

# **Post-Compact Monitoring & Evaluation Plan**

## **Mongolia**

September 2013

## **1. PREAMBLE**

This Post Compact Monitoring and Evaluation (M&E) Plan is required according to the M&E Policy approved on May 1, 2012. As stated in the Policy on Monitoring and Evaluation of Compacts and Threshold Programs “In conjunction with the Program Closure Plan, MCC and MCA will develop a Post Compact monitoring and evaluation plan designed to observe the persistence of benefits created under the Compact. This plan should describe future monitoring and evaluation activities, identify the individuals and organizations that would undertake these activities, and provide a budget framework for future monitoring and evaluation which would draw upon both MCC and country resources.”

The Post Compact Monitoring and Evaluation Plan serves as a guide for monitoring Post Compact sustainability of Millennium Challenge Corporation (MCC) investment. Post Compact Monitoring and Evaluation Plan may be modified or amended based on the agreement between the designated representative, Secretariat Cabinet of Mongolia and Millennium Challenge Corporation.

## 2. LIST OF ACRONYMS

AADT	Annual Average Daily Traffic
ALACGAC	Administration of Land Affairs, Construction, Geodesy and Cartography
AVET	Agency for Vocational Education and Training
CO	Carbon Monoxide
CORS	Continually Operating Reference Stations
CPI	Consumer Price Index
DQA	Data Quality Assessment
DQR	Data Quality Review
EEP	Energy and Environment Project
ERR	Economic Rate of Return
GASR	General Authority of State Registration
GIS	Geographic Information System
GoM	Government of Mongolia
HOB	Heat Only Boiler
IE	Impact Evaluation
IFC	International Finance Corporation
IPA	Innovations for Poverty Action
IRI	International Roughness Index
M&E	Monitoring and Evaluation
MCA-Mongolia	Millennium Challenge Account-Mongolia
MCC	Millennium Challenge Corporation
MCEEIF	Millennium Challenge Corporation Innovation of Energy Fund
MECS	Ministry of Education, Culture and Science
MLSW	Ministry of Labor and Social Welfare
MOFALI	Ministry of Food, Agriculture and Light Industry
MUST	Mongolian University of Science and Technology
NCDI	Non-Communicable Disease and Injuries
NCVET	National Council of Vocational Education and Training
PIA	Program Implementation Agreement
PIU	Project Implementation Unit
PM	Particulate Matter
PPP	Public and Private Partnership
PURLS	Peri-Urban Rangeland Leasing Survey
RW	Railway
TBD	To be determined
TLC	Training Logistics Contractor
TVET	Technical Vocational Education and Training
UB	Ulaanbaatar
USDA	United States Department of Agriculture
VOC	Vehicle Operating Cost

### **3. COMPACT AND OBJECTIVE OVERVIEW**

#### **3.1 Introduction**

On October 23, 2007, the Government of Mongolia (GoM) and the Millennium Challenge Corporation (MCC), a United States Government agency, signed a five-year, \$285 million Compact to reduce poverty in Mongolia through economic growth. The five year Compact entered into force on September 17, 2008 and ended on September 17, 2013.

As part of a Memorandum of Understanding between the Government of Mongolia and the Millennium Challenge Corporation, the GOM will continue monitoring and evaluation of Compact activities through the Cabinet Secretariat. The purpose of the Post-Compact M&E Plan is to explain what activities the MCC and the GOM will undertake in the post-Compact period to monitor the benefits of the Compact.

The Post-Compact M&E Plan serves the following functions:

- Provides information about Post-Compact Evaluation. In addition to Post Compact monitoring, MCC will be publishing final evaluations after the Compact. MCC has contracted Innovations for Poverty Action, United States Department of Agriculture and Social Impact, independent evaluators, to conduct the final evaluation surveys and produce independent Post-Compact evaluations of four Compact Projects. The Cabinet Secretariat is responsible for supporting the dissemination and presentations of findings of the final evaluations.
- Discusses Post-Compact Reporting requirements. There are a number of indicators that the GOM will monitor and report on annually. These indicators are further detailed in Annex 1.

