

Environmental Assessment and Review Framework (DRAFT)

Project Number: 39229
September 2012

Mongolia: Additional Financing of Agriculture and Rural Development Project

Prepared by the Government of Mongolia for the Asian Development Bank.

CURRENCY EQUIVALENTS

(as of 20 September 2012)

Currency Unit	=	togrog (MNT)
MNT1.00	=	\$0.00071
\$1.00	=	MNT1,400.00

ABBREVIATIONS

ADB	–	Asian Development Bank
DEIA	–	detailed environment impact assessment
EIA	–	environmental impact assessment
EMP	–	environmental management plan
EMoP	–	environmental monitoring plan
ETD	–	Environment and Tourism Department
GEA	–	general environmental assessment
GOM	–	Government of Mongolia
GRM	–	grievance redress mechanism
IEE	–	initial environmental examination
MEGD	–	Ministry of Environment and Green Development
MNET	–	Ministry of Nature, Environment and Tourism
MOF	–	Ministry of Finance
PAB	–	project advisory board
PMU	–	project management unit
PPB	–	project participating bank
PPE	–	project participating enterprise
SPS	–	safeguard policy statement
VCI	–	value chain investment

GLOSSARY

<i>aimag</i>	–	province
<i>bagh</i>	–	subdistrict
<i>soum</i>	–	district

NOTES

- (i) The fiscal year (FY) of the Government of Mongolia and its agencies ends on 31 December. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2011 ends on 31 December 2011.
- (ii) In this report, "\$" refers to US dollars.

The environmental assessment and review framework is a document of the borrower. The views expressed herein do not necessarily represent those of ADB's Board of Directors, Management, or staff, and may be preliminary in nature. Your attention is directed to the "terms of use" section of this website.

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	ASSESSMENT OF LEGAL FRAMEWORK AND INSTITUTIONAL CAPACITY	2
	A. Legal Framework of Mongolia	2
	B. ADB Environmental Safeguard Requirements	5
III.	DESCRIPTION OF THE PROJECT	5
	A. Project Impact, Outcome, and Outputs	5
	B. Project Costs	6
IV.	ANTICIPATED ENVIRONMENTAL IMPACTS	7
	A. Experiences in the Existing Project	7
	B. Environmental Benefits	12
	C. Analysis of Alternatives	12
V.	ENVIRONMENTAL ASSESSMENT FOR SUBPROJECTS	12
	A. General Review Procedures	12
	B. Environmental Selection Criteria and Categorization of Subprojects	13
	C. Procedure for Environmental Assessment of Subprojects	14
VI.	CONSULTATION, INFORMATION DISCLOSURE, AND GRM	17
	A. Consultation and Participation	17
	B. Information Disclosure	18
	C. Grievance Redress Mechanism (GRM)	18
VII.	INSTITUTIONAL ARRANGEMENTS AND RESPONSIBILITIES	19
VIII.	MONITORING AND REPORTING	21

Attachments

Attachment 1	Environmental Impact Assessment Flowchart
Attachment 2	Rapid Environmental Assessment (REA) Checklist
Attachment 3	Example of an Environmental Mitigation Plan
Attachment 4	Example of an Environmental Monitoring Program
Attachment 5	Sample Consultation Record
Attachment 6	Terms of Reference for National Environmental Consultant
Attachment 7	Template Environmental Monitoring and Progress Report

I. INTRODUCTION

1. The additional financing for the Agricultural and Rural Development Project (the proposed project) will continue to support value chain development of Mongolian agro-processing sector.¹ The project also assists agro-processing enterprises and their existing and potential raw material producers (i.e., herders and farmers) over the nation through value chain investment (VCI) subloans and capacity development. The expected impact of the proposed project will remain as sustained premium-value differentiation for Mongolian agricultural products. The expected outcome will be improved value chains of Mongolian agribusiness enterprises to deliver higher-value products. The expected project outputs will be: (i) VCIs financed, (ii) herders' and farmers' production capacity improved, (iii) enterprises' marketing and technical capacity improved, (iv) brand development and management strategy defined, and (v) effective project management.

2. The proposed project will be implemented over a period of 4 years from 2013 to 2016. The VCI subprojects will be implemented through a project management unit (PMU) established within the Ministry of Finance (MOF). The PMU will also be responsible for the financial management and administration of project funds, and ensuring compliance with project safeguard documents and requirements. Capacity development for PMU and support staff in accordance with ADB's project management guidelines will be carried out to strengthen PMU and support staff, together with the national consultants, on project management as well as on identifying and addressing social and environmental safeguards issues that may affect project implementation.

3. The overall project has been classified as category B under ADB environmental assessment requirements. The environmental assessment for the additional financing was compiled on the basis of mainly three sample initial environmental examinations (IEEs) that represent VCI subprojects of the original project. Environmental, health, and safety general guidelines; and industry specific guidelines for agricultural sector of World Bank group were used as reference documents for the environmental assessment of the proposed project. The assessment has found that there are no major environmental impacts with the mitigation and management measures proposed.

4. This environmental assessment and review framework (EARF) has been developed in compliance with the provisions of ADB's Safeguard Policy Statement (SPS, 2009) and the Mongolian Law on Environmental Impact Assessment (1998, revised in 2012). The EARF (i) describes the project and its outputs; (ii) explains the general anticipated environmental impacts of the subprojects to be financed under the proposed project; (iii) specifies the requirements that will be followed related to screening and categorization of subprojects, assessment, and planning, including meaningful consultation with affected people and other stakeholders and information disclosure requirements; and (iv) specifies the environmental safeguard criteria that are to be used in selecting and/or rejecting subprojects, etc. The EARF provisions shall guide PMU in the selection, screening, categorization, and environmental assessment of subprojects. The preparation of environmental assessment documents for the subprojects shall follow the procedures outlined in this EARF. The environmental assessment reports to be prepared for subprojects shall be officially endorsed by MOF and submitted to ADB for final clearance.

¹ Sector Assessment (Summary): Agro-processing Sector (accessible from the list of linked documents in Appendix 2).

5. The PMU will ensure to meet environment covenants and safeguard requirements for the proposed project and all subprojects through assistance, training, monitoring to any stakeholders by the environment specialist.

II. ASSESSMENT OF LEGAL FRAMEWORK AND INSTITUTIONAL CAPACITY

A. Legal Framework of Mongolia

6. Mongolia has enacted a comprehensive policy and legal framework for environmental assessment and management. It has policies, legislation and strategies in place to manage the protected estate, to satisfy its international obligations, and to protect the quality of the environment for the health and well-being of its citizens. The hierarchy of policies and legislative provisions for environmental management in Mongolia comprises several layers ranging from the constitution to international treaties, and to environment and resources protection laws.

7. The basic principle of the Mongolian state environmental policy is that economic development must be in harmony with the extraction and utilization of natural resources and air, water, and soil pollution will be controlled. In April 1996, Mongolia's National Council for Sustainable Development was established to manage and organize activities related to sustainable development in the country. The country's strategy is designed for environmentally friendly, economically stable and socially wealthy development, which emphasizes people as the determining factor for long-term sustainable development.

8. In recognition of its global responsibilities, Mongolia has acceded to a number of international environmental conventions and the key ones are tabulated below (Table 1). Each of these conventions places obligations on signatory governments ranging from the provision of a legislative basis for implementation, adherence to the requirements and conditions of each convention, monitoring implementation performance on a regular basis, and reporting on a regular basis to the conference of parties.

Table 1: International Environmental Conventions Signed by Mongolia

Convention	Year of Accession
Stockholm Convention on Persistent Organic Pollutants	2004
Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade	2000
Kyoto Protocol	1999
Convention on the Protection of Wetlands of International Importance (Ramsar)	1998
Convention on the Transboundary Movement of Hazardous Waste (Basel)	1997
UN Convention on Combating Desertification	1996
Vienna Convention for the Protection of the Ozone Layer	1996
Montreal Protocol (regulating substances that deplete the ozone layer)	1996
Convention on International Trade in Endangered Species of Fauna and Flora (CITES)	1996
UN Framework Convention on Climate Change	1994
Convention on Biological Diversity	1993
World Heritage Convention	1990

UN = United Nations.

9. The Government of Mongolia undertook a major environmental law reform in 1990 including the law of land, protected areas, water, forest, wildlife, and native flora resources.

Most of major laws were renewed in May 2012. Acting Laws Relating to the Environment are presented in Table 2 below.

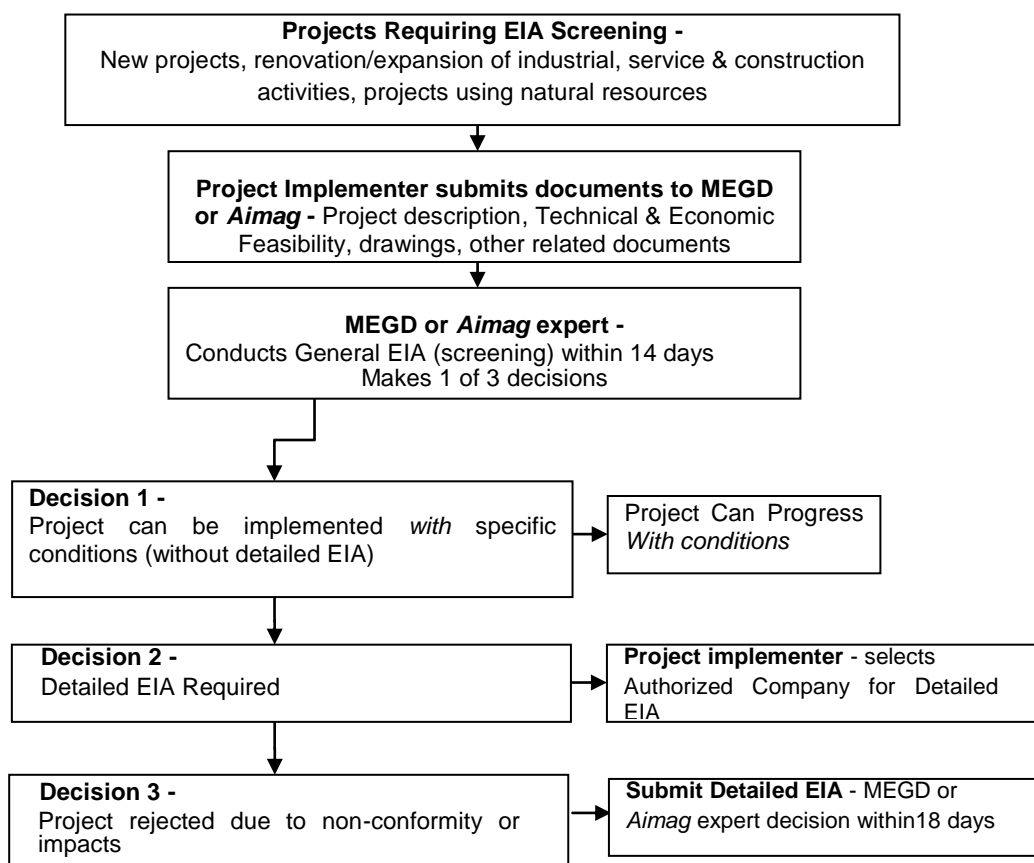
Table 2: Acting Laws Relating to the Environment

