

Environmental Assessment and Review Framework

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Mongolia: Agriculture and Rural Development Project

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CURRENCY EQUIVALENTS

(as of 1 August 2018)

Currency unit	–	togrog (MNT)
MNT1.00	=	\$0.000405
\$1.00	=	MNT2,464.50

ABBREVIATIONS

ADB	–	Asian Development Bank
DEIA	–	detailed environment impact assessment
EIA	–	environmental impact assessment
EMP	–	environmental management plan
GEIA	–	general environmental impact assessment
GOM	–	Government of Mongolia
GRM	–	grievance redress mechanism
IEE	–	initial environmental examination
MET	–	Ministry of Environment and Tourism
MOF	–	Ministry of Finance
MOFALI	–	Ministry of Food, Agriculture and Light Industry
PMU	–	project management unit
PPB	–	project participating bank
PPE	–	project participating enterprise
PSC	–	project steering committee
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.
- (ii) In this report, “\$” refers to United States dollars.

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I. INTRODUCTION

1. The additional financing will continue to support value chain development of the Mongolian agro-processing sector with value chain investment (VCI) subloans and capacity development.¹ The additional financing will also help herders and primary-processors for the agro-processing sector to improve their production capacity and income generation through capacity development and provision of works, goods, and services.

2. The proposed project will be implemented tentatively from 2016 to 2020 for 5 years. The VCI subprojects will be implemented with support from a project management unit (PMU). 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 current 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 the 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 the Project Steering Committee and submitted to ADB for final clearance.

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

¹ Sector Assessment (Summary): Agro-Processing (accessible from the list of linked documents in Appendix 2 of the report and recommendation of the President).

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 on substances that deplete the ozone layer	1996
Convention on International Trade in Endangered Species of Wild 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 revised in 2012. The key national environmental, labor, health and safety laws are described in below presented table.

Table 2: Acting Laws Relating to the Environment

#	Laws	Year	Description
1. Laws Relating to the Environment			
1	Law on Land	2002, last amended in 2015	Identifies requirements for the various types of land depending on the use, and includes common requirements, sanitary requirements, pasture protection, protection of hayfields and cultivated areas. Specific requirements that apply to this project include the requirement to rehabilitate, or to "immediately restore eroded and damaged land", and "Land users should "prevent adverse impacts to the environment and land due to use of the land".
2	Law on Soil Protection and Prevention From Desertification	2012	This law includes measures to prevent desertification from the intensification of agriculture, mining, road construction, and urban land use as well as climate change. The law provides guidance to facilitate a safe and healthy environment for the population, and to prevent soil damage and lower soil fertility from overgrazing and desertification, and systems to prevent soil erosion. The law also contains measures to establish accountability in environmental protection along with more elaboration on soil degradation, desertification gradation criteria and soil assessment methodology.
3	Law on Water	2012	This Law makes provision with respect to the proper use, protection and restoration of water resources of Mongolia. The purpose of the Law is to govern relations concerning the protection and rational use and restoration of water resource and its basin.
4	Law on Water Pollution Fee	2012	It introduces fees payable by entities and organizations that pollute water resources and sets out the maximum and minimum amount of water pollution fees per polluting substance type. In accordance with the law water polluter shall be responsible to supervise the volume and composition of waste water and to remove the waste water after meeting the standard requirement and to be liable to pay water contamination fee.
5	Law on Water Supply and Sewage System in City and Settlements	2011	This law governs relations related to possessing and utilizing engineer facility designed for supplying urban settlement users with clean water meeting standard requirements, disposing, and treating wastewater from consumption.
6	Law on Environmental Protection	1995, last amended in 2012	This law is based on a number of principles as stated in the various chapters and provisions, as follows: Prevention of adverse impacts; Creation of favorable environmental conditions for human life, labor and recreation; Development of an ecologically sustainable economy; Proper and scientifically sound use of natural wealth; Public participation. Most important provision states that the individual who potentially pollutes or actually pollutes pays for the prevention and clean up. Therefore, polluters must compensate for, rehabilitate and restore environmental damages caused by the activity. The purpose of this law, apart from requiring the preparation of EIAs is "the regulation of the inter relations between the State, citizens, economic entities and

			organizations in order to guarantee the human right to live in a healthy and safe environment, an ecologically balanced social and economic development, the protection of the environment for present and future generations, the proper use of natural resources and the restoration of natural resources.”
7	Law on Environmental Impact Assessment	2012	<p>This law defines two types of EIAs: General and Detailed. The General EIA is an initial assessment of the resource conducted within a 14 working day period by an expert appointed by the MET. It is in essence a desk-top review study that relies on professional experience of natural science experts within the MET. The project proponent is responsible for submitting all necessary documents to the MET including a brief description of the project, a technical and economic feasibility study, work drawings and other related documents for use in conducting a General EIA. No cost is associated with this type of EIA. The review may result in the following conclusions:</p> <p>In Article 9, the project proponent is required to develop an Environmental Management Plan (EMP) that consists from Environmental Protection Plan (EPP) and an Environmental Monitoring Program (EMPr) as a means of implementing the recommendations of the EIA and monitoring the control processes and performance of each activity. Implementation of the EMP is controlled by the <i>aimag</i> and <i>soum</i> representative bodies (Parliaments), together with the local Environmental Inspector.</p>
8	Law on Air	2012, last amended in 2018	This law prohibits the pollution of urban air with “toxic and infectious substances and wastes with offensive odors”, requires EIAs prior to engaging in commercial activities which discharge polluting substances, and further regulates five specific activities for air quality protection. These are discharge and burning of wastes, construction activities, equipment emitting air pollutants, discharge of greenhouse gases and activities affecting the ozone layer.
9	Law on Air Pollution Fee	2010, amended in 2012	This law regulates relationship related to payment of air pollution fee and sets amount of the fees.
10	Law on Prohibition Export and Transportation of Hazardous Waste	2000	This law regulates relations associated with the protection of the territory of Mongolia from hazardous wastes.
11	Law on Hazardous and Toxic Chemicals	2006, last amended in 2017	This law regulates relations concerning the export, import and transportation of toxic chemicals across the borders of Mongolia and production, storage, trade, transport, use, removal and control on thereof. It defines “toxic chemicals” as those chemicals that have a toxic impact on human health, livestock and wild animals and the environment and further pose a risk of death or extinction. It appears to indicate that chemicals with toxic effects but do not pose a risk of death will be excluded from the regulatory scheme. Hazardous chemicals are chemicals and their compositions that are explosive, oxidant, corrosive and irritable character.
12	Law on Waste Disposal	2017	This law regulates waste disposal and recycling, reward system for collected recyclable wastes, and an accountability system for individuals and organizations that violate waste disposal regulations.