#### **3.2 Program Logic**

The Compact Program consists of the Property Rights Project (Urban and Peri-Urban), the Vocational Education Project, the Health Project, the North-South Road Project and Energy and Environment Project as further described below (each, a “Project”). The direct aim of the Mongolia Compact is to reduce poverty through economic growth in Mongolia as a result of (i) increased security and capitalization of land assets and increase in peri-urban herder productivity and incomes, (ii) increased employment and income among Mongolians through access to more effective vocational education, (iii) reduced risk and incidence of premature death and disability from Non-Communicable Diseases and Injuries (NCDIs) (iv) more efficient transport for trade and access to services through the North-South corridor and (v) increased wealth and productivity through greater fuel use efficiency and decreasing health costs from air pollution in Ulaanbaatar. The Outcomes of the Mongolia Compact can be summarized as follows:

## COMPACT LOGIC

**Compact Goal**

**Reduce poverty through economic growth**

<b>Poverty Reduction through Economic Growth</b>	<p><b>Property Rights Project:</b> Increase the security and capitalization of land assets held by lower-income Mongolians, and increase peri-urban herder productivity and incomes  <b>Outcomes:</b> (1) Increased land right formalization and (2) Optimized peri-urban rangeland carrying capacity and range management</p>
	<p><b>Vocational Education Project:</b> Increase employment and income among unemployed and underemployed Mongolians  <b>Outcome:</b> Improved quality and relevance of TVET System</p>
	<p><b>Health Project:</b> Reduce the risk of premature death and disability from NCDIs (Non-Communicable Diseases and Injuries) and traffic injuries  <b>Outcomes:</b> (1) Improved National and local response to NCDI (2) Increased understanding of NCDI prevention, and (3) Increased availability of sound NCDI services</p>
	<p><b>NS Road Project:</b> More efficient transport for trade and access to services  <b>Outcomes:</b> (1) Increased Traffic, (2) Decreased travel times, (3) Decreased vehicle operating costs, and (4) Decreased road roughness</p>
	<p><b>Energy and Environment Project:</b> Increased wealth and productivity through greater fuel use efficiency and decreasing health costs from air pollution in Ulaanbaatar.  <b>Outcomes:</b> (1) Reduced incidence of respiratory-related morbidity, (2) Reduced fuel consumption, (3) Increased energy efficiency, (4) Substitution of wind power for additional coal-fired power generation capacity, (5) Improved power quality.</p>

### 3.3 Projected Economic Benefits

	Original Economic Rate of Return (ERR)	Date Original Economic Rate of Return (ERR) Established	Current Economic Rate of Return (ERR)	Date Current Economic Rate of Return (ERR) Established
Property Rights: Privatization & Registration of Ger Area Land Plots Activity and Land Privatization and Registration System Activity	38.5	2007	21.0	2011
Property Rights: Land Leasing Activity	26.6 (Darkhan, Erdenet, Ulaanbaatar), 31.6 (Kharkhorin and Choibalsan)	2007	21.0	2012
Vocational Education	19.8	2007	10.3	2009

Health	21.0	2007	13.4	2009
North-South Road	11.2	2011	8.0	2013
Energy and Environment: Salkhit Wind Park	14.1	2009		
Energy and Environment: Energy Efficiency Innovation Facility (MCEEIF)	23.2	2009		

### 3.4 Program Beneficiaries

Project/Sub-Activity	Estimated Number of Beneficiaries (over 20 years)	Present Value (PV) of Benefits
<b>1. Property Rights</b>		
Land Registration System Activity and Privatization of Ger Area Land Plots Activity	Up to 95,891 individuals	\$24,729,040
Peri-Urban Land Leasing	6,277 individuals	\$9,390,613.53
<b>2. Vocational Education</b>	Up 170,000 TVET graduates	\$35,547,846
<b>3. Health</b>	Approximately 2,300,000 people	\$48,000,000
<b>4. North-South Road</b>	168,900 people	\$121,400,000
<b>5. Environment and Energy</b>		\$36,359,014
Wind Park	338,425 people in Ulaanbaatar	\$94,854,923
MCCEEIF		

## 4. MONITORING COMPONENT

### 4.1 Summary of Monitoring Strategy

The Post Compact performance will be monitored systematically and progress reported annually selected indicators listed in the indicator tracking table (ITT). This will permit the Government of Mongolia and MCC to track the use of Compact investments and sustainability of Compact activities. Most indicators will be based on data collected from MCC-funded evaluations.

The Indicator Documentation Table in Annex 1 provides a detailed definition of each indicator, unit of measurement, source of data, frequency of data collection, and the entity responsible for collecting the data. The Performance Tracking Table in Annex 2 identifies that baselines and targets for the indicators.