Resource Type	Law and Year of Passage
Land Resources	Mongolian Law on Land, 1994, renewed 2002, amended 2012 Mongolian Law on Land Use Fees, 1997, renewed 2002 Mongolian Law on Land Ownership for Mongolian Citizens, 2002 Mongolian Law on Regulation for Implementing the Land Law, 2002
Forest resources	Mongolian Law on Forests, 1995, renewed 2007, 2012
Water resources	Mongolian Law on Water, 1995, renewed 2004, renewed 2012 Mongolian Law on Water Pollution Fees, newly adapted 2012 Mongolian Law on mineral water, 2003
Plant Resources	Mongolian Law on Plant Protection, 1996, last amended 2011 Mongolian Law on Natural Plants, 1995, amended 2010, 2012
Wildlife Resources	Mongolian Law on Fauna, 2000, renewed 2012
National Park Resources	Mongolian Law on Special Protected Areas, 1996 Mongolian Law on Buffer Zones, 1997
Conservation and other legislation	Mongolian Law on Environmental Protection 1995, and renewed 2005, amended 2012 Mongolian Law on Environmental Impact Assessment, 1998, renewed 2012 Mongolian Law on Air, 1995, and renewed 2010, renewed 2012 Mongolian law on hazardous and toxic chemicals, 2006 Mongolian law on hazardous and chemical toxic waste, 2006 Mongolian Law on hydrology, meteorology and environmental monitoring, 1997 Mongolian Law on Cultural Heritage Protection , 2001, revised in 2004 and 2005. Mongolian Law on Natural Resource Use Fees, renewed 2012 Mongolian Law on Waste Disposal, 2012

10. **Environmental assessment requirements of Mongolia.** The environmental impact assessment (EIA) requirements of Mongolia are regulated by the Law on Environmental Impact Assessment (1998, amended in 2012).² The terms of the law apply to all new projects, as well as rehabilitation and expansion of existing industrial, service, or construction activities and projects that use natural resources. The purpose of the law is environmental protection, the prevention of ecological imbalance, the regulation of natural resource use, and the assessment of environmental impacts of projects and procedures for decision-making regarding the implementation of projects. The EIA process in Mongolia is summarized in Figure 1.

² Law of Mongolia on Environmental Impact Assessments (1998, amended in 2012).

Figure 1: Environmental Impact Assessment Process in Mongolia



11. The type and size of the planned activity define responsibility as either the Ministry of Environment and Green Development (MEGD)³ or *aimag* (provincial) government. There are two types of EIAs defined in the Law:

- (i) General EIA (screening) – to initiate a general environment assessment (GEA), the project implementer submits to MEGD (or *aimag* government) a brief description of the project including feasibility study, technical details, drawings, and other information. The GEA may lead to one of three conclusions: (i) the project may be completed pursuant to specific conditions, (ii) a detailed EIA (DEIA) is necessary, or (iii) project cancellation. Issue of GEA is free and usually takes up to 14 working days.
- (ii) Detailed EIA – the scope is defined in the GEA. The DEIA report must be produced by a Mongolian company which is authorized by the MEGD. The developer of the DEIA should submit it to the MEGD (or *aimag* government). An expert of the authority organization who was involved in conducting GEA is expected to make a review of the DEIA within 18 days and present it to MEGD (or *aimag* government). Based on the conclusion of the expert, the MEGD (or *aimag* government) takes a decision about approval or disapproval of the project.

³ Until 2012 the Ministry of Nature, Environment, and Tourism (MNET)

12. The DEIA must contain the following chapters: (i) environmental baseline data; (ii) project alternatives; (iii) recommendations for minimizing, mitigation, and elimination of impacts; (iv) analysis of extent and distribution of adverse impacts and their consequences; (v) risk assessment; (vi) environmental protection plan; (vii) environmental monitoring program (EMP); and (viii) record of residents acknowledgement and opinion on project implementation.

B. ADB Environmental Safeguard Requirements

13. **Safeguard policy statement (2009).** Environmental safeguards requirements, including EIA requirements, are defined in ADB's SPS (2009). All projects funded by ADB must comply with ADB's SPS (2009) to ensure that projects undertaken as part of programs funded under ADB loans are environmentally sound, are designed to operate in compliance with applicable regulatory requirements, and are not likely to cause significant environmental, health, or safety hazards. With respect to the environment, the ADB's SPS (2009) is underpinned by the ADB operations manual, bank policy (OM section F1/OP, 2010). The policy promotes international good practice as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health and Safety Guidelines.⁴

III. DESCRIPTION OF THE PROJECT

A. Project Impact, Outcome, and Outputs

14. The expected impact of the proposed project will remain as sustained premium-value differentiation for Mongolian agricultural products. The expected outcome will be improved value chains of Mongolian agribusiness enterprises to deliver higher-value products. The expected project outputs will be: (i) VCIs financed, (ii) herders' and farmers' production capacity improved, (iii) enterprises' marketing and technical capacity improved, (iv) brand development and management strategy defined, and (v) effective project management.

15. **Output 1: Value chain investments financed.** This comprises (i) preparation of VCI proposals—the VCI proposal will include a marketing strategy, a value chain development strategy, and an intended expenditure; (ii) due diligence of VCI subprojects; and (iii) provision of subloans to at least seven project participating enterprises (PPEs) which have the potential to produce and deliver premium value products to domestic and/or international markets. Each PPE needs to prepare a VCI proposal to apply for a subloan. The PMU will assist PPEs' preparation of VCI proposals, particularly to identify areas needed for improvement on raw material procurement, marketing, and quality control. The identified needs will be reflected in the VCI proposal and used to select activities under outputs 2 and 3. In addition, for each VCI proposal, the PMU will carry out a financial analysis, an initial environmental examination, and a social and gender analysis, and prepare a VCI subproject implementation and monitoring plan in close consultation with the PPE. This entire process of VCI proposal preparation will serve as hands-on capacity development to each PPE on business operation; financial management; value chain development; and corporate social responsibility, including social and environmental safeguard compliance. All VCI subloans will be channeled through PPBs based on onlending agreements to be made with the Ministry of Finance (MOF). Based on the selection criteria, each PPB will select enterprises among those that pass respective financial assessments.⁵

⁴ New Version of the "World Bank Group Environmental, Health, and Safety Guidelines", April 30, 2007, Washington, USA. <http://www.ifc.org/ifcext/enviro.nsf/Content/EnvironmentalGuidelines>

⁵ Selection criteria of project participating enterprises are described in detail in the project administration manual (accessible from the list of linked documents in Appendix 2).

16. **Output 2: Herders' and farmers' production capacity improved.** This output comprises (i) capacity development for herders, farmers, and primary processors of agriculture products who provide raw materials and primary processing products to PPEs; (ii) provision of medical supplies, equipment, machinery, livestock and/or agriculture material and inputs for the herders, farmers, and primary processors of agriculture products; and (iii) construction, if any, of animal slaughter houses. Mongolian agro-processing enterprises generally have limited access to quality raw materials, which is the bottleneck for product quality improvement. Most enterprises procure raw materials of low and/or mixed quality from quality-unconscious raw material traders because of the absence of alternative procurement channels at reasonable costs. To capture domestic and international high-end markets, PPEs need to ensure stable procurement of quality raw materials. This output will supplement PPEs' own investments in establishing reliable quality raw material supply as part of the respective VCIs. The project will help herders, farmers, and/or primary processors, who have the potential to supply quality raw materials and/or primary processing products for PPEs, to improve their production capacity. The type of works, goods, and/or services to be provided to the herders, farmers, and/or primary processors will be decided for each VCI subproject based on the needs identified during the VCI proposal preparation.

17. **Output 3: Enterprises' marketing and technical capacity improved.** This output comprises (i) marketing and technical capacity development to enable PPEs to produce and deliver premium value products to domestic and/or international markets, and (ii) market analysis of PPEs' products. The capacity development will be given to primarily subloan VCI recipient PPEs, but also other enterprises that have potential to deliver high value products. This output is based on a lesson learned from the original project—a substantial gap between the PPEs' capacity and the quality standards that high end markets, especially international ones, require. Target market analysis and marketing strategies for export-oriented animal fiber and leather subsectors will be prepared. The PMU will also advise each subloan recipient on quality improvement. This output will complement PPEs' VCI investments, which are mainly for hard component (e.g., building, machinery, and equipment) improvement, but not soft component (e.g., marketing, technical and managerial capacity, and system).

18. **Output 4: Brand development and management strategy defined.** This output comprises (i) brand development of agriculture products such as animal fiber, and (ii) preparation of a business plan for a brand management agency. For brand development, the proposed project will complete the registration of the certification mark for the Mongolian animal fiber in close cooperation with relevant business associations. To maintain the value and international recognition of the certification mark, its management is crucial. A business plan for a brand management agency, which is charged with management of the certification mark, will be prepared.

19. **Output 5: Effective project management.** This output comprises (i) project management; and (ii) capacity development of the project advisory board (PAB), PPBs, PPEs, and PMU, to ensure effective and smooth implementation of the project. The PMU will provide support for smooth implementation of project activities, which include project planning, project fund management, procurement of goods, services, and works, consultant recruitment, monitoring of project activities, and reporting to ADB and PAB.