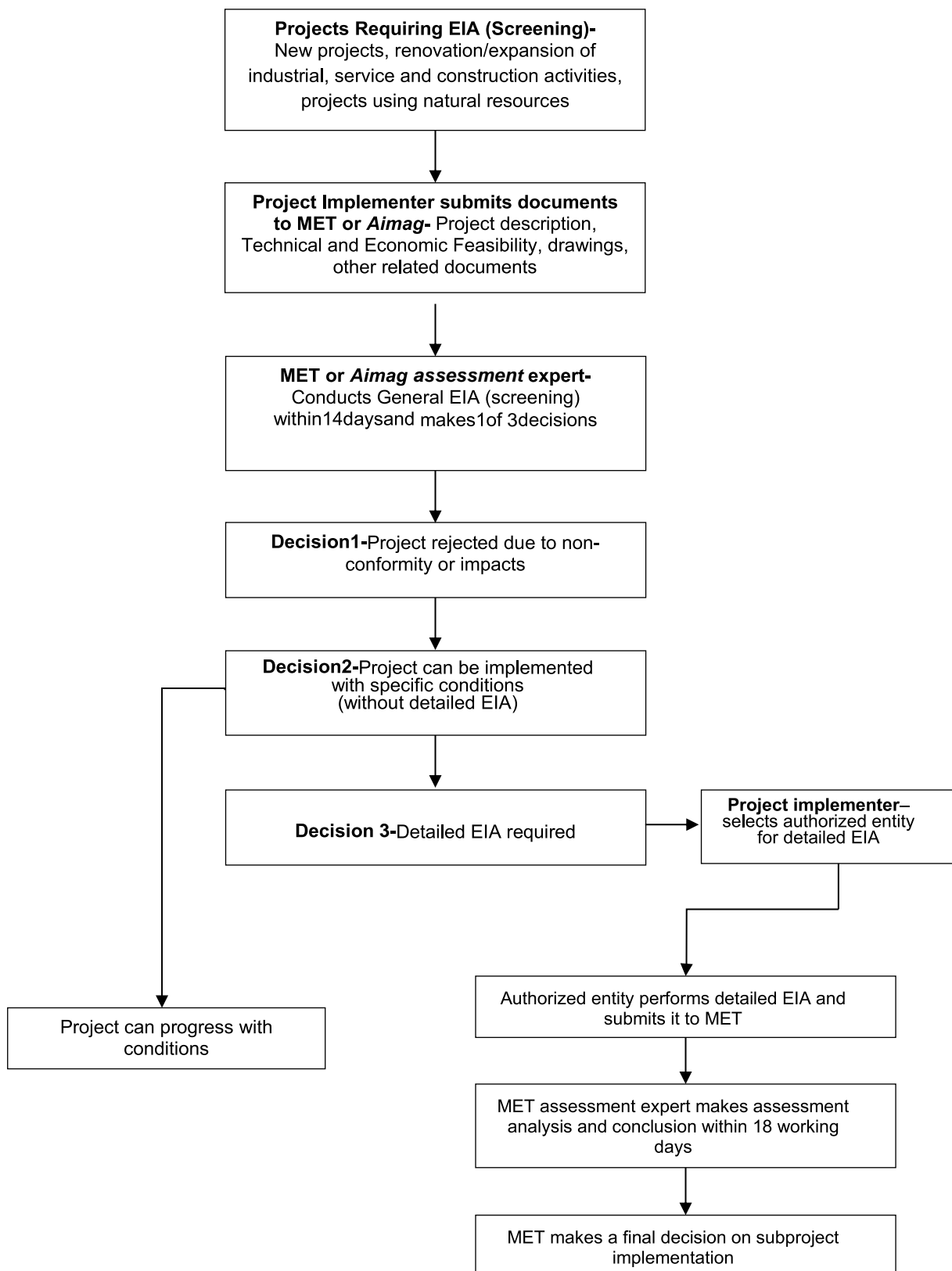
13	Law on Hydrology, Meteorology and Environmental Monitoring	1997, last amended in 2017	This law regulates relationship relating to providing citizens, business entities and organizations with information on hydrology and meteorology.
14	Law on Natural Resource Use Fees	2012, last amended in 2015	This law regulates relations concerning imposing fees for use of natural resources to citizens, economic entities and organizations and spending the fund from proceeds from use of natural resources for environmental protection and restoration of natural resources.
15	Law on Energy Conservation	2015, last amended in 2016	This law regulates the relations arising from energy conservation and efficient use of the energy.
2. Laws relating to the labor, occupational safety and health			
16	Labor Law	1999, last amended in 2017	It governs labor relations of entities between employees and employers, and their rights and duties and addresses, determines minimum wage level, maximum working hours regulations, collective employment agreements and resolutions of employment disputes. The law prohibits all types of discrimination, particularly employment discrimination on the grounds of social or property status, race, colour or nationality, sex, religion or political views, as are unwritten contracts of employment. The standard working day is set at 8 hours (subject to modification by mutual agreement) and the maximum working hours per week is 40 hours. Basic annual vacation for workers is 15 days, increased both for additional years of service and work under difficult conditions. Overtime is reimbursed at the rate of at least 1.5 times the standard rate of pay. Deductions from worker's pay, other than for income tax and child support are limited to 20% of gross monthly wages. It also regulates labor relation relating to employment of women, minors, disabled persons, dwarfs and elderly people.
17	Law on Occupational Safety and Health	2008, last amended in 2015	The Law on Occupational Safety and Health determines the state policy and principles on labor safety and hygiene, and to regulate relationship with respect to management and monitoring system of state organizations, to ensure fulfillment of requirements and standards for labor safety and hygiene at workplace and to create safe and hygienic work environment for employed citizens. The law includes the requirements and standards of labor safety and hygiene, rights and duties of citizens and employees to provide favorable working conditions, investigation and registration industrial accidents, occupational diseases and acute poisoning, organizational structures of Occupational safety and health at the entities, responsibilities and rights of the employer, management system, authority, funding of organization responsible for monitoring on the implementation of the OSH issues, monitoring system and liabilities for violation of the laws and legislations on occupational safety and health.
18	Law on Hygiene	2016	This law regulates relations relating to create healthy and safe environment to live, prevent from any actions and activities that has adverse impacts to human health and environment, reduce and eliminate those impacts.
19	Law on Fire Safety	2015	This law ensures fire safety, establishes the legal basis of the authority in charge of fire safety monitoring, defines the rights and duties of local administrative bodies, business entities and citizens for ensuring fire safety and governs relationships connected with the exercise of such rights and duties.