Where possible, indicators will be disaggregated by gender.

### 4.2 Data Quality Reviews

The designated representative will be responsible for ensuring data quality and conducting data

quality reviews to verify data included in the annual report by checking the accuracy and reliability of performance data submitted by responsible entities.

### **4.3 Standard Reporting Requirements**

The Cabinet Secretariat will be responsible for submitting annual reports to MCC covering through 2016. These reports should be submitted to via email to the the MCC M&E counterpart and the Vice President of the Department of Compact Operations [VPOperations@mcc.gov](mailto:VPOperations@mcc.gov) with the subject line “Mongolia Post-Compacting Reporting” and the dates of report coverage.

The Cabinet Secretariat, with support from MCC, should submit n annual report on or by January 15 in 2014, 2015 and 2016. The Annual Summary Report should include the following:

- A Post-Compact Indicator Tracking Table (ITT) that incldes all of the indicators included in Annex 1 of this plan for the preceding calendar year using the MCC template.

## **5. EVALUATION COMPONENT**

### **5.1 Summary of Evaluation Strategy**

Evaluation is an essential element of the Mongolia Compact. One of the key features of the MCC’s approach to development assistance is its strong commitment to conducting rigorous impact evaluations of its programs, which employ, whenever possible, methods that determine whether results can be reliably attributed to MCC interventions. In addition, evaluation indicators can improve program management and provide lessons for future program implementation.

MCC has contracted three independent evaluators – Innovations for Poverty Action (IPA), United States Department of Agriculture, and Social Impact (SI) – to conduct the final evaluation surveys and produce independent post-Compact evaluations of the Property Rights – Urban and Peri-Urban, Energy and Environemnt and Vocational Education Projects.

MCC will be responsible for managing IPA and SI and all final evaluations. MCC, IPA and SI will be responsible for gathering comments from relevant stakeholders and working with the Cabinet Secretariat to organize presentations of results.

In addition, both SI and IPA will directly sub-contract any final surveys directly.

#### *Impact Evaluations and Performance Evaluations*

The Program will be evaluated based on the extent to which the interventions contribute to the Compact Goal, which is to decrease poverty through improved economic performance. An impact evaluation is defined as a study that measures the changes in income and/or other aspects of well-being that are attributable to a defined intervention. Impact evaluations require a credible and rigorously defined counterfactual, which estimates what would have happened to the beneficiaries absent the project. Estimated impacts, when contrasted with total related costs, provide an assessment of the intervention’s cost-effectiveness. A performance evaluation is defined as a study that seeks to answer descriptive questions, such

as: what were the objectives of a particular project or program, what the project or program has achieved; how it has been implemented; how it is perceived and valued; whether expected results are occurring and are sustainable; and other questions that are pertinent to program design, management and operational decision making. MCC's performance evaluations also address questions of program impact and cost-effectiveness.

MCC will be responsible for contracting the impact evaluators for the Property Rights, Energy and Environment, and Vocational Education Projects.

## **5.2 Specific Evaluation Plans**

### **Property Rights Project: Privatization of Ger Area Land Plots**

#### **Evaluation Question**

How does the privatization and registration of ger area land through the Property Rights Project impact land investments, property values, access to credit, and ultimately, household income?

#### **Evaluation Methodology**

In order to best detect the effects of the Ger Area Land Activity under the Property Rights Project, the evaluation used a randomized controlled design. The evaluation design groups hashaa plots into geographic clusters defined by kheseq, the smallest administrative unit utilized in Mongolian cities. Because these are small and relatively numerous, randomizing at this level will allow for the greatest statistical power while also allowing for the cost savings associated with registering geographically contiguous groups of plots at the same time.

Kheseqs were also stratified by level of formalization. GIS data on all hashaa plots in the ger areas of the relevant districts of Ulaanbaatar (Bayanzurkh, Chingeltei, and Songinokhairkhan) and in Darkhan and Erdenet, were obtained from the PRP Implementation Unit (PIU). The ownership status of many of these plots was recorded in this GIS data set, though the ownership status information was known to be out of date and inaccurate. Once the GIS and administrative cadastral datasets were integrated, the number of program-eligible plots per kheseq unit was calculated. Plots listed as "fully registered" in the GIS data were not included in this calculation since they would not be eligible for project assistance. The number of plots to be sampled from each kheseq was determined by multiplying the proportion of all eligible plots that resided in that kheseq by 8000, the targeted survey sample size. After the sample size for each kheseq was determined, that same number of plots was randomly selected from the list of plots in each kheseq to be administered the survey. After the Special Hasha Plot Survey (SHPS) baseline was conducted, some kheseqs in the ger areas were randomly selected to receive the privatization and registration assistance (the treatment group), while other kheseqs in ger areas were selected to remain as control groups.

