



Mongolia

MCC Learning from

“MCC – Mongolia 1 Property Rights Project (PRP)-

Peri-Urban Land Leasing Activity”

Innovations for Poverty Action

MCC has identified the following programmatic and evaluation lessons based on the MCC – Mongolia 1 Property Rights Project (PRP)-Peri-Urban Land Leasing Activity (PURP)¹.

PROGRAMMATIC LESSONS

- *Legal and policy reform can significantly impact an intervention’s ability to obtain results. MCC should keep channels open with the partner government on any pending policy and legal reforms even if the Compact is not funding those reforms. While some legal and policy changes take significant time and awareness raising before having a noticeable effect, other legal and policy changes can have an immediate impact on behavior. In an effort to stem further land degradation, the PURP encouraged herders with newly granted private land rights to reduce the size of their herds so as to be within the pasture land’s carrying capacity². However, during PURP implementation herders across Mongolia, including herders in the control and treatment groups, increased their herd sizes and there was no observable difference between the groups. The one exception was in Choibalsan, where there was a significant reverse effect (treatment herder households increased their herd sizes by more sheep units than comparison herder households). In Kharkhorin, the evaluation did find a substantial project impact on yearly pasture load, with herders in the treatment group grazing less sheep units on average per hectare even with the increase in herd size. Local stakeholders and the evaluation noted that the Government of Mongolia’s removal of the per head animal tax likely contributed to herders increasing their herd sizes. However, on the urban side of the PRP, the government supported mortgage subsidies that led to increased demand for formal land registration services and mortgages—both of which were expected project outcomes.*

PURP was not involved in the elimination of the per-head animal tax or the mortgage subsidies, but they each likely affected PRP’s ability to realize expected outcomes--positively (urban property rights) and negatively (peri-urban rangeland). Considering the impact of legal and policy reforms on land intervention outcomes, even if the Compact intervention is not funding legal and policy reform, MCC may want to stay engaged with the partner government in an open dialogue on upcoming legal and policy reforms in the sector.

- *An incomplete understanding during project design of existing land rights, land use behaviors and land quality in the specific program areas can result in implementation delays, as well as changes in focus and outcomes. Although a detailed picture of land is often unavailable without in-depth field work, key assumptions should be verified during compact due diligence. PURP was prefaced on the assumption that 1) land was overgrazed due to common use pastureland and lack of private land use rights; and 2) herders had customary grazing areas around their winter shelters that did not overlap with other grazing rights, which could be leased to individual herder groups to spur investment. In reality, land was largely overgrazed in the peri-urban areas around the three main cities; however, it was not as overgrazed in one of the two peri-urban Phase 2 areas (Choibalsan). Unlike the other four peri-urban areas, Choibalsan households had relatively high levels of perception of tenure security. Rangeland management behaviors*

¹The Peri-Urban Land Leasing Activity part of the Property Rights Project (PRP) as set forth in the Compact, but in fact the activity was implemented as a separate project, including its own Project Implementation Unit. As such, it was commonly known as PURP—the Peri-Urban Rangeland Project.

² Carrying capacity is the maximum number of livestock that an area of pastureland can sustainably support without becoming degraded over time.

did not change there, which could have been since households there were not as driven by concerns of overgrazing.

In Phase 1 peri-urban areas, which surrounded Mongolia's three main cities, there was also a misunderstanding of the amount of land available for leasing, which affected the ability of qualified herder applicants to participate in PURP. The aim was to supply 300 leases via a lottery from those herder groups whose applications were shortlisted by local-government selection committees. However, only 284 herder group parcels out of the 467 shortlisted herder groups qualified following a social assessment around resettlement concerns, which also caused significant project delays. Before granting a lease, many parcels had to be resized to avoid impeding on neighbors' grazing areas or falling into buffer zones around water areas. In the end, some herder groups did not have sufficient land area to participate in PURP. A better picture of existing land availability and land degradation would have lessened this issue, but it would have required more time and money during due diligence. Phase 2, for example, revised its herder selection process to avoid facing similar issues. At the time, MCC was interested in quickly getting Compacts signed. Now, MCC engages in more detailed due diligence, but it does take much longer to design the Compact. There are tradeoffs and MCC should consider its risk tolerance in each case.