20	Law on State Supervision and Inspection	2003, last amended in 2015	This law regulates matters relating to state supervision and inspection structure, definition of legal basis for state administrative supervision and inspection activities, and implementation of state supervision and inspection.
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10. **Environmental assessment requirements of Mongolia.** The environmental impact assessment (EIA) requirements of Mongolia are regulated by the Law on Environmental Impact Assessment (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, revised 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 Tourism (MET)³ or *aimag* (provincial) government. There are two types of EIAs defined in the Law:

- (i) General EIA (screening)—to initiate a general environmental impact assessment (GEIA), the project implementer submits to the MET or *aimag*/capital city governor's office a brief description of the project including feasibility study, technical details, drawings, baseline description of the proposed project environment, a written opinion of the relevant soum and district governor and other related documents. The GEIA may lead to one of three conclusions: (i) the project rejection due to non-comformity and impacts; (ii) can be completed pursuant to specific conditions, and (iii) a detailed EIA (DEIA) is necessary. Issue of GEIA is free and usually takes up to 14 working days.
- (ii) Detailed EIA—the scope is defined in the GEIA. The DEIA report must be produced by a Mongolian entity which is authorized by the MET. The developer of the DEIA should submit it to the MET. An expert of the MET is expected to make a review of the DEIA within 18 working days and present it to the MET. Based on the detailed environmental impact assessment report, conclusion of the expert and the Technical Board that have appraised the quality of the report the MET takes a decision about approval or disapproval of the project.
- (iii) The DEIA must contain the following chapters: (i) environmental baseline data; (ii) analysis of extent and distribution of adverse impacts and their consequences; (iii) recommendations of measures for minimizing, mitigation, and elimination of impacts; (iv) recommendations for alternative methods and technology; (v) risk assessment; (vi) environmental management plan (EMP); and (vii) notes of consultations made with local authority and community likely to be affected by the proposed project.

B. ADB Environmental Safeguard Requirements

12. **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 (i) environmentally sound; (ii) are designed to operate in compliance with applicable regulatory requirements; and (iii) are not likely to cause significant environmental, health, or safety hazards. With respect to the environment, the ADB's SPS (2009) is underpinned by 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

³ Formerly named Ministry of Environment, Green Development and Tourism.

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>

III. DESCRIPTION OF THE PROJECT

A. Project Impact, Outcome, and Outputs

13. The impacts of the overall project will be (i) competitiveness of the agriculture processing industry enhanced, (ii) private sector-led employment generated, and (iii) SMEs developed. The outcome of the overall project will be value addition on Mongolian agricultural resources increased by PPEs. The project is expected to increase primarily the agro-processing capacity and secondarily primary agricultural production in Mongolia, and hence increase value addition to agricultural resources. The increased capacity will lead to employment generation, and indirectly benefit herders, farmers, and primary processors through the PPEs' increased demand for raw materials.

14. **Output 1: Value chain investments financed.** Output 1 comprises (i) preparation of the VCI proposals; (ii) due diligence of the VCI subprojects; (iii) provision of subloans to the PPEs⁵ to improve their value chains and/or enhance their production and productivity; and (iv) capacity development of the PPEs and project participating banks (PPBs) on financial management, value chain development, and social and environmental safeguards. The consolidated PMU will assist the PPEs in preparing the VCI proposals required for subloan application, particularly in identifying areas for business improvement such as marketing, product development, and quality control. The identified needs will be reflected in the VCI proposals and used to tailor activities under outputs 2 and 3.

15. **Output 2: Production capacity of herders and farmers improved.** Output 2 comprises (i) capacity development for herders, farmers, and primary processors of agricultural products; (ii) provision of veterinary medical supplies, equipment, machinery, material, and inputs for herders, farmers, and primary processors of agricultural products; and (iii) construction of a livestock primary processing facility. Under output 2, the project will help herders, farmers, and primary processors, including potential suppliers of quality raw materials and primary processing products to the PPEs, to improve their production capacity and quality control.

16. **Output 3: Enterprises' marketing and technical capacity improved.** Output 3 comprises (i) marketing and technical capacity development to enable the PPEs to produce and deliver high-value and/or quality products to domestic and international markets; and (ii) provision of equipment and capacity development to technical and research institutes dealing with food and agriculture products. This output is based on an observation from the current project—that a substantial gap exists between the capacity of the PPEs and the quality standards that international markets require. In tandem with financial support to the PPEs (output 1), strengthening enterprises' marketing and technical capacity is crucial to realizing higher value addition. The capacity development training will be given not only to the PPEs, but also to other agro-enterprises of interest for a wider impact. The training will help strengthen the quality-testing capacity of technical institutes, which will help improve and assure the quality of Mongolian products in the medium term.

17. **Output 4: Mongolian product brand(s) developed.** Output 4 comprises (i) brand development for export-oriented products (e.g., animal fiber and its processed products); and (ii) promotion and management of brand(s) developed and/or to be developed. Regarding brand management, the project will continue to help the government register the Mongolian Noble Fiber certification mark with national intellectual property offices of selected countries that are current

⁵ PPEs under the current project comprise public limited or limited liability companies. Under the additional financing, PPEs will also include cooperatives registered under the Law on Cooperatives.

and potential buyers of the Mongolian animal fiber products. Regarding brand promotion and management, the project will assist Mongolian agro-enterprises in getting their products tested and certified for the certification mark.

A. Project Costs

18. The additional financing is estimated to cost \$61.0 million (Table 1). Detailed cost estimates by expenditure category and by financier are in the project administration manual.

Table 3: Summary Cost Estimates
(\$ million)

Item	Current Amount ^a	Additional Financing ^b	Total
A. Base Cost^c			
1. Value chain investments financed	39.55	52.39	91.94
2. Production capacity of herders and farmers improved ^d	2.22	1.71	3.93
3. Enterprises' marketing and technical capacity improved	0.00	1.87	1.87
4. Mongolian product brand(s) developed	0.00	0.59	0.59
Project management ^e	2.40	1.11	3.51
Subtotal (A)	44.17	57.68	101.85
B. Contingencies^f	3.33	0.8	4.13
C. Financing Charges During Implementation^g	0.00	2.26	2.26
Total (A+B+C)	47.50	60.74	108.24

Note: Numbers may not sum precisely because of rounding.

^a Refers to the original amount. Includes taxes and duties of \$0.67 million to be financed from government resources.

^b Includes taxes and duties of \$0.54 million to be financed from government and ADB resources. ADB financing of taxes and duties is deemed acceptable as the (i) amount is within the reasonable threshold identified during preparation of the country partnership strategy, (ii) amount does not represent an excessive share of the project investment plan, (iii) taxes and duties apply only to ADB-financed expenditures, and (iv) financing of taxes and duties is material and relevant to the success of the project.

^c In mid-2015 prices as at 16 March 2015.

^d This output corresponds with "Rural infrastructure and services development" component under the current project.

^e This output corresponds with "Project management" component under the current project.

^f Physical contingencies computed at 5% for all expenditure categories except value chain investments and consulting services. Price contingencies computed for all expenditure categories except value chain investments at 1.5% for 2016, 1.4% for 2017, and 1.5% for the years 2018–2020 on foreign exchange costs; and 9.0% for 2016, 8.5% for 2017, and 8.0% for the years 2018–2020 on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^g Includes interest and commitment charges. Interests during construction have been computed for (i) ADB's Asian Development Fund loan at 2.0% per annum during the implementation period, and (ii) ADB's OCR loan at the 5-year US dollars (USD) fixed swap rate plus an effective contractual spread of 0.5% and maturity premium of 0.1%. Commitment charges for an OCR loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: ADB estimates.