The outcomes of the households in the treatment and control group will be compared to assess the impacts of the program. The random assignment described above led to the creation of two virtually identical groups at the baseline. The only difference between the two groups will be that the treatment group is offered the privatization and registration assistance, while the control group is not. As a result, any changes observed between the two groups over time can be attributed to the privatization and registration assistance program.



**Treatment group:** The treatment group will consist of households that have not registered their parcel and are located in ger areas throughout Mongolia that have been chosen to be included in the Property Rights Project.

**Control group:** The control group will consist of households that have not registered their parcel and are located in ger areas throughout Mongolia that have *not* been chosen to be included in the Property Rights Project.

**Data collection:** The Special Hashaa Plot Survey (SHPS) evaluates the household level impacts of privatization and registration of hashaa plots. The household-level surveys includes questions on demographic characteristics of household members (age, education, race, religion), employment and income, land tenure and transactions, total wealth and its components, borrowing behavior including sources of credit, size of loans, conflicts, the use of collateral, and the cost and time to register. The key plot-level variables include ownership status, property value, specific measures of investments to land, specific measures of investment in housing, plots size, and distance to amenities. The survey planned to collect data on an estimated 8000 households across several hundred khesege areas in Ulaanbaatar and the aimag centers of Erdenet, Darkhan and Tuv; however due largely to empty plots and a variety of other factors, only around 5800 plots were surveyed. A baseline survey was conducted Nov 2011-Aug 2012 and a follow-up survey is planned for post compact-2015.

### **Property Rights Project: Privatization of Ger Area Land Plots and Land Registration System Activities**

**Evaluation Methodology:** The evaluation of the Land Registration System Activity is a pre-post comparison focused around the changes in 1) the changes in time to access a loan; and 2) the back office time and procedures at Mongolia's Land Registry at the General State Registry (GASR) brought on from the electronic registry system and any policy or institutional reforms that occur after the baseline. In addition, a performance evaluation will assess changes in legislation, increases in demand for land registration and related reasons, and changes in time to carry out a transaction from the establishment of district offices.

**Treatment group:** Both treatment and control groups from Privatization of Ger Area Land Plots Activity.

**Control group:** No control group.

**Data collection:** A Registry Systems Process Study (RSPS) will examine changes in the time, and procedures associated with the key property transactions at GASR, including first time land privatization and registration and majorsecondary transactions, such as mortgages. The study will collect data on roughly 900 individuals and commercial entities engaged in the completion of banking related transactions that involve GASR, as well as data on the back office processing time at GASR to carry out 900 land transactions. The first baseline survey did not provide quality data. As such, a second baseline with the above revised design is scheduled for 2013. A follow-up survey will occur in 2014. The performance evaluation will largely rely on interviews with stakeholders-banks and other commercial entities, land administration officers and customers.

## **Property Rights Project: Peri-Urban Land Leasing Activity**

### **Evaluation Questions**

1. How does the securing of long-term land use rights and provision of infrastructure and training through the Peri-Urban Rangeland Management Project impact livestock herding efficiency and productivity in the peri-urban area?

### **Evaluation Methodology, Phase 1 (Ulaanbaatar, Darkhan and Erdenet)**

Since beneficiary herders in these areas were chosen through a non-randomized process, one cannot assume that they are similar to other herders that applied for the project but were not chosen. In order to construct a control group that is similar to the herders in the project, statistical modeling techniques were used. A large number of non-beneficiary herder households were interviewed during the baseline and follow-up data collections. These households included herders that applied for the project but were not accepted as well as a randomly selected portion of the general herder population. Non-project households were compared to the project households along a variety of observable dimensions like income, education, rangeland location, herd size, etc. Each project household was then matched with one or more non-project households that were very similar in terms of important observable characteristics. The difference in outcomes for these paired households was then analyzed and the average difference calculated to gain an estimate of project impact. Because each pair of households will be almost identical in terms of observable characteristics, except for the fact that one was selected to participate in the project and the other was not, it is reasonable to assume that any difference in outcomes between the pair was induced by the project.<sup>1</sup> However, the major drawback of this approach is that the estimate of impact generated does not account for non-observable traits, such as motivation or talent, that can have an important effect on ultimate outcomes.