B. Project Costs

20. The proposed project is estimated to cost \$28.25 million (Table 1), including contingencies of \$0.24 million, and financing charges during implementation of \$0.70 million.

The overall project is estimated to cost \$77.75 million, which includes the cost of the original project for \$49.50 million.

Table 3: Project Investment Plan
(\$ million)

Item	Amount ^a		
	Original Project	Additional Financing	Total
A. Base Cost^b			
1. Value chain investments financed	39.55	22.80	62.35
2. Herders' and farmers' production capacity improved	2.22	1.37	3.59
3. Enterprises' marketing and technical capacity improved	1.40	1.68	3.08
4. Brand development and management strategy defined	0.60	0.42	1.02
5. Effective project management	2.40	1.05	3.45
Subtotal (A)	46.17	27.31	73.48
B. Contingencies^c	3.33	0.24	3.57
C. Financing Charges During Implementation^d	0.00	0.70	0.70
Total (A+B+C)	49.50	28.25	77.75

^a Taxes and duties are excluded as they will be exempted by the government.

^b In mid-2012 prices.

^c Physical contingencies were computed at 5% for works and project management expenditure categories. Price contingencies were computed according to the Asian Development Bank's technical note on the "Preparation and Presentation of Cost Estimates" for total base cost, excluding consulting services and value chain investment loans. Foreign price contingency was calculated on a yearly base according to the technical note, while local price contingency was assumed at 8% for the years 2013–2016.

^d Interest charges were computed at 1% loan rate per annum during the grace period.

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates.

IV. ANTICIPATED ENVIRONMENTAL IMPACTS

A. Experiences in the Existing Project

21. **Output 1: Value chain investments financed.** The additional financing will further strengthen the value chains in different agricultural subsectors such as leather, wool and cashmere, meat, dairy products, vegetable, fruits, etc. During the implementation of the original project the bankable proposals were prepared for 12 subprojects. Environmental assessments were completed for these 12 subprojects funded under the original project provide solid basis for the key considerations and issues to be addressed in the assessment and environmental monitoring plan (EMoP). They include detailed tables identifying potential environmental impacts for each subproject activity, and required mitigation and enhancement measures.

22. The overall approach taken for the environmental assessment is to assess the likely overall impact of the project by studying representative subprojects and reviewing the overall range of subproject proposals to identify any outstanding issues. The subprojects funded under the proposed project that were assessed in detail and for which IEEs were prepared are presented in Table 4. Three proposals that were identified as representative subprojects are Mongol Shevro (tannery), Zavkhan Khuns (meat), and Erdenet Carpet (wool). A summary of the specific potential environmental impacts based on these three IEEs is summarized below.

Table 4: Location of the Enterprise and Supply Chain Areas

No.	Enterprise	Location of the enterprise	Supply chain location and investment in supply chain
1	Mongol Shevro tannery, and leather garment	Ulaanbaatar	Cooperative developments in 20 <i>soums</i> of Dund-Gobi <i>aimag</i>
2	Darkhan Nekhii tannery and sheep skin products	Darkhan Uul <i>aimag</i>	Warehouses in Uvs, Khuvsgul, Uvurkhangai, Arkhangai, Khovd <i>aimags</i>
3	Erdenet Khivs, Carpet (wool and cashmere processing plant felt, cashmere and carpet products	Orkhon <i>aimag</i>	Primary wool handling centers and wool warehouses in Zavkhan (Yaruu <i>soum</i>), Gobi Altai (Bugat, Tonkhil <i>soums</i>) and Bayankhongor <i>aimags</i> (Bayankhongor <i>soum</i>)
4	Mogol Noos, Wool processing plant	Tuv <i>aimag</i>	Wool scouring plant in Bayantsogt <i>soum</i> of Tuv <i>aimag</i> and Yarn spinning plant in Zuun mod <i>soum</i> of Tuv <i>aimag</i> . Cooperatives in four <i>soums</i> of Zavkhan <i>aimag</i> (Yaruu, Telmen, Tudevtei, and Tsagaan Khairkhan <i>soums</i>).
5	Zavkhan Khuns, Meat processing plant	Zavkhan <i>aimag</i>	The slaughterhouse in Uliastai <i>soum</i> of Zavkhan <i>aimag</i> . The company plans to procure livestock from herders of Khuvsgul, Uvs, Khovd, Bayankhongor and Arkhangai <i>aimags</i> .
6	Mon Meat Trade, Meat processing plant	Ulaanbaatar, Khentii <i>aimag</i>	New slaughtering and processing plant in Kherlen <i>soum</i> of Khentii <i>aimag</i> . Collaborate with herders of selected 10 <i>soums</i> of Khentii <i>aimag</i> such as Kherlen, Batnorov, Bayankhutag, Galshar, Darkhan, Murun, Bayan Ovoo6
7	Mon Fresh Milk, Milk and beverage plant	Ulaanbaatar	12 milk collection, reception and cooling centers in peri-urban areas of Ulaanbaatar city and in several <i>soums</i> of Tuv <i>aimag</i> .
8	Vitafit, Milk and beverage plant	Ulaanbaatar, Khentii <i>aimag</i>	The Atarchandgana farm is located in Kherlen <i>soum</i> of Khentii <i>aimag</i> , cool chain, milk pump system, transport
9	Bornuur Foods, Dairy plant	Tuv <i>aimag</i>	The dairy farm and plant is located in Bornuur <i>soum</i> of Tuv <i>aimag</i> . Fodder solution, dairy farm renovation and modernization and expansion of milk processing equipment
10	Altai Cashmere, cashmere factory	Ulaanbaatar	Support herders' cooperatives of Shine Jinst (white goat) and Bayanlig <i>soums</i> of Bayankhongor <i>aimag</i> (camel) and Ikh Tamir <i>soum</i> of Arkhangai <i>aimag</i> (yak).

23. **Leather subsector (example: Mongol Shevro).** The Mongol Shevro leather factory has existing pollution issues relating to wastewater containing chromium and other contaminants. The plant is connected to the Khargia Industrial Wastewater Treatment Plant for pretreatment of waste from tanneries in Ulaanbaatar industrial area. Effluent from Khargia treatment plant flows to the Central Wastewater Treatment Plant which treats wastewater from Ulaanbaatar municipal area. However these treatment plants have not operated well with resultant unacceptable levels of pollution into Tuul River. The replacement of equipment in the factory is seen as a positive as this modernization will result in more efficient, safer operation with lower resource use and less waste. The factory is currently operating at approximately 20% of capacity and the machinery replacement does not represent an increase in factory capacity.

24. The project required the PPE to implement mitigation measures to reduce pollution by at least the same amount as the additional pollution caused by the increased production. Possible solutions were upgrading of equipment and operations or reduction of chemical consumption to reduce pollution at its source in the production process through a 'cleaner production' approach. Treatment of effluent from the plant, that was clearly more expensive and in the medium term but would be achieved by the expected rehabilitation of the Khargia Industrial Wastewater Treatment Plant. Proposed equipment upgrade included investment proposal would result in

reduced water and chemical consumption. The factory has had a previous cleaner production assessment carried out and work was done on this as part of the Private Sector Development Project, and a related project by CRDI.

25. Another potential significant negative impact is that the herders may perceive an incentive to increase their herd size thus adding to the existing unsustainable pasture use and land degradation. The supply chain activities may encourage herders to increase their herd size, thus, adding to the existing unsustainable pasture use and land degradation. As a mitigation measure for this, the training and awareness-raising proposed by the company to undertake with herders will include awareness of the benefits of maintaining a smaller healthier herd and improving returns by focusing on quality, not quantity. As a mitigation measure for supply chain capacity improvement the company planned to carry out the training and awareness-raising for herders shall include awareness to promote a smaller, healthier herd and improving returns by focusing on quality not quantity. Further, the project planned to assist in establishment of herder cooperatives, supply of veterinary services, training to herders, establishment of facilities in regional areas.

26. **Meat subsector (example: Zavkhan Khuns).** The main significant negative impacts identified are in the increased slaughterhouse production and the associated waste issues. The increased production will mainly be due to targeted investment in processing equipment which will remove current bottlenecks in the process. However, the process is relatively benign, producing little solid waste, and wastewater which is disposed of to the local landfills after physical pretreatment to reduce solid content. There will be an increase in land degradation due to human, animal and vehicle traffic, failure of road maintenance, improper waste disposal and poor waste removal handling and PPE was required to develop an environmental management plan (EMP) and an EMoP, where necessary actions for the mitigation and prevention were included. The subproject shows as a result of upgrading equipment and technology of the plant food safety and hygiene is improved significantly.

27. Similar to the previous example above, the supply chain activities may encourage herders to increase their herd size thus adding to the existing unsustainable pasture use and land degradation. As a mitigation measure for this, the training and awareness-raising that the company proposes to undertake with herders shall include awareness of the benefits of maintaining a smaller, healthier herd and improving returns by focusing on quality not quantity.

28. **Wool and cashmere subsector (example: Erdenet Carpet).** The Erdenet Carpet subproject is upgrading in-house treatment system in further in order to improve sewage treatment. It implements mitigation measures to reduce solid waste and introduce new waste recycling technology for wool waste generated from the carpet manufacturing operation. The proposed factory upgrade is expected to have no significant adverse environmental impact. Since an existing factory was built and has been operated in compliance with the environment requirements of Mongolia, the subproject has no significant impact on surrounding area and a relatively small amount of waste is produced. Waste water generated from the wool washing factory and wool dyeing unit of the Yarn spinning factory are treated at the factory through in-house mechanical treatment prior its discharged into Centralized Sewage System of the Erdenet city. The replacement of the older equipment in the factory is seen as a positive as this modernization will result in more efficient, safer operation with lower resource use and less waste. The factory operates at approximately 60% of capacity and the machinery replacement does not represent an increase in factory capacity. Upgrading and modernizing equipment and technology of the factory within the project implementation environmental situation at the factory will be improved significantly. Namely, amount of the dyes for factory operations expected to

decrease by 13% and water consumption by 15%. Improved initial processing practices, volume of solid waste will be reduced by 10% and sludge by 5%–6%. Working place conditions at all factory units are expected to improve noticeably, for example, noise in carpet weaving factory will be reduced by three times and dust by 50%.

