



Environmental Monitoring Report

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Mongolia: Agriculture and Rural Development Project

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ARDP environmental performance monitoring for 2012

Main goal of the monitoring of ARDP projects was to ensure their compliance with ADB and GOM environmental protection requirements and identify problems that should be addressed in future.

During the reporting period in total of 5 projects have received loans from ADB (See table 1) additionally.

Table 1. List of companies received loan from ADB

#	Company	Activity	Approval date	Issuing bank
1	Darkhan Nekhii	Tannery	August 2010	Khaan bank
2	Mongol Shevro	Tannery	August 2010	XAC bank
3	Sor Cashmere*	Cashmere production	September 2010	Khaan bank
4	Monos Pharma*	Pharmaceutical	December 2010	Khaan bank
5	Erdenet Carpet	Wool processing	December 2010	Khaan bank
6	Mon Fresh Suu	Milk processing	May 2011	Golomt bank
7	Mogol Noos	Wool production	July 2011	Trade and Development Bank
8	Mon Meat	Meat processing	October 2011	Khaan bank
9	Vitafit	Milk processing	March 20, 2012	XAC bank
10	Zavkhan Khuns	Meat processing	March 2012	XAC bank
11	Bornuur Foods	Milk processing	May 2012	Golomt bank
12	Altai Cashmere	Cashmere production	June 2012	XAC bank
13	Darkhan Minj	Tannery	October 2012	Trade and Development Bank

***Notes:** Monos Pharma LLC left the project after receiving 1st financing from ARDP due to another investor (EBRD) is committed larger size of investment for longer period. Sor Cashmere has received bond from Government of Mongolia and left the project.

During the project implementation PEs were responsible for internal monitoring of the environmental protection plan and environmental monitoring program for the company.

Also monitoring of these projects were performed by PMU and applicable state professional agencies such as Professional Inspection Agency (PIA) of city, district, and aimag and soum in order to ensure compliance with national environmental protection requirements.

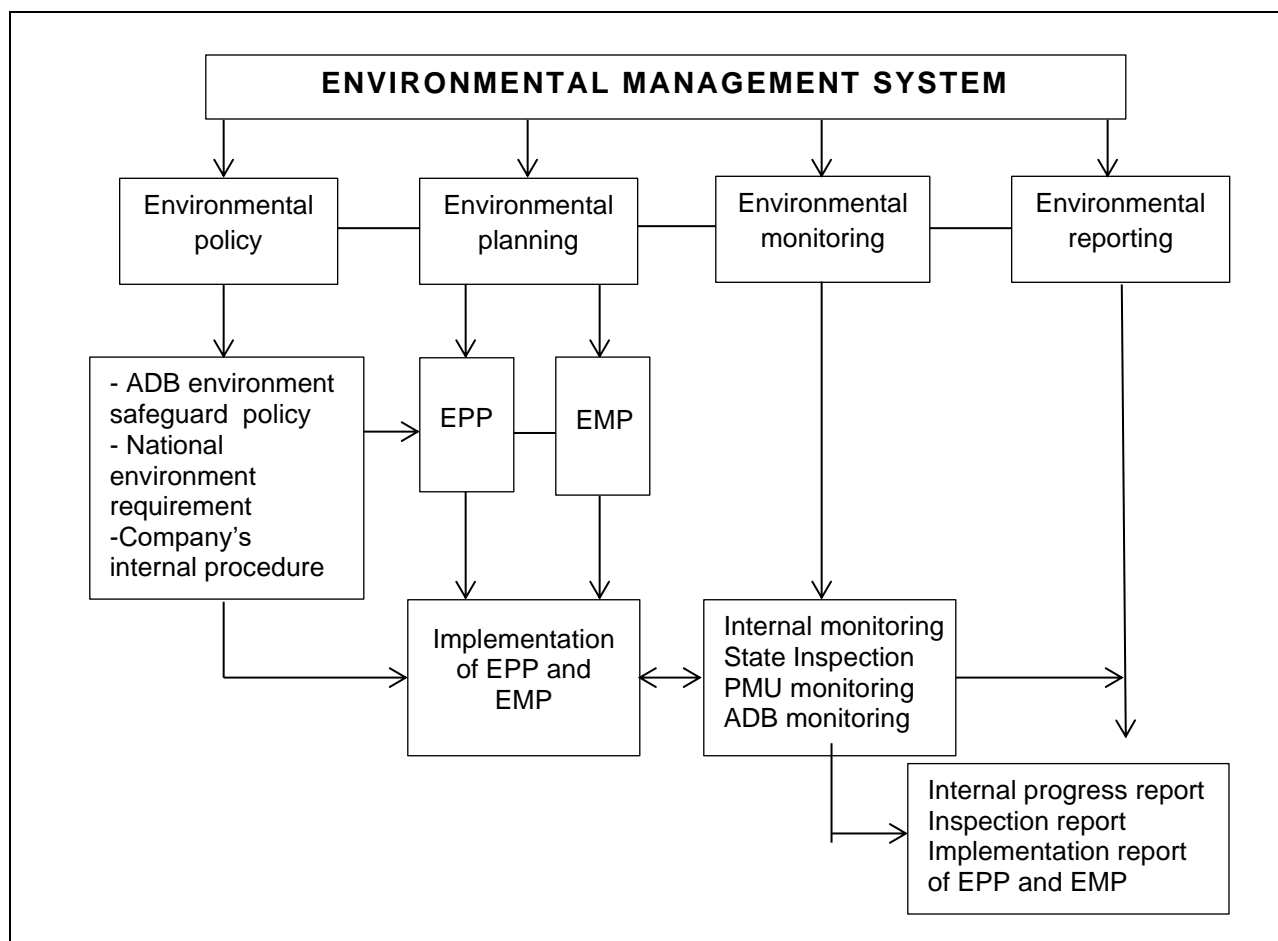
In total of 11 projects which received funding in 2010-2012 from the ADB through ARDP were involved in monitoring by PMU in 2012.