### **Evaluation Methodology, Phase 2 (Choibalsan and Kharkhorin)**

In the first stage of this design, all herder groups who had access to land that met the project criteria were allowed to submit applications for the available leasing slots. These applications were scored by local selection committees, according to a set of predefined social criteria, and some of the herders were short-listed. In the second round of selection, all of the short-listed applicants participated in a lottery. Approximately half of the applicants were randomly selected to receive a leasing slot (the treatment group) while the other candidates were assigned to the control group. Because random assignment leads to the creation of two virtually identical groups at the baseline, the only difference will be that the treatment group is offered the lease and associated project assistance while the other group (the control group) is not. As a result, any changes observed between the two groups over time can be attributed to the leasing program.

**Treatment group:** The treatment group will consist of herder groups in peri-urban areas of UB, Erdenet, Darkhan, Choibalsan and Kharkhorin that have been chosen to be included in the project.

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<sup>1</sup> This assumes no overlap of land or pasture usage between treatment and control herders. If this assumption does not hold and “control” herders lose access to land they previously used because it has now been leased to the treatment group, the benefits of the treatment could be exaggerated.

**Control group:** The control group will consist of herder groups in peri-urban areas of Choibalsan and Kharkhorin that have *not* been chosen to be included in the project.

### **Data collection for both Phase I and II**

The below data collection efforts have been developed to capture extensive data on the intervention of peri-urban rangeland project, including leasing, training, wells, fodder and fencing materials.

1. A Peri-Urban Rangeland Leasing Survey (PURLs) that measures activity effects to project herder groups and associated households, such as livestock productivity, across the Phase 1 project areas of UB, Darkhan and Erdenet. The Phase I baseline was collected in 2011, with follow-up surveys in 2013 and a tentative third follow-up survey scheduled for 2015. The Phase II PURLs (ePURLs) baseline survey was collected in 2012 with a follow-up survey planned for 2014 and tentatively another follow-up survey in 2016. In addition, the surveys will gather data on a number of neighboring households living on land that is contiguous to the tracts utilized by the herder groups. Information on neighboring households will be used to answer questions regarding possible spillovers that the project may have on nearby residents. Finally, a separate questionnaire will be administered to soum governors in project areas to collect information on soum level outcomes like soum-level land disputes, in- and out-migration, land tenure rights, and overall agricultural activity. The lease candidate and neighbor questionnaires will collect data on the characteristics and economic activity of herder households, herd and rangeland management practices, characteristics of the pastureland plot, conflict and cooperation with neighbors, tenure rights and perceptions, and future plans for business activity.
2. A Rangeland Quality Productivity Survey that examines the Peri Urban Land Leasing Activity effects on environmental degradation and rangeland quality of the project parcels in the peri-urban areas of Choibalsan and Kharkhorin. Data was collected in Spring/Fall 2012 and in Spring/Fall 2013. Planning for future follow-up surveys will depend on changes in herding practices seen from the PURLs/ePURLs surveys.

### **Vocational Education and Training Project**

#### **Evaluation Questions**

1. What is the causal impact of attending the TVET schools in our sample on vocational education students' academic achievements and skill levels?
2. What is the causal impact of attending a TVET school on vocational education students' post-graduation employment rates and salary levels?
3. What characteristics predict greater academic and labor market success for applicants due to participation in a TVET school?

**Evaluation Methodology:** The evaluation will estimate the impact of the Vocational Education Project's activities by comparing students that have received the benefits of the project to similar groups that do not receive these benefits.

An "oversubscription" model was used to separate out the causal impact of attending a VET school. This model relies on the fact that many schools are already oversubscribed – i.e. receive more applications than they have the resources to accept. Students at ten oversubscribed project

schools were first determined to be eligible for admissions and then took part in a lottery that fairly and transparently selected students to be part of the treatment and control groups.

**Treatment group:** Vocational school applicants who have been admitted to 10 (of 50) project-supported vocational schools.

**Control group:** Vocational school applicants who have *not* been admitted to 10 (of 50) project-supported vocational schools.