29. The project plans to assist in establishment herder cooperatives, supply of veterinary services, organize training to herders on wool cutting and handling to introduce New Zealand expertise and breed improvement, and raise awareness on use of alternative means for sheep identification and/or marking instead of dyeing, establishment of primary wool handling centers (for wool collecting, sorting, grading, pressing, packing) and wool warehouses in regional areas. The enterprise has introduced a new recycling technology to produce insulation material for construction using waste wool and yarn generated from the carpet factory since 2011. Due to this technology an amount of waste discharged from the carpet manufacturing operation is reduced by 15%.

30. **Output 2: Herders' and farmers' production capacity improved.** The environmental assessment of output 2 subprojects is based on a review of those carried out under the original project and a review of potential sites for subprojects. The scale and nature of activities in the output are such that no significant environmental impact is expected; this output is categorized as C under the ADB environmental assessment criteria. Based on previously implemented output 2 subprojects, a summary of impacts and proposed mitigation measures is given below.

31. Due largely to their small scale and spread over the project areas, none of the subprojects to support herder marketing cooperatives are expected to have any significant negative environmental impact. A positive benefit will be improved ability of herders to add value and improve the quality of their produce, improve their linkage to the market, and improve the efficiency of production. By increasing the return to herders per animal, these activities will reduce the need for herders to simply maximize their herd size, thus, contributing to improved sustainability. It will provide support to herders located in more remote parts of the country reducing the incentive for a larger number of animals to be located near the main centers, and reducing this current source of land degradation in these areas. Waste from veterinary supplies is required to be handled appropriately, if possible it will be incinerated in coordination with the veterinary centers or returned to the *aimag* veterinary center.

32. The program to develop livestock testing and veterinary extension centers will have a generally positive benefit in improving the health of livestock and quality of animal products. Improved animal health will result in improved resource use efficiency in terms of the amount of land, feed, and other inputs required per unit of product with corresponding reduction in land degradation. Improving the quality of skins and fibers will result in reduced wastage due to damaged materials. Some potential for minor impacts is associated with disposal of waste. As a safeguard measure, training will be provided on safe handling of supplies and waste disposal. Veterinary laboratories will be required to have a special incinerator meeting international standards for veterinary medical waste.

33. Given the scale and nature of the activities to develop fodder supply and storage facilities to foster fodder market development, no significant negative environmental impact is expected. Fodder production will reduce pressure on grazing land by providing secure feed for winter and spring when feed is most scarce. There will be minor building works from which no significant environmental impacts are expected. Cultivation, if any, should be on a small scale but still may result in soil erosion. As a safeguard for this, cultivation will be planned on land with soil of low erosion potential, and employ soil conservation techniques including minimum tillage

cultivation techniques. Sites selected for cultivation will be flat with established wind breaks against prevailing winds; they will not be located adjacent to waterways. These aspects will be included in a training program together with safe use of fertilizers; herbicides; and pesticides, if these are used.

34. **Existing output 2 subprojects.** The environmental assessment of the other output 2 is based on a review of similar output 2 subprojects carried out under the agriculture sector development program and a review of potential sites for project investments. The scale and nature of activities in the rural infrastructure and services development component are such that no significant environmental impact is expected; this component is categorized as C under the ADB environmental assessment criteria.

35. The development of livestock testing and veterinary extension centers will have a generally positive benefit in improving the health of livestock and the quality of animal products. Improved animal health will result in improved resource use efficiency in terms of the amount of land, feed and other inputs required per unit of product, with corresponding reduction in land degradation. Improving the quality of skins and fibers will result in reduced wastage due to damaged materials. There is some potential for minor impacts associated with disposal of waste and as a safeguard measure for this the training component shall include safe handling of supplies and waste disposal and requirement for veterinary laboratories to have a specialist incinerator meeting international standards for veterinary medical waste. Waste materials from field activities shall be returned to the laboratory for incineration. Civil works proposed will have no significant environmental impact as there will minor building activities.

36. Support to herder marketing cooperatives is not expected to have any significant negative environmental impact, due largely to the small scale of the activities, being spread over the project areas. There will be a positive benefit in improving the ability of herders to add value and improve the quality of their produce, improve their linkage to the market, and improve the efficiency of production. By increasing the return to herders per animal, these activities will reduce the need for herders to simply maximize their herd size thus contributing to improved sustainability. It will provide support to herders located in more remote parts of the country, reducing the incentive for larger number of animals to be located near the main centers, reducing this current source of land degradation in these areas. Waste from veterinary supplies shall be returned to the aimag veterinary center if possible for disposal in a purpose built incinerator, in coordination with the veterinary centers subproject.

37. The development of fodder supply and storage facilities to foster fodder market development is not expected to have any significant negative environmental impact due to the scale and nature of the activities. The fodder production will reduce pressure on grazing land by providing secure feed for winter and spring when feed is most scarce. It will require areas to be set aside and grazing excluded which will in turn require effective land and pasture management with participation of herders and local authorities. Thus the activity will be providing a benefit in stimulating cooperation and planning for sustainable management. No significant environmental impacts are expected from minor construction activity. It is preferable from a soil conservation aspect that fodder production be based on existing pasture without cultivation. Cultivation, if any, should be on a small scale but still may result in soil erosion. As a safeguard for this, cultivation shall be planned on land with soil of low erosion potential and employ soil conservation techniques including minimum tillage cultivation techniques. Sites selected for cultivation shall be flat with established wind breaks against the prevailing wind direction and not be located adjacent to waterways. These aspects shall be included in the training program together with safe use of fertilizers, herbicides and pesticides if these are used.

B. Environmental Benefits

38. In summary, the proposed project is expected to provide mainly environmental benefits. Improvements to processing technology will in general result in greater efficiency in use of raw materials, water and energy and reduced waste and pollution per unit of production, compared with the current situation where equipment is often out of date and in poor state of repair. Improved quality of raw materials will result in less wastage. The focus on quality and health of livestock will encourage herders to reduce their animal numbers with consequent benefits in reduced land degradation. Encouragement of participation in pasture management plans and improved fodder production will reduce the incentive for overgrazing and associated land degradation.

C. Analysis of Alternatives

39. The approach for the additional financing is based on the ongoing project, which is being implemented successfully. No alternatives have been considered in the proposed activities of the project. The only changes that have been introduced are (i) stricter environmental screening of the proposed subprojects, as already gradually introduced during the ongoing project; and (ii) compliance with new features of ADB's SPS (2009) (e.g., introduction of increased Government of Mongolia's (GOM's) ownership of safeguard documents, climate change considerations, and grievance redress mechanism).

V. ENVIRONMENTAL ASSESSMENT FOR SUBPROJECTS

A. General Review Procedures

40. The selection by PMU of individual subprojects under the proposed project has not yet been finalized. The individual VCI subprojects to be financed are in the process of shortlisting and selection by an advisory board. The individual output 2 subprojects are to be selected by the government.

41. The EARF has been prepared to conduct the environmental assessment of the subprojects to be selected. A flowchart on the environmental assessment that is used for this project (Attachment 1) was developed based on requirements of ADB's SPS (2009) and the GOM Environmental Assessment Guidelines (2010). A summary of the general project procedures are given below.

42. **Output 1: Value chain investments financed.** The following environmental assessment and review procedure for environmental assessment and approval of subprojects under the output is based on MEGD procedures and ADB guidelines:

- (i) The PMU selects subproject proposals based on participating bank conclusion.
- (ii) Selected companies are advised of the process including the requirement to comply with government and ADB requirements.
- (iii) PMU environment specialist categorizes the selected proposals according to ADB environmental requirements and provides recommendations to ADB for decision: (a) category A activities will not be funded, (b) category B activities will require environmental assessment in accordance with ADB (IEE) and government requirements, and (c) category C activities will require no further environmental assessment under ADB requirements (but may still require assessment under government requirements).

- (iv) PPEs refer their proposals to MEGD (or *aimag*) for initial assessment in parallel with preparing a detailed proposal. The MEGD process is as follows: (a) an MEGD expert carries out initial assessment and makes a recommendation to the MEGD committee to be completed within 14 days; (b) the MEGD determines whether (1) no further assessment is needed but may impose conditions, or (2) detailed environmental assessment is needed; (c) if detailed environmental assessment is needed, then the company arranges for this to be carried out by a consultant licensed for this; (d) MEGD reviews the detailed environmental assessment and may request further information; and (e) MEGD approves with or without conditions, or rejects.
- (v) PMU environment specialist refers the subproject to ADB for review and approval at the following points together with recommendations: (a) categorization according to ADB environmental requirements, (b) MEGD initial assessment, (c) detailed environmental assessment, and (d) MEGD approval.
- (vi) The commercial bank confirms that approvals are in place and that PMU has no objection before granting the loan.

43. **Output 2: Herders' and farmers' production capacity improved.** These subprojects are confirmed as category C; therefore no formal procedure of approval is needed. However, the environment specialist within PMU will be responsible for overseeing and reviewing the subprojects to ensure that it is satisfactorily carried out with no significant deviations from the original scope and nature of subprojects, and that the exclusion list is respected.

44. During project implementation, PMU environment specialist will review the selected subprojects to ensure that they do not differ significantly from those anticipated during the original project in terms of type, scale, and environmental sensitivity of location. In addition, PMU will be guided by an exclusion list that states that project activities not be located in environmentally sensitive locations including protected areas or their buffer zones; or cultural heritage sites, wetlands, sensitive habitats, or areas with significant biodiversity. The project will not fund (i) major civil works including major earthworks, dams, irrigation or drainage works; (ii) major land clearance; (iii) activities producing significant liquid, gaseous, or solid wastes; (iv) activities involving displacement or relocation of people or effects on livelihoods, influx of workers, intensification of land use with significant environmental degradation, roads, or significant heavy vehicle traffic, forestry or extractive industry (quarries); or (v) any activities that would warrant classification as category A or B under ADB environmental requirements.

B. Environmental Selection Criteria and Categorization of Subprojects

45. **Selection criteria.** The environmental criteria for selecting subprojects include the following: (i) proposed subprojects must comply with Mongolian environmental legislation and ADB's SPS (2009); (ii) proposed subprojects must not include prohibited activities as defined in Annex 5 of ADB's SPS (2009); (iii) proposed subprojects must have potential environmental benefits; (iv) proposed subprojects must improve community and occupational health and safety conditions, and reduce pollution and waste; and (v) proposed subprojects must avoid negative impacts on sensitive areas and habitats such as water-gathering grounds, nature conservation areas, protected ecological habitats, and physical cultural resources.

