase in mortgage lending coincided with project implementation. It is important to further note other factors that may encourage Mongolians to borrow to purchase or leverage real property, such as increased household incomes that resulted from recent expansion of mining activities, government-provided services and infrastructure, and rising real property market values. Conversely, ongoing reluctance by banks to accept empty land as collateral may still limit access to credit.

Beyond the MCC-financed electronic registry system that appears to have permanently streamlined the application process, two key lasting impacts of the project are follow-on innovations that the electronic registry system and digitized records made possible: the self-service kiosk system through which citizens can receive copies of official documents, among other services, and the KHUR records system that grants trusted private entities like banks streamlined access to government records such as property records with the consent of the individual. These new offerings decreased the number of people traveling to GASR offices for property reference letters and decreased both the time and cost to obtain a reference letter. These services boast future potential to continue to meet customer needs more efficiently through expanding to support more virtual services (as opposed to requiring a GASR office visit), though to date the only property registration transaction they support is the reference letter.

7) Conclusion and Next Steps

This paper has presented preliminary findings based on the data sources and analysis currently available. The next stage of this research is to integrate/update the results using two quantitative data sources. This evaluation will ultimately utilize a variety of data sources to test whether the project achieved expected outcomes. We will compare pre- and post- data measuring transaction times – including administrative transaction records and detailed tracking of loan application times for banking customers.

The study will analyze historic trends in administrative land transaction records, such as the volume and processing times of transactions. The administrative property registration data from the ePRS system is being collected at the level of the transaction to compare elapsed times and characteristics of individuals/properties pre- and post-introduction of the digital property registration system. The ePRS data provides multiple data points about post-ePRS values of the indicators of transaction times, transaction volumes, and characteristics⁶ of individuals engaging in transactions. This data is being obtained through an export of the ePRS transaction data by the central Database Software Division of GASR. This export includes all transactions for the years with complete data (2014, 2015, 2016, and 2017) from Ulaanbaatar and the cities in the eight aimags digitized through the PRP (Erdenet, Darkhan, Arvaikheer, Uliastai, Khovd, Zuunmod, Undurkhaan and Choibalsan), and limited prior data from the period 2008-2013.

This study also includes two rounds of surveys of banking customers, in 2013 and in 2018. The banking customer survey data will serve as the main source of information about changes over time in the average time and cost to obtain a loan and the types of loans obtained between the 1st and 2nd round banking customer surveys. The banking customer survey is designed to track eligible loan applications (land or property based transactions, such as mortgages or collateralized loans) from submission to approval, including the processing of document requests to GASR, to provide a picture of how the improvements within GASR (ePRS, document digitization) translate into time savings when accessing credit.

⁶ These characteristics are: district, aimag, parcel/property size, parcel/property value (price per square Meter), parcel/property type, number of registered owners, gender of registered owner(s).

Collecting quantitative and qualitative information about individual users and their properties allows the study team to compare the demographic characteristics of people engaging in formal land transactions and their properties before and after the introduction of ePRS, both in a systematic fashion through their inclusion in statistical models and also to descriptively understand how service providers and users understand any shifts in the kinds of customers accessing these services.

While the development context in Mongolia is unique in many ways, these initial working paper findings and the larger study results of this study may, nonetheless, hold useful lessons for policy makers and development practitioners more broadly, particularly regarding the question of what may work to increase the efficiency and accessibility of formal land and property administration services.