**Data collection:** Four surveys have been developed to capture extensive data on the intervention's effects on student outcomes.

1. Student Admissions Survey collects the below data on prospective applicants to the 10 project-supported schools that are being studied for this evaluation.
  - i. Demographic and employment information
  - ii. School-specific information used to identify unqualified applicants
  - iii. Students' preferences over trades offered by school
  - iv. A short aptitude test
  - v. Contact information
2. School Administrative Survey captures data on students and administrators in all 50 MCA-supported schools
  - i. Student Level: Teacher assessment of students' skills
  - ii. Administrator/School Level: Presence of school improvements
  - iii. Administrator/School Level: Experience with compact programs
3. Graduate Follow Up Survey evaluate the technical and vocational aptitude the treatment and control group learned during their study in vocational schools. The following information will be collected:
  - i. Educational history
  - ii. Employment history and wages
  - iii. Psychometric scales to assess well-being
  - iv. Asset and ownership
  - v. Contact information
  - vi. Skills tests
4. Tracking Survey follows students approximately each year to ensure that MCA maintains accurate contact information for students. This will help avoid attrition for the Student Graduation Survey. The following information is collected:
  - i. Short education survey from previous year
  - ii. Short employment survey from previous year
  - iii. Contact information

## **Energy and Environment Project**

### **Evaluation Questions**

1. How do energy-efficient products impact ambient air pollution levels, and health and income of residents in Ulaanbaatar?
2. How do different project stove models and different patterns of usage affect the level of impact on ambient air pollution, and the health and income of households with project stoves?

**Evaluation Methodology:** To measure changes in fuel consumption and expenditures at the household level, the evaluation compares a sample of households using project stoves to a sample of households using traditional stoves. Since households can choose whether to obtain a project stove at the subsidized price, the households that decide to purchase the project stove may systematically differ from those that do not. In order to control for these differences, a statistical technique called propensity score matching (PSM) is used. This matching technique allows the estimation of the differences in outcomes between participating and non-participating households while accounting for differences in observable characteristics that predict the probability that a household adopts the project stove.

To measure the effect of project stoves on emissions, the evaluation employs a similar household-based approach. Simple comparisons of total emissions levels from households with project versus traditional stoves may be biased, since households that adopt project stoves may be more conservative in terms of fuel consumption, and by extension emit lower emissions, even if they were still using traditional stoves. This type of bias could distort the estimates of outcomes and the differences in stoves use by households with different behaviors and characteristics. To account for this potential bias, the evaluation measures emissions on a per-unit-of-fuel basis, to estimate the relative emissions of different stove types under real-world conditions. To estimate the overall reduction in emissions from project stoves in Ulaanbaatar, the evaluation combines measured emissions rates with differences in fuel consumption for houses matched by propensity score.

To understand the project's contribution to improving air quality in Ulaanbaatar, the evaluation will take a modeling approach that will estimate air pollution levels under two scenarios: (1) the existing scenario, in which the project stoves have been distributed, and (2) a hypothetical counterfactual in which all households would still be using traditional stoves as if the project stoves had never been distributed. The evaluation will then use global dose-response functions to calculate health outcomes for Ulaanbaatar residents resulting from the estimated decrease in local ambient pollution levels.

**Treatment group:** Ulaanbaatar ger area residents who have adopted MCEEIF-subsidized stoves.

**Control group:** Ulaanbaatar ger area residents who have not adopted MCEEIF-subsidized stoves.

**Data collection:** A pilot survey was conducted during the 2011-2012 heating season and a full survey was done during the 2012-2013 heating season. Further data collection will be decided in early 2014. Both efforts included the following:

1. Household survey in approximately 1096 homes for full survey (and less than 500 in the pilot).
2. Emissions and indoor air pollution monitoring in a subsample of at least 150 homes.
3. Modeling of changes in ambient urban PM in Ulaanbaatar using emissions and fuel consumption data measured above.

## **6. IMPLEMENTATION AND MANAGEMENT OF M&E**

### **6.1 Responsibilities**

The designated representative, the Cabinet Secretariat, is responsible for on-going monitoring and evaluation of the Mongolia Compact. This includes the following activities:

- Coordinating with IPA and SI to ensure relevant GOM stakeholders review evaluation documents such as questionnaires and analytical reports
- Coordinating with IPA and SI presentations of final survey and evaluation results in Mongolia
- Supporting IPA and SI with visa and work permit issues
- Providing annual report to MCC with information described in the reporting section, including statistics from relevant government offices (see Annex 1 for the Indicator Documentation Table and Annex 2 for the Performance Tracking Table)

### **6.2 Review and Revision of the M&E Plan**

All revisions to the plan will be mutually agreed upon by the Cabinet Secretariat and the MCC.