- *Incentives are often needed to advance the selection of women and vulnerable groups as project beneficiaries. When using a scoring system to select beneficiaries, simply awarding higher points for inclusion of women and low-income groups may not be sufficient to gain their participation.* PURP shortlisted herder group applicants based on those who passed a minimum score using established scoring criteria; these criteria included more points for the inclusion of low income and women-headed households. However, the final beneficiary herder groups did not include many women-headed or lower income households. This could have been due to more points also given for herders for socioeconomic factors and animal husbandry experience such as owning fodder and dairy processing equipment and experience in milk and meat sales. Herder groups also were required to repay a notable part of the cost of PURP-supplied wells and funds for materials for fencing and animal shelters, so herder applicants may not have been as willing to include herder households with lower incomes and less experience. MCC may want to ensure the project concept works first before expanding to households who may have less ability to succeed. However, if participation by women and vulnerable groups is key to the project, MCC should consider alternative methods to ensure participation by these groups, such as a quota. As there are various factors at hand in each environment and intervention that could influence beneficiary selection, program designers should consider in each situation the specific drivers of women and vulnerable group participation in that context.
- *Provision of private land-use rights over previously common use grazing land can significantly improve perceptions of tenure security for beneficiaries in terms of both risk of expropriation of land and overgrazing by others. It can also encourage related investment in immovable property. However, even when combining private use rights with provision of wells for water access, materials for fences and animal shelters, and training in rangeland management and intensive dairy farming, it was insufficient to change herder migration patterns or overall incomes.* It is unclear whether the lack of effect on migration was due to the majority of semi-intensive leases limited to 2 seasons due to limited land availability. However, overall migration patterns did not change and there may be other factors driving migration patterns and grazing practices that could have been explored more with qualitative data collection following the household surveys.
- *Having multiple types of land lease terms and trainings was difficult to enforce and implement. As this was the first time allocating private land use rights over common use grazing areas, standard packages for each intensive and semi-intensive herders would have been easier to implement and likely more effective.* The program planned for there to be two distinct types of herder groups: semi-intensive and intensive. Herders were granted private land use over traditional common use rangeland for either 1) semi-intensive use or 2) intensive use (dairy farming only). Each herder group, whether intensive or semi-intensive, was granted a lease over differing size parcels with grazing terms ranging from 1-4 seasons. In theory, the size of land granted was in accordance with the herders' existing grazing areas and was large enough to sustain herd sizes which would make households economically viable. Herder groups were required to limit herd sizes to no more animals than could be supported by the carrying capacity of the land. Intensive groups were hence able to apply for smaller areas of land under the presumption that these types of dairy operations were less reliant on pastureland to feed their animals.

Although semi-intensive and intensive herder groups were supposed to be distinct from one another and have different outcomes, in fact they were treated similarly and provided largely the same training around increasing dairy farming and improving rangeland and animal management practices. Due to variances in lease terms for each herder group, there was also no comprehensive training on using the land for a certain number of seasons. It is unclear whether herders adhered to using the land for the number of grazing seasons granted in the lease, but the evaluation did not find changes in migration patterns. The evaluation was unable to track grazing patterns around the specific terms for each herder group, but at the aggregate level, there were not significant changes seen in these variables. It is also unclear whether these terms were enforced by the local governments, as was intended. In future projects, MCC may want to consider limiting the types of land rights and variation in terms provided to beneficiaries in order to allow for common messaging for awareness raising and trainings, as well as ability to practically implement and enforce those terms post compact.

- *Phasing allows for learning and modifications to improve the program.* Based on the land selection process delays and issues faced in Phase 1, the PURP selection process was shifted for Phase 2, significantly speeding up the process while also facilitating random selection of beneficiaries.