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Tables

Table 1: GASR Structured KII Transaction Indicators

Indicator	Overall Value
Has seen major changes in the way GASR handles first time registration of land and immovable property according to the law on privatization in the last 5 years	67%(70)
Changes include:	
Citizens are more aware of their land and property rights	14%(10)
Increase in number of people registering land and property	43%(30)
Increase in number of first-time land and property registrations	16%(11)
Introduction of ePRS/paper documents are now digitized	13%(9)
Increase in number of people putting land and property in economic circulation (buying, selling land, using as collateral)	17%(12)
Improved Customer service	6%(4)
Faster/easier registration process (including reduced number of steps or documents required.)	9%(6)
Expanded access to information among institution	6%(4)
Increase in demand for land and property	6%(4)
Believe those changes decreased or significantly decreased processing times	59%(41)
The most important cause of these changes is:	
Law/policy change	11%(7)
Change in number of steps it takes to process transaction	9%(6)
Ability to process transactions electronically rather than physically	44%(28)
Increased capacity for processing transactions due to opening new offices	2%(1)
Increased capacity of staff to process transactions due to training	2%(1)
Increased availability of some services through kiosks	31%(20)
More people taking loans	2%(1)
Estimate of average processing time to register and receive ownership title for the first time for a residential property on land which already has a governor's decision/privatization decision? (In days)	Mean 7, Std. Dev 4, Min .5, Max 14.
Believe it is difficult to achieve full land registration/title in ger areas	10%(10)
Feel the average length of time to issue a certificate of ownership has decreased or significantly decreased in the past 10 years	41%(42)
Believe the primary challenges to speeding up the land registration process is:	
Disputed or complex applications	9%(9)
Lack of bureaucratic motivation	1%(1)
Lack of registry/cadastral information	45%(47)
Administrative processes are slow	13%(13)
Information sharing between government bodies involved	9%(9)
Centralized processing of formalization	6%(6)
Lack of information/knowledge among citizens	1%(1)
Insufficient number of employees for workload	2%(2)
Software program errors/slow speed	2%(2)
None	13%(14)
Estimate of average processing time to transfer ownership title for a residential property on land	Mean 4.7, Std. Dev 4.6, Min .5, Max 40.
Has seen decrease or significant decrease in the time it takes the GASR office to approve transactions	40%(41)
Believes the following is the most important cause of this change:	
Law/policy change	8%(4)
Change in number of steps it takes to process transaction	8%(4)

Indicator	Overall Value
Ability to process transactions electronically rather than physically	76%(39)
Increased capacity for processing transactions due to opening new offices	0%
Increased capacity of staff to process transactions due to training	2%(1)
Increased availability of some services through kiosks	6%(3)
During tenure, the overall costs for processing transactions has decreased or significantly decreased.	25%(26)
Believes the following is the most important cause of this change:	
Law/policy change	34%(10)
Change in number of steps it takes to process transaction	7%(2)
Ability to process transactions electronically rather than physically	31%(9)
Increased capacity for processing transactions due to opening new offices	0%
Increased capacity of staff to process transactions due to training	0%
Increased availability of some services through kiosks	21%(6)
During tenure, the overall number of steps for processing various transactions has decreased or significantly decreased.	24%(25)
During tenure, the overall number of people making land transactions in office has increased or significantly increased.	80%(83)
If increased, believes the following is the most important cause of this change:	
Increased demand for follow on transactions now that people have official title to their registered land and property	73%(61)
Increased demand because the transaction process is easier	5%(4)
Increased demand for loans/mortgages	17%(14)
Changes to land law	5%(4)
During time at GASR, decrease or significant decrease in number of steps required to complete:	
Registration of Ownership rights of immovable property	20%(21)
Registration of Ownership rights of land	20%(21)
Buying, selling, or subdividing property	17%(18)
Gifting property	13%(14)
Inheriting property	11%(11)
Registering a mortgage	85%(88)
Registering of assets as collateral (land or property)	10%(10)
Reference letter of immovable property	45%(47)
During time at GASR, decrease or significant decrease in the administrative fee charged for the following transaction:	
Registration of Ownership rights of immovable property	8%(8)
Registration of Ownership rights of land	17%(18)
Buying, selling, or subdividing property	99%(103)
Gifting property	4%(4)
Inheriting property	3%(3)
Registering a mortgage	13%(13)
Registering of assets as collateral (land or property)	13%(13)
Reference letter of immovable property	99% (102)

