

*Training for MEGD staff in relation to
Biodiversity and Conservation in the Southern Gobi Desert*

Inception Meeting Report

December 18, 2014

The project inception meeting was held in the Ministry of Environment and Green Development (MEGD) offices in Ulaanbaatar on December 4, 2014 from 9 am to 5:30 pm. A list of participants is attached in annex 1 to this document. The goals of the inception meeting were to review the Scope of Work and revise it as necessary, to identify any other stakeholders beyond MEGD (such as the Ministry of Transportation) in the Mongolian government, and to review the ideal qualifications for trainees for the GIS/connectivity, Mitigation Design Tool and Soil Assessment training courses.

Opening remarks from MEGD and EBRD stressed the importance of the project's resulting in tangible outputs related to the government's capacity to implement its mitigation policy in the mining sector, and that this capacity be developed in a way to be self-sustaining within the ministry. The Nature Conservancy (TNC) then provided a general overview of the four main components of the project and related training modules:

- Mitigation Design Tool
- Connectivity Analysis
- Traffic study for south Gobi
- Soil Assessment Training

Participants held detailed discussions on each of these components over the course of the day. Major points from the discussion and revisions to the Scope of Work are summarized below.

I. Mitigation Design Tool Development and trainings

Participants were enthusiastic about the possibility of the Mitigation Design Tool (MDT) to improve the implementation of mitigation policy in the south Gobi and beyond the scope of this project how the tool might ultimately be expanded for use nationally. Concern was expressed about sustainability of data management and tool management for the ministry after the project ends. All agreed that it would be important to include future trainers in the training pool to ensure that sustainability. The ministry should identify staff for training who will have responsibility to manage the data and to conduct further training for their successors.

There was discussion about whether and how the tool would apply to existing mines. The desktop version of the tool can conduct an assessment of old and existing mine sites. The web tool is designed for anticipated projects, to best address the avoidance opportunities. The decision of how and when to include the current mining portfolio is up to the ministry and will not affect the project component directly.

A robust discussion took place on the potential to include groundwater impacts and other ecosystem services in the MDT. The current ecoregional assessment for the south Gobi provides information on ground water dependent systems that can serve as benchmark to assess potential mining related impacts to ground water. But a complete assessment of ecosystems services was not included in TNCs Gobi Development by Design analysis. TNC advised that including ecosystem services would add significantly to the cost and complexity and could not be done without significantly reducing other activities in the project.

The trainings (activity 4.1) cannot occur until after the tool is developed. Therefore the two trainings on the MDT will take place in the 13th month of the project. The timing of deliverables has been adjusted in the deliverables table (Annex 2) to reflect this necessary change.

The first training will be an intensive, in-depth understanding of the tool and training of trainers. The second will be conducted by graduates of the first training (Dr. Bolarchuluun, supported by TNC Mongolia) and will be focused on practical end-users of the tool. The narrative for activity 4.1 in the Scope of Work should be amended to remove reference to QGIS and be replaced by desktop GIS (i.e. ArcGIS/QGIS), as training will be broader and include ArcGIS.

The ministry requested Trimble GPS equipment to support the use of the MDT. This equipment assists in identifying a mining footprint in the field and in uploading shape files. This equipment is not in the current project budget. EBRD noted they would review procurement requirements and whether this request could be accommodated. The additional budgetary impact would be offset by reductions in the traffic study (Task 3) see below.

II. Connectivity Analysis and training

The connectivity analysis conducted by TNC will focus on khulan needs in the eastern part of the south Gobi. MEGD requested that the analysis work could inform design of mitigation features along several major transport corridors currently in development.

TNC presented on the Circuitscape software tool designed by Brad McRae to assess connectivity options in the landscape. The Circuitscape training will replace the more general GIS/Connectivity syllabus proposed in the Appendix to the original Scope of Work. Ministry officials requested two different types of training: One,

more conceptual training for MEGD managers to understand the capacity and general application of the program; and a second, technical training for graduate-level GIS experts in the ministry. TNC emphasized that those with advanced GIS training at the graduate level would benefit most from this training. It would also be helpful if the education and experience level of trainees could be provided to the trainer well before to the training so that the syllabus can be adjusted to their level of expertise.

The training courses are still planned for 2 days each, but will need to be extended for an additional day at some increase to the budget.

The Scope of Work should be revised to delete reference to the GIS connectivity training (in 4.2) and replace it with the more specific Circuitscape training. The Circuitscape training needs to be take place after the data inputs and outputs are available for it to be a meaningful exercise. Data inputs and outputs deliverables can both be achieved by month 6 of the project. The timing for the trainings would there be more appropriate if moved to the 7th month of the project. The timing of deliverables table (see Annex 2) has been amended to reflect these changes.

Some ministry officials expressed concern that movement of most species of concern is random, not in discrete pathways, and therefore the Circuitscape analysis might prove of limited use. If migratory movements are truly undefined it will be challenging to introduce mitigation measures for impacts from linear infrastructure.

III. Traffic study

Current studies on linear infrastructure take into account impacts on livestock, but MEGD emphasized there is a need to focus on wildlife impacts that this study will address. MEGD chairs an inter-ministry (MEGD and Infrastructure) Working Group that will be the chief point of contact and stakeholders for project staff on this component.