46. **ADB environmental categorization.** Environmental categorization shall be determined by the PMU and approved by ADB and shall follow the procedure prescribed in this EARF. ADB's rapid environmental assessment (REA) checklist of subprojects (Attachment 2) shall be developed based on ADB's categorization and project site visits, discussions with local

environmental protection authorities, and other relevant stakeholders. The REA checklist shall be completed by the PMU and submitted to ADB for review and approval. Based on ADB's classification system and the submitted REA, ADB will endorse assigning the subproject to one of the following categories:

- (i) Category A: a proposed subproject is not eligible for funding under the proposed project.
- (ii) Category B: a proposed subproject is classified as category B and an IEE (initial environmental examination) is required if its potential adverse environmental impacts are less adverse than those of category A subprojects. These impacts are site specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category A subprojects.
- (iii) Category C: a proposed subproject is classified as category C if it is likely to have minimal or no adverse environmental impacts. No environmental assessment is required although environmental implications need to be reviewed.

47. Subprojects involving training, capacity building or purchase of equipment usually do not involve any significant impacts and are classified as category C. Such subprojects still require a short report justifying their classification and why no impacts are predicted.

48. **Ministry of Environment and Green Development environmental categorization.** The Mongolian environmental assessment process requires project screening, known as the general environmental assessment (GEA). This is undertaken by MEGD or city, *aimag* environmental department, depending its scale. It takes 14 working days according to the law on assessment. The screening is done on the basis of an official request submitted by the PPE to MEGD or city, *aimag* environmental department. The following documents should be submitted to MEGD or city, *aimag* to undertake a GEA for a subproject: (i) official letter from the PPE, (ii) project location description and location map, (iii) land management plan if changes are made to land use and required land permissions, (iv) general information about the project including technologies used, (v) copy of relevant certificates of the organization (s) involved, (vi) technical and economic study (feasibility study), and (vii) contact details of the relevant organizations.

49. A GEA for subprojects are prepared by MEGD or *aimag*, city environmental department. MEGD issues relevant decision based on the assessment of a subproject. In most cases of the original project's subprojects, MEGD required to update existing DEIA as these subprojects were planning to upgrade their equipment and technology. Only few of them were approved with general assessment with specific condition as no adverse impacts were expected from implementation of these subprojects.

C. Procedure for Environmental Assessment of Subprojects

50. **General principles.** Subprojects shall meet requirements of ADB's SPS (2009), and Mongolian legislation and standards. ADB's Environmental Safeguards policy principles are defined in Safeguard Requirements 1 of the SPS:

- (i) Use a screening process for each proposed project, as early as possible, to determine the appropriate extent and type of environmental assessment so that appropriate studies are undertaken commensurate with the significance of potential impacts and risks.

- (ii) Conduct an environmental assessment for each proposed project to identify potential direct, indirect, cumulative, and induced impacts and risks to physical, biological, socioeconomic (including impacts on livelihood through environmental media, health and safety, vulnerable groups, and gender issues), and physical cultural resources in the context of the project's area of influence. Assess potential transboundary and global impacts, including climate change. Use strategic environmental assessment where appropriate.
- (iii) Examine alternatives to the project's location, design, technology, and components and their potential environmental and social impacts and document the rationale for selecting the particular alternative proposed. Also consider the no project alternative.
- (iv) Avoid, and where avoidance is not possible, minimize, mitigate, and/or offset adverse impacts and enhance positive impacts by means of environmental planning and management. Prepare an EMP that includes the proposed mitigation measures, environmental monitoring and reporting requirements, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators. Key considerations for EMP preparation include mitigation of potential adverse impacts to the level of no significant harm to third parties, and the polluter pays principle.
- (v) Carry out meaningful consultation with affected people and facilitate their informed participation. Ensure women's participation in consultation. Involve stakeholders, including affected people and concerned nongovernment organizations, early in the project preparation process and ensure that their views and concerns are made known to and understood by decision makers and taken into account. Continue consultations with stakeholders throughout project implementation as necessary to address issues related to environmental assessment. Establish a grievance redress mechanism to receive and facilitate resolution of the affected people's concerns and grievances regarding the project's environmental performance.
- (vi) Disclose a draft environmental assessment (including the EMP) in a timely manner, before project appraisal, in an accessible place and in a form and language(s) understandable to affected people and other stakeholders. Disclose the final environmental assessment, and its updates if any, to affected people and other stakeholders.
- (vii) Implement the EMP and monitor its effectiveness. Document monitoring results, including the development and implementation of corrective actions, and disclose monitoring reports.
- (viii) Avoid implementing project activities in areas of critical habitats, unless (a) there are no measurable adverse impacts on the critical habitat that could impair its ability to function, (b) there is no reduction in the population of any recognized endangered or critically endangered species, and (c) any lesser impacts are mitigated. If a project is located within a legally protected area, implement additional programs to promote and enhance the conservation aims of the protected area. In an area of natural habitats, there must be no significant conversion or degradation, unless (a) alternatives are not available, (b) the overall benefits from the project substantially outweigh the environmental costs, and (c) any conversion or degradation is appropriately mitigated. Use a precautionary approach to the use, development, and management of renewable natural resources.

- (ix) Apply pollution prevention and control technologies and practices consistent with international good practices as reflected in internationally recognized standards such as the World Bank Group's Environmental, Health and Safety Guidelines. Adopt cleaner production processes and good energy efficiency practices. Avoid pollution, or, when avoidance is not possible, minimize or control the intensity or load of pollutant emissions and discharges, including direct and indirect greenhouse gases emissions, waste generation, and release of hazardous materials from their production, transportation, handling, and storage. Avoid the use of hazardous materials subject to international bans or phase-outs. Purchase, use, and manage pesticides based on integrated pest management approaches and reduce reliance on synthetic chemical pesticides.
- (x) Provide workers with safe and healthy working conditions and prevent accidents, injuries, and disease. Establish preventive and emergency preparedness and response measures to avoid, and where avoidance is not possible, to minimize, adverse impacts and risks to the health and safety of local communities.
- (xi) Conserve physical cultural resources and avoid destroying or damaging them by using field-based on surveys that employ qualified and experienced experts during environmental assessment. Provide for the use of chance find procedures that include a pre-approved management and conservation approach for materials that may be discovered during project implementation.

51. **Preparation of initial environmental examination report.** Environmental assessment will be prepared by the environmental specialist in PMU as the proposed project will support subprojects of B and C categories which do not require full environmental impact assessment. IEE shall (i) be consistent with ADBs Safeguard Requirements and with the Law on Environmental Impact Assessment of Mongolia. The IEE of the subprojects will be submitted to ADB for approval, prior to ADB's approval The detailed environmental impact assessment (DEIA in Mongolian) must be approved by MEGD before ADB can approve the English IEE and/or EIA.

52. The environment assessment shall start with a field visit and study of the environmental conditions at the subproject site to see the environmental performance and commitment of the project participating enterprise (PPE). The environment specialist in the PMU will assess compliance with mitigation measures and monitoring plans defined in the EMP, identify additional mitigation actions to implement for the sub-project. The environmental performance of PPE shall be documented in the IEE.

53. The baseline conditions for the project will be obtained from the existing assessment reports, site visits, and any available secondary sources and relevant databases, such as topography, soils, geology, protected areas, sensitive areas, land use, and all ambient air, noise and water quality conditions in the project's area of influence.

54. Predicting potential environmental impacts involves predicting environmental risks and anticipated impacts as a result of project activities and plant operation, impacts on air and surface water quality, noise, risks to occupational and community health and safety, protected and sensitive ecological, socio-economic and cultural resources.

55. The EMP of the PPE should include a table listing the implementation of the mitigation measures. A template is provided in Attachment 3. All mitigation measures mentioned in the EIA report should be listed in this table. Mitigation measures should be defined for all phases of the project, including (i) detailed design, (ii) construction, and (iii) operation. The table must clearly

define responsibilities for implementation and supervision of the mitigation measures. Actions related to public consultation and GRM can be included in the EMP or developed as in separate plan.

56. An environmental monitoring plan of the subproject must be compiled by PPE. A template is provided in Attachment 4. The plan should be very specific about the parameters to be monitored, the total number of monitoring locations, the exact locations (location and name of each sensitive target) where monitoring is to be carried out, and the frequency and duration of monitoring.

57. Environmental management and capacity development training plan for the PPE will be developed by the PMU and conducted with cooperation of relevant agencies. These trainings should be incorporated into trainings designed for PPEs along with business proposal writing, financial management etc.

58. Payment of the costs for the preparation of the required environmental documents will be the responsibility of the PPEs. The PMU will provide support to the PPEs through the environmental consultant in finalizing the required document and submission to MEGD and ADB for approval.

VI. CONSULTATION, INFORMATION DISCLOSURE, AND GRIEVANCE REDRESS MECHANISM

A. Consultation and Participation

59. Major documents related to the original project have been accessible through ADB website in both English and Mongolian during its first stage implementation. Numerous consultations were held with industry, government officials, nongovernment organizations, herders, traders, suppliers, and others. For the IEE, meetings were held with Ministry of Industry and Agriculture, MEGD, State Specialized Inspection Agency, project participating banks (PPBs), World Bank Sustainable Livelihoods Project, Mongolian Cleaner Production and Energy Efficiency Center, University of Mongolia tannery research project, and representative enterprises in each major subsector to be supported by the project. Local (*soum*) officials and community groups were consulted in group meetings in the field. All parties consulted are in favor of the project.

60. In terms of environmental impacts, the main concerns raised during the original project are on the need for sustainable pasture management and a sustainable harvesting system, and for upgrading equipment and processes used in the leather and wool and/or cashmere industry.