Table 2: Loan Officer Structured KII Loan Indicators

Indicator	Overall Value
Average processing time for a mortgage loan has increased (past 5 years)	8%(5)
Average processing time for a mortgage loan has decreased (past 5 years)	47%(30)
Average processing time for a mortgage loan has not changed (past 5 years)	45%(29)
Reasons for increase in mortgage loan processing time:	
More applications/backlog	17%(1)
Government/regulatory changes	33%(2)
Delays or slow process internally within bank	50%(3)
Reasons for decrease in mortgage loan processing time:	
Fewer applications	15%(7)
Easier to verify information contained in applications	6%(3)
More complete applications submitted/customers faster to complete their applications	28%(13)
Government/regulatory changes	13%(6)
Process improvements internally within bank	81%(38)
Efficiency improvements due to KHUR/kiosk systems	55%(26)
Avoiding field verification	6%(3)
Reduction in counterfeit documents	2%(1)
Avoiding multiple mortgages on same property	6%(3)
New access to electronic property records (ePRS)	2%(1)
Average processing time for a non-mortgage loan has increased (past 5 years)	6%(4)
Average processing time for a non-mortgage loan has decreased (past 5 years)	41%(26)
Average processing time for a non-mortgage loan has not changed (past 5 years)	53%(34)
Reasons for increase in non-mortgage loan processing time:	
More incomplete applications submitted/customers slow to complete their applications	20%(1)
Government/regulatory changes	20%(1)
Delays or slow process internally within bank	60%(3)
Reasons for decrease in non-mortgage loan processing time:	
Fewer applications	8%(4)
Easier to verify information contained in applications	15%(8)
More complete applications submitted/customers faster to complete their applications	11%(6)
Government/regulatory changes	2%(1)
Process improvements internally within bank	89%(47)
Efficiency improvements due to KHUR/kiosk systems	40%(21)
Avoiding field verification	13%(7)
Reduction in counterfeit documents	4%(2)
Avoiding multiple mortgages on same property	4%(2)
New access to electronic property records (ePRS)	8%(4)
Estimated percentage of applicants who obtain property reference via kiosk:	
Less than 25%	5%(5)
Less than half (25-49%)	1%(1)
About half (50%)	8%(8)
More than half (51-75%)	11%(11)
Most or almost all (76-99%)	47%(46)
All (100%)	27%(26)
Estimated percentage of applicants who obtain property reference via KHUR:	
None	22%(11)
Less than 25%	33%(17)
Less than half (25-49%)	10%(5)
About half (50%)	10%(5)
More than half (51-75%)	2%(1)
Most or almost all (76-99%)	12%(6)

Indicator	Overall Value
All (100%)	12%(6)
Primary current challenge to speeding up loan application process:	
Incomplete applications	30%(30)
Lack of registry information	6%(6)
Internal bank process is slow	16%(16)
Administrative registry processes are slow	13%(13)
Slow registry data	4%(4)
Field verification of parcels	11%(11)
Percentage of people who seek a mortgage to buy apartment has increased (past 5 years)	36%(23)
Percentage of people who seek a mortgage to buy apartment has decreased (past 5 years)	19%(12)
Percentage of people who seek a mortgage to buy apartment has not changed (past 5 years)	45%(29)
Increase in total number of mortgage applicants (past 5 years)	17%(11)
Decrease in total number of mortgage applicants (past 5 years)	33%(21)
No change in total number of mortgage applicants (past 5 years)	50%(32)
Reasons for increase in total number of mortgage applicants:	
Changes in policy/government regulations	56%(16)
Economic growth/people feel wealthier	19%(3)
Migration/people moving to cities	6%(1)
More people have land/property to use as collateral	13%(2)
Bank offering more favorable terms	50%(8)
Reasons for decrease in total number of mortgage applicants:	
Changes in policy/government regulations	42%(13)
Economic uncertainty/people less wealthy	13%(4)
Do not have collateral	19%(6)
Lack of available financing	65%(20)
Percentage of people who use new apartment as collateral for non-mortgage loan has increased (past 5 years)	44%(28)
Percentage of people who use new apartment as collateral for non-mortgage loan has decreased (past 5 years)	2%(1)
Percentage of people who use new apartment as collateral for non-mortgage loan has not changed (past 5 years)	55%(35)
Increase in total number of non-mortgage loan applicants (past 1-5 years)	53%(53)
Decrease in total number of non-mortgage loan applicants (past 1-5 years)	6%(6)
No change in total number of non-mortgage loan applicants (past 1-5 years)	41%(41)
Reasons for increase in total number of non-mortgage loan applicants:	
Changes in policy/government regulations	6%(3)
Economic growth/people feel wealthier	43%(23)
Migration/people moving to cities	4%(2)
More people have land/property to use as collateral	17%(9)
Bank offering more favorable terms	81%(43)
Reasons for decrease in total number of non-mortgage loan applicants:	
Economic uncertainty/people less wealthy	33%(2)
Bank offering less favorable terms	17%(1)
Do not have cosigner	17%(1)
Lack of available financing	67%(4)