MEGD suggested that considerable work had been done by the current Working Group and others since the Terms of Reference for the project were initially drafted. This work obviates the need for some of the components proposed for the study. A follow up consultation with the Working Group and Ministry of Roads and Transportation defined the most urgent priorities and reduced the scope of the study as follows:

1. Maintain primary focus on wildlife connectivity needs presented by transport infrastructure, with specific recommendations on wildlife crossing structures and reducing wildlife mortality. This work will be coordinated with the connectivity analysis in Task 1.
2. Develop a draft list of potential alternatives and mitigation measures for roads and rails, including those that address dust and noise effects (model dust and noise effects) and other environmental impacts of roads.

3. Eliminate analysis of safety issues.
4. Eliminate transportation engineering analysis (logistical constraints on traffic).
5. Eliminate proposed traffic stakeholder workshop in Ulaanbaatar and associated report.
6. Eliminate research outputs on social and economic issues.

The budget for this task will be reduced to reflect the reduction in outputs.

IV. Soil Assessment Training

MEGD expressed a high degree of support for the soil assessment training, emphasizing that it was needed to help them establish baselines and monitoring protocols for active mine sites and mine reclamation sites. The ministry requested that the training be national in scope, and that the number of trainees be increased from the proposed 15 to 25 (at least one from each *aimag*) plus 3 from the ministry (28 total). To accommodate these additional staff while staying within budgetary constraints, it is recommended that only staff from Gobi *aimags* attend the field training in Tavan Tolgoi. Even so, the budget for this training will have to be increased to accommodate the additional trainees. The additional funds will come from the reduced budget for Task 3.

TNC requested that the educational background and experience of the trainees be provided to project soil expert Stephen Williams at least two months before the start of the training so that he can incorporate necessary adjustments to the syllabus. The ministry also agreed it would distribute the proposed syllabus to all the *aimag* soil inspectors for their input on which components of the curriculum they feel is most important and follow up with TNC and Dr. Williams on responses received.

The government also expressed interest in creation of a national soil map. TNC noted that this was a major undertaking, well beyond the scope of the project. They recommended MEGD consult with Dr. Williams to gain a better understanding of what might be involved in creating such a map.

Annex 1: List of Meeting Participants

Environment and Natural Resources Department, MEGD	
Enkhbat D.	Director
Sarantsetseg B.	Officer of Mining impacts to environment and mitigation policy implementation,
Erdenebayasgalan B.	Officer of Underground resources restoration, and soil pollution policy implementation
Onon Yo.	Officer of Wildlife policy implementation
Oyunbileg Kh.	Officer of Plants policy implementation
Green Development Policy Planning Department, MEGD	
Khishigjargal Kh.	Senior Officer of Green development policy planning
Environmental assessment, and audition department, MEGD	
Tsogtsaikhan P.	Director of Environmental assessment, and audition implementation
European Bank of Reconstruction and Development (EBRD)	
Jeff Jeter	Senior environmental advisor
The Nature Conservancy	
Bruce McKenney	Strategy Director, Development by Design
Joe Kiesecker	Lead Scientist & Director, Development by Design
Linda Krueger	Senior Policy Advisor
James Oakleaf	Conservation Geographer
Enkhtuya Oidov	Director, Mongolia Program
Galbadrakh Davaa	Conservation Director, Mongolia Program
Bayarjargal Yunden	Research Director, Mongolia Program
Binderya Oyunbaatar	Project Assistant, Mongolia Program
Naranzul Bazarsukh	Project Officer, Mongolia Program
Munkhzul Munkhbayar	Administrative Assistant, Mongolia Program
Tsogtsaikhan Battsengel	GIS technician, Mongolia Program

Annex: Revised outputs and deliverables Table

Action / Report	Original Timing	Revised timeline	Payment schedule
Schedule for kick-off meeting	Two weeks after Contract Start Date	no change	
Inception report	Two weeks after the Inception Workshop	no change	1
Monthly progress reports (two pages)	Within seven working days following the end of each full month of the Contract period including the below task specific documents	no change	all
First workshop on GIS and review (task 4.1 and 4.2) [revise to: Connectivity/Circuitscape workshops and report (4.2)]	Month 4-5	Month 7 for 4.2 (Circuitscape) -- both workshops; Month 13 for 4.1 (both workshops)	1, 4
Training course on evaluation of soil and review report (task 4.3)	Month 4-5	Months 9-10 (soil field course must be done in summer months)	3
Data standards and procedures document (task 1 b)	Month 6	Month 8	2
Data inputs for corridor analysis (task 1 a)	Month 7	Month 5	1
Application development plan documentation on what has been decided to create application (task 1 b)	Month 8	no change	2
Second workshop on GIS and review report (tasks 4.1 and 4.2) [revised to: Mitigation	Month 8-9	Month 7 for 4.2 (Circuitscape); Month 13 for 4.1 (both workshops)	1,4

Design Tool workshops and report (4.1)]			
Connectivity Assessment workshop and workshop report (task 2 and 3)	Month 9	month 10 (ministry requests no workshops in August)	3
GIS data output for corridor analysis (task 1 a)	Month 10	Month 6 (needs to come before 4.2 training)	1
Release of web application tool (task 1 b)	Month 13	no change	4
Draft report in English and Mongolian	Month 14	no change	5
Final report in English and Mongolian	Three weeks following final stakeholder meeting	no change	5