IV. ANTICIPATED ENVIRONMENTAL IMPACTS

A. Experiences from the Current project

19. The overall approach taken for the environmental assessment is to assess the likely overall impact of the project by studying representative subprojects financed by the current project and reviewing the overall range of subproject proposals to identify any outstanding issues.

20. **Output 1: VCIs financed.** The additional financing will further strengthen the value chains in different agricultural subsectors such as leather, wool and cashmere, meat, dairy products, etc. During the implementation of the Original phase and Additional Financing of the ARDP the VCI proposals were approved for 48 subprojects. Environmental assessments were completed for all these subprojects funded under the ARDP provide solid basis for the key considerations and issues to be addressed in the assessment and EMP. They include detailed tables identifying potential environmental impacts for each subproject activity, and required mitigation and enhancement measures.

21. The subprojects financed and implemented under the ARDP that were assessed in detail and IEEs and environmental implications were prepared are presented in Table 4 A summary of the subprojects is summarized below.

Table 4: List of VCI subprojects

#	Company	Sector and business	Location, city/aimag	ADB cat.	MGL EA	Approved			Loan status
						USD '000	by	Year	
1. Wool and cashmere processing/production									
1	Sor Cashmere	Cashmere production (spinning and knitwear)	UB	B	GEA	766.3	ADB	2010	Re-paid, 2013
2	Erdenet Carpet	Wool processing and carpet making	Orkhon	B	DEIA	2,965.0	ADB	2010	Re-paid, 2018
3	Mogol Noos	Wool processing	Tuv	B	DEIA	1,606.0	ADB	2011	Re-paid, 2018
4	Altai Cashmere	Cashmere de-hairing and knitwear	UB	B	DEIA	2,963.0	ADB	2012	Re-paid, 2019
5	Noos Ireedui	Wool processing	Uvurkhangai	B	DEIA	1,339.3	ADB	2016	Ongoing
6	Gobi	Cashmere processing and manufacturing	UB	B	DEIA	2,378.6	ADB	2016	Ongoing
7	Sor Cashmere 2	Cashmere production, new spinning line, knitwear	UB	B	GEA	2,353.3	ADB	2016	Ongoing
8	Khan Bogd	Cashmere processing	UB	B	DEIA	2,250.0	ADB	2017	Ongoing
9	Mogol Noos 2	Wool processing and end products	Tuv	B	DEIA	1,041.7	ADB	2017	Ongoing
10	Bayalag Ulzii	Wool processing and knitwear	UB	C	GEA	553.2	PSC	2017	Ongoing
11	Yanmal	Socks production	UB	C	GEA	1,495.7	ADB	2018	Ongoing
12	Choir Khairkhan	Wool processing	Gobi-sumber	B	DEIA	638.3	ADB	2018	Ongoing
13	Mongol Textile	Fiber processing and textile products	UB	C	GEA	800.0	PSC	2018	Ongoing
14	Jinst Murun	Wool and cashmere production	Khuvsgul	C	GEA	163.9	PSC	2018	Ongoing

#	Company	Sector and business	Location, city/aimag	ADB cat.	MGL EA	Approved			Loan status
						USD '000	by	Year	
15	Munkhbumuud	Cashmere and wool production	UB	C	GEA	375.7	PSC	2018	Ongoing
16	NTG	Carpet making	Orkhon	C	DEIA	2,727.3	ADB	2019	Ongoing
2. Tannery									
1	Mongol Shevro	Tannery and leather manufacturing	UB	B	DEIA	1,330.0	ADB	2010	Re-paid, 2015
2	Darkhan Nekhii	Tannery and leather manufacturing	Darkhan Uul	B	DEIA	1,523.0	ADB	2010	Re-paid, 2014
3	Darkhan Minj	Tannery and leather manufacturing	Darkhan Uul	B	DEIA	612.0	ADB	2012	Re-paid, 2017
4	Darkhan Nekhii 2	Tannery and leather processing	Darkhan Uul	B	DEIA	1,708.3	ADB	2017	Ongoing
5	Best Shoes	Shoe manufacturing	UB	C	GEA	604.1	PSC	2018	Ongoing
3. Milk processing									
1	Mon Fresh Suu	Milk processing	UB	B	DEIA	2,800.0	ADB	2011	Re-paid, 2015
2	Bornuur Foods	Milk processing	Tuv	B	DEIA	2,479.0	ADB	2012	Re-paid, 2018
3	Vitafit	Milk processing	2 locations UB, Khentii	B	DEIA	1,500.0	ADB	2012	Re-paid, 2019
4	Khan Brand	Dairy processing	UB	C	GEA	344.8	PSC	2016	Ongoing
5	Jigd Khuch	Dairy processing	UB	C	GEA	250.0	PSC	2019	Ongoing
6	Jur Ur	Dairy processing	UB	C	GEA	615.4	PSC	2019	Ongoing
4. Meat processing									
1	Zavkhan Khuns	Meat processing	Zavkhan	B	DEIA	1,513.0	ADB	2012	Re-paid, 2013
2	Mon Meat	Meat processing	UB, Khentii	B	GEA	582.3	ADB	2011	Re-paid, 2017
3	Mongolian Cattle	Intensive farm	Khovd	C	GEA	165.2	PSC	2016	Ongoing
4	Russkie kolbasy	Meat processing/sausage making	UB	C	GEA	194.0	PSC	2017	Ongoing
5	Davshilt Trade	Meat processing/minced by-products and carcass sectioning and processed meat	UB	C	GEA	215.5	PSC	2017	Ongoing
6	Mon Meat 2	Meat processing, slaughtering and sorted meat	2 locations UB, Khentii	B	GEA	439.7	ADB	2016	Ongoing
7	Zurgaan Khoshuu	Pork farm	Tuv	C	DEIA	766.0	ADB	2017	Ongoing
8	Ajigana	Poultry	UB	B	DEIA	2,500.0	ADB	2018	Ongoing
9	Erdmeat	Meat processing and slaughtering	Orkhon	B	DEIA	833.3	ADB	2019	Ongoing
10	Trust Trade	Meat processing and slaughtering	UB	B	DEIA	2,519.2	ADB	2019	Ongoing
11	Efes Khuns	Meat processing	UB	C	GEA	576.9	PSC	2019	Ongoing

#	Company	Sector and business	Location, city/aimag	ADB cat.	MGL EA	Approved			Loan status
						USD '000	by	Year	
5. Sewing									
1	Denimon	Apparel	UB	C	GEA	223.2	PSC	2016	Ongoing
2	Ikh Ulam Undrakh	Boots production	UB	C	GEA	159.6	PSC	2017	Ongoing
6. Other									
1	Monos Pharma	Pharmaceutical based on herbs	UB	B	DEIA	1,763.0	ADB	2010	Re-paid, 2011
2	Tumen Shuvuut	Poultry	UB	C	GEA	1,276.6	ADB	2017	Ongoing
3	Nuudel Tejeel	Pellet production	UB	C	DEIA	547.9	PSC	2018	Ongoing
4	GBT Trading	Vegetable pickling	UB	C	GEA	1,932.8	ADB	2018	Ongoing
5	Khurkh Gol	Seed production	Khentii	C	DEIA	840.3	ADB	2018	Ongoing
6	Ikh Aurag Ord	Honey	Tuv	C	GEA	159.7	PSC	2018	Ongoing
7	Mihachi	Honey	Selenge	C	GEA	252.1	PSC	2018	Ongoing
8	Uguuj Mandal Uul	Seed production	Selenge	C	DEIA	571.4	PSC	2018	Ongoing
9	Zavkhan Bayalag	Berry and sea buckthorn production	Zavkhan	C	GEA	426.7	PSC	2018	Ongoing
10	Jivertyn orgil	Sea-buckthorn	UB	C	DEIA	1,287.9	ADB	2019	Ongoing

22. **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.