## **7. M&E BUDGET**

MCC is responsible for paying the independent evaluator for post-Compact data collection and analysis.

### Annex 1. Indicator Documentation Table: Post-Compact Indicators

#### Roads Project

Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting
Outcome	Vehicle operating cost saving (VOC)	The VOC is calculated from a composite of vehicle use cost prices (e.g., parts, wear and tear, fuel consumption, etc.) that are a function of road conditions, to obtain a cost per km to the driver. This is multiplied by traffic volume for total savings.	US Dollars	N/A	Ministry of Roads and Transport Survey	Ministry of Roads and Transport	Once
Outcome	Average annual daily traffic	The average number and type of vehicles per day, averaged over different times (day and night) and over different seasons to arrive at an annualized daily average.	Number	N/A	Ministry of Roads and Transport Survey	Ministry of Roads and Transport	Once
Outcome	Travel Time	Total time to drive from Choir to Sainshand/35th RW Crossing (176.4km)	Hours	N/A	Ministry of Roads and Transport Survey	Ministry of Roads and Transport	Once

#### TVET Project

Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting
Goal	Annual salary	Average annual salary of employed graduates who completed new curriculum after graduation	US Dollars	Gender	IPA Graduates Survey	IPA	Annual

Goal	Rate of employment	Employment rates of graduates who completed new curriculum after graduation	Percentage	Gender	IPA M&E Graduates Survey	IPA	Annual
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### Peri-Urban Rangeland Project

Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting
Outcome Indicator	Net earned income of herder households in treatment versus control areas of Darkhan, Erdenet and Ulaanbataar and Choibalsan and Kharkhorin	Net earned income of participating project herder households including agricultural net income, wages, and other business profits (excludes government transfers and unearned income). This indicator will be measured in the 3 central areas, which were the original scope of the project, as well as the 2 expansion areas.	US Dollars	Gender; phase I - UB, Darkhan, Erdenet, phase II - Choibalsan and Kharkhorin, Intensive, semi-intensive	IPA PURLS and e-PURLS survey	IPA	2015 for phase one areas and 2014 and 2016 for phase two areas
Outcome Indicator	Herd mortality rate	Herd mortality rate (natural causes and sickness-related deaths) of project herder groups in 5 project areas.	Percentage	Phase I – UB, Darkhan, Erdenet, phase II – Choibalsan, Kharkhorin; cattle, sheep	IPA PURLS and e-PURLS survey	IPA	<a href="#">Follow-ups 2014 and 2016 ePURLs and 2015 PURLs</a>
Outcome Indicator	Liters of milk per cow	Annual average milk production per cow.	Liters	Intensive, semi-intensive farm, phase I - UB, Darkhan, Erdenet, phase II - Choibalsan and Kharkhorin	IPA PURLS and e-PURLS survey	IPA	2015 for phase one areas and 2014 and 2016 for phase two areas



Outcome Indicator	Percentage of project herder groups limiting their livestock population to the carrying capacity of their leases	Percentage of herder groups with leases having no more than the maximum number of sheep units of livestock per 100 ha (carrying capacity of land) as specified in their leases.	Percentage	Type of areas (phase I - UB, Darkhan, Erdenet, phase II - Choibalsan and Kharkorin)	IPA Peri-Urban Rangeland Leasing Survey (PURLS) and EPURLS	IPA	2015 for phase one areas and 2014 and 2016 for phase two areas
Outcome Indicator	Management effect, standing biomass	Average air-dry weight (in kg/ha) of total standing biomass of uncaged areas in project sites.	Kilograms/Hectare	Type of harvest (Summer, winter), type of areas (phase I – UB, Darkhan and Erdenet, phase II – Choibalsan and Kharkhorin)	Peri-Urban Rangeland Productivity Survey	MSRM/USDA	2014
Outcome indicator	Repayment rate by the leaseholders	Percentage of payments collected from herder groups on time (disaggregated by peri-urban area and intensive/semi-intensive)	Percentage		Local soum officials	Cabinet Secretariat of Government	Annual