61. Public consultations will be conducted during the preparation of the IEEs for the individual subprojects. The PPE will carry out meaningful consultation with affected people and other concerned stakeholders, including civil society, and facilitate their informed participation. The consultation process shall also be used to introduce and discuss the project GRM. Meaningful consultation is a process that (i) begins early in the project preparation stage and is carried out on an ongoing basis throughout the project cycle; (ii) provides timely disclosure of relevant and adequate information that is understandable and readily accessible to affected people; (iii) is undertaken in an atmosphere free of intimidation or coercion; (iv) is gender inclusive and responsive, and tailored to the needs of disadvantaged and vulnerable groups; and (v) enables the incorporation of all relevant views of affected people and other stakeholders into decision making, such as project design, mitigation measures, the sharing of development benefits and opportunities, and implementation issues. Consultation will be carried out in a

manner commensurate with the impacts on affected communities. The consultation process and its results are to be documented and reflected in the environmental assessment report.

62. The IEE shall document details of the public consultation by providing details of the environmental issues and concerns raised by stakeholders and by indicating how these will be addressed in the project design and mitigation measures. Proof of consultations such as attendance sheets, minutes of meetings and pictures shall be included in the documentation. A template of the consultation record is provided in Attachment 5.

63. The consultation should focus on public concerns about community annoyances from project implementation, such as noise and dust, as well as public concerns about the environment and resettlement. Immediate adjustments must be undertaken to address any public complaints and concerns.

B. Information Disclosure

64. The PMU and PPEs are responsible for ensuring that all environmental assessment documents and environmental monitoring reports are properly and systematically kept as part of the project record. The PPE shall make these documents available in a form, language and at a location in which they can be easily accessed by all stakeholders including affected people.

65. In addition, according to the ADB requirements (for category B projects), the environmental progress reports submitted by the PMU on an annual basis will be posted on ADB website.

C. Grievance Redress Mechanism (GRM)

66. The PMU and PPEs shall establish and maintain a mechanism to receive and facilitate resolution of affected peoples' concerns, complaints, and grievances about the project's environmental performance. The GRM will address affected people's concerns and complaints promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to all segments of the affected people at no costs and without retribution. The mechanism will not impede access to Mongolia's judicial or administrative remedies. The GRM will be introduced during consultation with community and made publicly available and accessible to the affected people prior and during to project implementation.

67. As a result of this public participation and safeguard assessment during the initial stages of the project, major grievances are not expected. However, unforeseen issues may occur. In order to settle such issues effectively, a practical and transparent channel for lodging complaints and grievances has been established, in parallel with the mechanism developed under the resettlement planning process. In the event of a grievance issue, the basic stages established for redress are:

- (i) Stage 1: If a concern arises during construction, the affected person addresses the issue of concern directly to the contractor and the PPE project officer. If the issue is successfully resolved, no further follow-up is required.
- (ii) Stage 2: If not successful, the affected person can submit an oral or written petition and/or complaint to the PPE. For an oral complaint, the PPE must make proper written records and provide a clear reply within 2 weeks to the affected person. The environmental consultant can assist the PPE in replying to the affected person.

- (iii) **Stage 3:** If the affected person is still not satisfied with the reply of the PPE, he and/or she can appeal to the PMU after receiving the reply in Stage 3. The PMU must report to ADB as soon as the complaint is recorded by submitting relevant documents, and prepare a clear reply in consultation with ADB and MEGD. The PMU must give the reply to the affected person within 30 days. ADB project team will assess the situation, contact the affected people and government project counterparts and design and implement the course of actions.

VII. INSTITUTIONAL ARRANGEMENTS AND RESPONSIBILITIES

68. **Ministry of Finance.** The MOF is the executing agency of the loan. The executing agency's function is financial disbursement and due diligence oversight. For this loan, MOF has established a PMU to oversee all the work and ensure compliance with all safeguard documents of the project (see below). The PMU will be staffed by a national environment safeguard specialist. A national environment specialist and/or consultant be hired for 4 years to carry out initial environmental assessment, oversee compliance with Government of Mongolia, and ADB environment requirements. The term of reference of this consultant is included in the EMP.

69. **Project participating enterprises.** The PPE will be responsible for development, implementation, monitoring, and reporting of the subproject. The PPE shall establish a project implementing team which includes a person in charge of environmental, safety and health issues of the enterprise. During the implementation of the original project, it showed that the PPEs lacked expertise and capacities to ensure adequate environmental management of the projects. There is a need for institutional strengthening, environmental management, and capacity development of PPEs. PMU will organize capacity development trainings for PPEs with assistance professional agencies to ensure effective project implementation of subprojects. A training program will be defined for PPEs to meet the capacity development needs.

70. **Project advisory board (PAB).** It will comprise representatives from MOF; Ministry of Industry and Agriculture, and Ministry of Environment and Green Development. The PAB will mainly be responsible for approving the subprojects proposed by the PMU.

71. **Project management office.** The PMU will oversee and ensure that environmental assessments of the subprojects are carried out in accordance with ADB's SPS (2009). The PMU will finalize IEEs and monitors the project implementation. The PMU will ensure that all subprojects are implemented in compliance with ADB and Mongolian environmental requirements. The PMU will include a project director, coordinator, financial specialist, business consultant, environmental specialist, social and gender specialist, etc. An environmental specialist will have responsibility to supervise EARF and EMP implementation, monitoring of subprojects, and provision of reports to the PMU and ADB. The Terms of Reference for the Consultant is in Attachment 6.

72. The responsibilities of the PMU in carrying out the EARF provisions for subprojects are as follows:

- (i) Classify subproject by completing rapid environmental assessment using approved REA checklists (Attachment 2) and submitting them to ADB for approval of the environment category;
- (ii) Conduct environmental assessment and prepare IEE report in compliance with the requirements of National legislation and ADB's SPS (2009);

- (iii) Ensure that PPEs hold meaningful consultation with affected people and other stakeholders in accordance with ADB's SPS (2009);
- (iv) Organize training programs, with support of professional agencies covering (a) environmental laws, regulation and policies; (b) planning and implementing mitigation measures; (c) environmental management and reporting; (d) community and occupational health and safety; (e) environmental monitoring; and (f) documentation and reporting;
- (v) Ensure that PPEs develop adequate EMP and EMoP and submits their implementation reports to applicable agencies in timely manner;
- (vi) Ensuring that PPE implemented environmental monitoring in accordance with the approved EMoP; and
- (vii) Conduct monitoring of sub-projects environmental performance and report to ADB on an annual basis that describe progress with implementation of the EMP and compliance issues and corrective actions, if any.

73. **Ministry of Environment and Green Development (MEGD).** The MEGD will be responsible to conduct GEIA in accordance with the Law on Environmental Impact Assessment (1998, amended in 2012), and review and approve detailed EIAs, if relevant. The MEGD is the agency primarily responsible for the implementation of environmental policy in Mongolia. The Department of Environment and Natural Resources under MEGD is responsible for the planning and implementation of actions to reduce environmental degradation and adverse environmental impacts, and ensuring the appropriate use of natural resources. Its functions include the conduct of GEIAs and the appraisal and approval of detailed EIAs. The Department has extensive experience in conducting GEIAs (i.e., screening and categorization of projects) which comply with the Mongolian Law on Environmental Impact Assessment (1998, amended in 2012), and has either internally or readily accessible expertise to assess full EIAs submitted for approval.

74. **Local governments.** *Aimags* and *soums* governors are responsible for all environmental management at local level. They issue local permits and licenses and deal with natural resource management. Enforcement of regulations is the responsibility of environmental inspectors at the *aimag* level and rangers at the *soum* and *bag* level. *Aimags* have their own environmental protection and tourism department (ETD) with 3–5 staff. It has the responsibility to conduct the general environmental assessment for local projects and approve it. Assessment and approval for bigger farms (national level) is done by MEGD. The ETD's function is also to supervise the *soum* and *bag* level rangers and report back to MEGD. Local governors have the legal right and responsibility for all environmental actions in their given administrative territory. Therefore, the *aimag* ETD has a key role to play in conducting (and approving or otherwise) general environmental assessment for local projects.

75. The State Professional Inspection Agency (SPIA) is responsible for environmental inspection services nationwide. The Department of the Environment, Geology and Mining Inspection is the main supervising focal point for project activity. This department has 32 inspectors at the central level, 3–5 inspectors at *aimag* level, and 1–2 at *soum* level. Environmental inspectors of this agency are responsible for environmental monitoring, operational inspections, and information collection.

76. **Asian Development Bank.** The ADB will be responsible for: (i) reviewing REA checklists prepared by the PMU and approving the environment category subprojects; (ii) advising the PMU on the type and extent of environmental assessment report to be prepared, based on the approved categorization and ADB's SPS (2009) requirements; (iii) reviewing and

approving the final IEE, disclosing on ADB's project website in accordance with ADB's disclosure policies; (iv) reviewing environmental monitoring reports submitted by the PMU, and conducting review missions during implementation to determine compliance with EMP and ADB's SPS (2009); and (v) disclosing environmental monitoring reports on ADB's project website in accordance with ADB's disclosure policies.