23. 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. During the final review in spring 2014 PMU has found that water and chemicals use at the Mongol Shevro was reduced by 20% due to upgraded technology and machine in 2013, and waste water reduced by 15%.

24. 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 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.

25. **Meat subsector (example: Zavkhan Khuns).** The main significant negative impacts identified are in the increased meat processing 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 EMP, 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.

26. 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.

27. **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 it's 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%. During final review in 2014 PMU found that water use reduced by 15%, noise reduced by 40% and sludge by 5% due to upgraded technology and machines.

28. 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%.

29. **Output 2: Production capacity of herders and farmers improved.** The environmental assessment of output 2 subprojects is also based on a review of those carried out under the current project. 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.

30. 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.

31. 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.

32. 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.

a. Environmental Benefits

33. 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.

b. Analysis of Alternatives

34. 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 SPS (e.g., introduction of increased GOM's ownership of safeguard documents, climate change considerations, and grievance redress mechanism).

V. ENVIRONMENTAL ASSESSMENT FOR SUBPROJECTS

A. General Review Procedures

35. The selection by the PMU of individual subprojects under the proposed project has not yet been started. The individual VCI subprojects to be financed will be nominated by PPBs and conducted assessment by PMU, and (i) approved by PSC⁶ for category B project of low risk and C subprojects, not exceeding \$1,000,000, or (ii) approved by ADB for category C subprojects, exceeding \$1,000,000 or category B subprojects of high risk, and endorsed by a steering committee.

36. 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 (2014). A summary of the general project procedures is given below.

37. **Output 1: VCIs financed.** The following environmental assessment and review procedure for environmental assessment and approval of subprojects under the output is based on MET procedures and ADB guidelines:

- (i) PPEs submit VCI bankable proposals (BP) to PPBs.
- (ii) PPEs prior to submission of BPs to PPBs refer their proposals to MET (or Ulaanbaatar City and/or *aimag* governments) for initial assessment. The assessment process is as follows: (a) an MET (or Ulaanbaatar City and/or *aimag* governments) expert carries out initial assessment and makes a recommendation to the MET(or Ulaanbaatar City and/or *aimag* governments) committee to be completed within 14 days; (b) the MET determines whether (1) no further assessment is needed but may impose conditions, or (2) detailed environmental impact assessment is needed; (c) if detailed environmental impact assessment is needed, then the company arranges for this to be carried out by a consulting company licensed for this; (d) MET reviews the detailed environmental impact assessment and may request further information; and (e) MET approves with or without conditions, or rejects.
- (iii) PPBs review and select BPs based on selection criteria agreed, including environmental requirements.

⁶ First three VCI BPs will require ADB's prior review

- (iv) The PMU makes initial screening of BPs based on banks conclusion ensuring compliance with government and ADB requirements
- (v) PMU environment specialist categorizes the selected BPs according to ADB Environmental Assessment Guidelines (2003) 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).
- (vi) Conduct environmental assessment and prepare IEER (Initial environmental examination report) for B category subprojects in compliance with the requirements of National legislation and SPS;
- (vii) PMU environment specialist refers the subproject to ADB for review and approval at the following points together with recommendations: (a) categorization and IEER/environmental implication according to ADB environmental requirements, (b) MET (or Ulaanbaatar city and aimag government) general environmental impact assessment, or (c) detailed environmental impact assessment, and (d) MET approval.
- (viii) PMU submits BPs along with environmental assessment documents (a) to Project Steering Committee (PSC) for approval, if subproject categorized as category B of low risk and C, and VCI requested amount not exceeding \$1,000,000 (first three VCI BPs will require ADB's prior review); or (b) to ADB for approval and to PSC for endorsement, if subproject categorized as category C and VCI requested amount exceeds \$1,000,000 or subproject categorized as category B of high risk.
- (ix) The PPB and PPE signing loan and collateral agreements, and issuing of loan.

38. **Output 2: Production capacity of herders and farmers improved.** These subprojects⁷ 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.

39. During project implementation, PMU environment specialist will review the selected subprojects to ensure that they do not differ significantly from those anticipated during the current 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

40. **Selection criteria.** The environmental criteria for selecting subprojects:

⁷ So far only one subproject under output 2 may require environmental assessment is construction of building for animal skin processing. Otherwise, all activities under output 2 are capacity building and provision of goods.

- (i) proposed subprojects must comply with Mongolian environmental legislation and ADB's SPS;
- (ii) proposed subprojects must not include prohibited activities as defined in Annex 5 of ADB's SPS;
- (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;
- (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.

41. **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, screening of PPBs checklist, 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 of high risk⁸ 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 B of low risk and C: a proposed subproject is classified as category B of low risk⁹ and 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.

42. Subprojects involving training, capacity development 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.

43. It should be noted that if financing is to be provided to existing facilities, this should be assessed and indicated during the categorization process. If so, as part of the IEE preparation, the borrower will need to undertake an environment and /or social compliance audit, including onsite inspection to identify past or present concerns related to safeguard impacts and determine whether any corrective action plans are needed. This may apply for example to equipment that is to be procured for the wool and cashmere, leather, and garment industry (output 3).

⁸ High risk projects include projects that use large amount of water and hazardous chemicals in production, generate contaminated waste water, and may cause insignificant adverse impact on soil, underground water (e.g. tannery, pharmaceutical factory, textile factory with primary processing, meat processing plant with slaughterhouse etc).

⁹ Low risk projects include projects that use much less water and do not generate hazardous waste, and cause minimal or no adverse impact on soil, underground water, and do not use toxic and hazardous chemicals in large amount etc. (e.g. intensive farm, milk and meat processing plant, wool and cashmere processing factory of small and medium size, seed production etc.)

44. **Ministry of Environment and Tourism environmental categorization.** The Mongolian environmental assessment process requires project screening, known as the general environmental impact assessment (GEIA). This is undertaken by MET, Ulaanbaatar City or *aimag* governments, depending on its scale. It takes 14 working days according to the Mongolian law on assessment. The screening is done on the basis of an official request submitted by the PPE to MET, Ulaanbaatar City or *aimag* governments. The following documents should be submitted to MET, Ulaanbaatar city or *aimag* governments to undertake a GEIA for a subproject: (i) official letter from the company; (ii) project description; location map, and feasibility study; (iii) baseline environmental description of the project area; (iv) a written opinion of the relevant *soum* and district governor regarding project relevance with local development programs; and (v) copy of relevant certificates of the PPE and land possession and use.