EVALUATION LESSONS

- *Land quality can be a key factor in investment and behavior change around land utilization. Land quality should be considered when establishing comparison groups and analyzing land-based outcomes.* This is one of the first impact evaluations that attempted to capture measurements of land quality and land degradation. The PURP theory of change was based on the idea that granting private use rights over common use rangeland would encourage better rangeland management and decrease overgrazing of pastureland, especially around heavily populated areas around city and regional centers. In line with the project logic, the evaluation found four of the five PURP areas saw increases in perceptions of tenure security around ability to protect their land from overgrazing and expropriation, as well as some changes in rangeland management behavior and related increases in perceptions of land quality. For the fifth area (Choibalsan), the evaluation found that , it was not as overgrazed (18% of herder groups stocking above the carrying capacity of the land) as the other project areas and similarly that there were already high levels of perceived tenure security against expropriation of land and protection from overgrazing in that area. , Choibalsan hence saw no significant changes in perception of tenure security and relatively larger increases in herd numbers than comparison households (the opposite of the expected effect). Although the lack of change in perception of tenure in Choibalsan could have been due to relatively high perception of tenure and perhaps leases being issued prior to the baseline, another explanation and one that would also explain the change in herd size, is that Choibalsan was not as degraded as the other peri-urban areas and already stocking animals below the carrying capacity of the land.

Beyond implications for outcomes, there is also a concern that establishing comparison groups on solely socioeconomic factors may not truly be comparable, as factors like land quality and characteristics of the land (slope, soil and water availability) can drive land utilization and investment behavior. In the evaluation of PURP for Phase 1, the two evaluators actually established different comparison groups. The socioeconomic survey by IPA used traditional matching methods. Alternatively, the land quality survey by USDA ARS Jornada used neighboring parcels with similar land characteristics noting that they did not believe the comparison areas selected by the socioeconomic survey had comparable land parcels, especially when measuring pastoral use and land degradation. A household may be similar in terms of income/education but if parcel sizes, land quality and land characteristics differ across treatment and comparison groups, the herders living on those parcels will not have similar land investment and herd management practices. MCC should consider when it makes sense to add land quality as a key evaluation variable. Due to the complexities in measuring land quality, MCC should ensure the necessary technical expertise is part of the required expertise in evaluator scope of work.

- *The carrying capacity of a land parcel and related grazing patterns change frequently based on factors such as rain and land use. In order to understand program driven changes in these variables, more frequent monitoring is required, such as via GPS, and with guidance from sector experts.* To monitor herder adherence to the carrying capacity limits on the land, PURP used maps and estimates that had been prepared to aid with herder eligibility and selection. However, grazing patterns and carrying capacity of the land changes from year to year based on a variety of factors including precipitation and land use. Measurement of a herder's current grazing patterns or of the land parcel's carrying capacity solely provides a snapshot in time. Carrying capacity is also specific to each parcel of land. Program herders were taught

to measure the capacity of the land along with improved herd and rangeland management practices. Each had a business plan and measured their parcels' vegetation and updated their business plans each year. The evaluation did not use these data points, which could have been helpful for understanding the drivers of herder behavior. The evaluation measured stocking rates based on three static points in time, including a baseline after a dzud (severe winter storm) that had killed many animals. The carrying capacity of the land also was only measured for herder applicants and not all comparisons like neighboring parcels. Together these factors made it difficult to measure program effect on herd sizes and whether in fact herders were maintaining herd numbers within the true carrying capacity of the land, as it had likely changed in the years following the initial program measurement during design and animal numbers had fallen due to the dzud for baseline. In the future, it would be best to bring in key experts in the sector who can advise on better ways to estimate carrying capacity, stocking rates and grazing patterns, including potentially measuring grazing patterns via GPS monitoring. It would also be useful to make use of program data and related updates to land use and updated carrying capacity estimates.