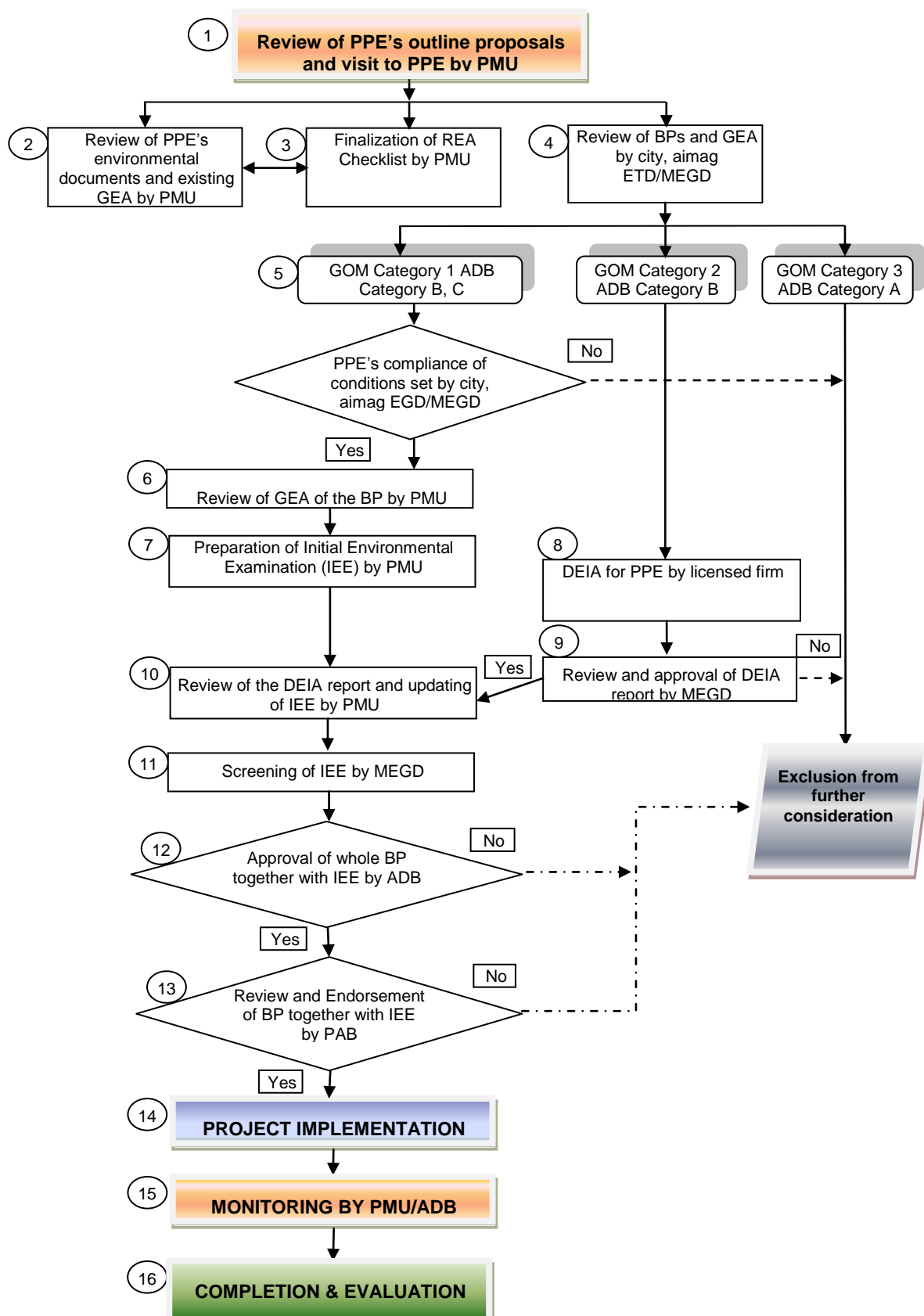
VIII. MONITORING AND REPORTING

77. During implementation, PPEs will monitor and semi-annually report to the PMU on the implementation of environmental requirements and outcomes as part of the overall reporting to a commercial bank such as Participating bank, Trade and Development Bank, XAC bank, etc. and ADB. The PPEs will be required to report any environmental incidents, accidents, complaints, litigation, regulatory notices, or fines in their operation to PMU, a commercial bank, and MEGD as soon as possible. Corrective actions will be developed and agreed upon between the PPE any and SPIA or other applicable agency. This will be referred to PMU environment specialist and PPB for review and concurrence. The PPB will report any environmental incidents that it becomes aware of to PMU and a similar procedure initiated. The environment specialist within PMU will be responsible for overseeing and reviewing this monitoring to ensure that it is satisfactorily carried out.

78. **Internal monitoring reports.** PPE shall monitor environmental performance of a subproject during the project implementation internally on regular basis and prepare a semi-annual monitoring reports to the PMU. It shall present (i) project implementation status; (ii) environmental mitigation measures implemented; (iii) monitoring activities; (iv) analysis of monitoring data against relevant standards; (v) violations of environmental regulations (results of inspection held, etc.); (vi) any additional mitigation measures and corrective actions required; (vii) occupational health and safety reporting (e.g., accidents during construction, etc.); (viii) major events or issues that happened during the reporting period and follow-up actions needed; and (ix) complaints received from the public and how these were resolved through the GRM. These reports will be submitted to the PMU.

79. **Environmental monitoring reports.** The PMU shall prepare monitoring reports on an annual basis. It shall describe progress with implementation of the EMP and compliance issues and corrective actions, if any. The environmental monitoring report should follow the sample outline for a periodic project environmental monitoring report provided in Attachment 7 of this EARF. These environmental monitoring reports will be provided by the PMU to ADB. If monitoring identifies weakness or deficiencies in the implementation of the EMP, the PMU shall require PPE to implement corrective actions.

ENVIRONMENTAL IMPACT ASSESSMENT FLOWCHART



ADB = Asian Development Bank, DEIA = detailed environmental impact assessment, EGD = Environment and Green Growth Department, GEIA = general environmental impact assessment, GOM = Government of Mongolia, IEER = initial environmental examination report, MEGD = Ministry of Environment and Green Development, PAB, project advisory board, PMU, project management unit, PPE = project participating enterprise, REA = rapid environmental assessment, VCI = value chain investment

RAPID ENVIRONMENTAL ASSESSMENT (REA) CHECKLIST

Note: Answer the questions assuming the “without mitigation” case. The purpose is to identify potential impacts. Use the “remarks” section to discuss any anticipated mitigation measures.

Country/Project Title: Mongolia/ Additional Financing of Agriculture and Rural Development	
Subproject name:	
Sector division:	

SCREENING QUESTIONS	Yes	No	REMARKS
A. Project Location			
Is the project area adjacent to or within any of the following environmentally sensitive areas?			
• Cultural heritage site			
• Protected Area			
• Wetland			
• Estuarine			
• Buffer zone of protected area			
• Special area for protecting biodiversity			
B. Potential Environmental Impacts			
Will the project cause...			
• ecological disturbances arising from the establishment of a plant or facility complex in or near sensitive habitats?			
• eventual degradation of water bodies due to discharge of wastes and other effluents from plant or facility complex?			
• serious contamination of soil and groundwater?			
• aggravation of solid waste problems in the area?			
• public health risks from discharge of wastes and poor air quality; noise and foul odor from plant emissions?			
• short-term construction impacts (e.g. soil erosion, deterioration of water and air quality, noise and vibration from construction equipment?			
• dislocation or involuntary resettlement of people			

SCREENING QUESTIONS	Yes	No	REMARKS
• social conflicts arising from the influx of construction laborers from other areas?			
• water pollution from discharge of liquid effluents?			
• air pollution from all plant operations?			
• gaseous and odor emissions to the atmosphere from processing operations?			
• accidental release of potentially hazardous solvents, acidic and alkaline materials?			
• uncontrolled in-migration with opening of roads to forest area and overloading of social infrastructure?			
• occupational health hazards due to fugitive dust, materials handling, noise, or other process operations?			
• disruption of transit patterns, creation of noise and congestion, and pedestrian hazards aggravated by heavy trucks?			
• disease transmission from inadequate waste disposal?			
C. Other potential impacts			
Will the project cause...			
• Contamination of soil and groundwater from solid wastes from water treatment sludge, cafeteria wastes etc.?			
• Deterioration of water quality due to inadequate sludge disposal or direct discharge of untreated sewage water?			
• Contamination of surface and ground waters due to improper waste disposal?			
• Contamination of surface and ground waters due to sludge on land?			
• Environmental pollution due to inadequate sludge disposal or industrial waste discharges illegally disposed in sewers?			

SCREENING QUESTIONS	Yes	No	REMARKS
<ul style="list-style-type: none"> Impacts associated with transport of wastes to the disposal site or treatment facility? 			
<ul style="list-style-type: none"> Land and/or pasture use conflicts? 			
D. Formal requirements			
Is there any permission of the company on land possession for the company from city and/or <i>aimag</i> government?			
Is there any permission of the company for its operation from city and/or <i>aimag</i> government?			
Is there any environmental assessment conducted for the enterprise?			
Is there any need in environmental assessment for the value chain investment subproject?			
E. Proposed categorization			
Category A: Subprojects with potential for significant adverse environmental impacts. The subproject is not eligible for funding under Agriculture and Rural Development Project.			
Category B: Subprojects judged to have some adverse environmental impacts, but of lesser degree and/or significance than those for category A projects. An initial environmental examination (IEE) is required. The IEE is regarded as the final environmental assessment report.			
Category C: Subprojects unlikely to have adverse environmental impacts. No EIA or IEE is required, although environmental implications are still reviewed.			
Climate Change and Disaster Risk Questions The following questions are not for environmental categorization. They are included in this checklist to help identify potential climate and disaster risks.	Yes	No	Remarks

SCREENING QUESTIONS	Yes	No	REMARKS
Is the project area subject to hazards such as earthquakes, floods, landslides, tropical cyclone winds, storm surges, tsunami or volcanic eruptions and climate changes?			
Could changes in precipitation, temperature, salinity, or extreme events over the project lifespan affect its sustainability or cost?			
Are there any demographic or socio-economic aspects of the project area that are already vulnerable (e.g., high incidence of marginalized populations, rural-urban migrants, illegal settlements, ethnic minorities, women or children)?			
Could the project potentially increase the climate or disaster vulnerability of the surrounding area (e.g., increasing traffic or housing in areas that will be more prone to flooding, by encouraging settlement in earthquake zones)?			