45. A GEIA for subprojects are prepared by MET (or Ulaanbaatar City or *aimag* governments). MET (or Ulaanbaatar City or *aimag* governments) issues relevant decision based on the assessment of a subproject. In most cases of the current project's subprojects, MET required to update existing DEIA as these subprojects were planning to upgrade their equipment and technology. Only few of them were approved with general impact assessment with specific condition as no adverse impacts were expected from implementation of these subprojects.

C. Procedure for Environmental Assessment of Subprojects

46. **General principles.** Subprojects shall meet requirements of ADB's SPS, and Mongolian legislation and standards. ADB's Environmental Safeguards policy principles are defined in Safeguard Requirements¹ 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 trans boundary 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 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.

47. **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 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 MET.

48. The environment assessment shall start with a field visit and study of the environmental conditions at the subproject site, including existing facilities, to see the environmental performance and commitment of the PPE. The PMU environment specialist 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.

49. 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.

50. 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.

51. An environmental management plan (EMP) of the subproject consists from an environmental protection plan and environmental monitoring program. Environmental protection plan 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.

52. An environmental monitoring plan as part of EMP 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.

53. 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.

54. 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 MET and ADB for approval. Based on the experiences of the ongoing project, the average annual mitigation cost is about \$8,500 per subproject. The average annual monitoring cost per subproject is \$500.

VI. CONSULTATION, INFORMATION DISCLOSURE, AND GRIEVANCE REDRESS MECHANISM

A. Consultation and Participation

55. Major documents related to the current 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 Food, Agriculture and Light Industry, MET, General Agency for Specialized Inspection, 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.

56. In terms of environmental impacts, the main concerns raised during the current 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.

57. 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.

58. 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.

59. 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

60. 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.

61. In addition, according to the ADB requirements, the environmental monitoring reports submitted by the PMU on an annual basis will be posted on ADB website.

C. Grievance Redress Mechanism (GRM)

62. 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.

63. 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 2. 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 MET. The PMU must give the reply to the affected person within 30 days.

VII. INSTITUTIONAL ARRANGEMENTS AND RESPONSIBILITIES

64. **Ministry of Finance.** MOF's function is financial disbursement and due diligence oversight. For the project, a PMU has been established to oversee all work and ensure compliance with all safeguard documents of the project (see below). Contract with the national environment specialist and/or consultant of PMU will be extended for the additional financing period of the project 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 EARF.

65. **Project participating banks.** Each PPB will be responsible for ensuring that each subloan agreements include provisions to comply with ADB and all national environmental regulations and requirements that are described in the project documents and the IEE and EMP for the subproject. The PPB will also ensure, with the support from the PMU, that the PPEs comply with the provisions in the subloan agreements, and that adequate compliance monitoring is carried out. This responsibility is to ensure that its lenders comply with relevant environmental regulations and procedures of Mongolia. The PPBs' compliance/environmental officer will work in

close cooperation with PMU on conducting environmental assessments. All procedures to be applied are described in the EARF.

66. **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 current 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 of professional agencies to ensure effective project implementation of subprojects. A training program will be defined for PPEs to meet the capacity development needs.

67. **Project steering committee (PSC).** It will comprise three representatives from MOFALI, two members from MOF, and one member each from MET and the Bank of Mongolia. The PSC will mainly be responsible for approving¹⁰ the subprojects proposed by the PMU and endorsing subprojects approved by ADB.

68. **Project management unit.** VCI unit of the PMU will oversee and ensure that environmental assessments of the subprojects are carried out in accordance with SPS. 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 VCI unit of the PMU will include a unit coordinator, financial analyst, business advisor, environmental specialist and social and gender specialist. 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 consultants' terms of reference are in Attachment 6.

69. 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 SPS;
- (iii) Ensure that PPEs hold meaningful consultation with affected people and other stakeholders in accordance with SPS;
- (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 submits their implementation reports to applicable agencies in timely manner;
- (vi) Ensuring that PPE implemented environmental monitoring in accordance with the approved EMP; and

¹⁰ Depending of the size of subproject and sectors covered final approval of smaller subprojects and subprojects categorized as category C will be done by PCS. The detailed criteria will be developed on a later stage.

- (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.

70. **Ministry of Environment and Tourism (MET).** The MET will be responsible to conduct GEIA in accordance with the Law on Environmental Impact Assessment (2012), and review and approve detailed EIAs, if relevant. The MET is the agency primarily responsible for the implementation of environmental policy in Mongolia. The Department of Environment and Natural Resources under MET 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 conducting 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 (2012), and has either internally or readily accessible expertise to assess DEIAs submitted for approval.

71. **Local governments.** Ulaanbaatar City, *aimag* and *soum* 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 *bagh* level. Ulaanbaatar City has environment department, all *aimags* have their own environmental and tourism department with 6 to 7 staff. It has the responsibility to conduct the general environmental impact assessment for local projects and approve it. Assessment and approval for bigger projects (national level) is done by MET. The environmental department's function is also to supervise the *soum* and *bagh* level rangers and report back to MET. Local governors have the legal right and responsibility for all environmental actions in their given administrative territory. Therefore, the *aimag* environmental department has a key role to play in conducting (and approving or otherwise) general environmental impact assessment for local projects.

72. **The General Agency for Specialized Inspection (GASI)** 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 16 inspectors at the central level, 4–6 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.

73. **Asian Development Bank.** 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 SPS 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 PMU, and conducting review missions during implementation to determine compliance with EMP and SPS; and (v) disclosing environmental monitoring reports on ADB's project website in accordance with ADB's disclosure policies.