### Property Rights Project

Indicator Level	Indicator Name	Definition	Unit of Measure	Disaggregation	Primary Data Source	Responsible Party	Frequency of Reporting
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Outcome	Immovable property value (per square meter) of hashaa plots	Average reported monetary value of hashaa plot per square meter in project areas in Ulaanbataar. Follow-up reflects households living on parcels in project areas which received title. Respondents are asked the value of their hashaa plot and the enumerator records the number of meters that the hashaa plot covers.	US Dollars		Special Hashaa Plot Survey	IPA	Follow up 2016
Outcome	Percentage of project households accessing bank credit	Percentage of surveyed households in project areas who are accessing bank credit in Ulaanbataar, . Follow-up reflects households living on parcels in project areas which received title.	Percentage	Gender	Special Hashaa Plot Survey	IPA	Follow up 2016
Outcome	Percentage of project households accessing bank credit using their khashaa plot as collateral	Percentage of surveyed households in project areas who are accessing bank loans and using their hashaa plot or property as collateral in bank loan in Ulaanbataar. Follow-up reflects households living on parcels in project areas which received title.	Percentage	-	Special Hashaa Plot Survey	IPA	Follow up 2016
Outcome	Official time prescribed for property transactions (first-time)	The prescribed number of calendar days for an individual or company to conduct a first-time property registration of a hashaa plot or a property . This starts from applying for land, mapping the parcel, a possession certificate, governor's decision/ approval, notarized supporting documents and a title from GASR.	Days		Law on Land Allocation to Mongolia Citizens; Regulations from ALACGAC; Regulation by Ministry of Justice on Notaries and	Cabinet Secretariat of Government	follow up 2016

					Notary Fees, and Property Registration Law by GASR		
Outcome	Official time prescribed for property transactions (sales)	The prescribed number of calendar days for an individual or company to conduct a sales of registered land with no boundary changes.	Days		Same as above	Cabinet Secretariat of Government	follow up 2016
Outcome	Official cost prescribed for property transactions (first-time)	The prescribed fees for a individual to conduct a first-time registration of hashaa plot. First time registration includes a possession certificate, governor's decision, supporting notarized documents and a title from GASR.	US Dollars		Same as above	Cabinet Secretariat of Government	follow up 2016
Outcome	Official cost prescribed for property transactions (sales)	The prescribed fees for a individual to conduct a sales of registered land with no boundary changes.	US Dollars		Same as above	Cabinet Secretariat of Government	follow up 2016

Outcome	Percentage Change in time for property transactions	The average percentage change in the number of calendar days for an individual or company to conduct a property transaction within formal system.	Percentage	Land Registration (First Time and Sales)	Urban Registry Systems Process Survey (RSPS)	IPA for baseline and independent evaluator for follow up	baseline 2013 and follow up 2015
Outcome	Number of property transactions in Ulaanbataar, Darkhan and Erdenet	Total number of new land transactions (sales, gifts, inheritance) registered in Ulaanbaatar and two of the regional centers (Darkhan and Erdenet) each year in the formal system at GASR	Number	By location (Darkhan and Erdenet/ UB)	GASR data	GASR	Annual
Outcome	Number of new loan transactions registered in Ulaanbataar, Darkhan and Erdenet that use land or immovable property as collateral	Total number of new loans registered each year in the formal system (GASR) for UB, Darkhan and Erdenet that use land or immovable property as collateral.	Number	By location (Darkhan and Erdenet/ UB) By type of collateral (Land/Immovable property)	GASR data	GASR	Annual
Outcome	Value of new loan transactions registered in Ulaanbataar, Darkhan and Erdenet that use land or immovable property as collateral	The value of total number of new loans using land or immovable property as collateral registered each year in the formal system (GASR). Mortgages will be defines as mortgages on privatized land in the formal system at GASR.	US Dollar	By location (Darkhan and Erdenet/ UB); by type of collateral (land/immovable property)	GASR data	GASR	Annual

Outcome	Change in perception of tenure	Percentage of surveyed households in project areas who responded that they feel secure from expropriation. Follow-up reflects household living on parcels in project areas which received title.	Percentage		SHPS	IPA	follow up 2016
Outcome	Change in land conflicts on parcel	Percentage of surveyed households in project areas who experienced disputes over land. Follow-up reflects household living on parcels in project areas which received title.	Percentage		SHPS	IPA	follow up 2016