Table 3: GASR Structured KII Gender Indicators

Indicator	Overall Value
Aware of the MCA-supported gender training that occurred between 2008-2013	37%(28)
Agree or strongly agree the gender component of the PRP supported your office to Increase the number of land registrations or transactions involving women.	50%(14)
Agree or strongly agree the gender component of the PRP supported your office to Increase the number of titles registered in the name of women.	50%(14)
Witnessed an increase in the numbers of women registering land in their own names compared to 5 years ago.	68%(19)
If witnessed increase, agree or strongly agree this is because of PRP.	63%(12)
Witnessed an increase in the numbers of women registering land in their own names compared to 10 years ago.	71%(20)
If witnessed increase, agree or strongly agree this is because of PRP.	65%(11)
Believe PRP encouraged office to engage more or much more with women	68%(19)
Agree or strongly agree PRP activities contributed to their knowledge of land rights for women	38%(40)

Table 4: Loan Officer Structured KII Gender Indicators

Indicator	Overall Value
Estimated percentage of applicants who are female (past year):	
None (0%)	4%(4)
Less than 25%	40%(40)
Less than half (25-49%)	17%(17)
About half (50%)	24%(24)
More than half (51-75%)	11%(11)
Most or almost all (76-99%)	4%(4)
Percentage of applicants who are female has increased (past 5 years)	42%(27)
Percentage of applicants who are female has not changed (past 5 years)	58%(37)

Figures

Figure 1



Example of “ger areas” which continue to increase in prevalence, size, and population.

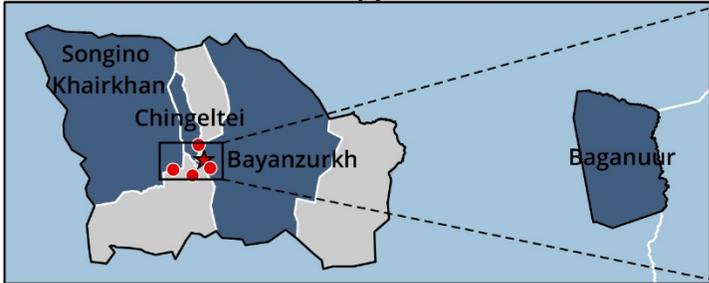
Figure 2

MCA/MCC Registry Strengthening Support Across Mongolia

- Duuregs (Districts)
- ★ Central Registration Office
- Aimags (Provinces)
- Integrated Service Centers



Ulaanbaatar - Districts Supported



Ulaanbaatar - GASR Central Offices

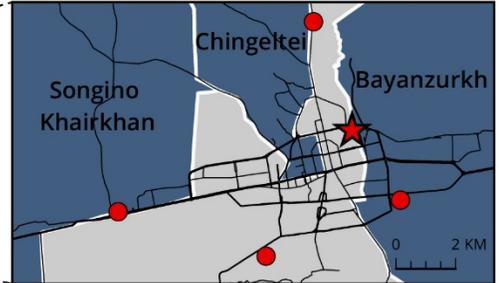


Figure 3



Tuts Mashin self-service kiosk in Ulaanbaatar