VIII. MONITORING AND REPORTING

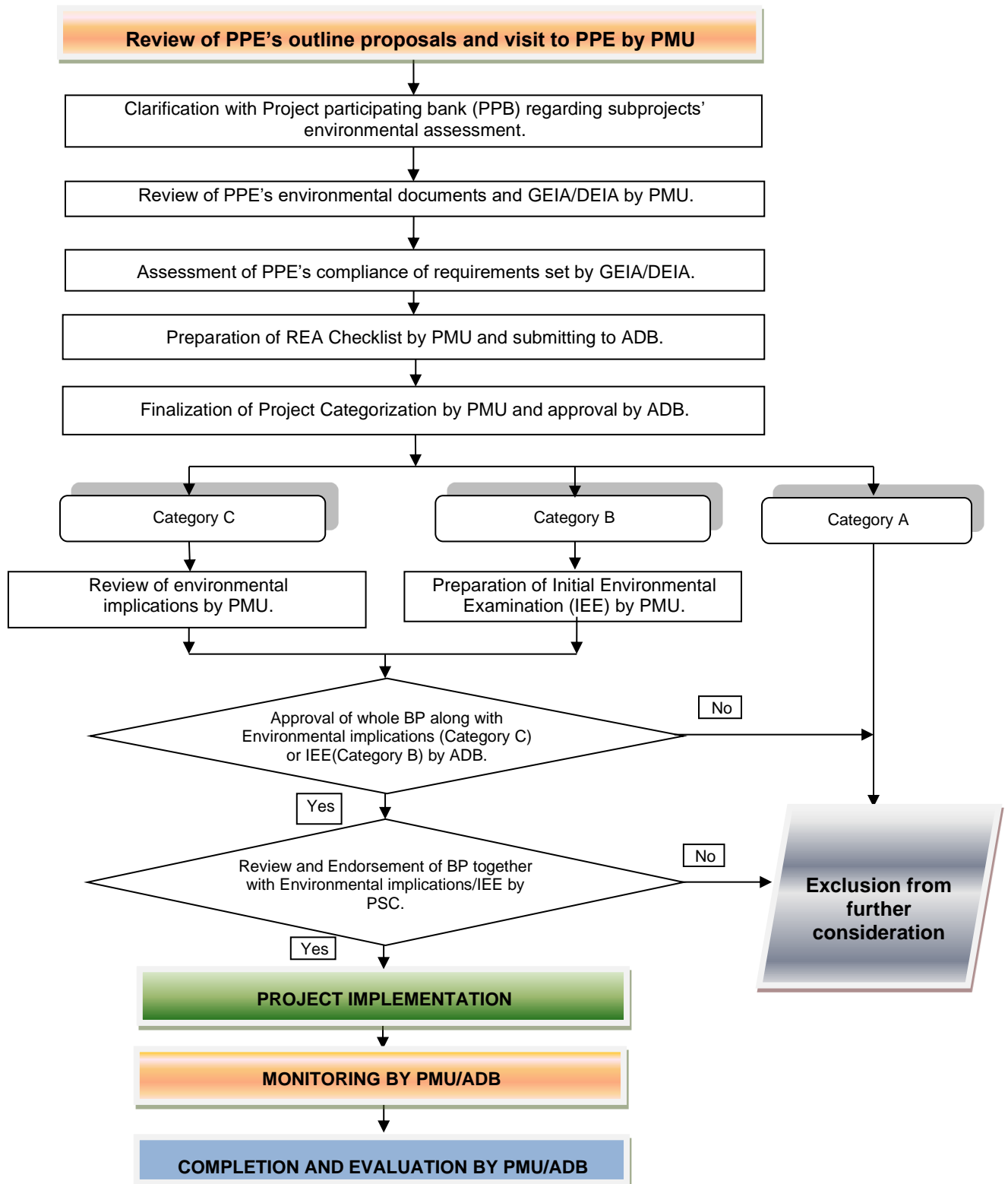
74. During implementation, PPEs will monitor and submit semi-annually report to the PMU on the implementation of environmental requirements and outcomes as part of the overall reporting to a PPBs and ADB. The PPEs will be required to report any environmental incidents, accidents, complaints, litigation, regulatory notices, or fines in their operation to PMU, PPB and MET as soon

as possible. Corrective actions will be developed and agreed upon between the PPE and GASI 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.

75. **Internal monitoring reports.** PPE shall monitor environmental performance of a subproject during the project implementation internally on regular basis and prepare 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.

76. **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. 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, GEIA = general environmental impact assessment, GOM = Government of Mongolia, IEER = initial environmental examination report, MET = Ministry of Environment and Tourism, PSC= project steering committee, PMU= project management unit, PPE = project participating enterprise, REA = rapid environmental assessment, PPB=Project participating bank.

RAPID ENVIRONMENTAL ASSESSMENT (REA) CHECKLIST

- *Note:*
1. Answer the first question (“Will it happen?”) assuming that no mitigation measures will be conducted. The purpose is to identify potential impacts.
 2. If the answer is “Yes” then fill out the next two columns, “is it irreversible?” and “can it be minimized?”
 3. The first three columns (“will it happen?”, “is it irreversible?”, “can it be minimized?”) should be filled out by discussions with the end-borrower and a site inspection.
 4. The final table refers to the ADB categories “A”, “B” and “C” for environmental impacts. Use these definitions to decide on the category.

Country/Project Title:	
Subproject name:	
Sector division:	

SCREENING QUESTIONS	Will it happen? Y/N	If yes		REMARKS
		Is it irreversible? Y/N	Can it be minimized?	
A. Project Location				
Is the project area adjacent to or within any of the following environmentally sensitive areas?				
• Cultural heritage site				
• Protected Area				
• Wetland				
• 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?				
• Alteration of surface water hydrology of waterways resulting in increased sediment in streams affected by increased soil erosion at site?				
• Deterioration of surface water quality due to silt runoff and sanitary wastes from worker-based camps and chemicals used in operation?				
• Increased air pollution due to sub-project operation?				

• Noise and vibration due to sub-project operation?				
• Generation of solid waste and/or hazardous waste?				
In land leveling, other earthworks and construction as necessary will there be:				
• construction dust				
• Soil degradation and pollution				
• loss of micro-habitat for local biodiversity				
• changes to local drainage				
In the upgrade or establish irrigation system, including wells, canals, pipes. Installation of quota irrigation systems will there be:				
• Unsustainable use of local water resources				
• location (too close to residences / waterways)				
• construction impacts - dust, noise				
• operational impacts – noise, odor				
C. Other potential impacts				
Will the project cause...				
• Contamination of soil and groundwater from wastewater discharge?				
• Deterioration of water quality due to inadequate sludge disposal?				
• Contamination of surface and ground waters due to improper solid waste disposal?				
• Land and/or pasture use conflicts?				
In the establishment of on-site water wells for operation and domestic use will there be:				
• unsustainable use of local water resources				
• water use conflicts				
• cumulative impacts on limited water resource				
For handling, transport, storage of chemicals and fertilizers will there be:				
• application of chemicals and fertilizer not carefully managed - increased volumes enter soil and water				

• extensive residue of plastic container in soil and water				
• loss of crop diversity and self-sustaining household plots				
• use or introduction of non-native species for seeding				

ADDITIONAL SCREENING QUESTIONS	Yes	No	Remarks
ADB PIAL			
Does the sub-loan application include any activities on the ADB Prohibited Investment Activity List (PIAL)?			
D. Formal requirements (Mongolia)			
Does the subproject include any activities prohibited under MGL laws or have existing/ pending lawsuits for violation of MGL laws related to environment or land?			
• Is there any permission of the company on land possession for the company from city and/or local government?			
• Are there any need for special permission for the subproject operation from government, e.g. seed plantation			
• Is there any permission of the company for chemicals import and use and handling from government?			
• Is financing to be provided to existing facilities? E.g. in case of equipment purchases for the wool and cashmere, garment industries and etc.			
• If the company has existing facilities, is there: (1) domestic EIA (general/detailed) completed? (2) Full compliance of existing operations with EMP requirements?			
• Is there any need in environmental assessment for the value chain investment subproject?			
E. Climate Change and Disaster Risk Questions	Yes	No	Remarks
The following questions are not for environmental categorization. They are included in this checklist to help identify potential climate and disaster risks.			
• 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?			