- *There are important gender differences in socioeconomic status, education and behavior that should be considered when designing and evaluating an intervention. Where gender analysis has been completed, the results between men and women often differ.* MCC should ensure that evaluation sampling and data collection instruments are designed to capture effects on women versus men, when these differences have been documented as key factors within the logic models. In the case of PURP, women were more likely to have smaller households, herds, and income, be more sedentary, and have lower education levels than men. These divisions continued post compact with men continuing to have higher incomes and herd sizes compared to women. Men also were more likely to access loans. These gender differences have presented themselves across many of MCC's land projects. Moving forward, MCC should note key gender differences in logic frameworks and implementation design, as well as any potential for different outcomes. Ensuring sampling of women as part of the evaluation is key to understanding these differences, including intrahousehold aspects. MCC in recent evaluations has now added modules for women to try and capture changes for not only women-headed households but also women in male-headed households.
- *If there is an interest in analysis of different types of beneficiaries rather than average project impact across beneficiaries, MCC needs to work with the evaluator and project implementers to ensure the program design and supporting evaluation sampling approach allow for analysis of beneficiary subgroups of interest.* Under PURP, there was interest in evaluating intensive versus semi-intensive herders as well as women versus men, but the evaluation was underpowered to capture those effects. The evaluation was able to analyze regional differences. Discussions on sampling frames and related analysis should occur at the outset, including incorporation of these elements into the logic, research questions and evaluation design.
- *Although gaining buy-in for randomization of beneficiary selection can be a lengthy process, randomized controlled trials (RCTs) can be successfully implemented in land and seen by stakeholders as successful at depoliticizing the land allocation process. Discussions with the government to randomize beneficiary selection should occur during compact development rather than during implementation.* When program areas and selection processes are already agreed upon, it is difficult to gain buy-in to changes to incorporate an RCT. Phase 2 of PURP was designed from the beginning to allow for selection via a lottery and publicized as such from the start. Following the lotteries, local stakeholders noted the process was a good way to allocate land as it depoliticized the process. Land allocation can often be a politically charged process, so it was key to have the allocation of leases seen as transparent and fair. The evaluation of PURP added to the land literature as it was the first RCT assessing provision of private land rights over traditional common use rangeland and was also one of the first studies incorporating land quality analysis. During the compact development process, MCC should actively consider if there is potential for incorporating an RCT into program design. Considerations include whether there is a defined group or area that must participate in the intervention, and if there is a large enough pool of potential beneficiaries and conditions to allow for randomization.
- *Evaluation teams should include sector experts around the expected benefit streams and have all components of the evaluation managed by one lead evaluator even if the expertise lies outside the prime evaluator.* Having sector-specific expertise is key for evaluations of land and improves stakeholder buy-in, instrument development, data analysis and results dissemination. The evaluation of PURP had two components run by two different evaluators. The main component was the socioeconomic survey, and the supporting component was the land quality evaluation component. The evaluation team conducting the socioeconomic evaluation component was well qualified to conduct the impact evaluation on the statistical

side but did not include an expert in rangeland management. This caused some consternation among local stakeholders and required a learning curve by the independent evaluator to understand the sector. Whereas for the land quality evaluation, the independent evaluation team was well versed in the sector and had close relations with government, civil society and research community, who they worked together with to understand the findings and adopt learnings in future efforts. Having an expert in the rangeland management for the main socioeconomic component of the evaluation would have brought more depth to the evaluation and learnings. In addition, although having two separate evaluators allowed MCC to bring in both experts in evaluation and land quality and rangeland health, this management structure led to a lack of synergy, conflicting methodologies and problems merging the two evaluation component findings into a clear message. In the future, it would be better to hire one contractor who subcontracts and manages the joint process from beginning, including all required expertise. In more recent evaluations, MCC has included requirements for experts in land administration, natural resources management and geospatial and the independent evaluators have been able to subcontract the expertise. This has allowed for a smoother evaluation process.

- Qualitative data can help clarify and provide insights on unexpected findings. In MCC's early evaluations, such as the evaluation of PURP, MCC employed largely household surveys with little qualitative analysis. As such, there was no way to obtain an understanding of some unexpected findings. More recently, MCC has used mixed method data collection methodologies, including impact and performance evaluation elements with triangulation of data from qualitative, quantitative and administration data sources. Allowing time for analysis of the household data sets to inform the qualitative instruments and add perspective on some of the results finding in household surveys could be beneficial as well.
- *Severe weather can create difficulties in evaluating aspects such as mortality rates and control of animal numbers.* In Mongolia, the year of the baseline data collection (Phase 1-late 2010 and Phase 2-early 2012) followed a dzud (2009-2010). This left lower animal numbers and stocking rates on the land than there would have otherwise been and higher than normal mortality rates when measuring animal deaths over the few years prior to the baseline. Although control herders faced the same severe weather issues, it still was difficult to interpret some of the data findings and related causes. For example, animal numbers increased in all areas for both treatment and control herders between baseline and endline, but animal stocking rates of program herder groups remained largely within the carrying capacity of the land that was determined by the PURP implementers in 2009 during parcel mapping activities.