Attachments:

1. Conclusion of GEA/DEIA.
2. Subproject (Investment Proposal)

SIGNING OFF:

Name of Preparer:

Designation: Environment Specialist, Agriculture and Rural Development Project

Signature:

Date:

Name of Approver:

Designation: Director General, Department of Environment and Natural Resources, MEGD

Signature:

Date:

EXAMPLE OF AN ENVIRONMENTAL MITIGATION PLAN

No.	Environmental impacts and mitigation measures	Parameters	Frequency	Responsibility	Cost, Th.MNT
A Water pollution:					
1	Maintain, renovate and replace water supply pipes, and clean sewage pipes	Sewage management	3rd quarter	Plumbing engineer	
2	Carry out sewage water tests in house and maintain records of test results	Concentration of pollutants in effluent (SAA etc.)	Monthly	Plumbing engineer	
3	Renovate waste water treatment facilities and aeration equipment	Sewage management	By schedule	Plumbing engineer	
4	Purchase new lab equipment for sewage analysis	Sewage management	4th quarter	Procurement manager	
5	Manage sludge removal and transportation	Sewage management	2 times a week	Auto mechanic	
B Waste disposal					
8	Regular clean-up within factory site with involvement of all production units	Waste management	Monthly	OSH officer	
9	Manage solid waste removal and transportation	Waste management	Regularly	Auto mechanic	
10	Procure truck for waste transportation	Waste management	4th quarter	Procurement manager	
11	Introduce new recycling technology of loose wool and waste yarn to produce insulation material	Waste management	4th quarter	Production department	
C Air pollution:					
13	Inspect all air ventilation systems of the factory	Air pollution management	3rd and 4th quarter	Head of mechanical division	
14	Replace and install air ventilation system in wool washing factory and felt making units	Air pollution management	3rd and 4th quarter	Head of engineering department	
15	Make research on exhaust filter for wool particles and dust	Air pollution management	4th quarter	Head of engineering department	
16	Make research on modern air ventilation and conditioning system in order to improve air quality in production units	Air pollution management	4th quarter	Equipment maintenance and research engineer	
D Chemicals use:					
17	Monitor storage and handling of toxic and hazardous chemicals,	Chemicals management	Regularly	Procurement manager	
18	Update references for hazardous and toxic chemicals and put in accessible	Chemicals management	4th quarter	OSH officer & procurement	

No.	Environmental impacts and mitigation measures	Parameters	Frequency	Responsibility	Cost, Th.MNT
19	places Develop procedure on storing, handling and expenditure of chemicals	Chemicals management	Q4	manager OSH engineer	
20	Make inventory of chemicals and terminate unnecessary and out dated chemicals with cooperation with related authorities	Chemicals management	March	Procurement manager and chemical engineer	
E	Soil pollution:				
21	Improve surrounding area of the factory and protect soil and vegetable coverage from erosion and degradation by renovating roads, passages	Soil management	Q2 and Q3	Head of engineering department	
22	Maintain green zone of the factory and plant grass, trees & bushes near factory buildings	Soil management	spring and fall	Head of HR department	
23	Maintain and clean up the surrounding areas of the factory regularly	Waste management	monthly	OSH officer	
F	Occupational safety, hygiene and sanitation:				
24	Conduct training of employees on fire prevention with cooperation with specialized agency	Safety and health management	Q4	OSH officer	
25	Place complete set of fire extinguishing equipment at the factory and monitor its preparedness	Emergency management	second half of the year	OSH officer and procurement manager	
26	Provide employees with occupational apparel and protective equipment	Safety and health management	2 times a year	OSH officer and procurement manager	
27	Involve all employees' in medical check-ups and take follow up action	Safety and health management	2 times a year	Head of HR department and doctor	
G	Organizational measures:				
28	Ensure compliance with government regulations and procedures in terms of environmental protection activities	Environmental management	Regularly	Factory management	
29	Environmental protection awareness raising activities for employees			Factory management	
30	Develop EPP and EMP in accordance with DEIA and PMU recommendation, and implement them in timely manner	Environmental management	December/ during the year	Factory management	
31	Prepare report on implementation of EPP and EMP and report to relevance authorities and PMU in timely manner	Environmental management	December	Factory management	
TOTAL					200.000

EXAMPLE OF AN ENVIRONMENTAL MONITORING PROGRAM

No.	Impact	Monitoring	Parameters	Reporting Frequency	Responsibility	Report to
1	Water pollution	Monitoring of surface and underground water quality by analyzing sewage, surface and underground water	pH, Chloride (Cl), Sulfate (SO ₄ ²⁻), Ammonia (NH ₄ ⁺), total), BOD, COD	Two times a year	Factory (through certified lab)	PIA of the aimag, PMU
2	Soil pollution	Monitoring of soil pollution by analyzing soil	Chemical, biological and physical characteristics of soil (to be determined)	Once a year	Factory (through a certified Lab)	PIA of the aimag, PMU
3	Solid waste	Monitoring of waste disposal	Waste management	Yearly	Factory	PIA of the aimag, PMU
4	Air pollution	Monitoring of air quality by sampling	SO ₂ , NO ₂ dust etc.	Two times in a year	Factory (through a certified Lab)	PID of the aimag, PMU
5	Occupational safety and hygiene	Monitoring of working condition,	Safety and hygienic parameters (To, dust, humidity, noise etc.)	Once a year	Factory (through aimag PIA)	PID of the aimag, PMU
6	Workers Safety and Health	Monitoring of safe operation, handling of chemicals and health	Employees health inspection, Safety and Health records, Inspection reports	Once in a year	Factory (internal monitoring reports)	PIA of the aimag, PMU
7	Compliance with National regulations	Compliance with GEA requirements and monitoring plans	Monitoring reports of EPP and EMP	End of the year	Factory, PMU	ADB, through PMU

SAMPLE CONSULTATION RECORD

Consultation Participants (meeting, focus group, discussion)

Consultation Location:			
Consultation Date:			
Purpose of Consultation:			
Name and Position of Facilitator:			
Name of Participant	Organization / Occupation	Address / Location of Residence	Gender
{name}	{Teacher & Resident}	{13th Khoroo}	F
{name}	{Unemployed, Resident}	{13th Khoroo}	M

Consultation Record (meeting, focus group, discussion)

Key Issues Discussed	
Issue	Proponent
{Concerns over access to community water resources during project implementation}	{supported by 5 residents and two NGOs from 14th Khoroo}
Actions Identified	
Action & Deadline	Responsible Organization
Additional Comments	

TERMS OF REFERENCE FOR NATIONAL ENVIRONMENTAL CONSULTANT

1. A national environmental specialist is to be appointed to the project management unit (PMU) for the proposed project to ensure compliance with the ADB's environmental requirements as part of the monitoring and evaluation for the loan. The consultant inputs will be in total 48 person-months. The environmental specialist shall have relevant technical qualifications and experience in environmental assessment, environmental auditing, and pollution control for agricultural or industrial projects.

2. The specialist will oversee and monitor all activities related to environmental compliance for the project. This includes but is not limited to ensuring that all the requirements of ADB's Safeguard Policy Statement (SPS, 2009) are met, the safeguards in the project documents are implemented, and that all approvals, permits, licenses and other Government of Mongolia's (GOM's) requirements are met. The specialist will work with the enterprises to ensure that cleaner production principles are incorporated in the project detailed design and equipment selection; provide inputs to ensure that output 2 subprojects do not have negative environment aspects; and monitor the implementation of the mitigation measures and the environment management plans.

3. The environmental specialist will report to the team leader of the PMU in MOF. Once subproject proposals are selected by a participating bank, the PMU environment specialist will: Advise selected companies of the process including requirement to comply with both GOM and ADB requirements; (ii) categorize the selected proposals according to ADB environmental requirements and provide recommendations to ADB for decision, i.e., category A activities will not be funded under the project, category B activities will require environmental assessment in accordance with ADB (IEE) and GOM requirements, and category C activities will require no further environmental assessment under ADB requirements (but may still require assessment under GOM requirements); (iii) liaise with Ministry of Environment and Green Development (MEGD) and SPIA to coordinate activities and ensure harmonization between ADB and GOM requirements; (iv) monitor and review the GOM process for environmental assessment and monitoring of projects. This includes initial assessment by MEGD, determination as to whether further detailed assessment is needed, terms of reference for any detailed assessment, review of detailed assessment, and project approval and any conditions imposed.

4. The environmental assessment will need to meet both ADB and GOM requirements as applicable. The PMU environment specialist will:
 - (i) Review documentation and forward to ADB with recommendation for determination on adequacy of assessment, whether the proposal should be approved and any approval conditions.
 - (ii) Liaise with companies to ensure that cleaner production requirements are incorporated into the detailed project design and equipment selection.
 - (iii) Liaise with companies regarding the selection of sites to ensure that there are no issues which would exclude the use of the site for the project.
 - (iv) Monitor individual subprojects during implementation to ensure that the subprojects are implemented in accordance with the project documents.
 - (v) Participate in regular project reviews.
 - (vi) Review project reports from companies.
 - (vii) Carry out spot checks on projects to verify reports.
 - (viii) Work with PPBs where needed to assist in developing capacity of PPBs staff working on the project.

- (ix) Review the subprojects selected by the government under output 2 to ensure that they do not differ significantly from those anticipated during PPTA, in terms of type, scale and environmental sensitivity of location.
- (x) Prepare regular reports to the PMU team leader on the compliance and environmental performance of the project.

TEMPLATE ENVIRONMENTAL MONITORING AND PROGRESS REPORT

1. Guidelines: Following requirements of the ADB Safeguard Policy Statement (2009) and the Operations Manual section on safeguard policy (OM F1), borrowers/clients are required to establish and maintain procedures to monitor the status of implementation of safeguard plans and ensure progress is made toward the desired outcomes.

2. The level of detail and comprehensiveness of a monitoring report is commensurate with the complexity and significance of social and environmental impacts. The following report structure is suggested:

1. Introduction
 - 1.1. *Report Purpose*
 - 1.2. *Project Implementation Progress*
2. Incorporation of Environmental Requirements into Project Contractual Arrangements (*Manner by which EMP requirements are incorporated into contractual arrangements, such as with contractors or other parties*).
3. Summary of Environmental Mitigations and Compensation Measures Implemented *Based on EMP; may include measures related to air quality, water quality, noise quality, pollution prevention, biodiversity and natural resources, health and safety, capacity building, and others.*
4. Summary of Environmental Monitoring
 - 4.1. *Compliance Inspections (if relevant)*
 - 4.1.1. *Summary of Inspection Activities*
 - 4.1.2. *Mitigation Compliance*
 - 4.1.3. *Mitigation Effectiveness*
 - 4.2. *Emission Discharge (Source) Monitoring Program (if relevant)*
 - 4.2.1. *Summary of Monitoring*
 - 4.2.2. *Results*
 - 4.2.3. *Assessment*
 - 4.3. *Ambient Monitoring Program (if relevant)*
 - 4.3.1. *Summary of Monitoring*
 - 4.3.2. *Results*
 - 4.3.3. *Assessment*
5. Key Environmental Issues
 - 5.1. *Key Issues Identified*
 - 5.2. *Action Taken*
 - 5.3. *Additional Action Required*
6. Conclusion

Overall Progress of Implementation of Environmental Management Measures
Problems Identified and Actions Recommended

Appendices

1. Site Inspection and/or Monitoring Reports
2. Ambient Monitoring Results
3. Photographs
4. Others