<ul style="list-style-type: none"> • 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)? 			
<ul style="list-style-type: none"> • 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)? 			

Overall conclusion on proposed Environment Category (circle one)

A B higher risk B lower risk C

Reason for conclusion:
Note:

Prepared by:

Designation: Environment consultant, ARDP

Signature:

Date:

Attachments:

1. Cover sheet for a project proposal
2. Cover page of DEIA/copy of the GEIA for the subproject
3. Other supporting document (location, public consultation, information about fauna or flora species etc.).

EXAMPLE OF AN ENVIRONMENTAL MANAGEMENT PLAN

1. 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 places	Chemicals management	4th quarter	OSH officer & procurement manager	

No.	Environmental impacts and mitigation measures	Parameters	Frequency	Responsibility	Cost, Th.MNT
19	Develop procedure on storing, handling and expenditure of chemicals	Chemicals management	Q4	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 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 EMP and report to relevance authorities and PMU in timely manner	Environmental management	December	Factory management	
TOTAL					

2. 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)	DSI of the <i>aimag</i> , 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)	DSI of the <i>aimag</i> , PMU
3	Solid waste	Monitoring of waste disposal	Waste management	Yearly	Factory	DSI of the <i>aimag</i> , 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 <i>aimag</i> , PMU
5	Occupational safety and hygiene	Monitoring of working condition,	Safety and hygienic parameters (To, dust, humidity, noise etc.)	Once a year	Factory (through <i>aimag</i> DSI)	PID of the <i>aimag</i> , 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)	DSI of the <i>aimag</i> , PMU
7	Compliance with National regulations	Compliance with GEIA requirements and monitoring plans	Monitoring reports of EMP	End of the year	Factory, PMU	ADB, through PMU

ADB = Asian Development Bank, EMP = environment monitoring plan, GEIA = general environmental impact assessment, PMU = project management unit, DSI = Department of Specialized Inspection.

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}	
{name}	{Unemployed, Resident}	{13th Khoroo}	

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. **Environment specialist** (national, 61 person-months). The consultant will have a postgraduate degree or equivalent related to environment science, environment economics/management or a relevant discipline with at least 5 years of relevant professional experience working for project(s) financed by ADB or other international organizations. The consultant will require proven capacity of working effectively with both private sector enterprises and the relevant government agency, sound knowledge of ADB environment safeguard policy and compliance requirements and policy and regulatory frameworks for environment assessment and management of the government, a good command of English and Mongolian, and good computer skills. Under the overall guidance of the project coordinator and the direct supervision of the subunit coordinator, the consultant will provide inputs and policy advice to ensure compliance of all subprojects with environmental requirements of ADB and the government. 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 requirements are met. The consultant will be responsible for monitoring the implementation of the mitigation measures and environmental management plans for the project. The consultant will specifically:

- (i) Conduct capacity development of PPEs and PPBs in environment safeguard and compliance by engaging relevant institutions and provide trainings and advice to them to assist them to articulate clean production requirements, Government and ADB policies into their processes and plans. Training should cover but not limited to 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;
- (ii) Assist the PPBs in carrying out initial environment and climate risk screening of the selected VCI proposals according to the Government and ADB environmental requirements as needed;
- (iii) Assist PPEs to hold meaningful consultation with affected people and other stakeholders in accordance with ADB's Safeguard Policy Statement (2009);
- (iv) Work closely with PPEs to ensure site selection for VCI subprojects in compliance with ADB's and government's requirements;
- (v) Assist PPEs to develop adequate environment monitoring plan;
- (vi) Support the business advisor in improvement of PPE's VCI proposals and detailed VCI subproject implementation plan to ensure that ADB requirements are met;
- (vii) Conduct rapid environmental assessment, categorize selected VCI proposals according to ADB environmental requirements;
- (viii) Conduct environmental assessment and prepare IEE report in compliance with the requirements of national legislation and SPS and categorization in accordance to ADB Environment assessment Guidelines (2003) and update existing EARF;
- (ix) Once VCI proposals are selected and approved by PPBs, ADB and PCS, help PPEs to improve both environmental management and environment monitoring plan if needed based on the field visit to PPEs and review of BPs from environment perspective and establish the project baseline for monitoring;
- (x) Liaise with the Ministry of Environment and Tourism (MET) and General Agency for Specialized Inspection to coordinate activities for the assessments where there is difference in ADB and Government requirements or during detailed assessment and project approval;

- (xi) Participate in reviews of subprojects related to output 2 to ensure that they meet ADB and the government's requirements in terms of type, scale, and environmental sensitivity of their locations;
- (xii) Monitor subprojects during implementation to ensure implementation in accordance with the requirements of the environmental assessment and environment management plan and monitor against the baseline;
- (xiii) Support the Government to establish and maintain the Grievance Redress Mechanism;
- (xiv) Participate in project reviews by ADB and other Government agencies, review project reports from PPEs, and carry out spot checks on subprojects to verify reports; and
- (xv) Prepare and/or provide relevant inputs for reports and documents required by the PMU, GOM, and/or ADB, which include annual environment monitoring reports, project progress report, and quarterly and annual reports containing in-depth analysis of the performance of PPEs and their value chain members, as well as recommendations for their improved performance, for submission to the PPEs and the PMU.

SAMPLE OUTLINE FOR ENVIRONMENTAL MONITORING 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 following report structure has been used for an environmental monitoring report of the ARDP since 2018.
 - 2.1. Introduction
 - 1.1. *Report Purpose*
 - 1.2. *Report content*
 - 2.2. Project performance of the ARDP
 - 2.1. *Background*
 - 2.2. *Subprojects Involved in Monitoring of ARDP in 20xx*
 - 2.3. *Project Information Disclosure*
 - 2.4. *Grievance Redressing*
 - 2.5. *Training and Capacity Building*
3. Environmental performance progress of subprojects
 - 3.1. *Progress in implementation of EMPs*
 - 3.2. *Environmental compliance with national requirements*
 - 3.2.1. *Compliance with national standard requirement*
 - 3.2.1.1. *Waste water*
 - 3.2.1.2. *Soil pollution*
 - 3.2.1.3. *Air pollution*
 - 3.2.1.4. *Occupational safety and hygiene*
 - 3.2.1.5. *Inspection on compliance with national requirements*
 - 3.2.2. *Compliance with ADB Requirements*
 - 3.2.2.1. *Information Disclosure and Public Consultations*
 - 3.2.2.2. *Grievance Redress Mechanism*
4. Conclusion
 - 4.1. *Overall compliance of subprojects*
 - 4.2. *Key Achievements*
 - 4.3. *Key problems*
 - 4.4. *Solution*
 - 4.5. *Follow-up actions*

Appendixes

1. Photos of monitoring site visits