Monitoring of these projects were performed in accordance with the following Environmental Management System flow chart (See Figure 1) since the issue of the ADB loan.

During the PMU monitoring the Environmental specialist used the following methods for monitoring:

- Visual inspection during the field visits;
- Review of results of tests and analysis;
- Review of reports of government inspections and follow-up actions of the company;
- Collection and review of company's reports on EPP and EMP etc.
- Tracking implementation of recommendations provided by GEA/DEIA and PMU based on the company reports;
- Communication with company's management, specialists etc.
- Communication and gathering information from applicable government agencies and inspectors;
- Study of published information about the company's environmental performance (news and articles on newspaper, TV and websites etc.).
- Study of newly revised environmental laws, and other legal acts and procedures etc.

Figure 1. Environmental Management System flow chart



During the project monitoring the environmental specialist has provided newly assigned managers who was in charge of environmental and safety issues of some companies such as Darkhan Nekhii, Altai Cashmere, Mongol Shevro etc. with ADB policy and national legal requirements, role and support of PMU, and their duties and responsibilities in internal monitoring activities of the company etc.

PMU oversaw environmental protection performance of all companies and implementation of measures addressed in EPP and EMP in order to mitigate, prevent and minimize the potential impacts on the environment and human health from the project implementation.

PMU developed cooperation with Department of Environment and Natural Resources (DENR) of Ministry of Environment and Green Development (former MNET), State Professional Inspection Agency (Department of the Environment, Geology and Mining Inspection, and Veterinary Department of Food, Agriculture, Industry and Service Inspection), Department of Environmental Protection and Tourism of city, aimag, district and environmental inspectors of soums.

Summary of results of environmental monitoring of projects is presented in the table below (See Table 2). It outlines the each company's environmental problems and progress made to mitigate, prevent and minimizes negative impacts from the project implementation.

Table 2. Summary of results of environmental monitoring of projects

#	Project name Main issue	Implementation progress of EPP and EMP	Required action
1	Darkhan Nekhii	PMU monitoring was held in April and December of 2012. Implementation of EPP and EMP of the company for 2012 was good. As a result of renovation of the plant building and facility work condition at the plant was improved visibly. Due to installation of new machines and equipment to replace old ones a productivity was increased (by reducing hand work by 20%), and noise, use of chemicals (by 15%), water use (by 33%), and use of Cr (by 5-6 times) was reduced. In house waste water treatment facility upgrading project was completed and operational. Workers supply of PPE and housekeeping practice was improved. Amount of solid waste was reduced due to its reuse: leather trimmings are used for small garment production, and removed hair is used for felt production, and its waste is used for small garment production too. State inspection was held regularly and the company takes follow of action of the inspection.	-Improve internal monitoring practice of the company; -Improve chemicals storage; -Train occupational safety manager (she is newly hired) who is in charge for environmental issues of the plant;
1	Erdenet Khivs -Waste water -Work condition	PMU monitoring was held in May, October and December of 2012. Implementation of EPP and EMP of the company for 2012 was good. Overall environmental management, including planning and monitoring practice of the company has improved.	Install air conditioner in the lab. Reduce pollution level of some pollutants in waste water.

	-Handling and storing of chemicals	<p>Due to installation of new carpet weaving machines productivity was improved, noise was reduced.</p> <p>Waste water pollution level was decreased due to renovation of some parts of the in-house waste water treatment facility. The company plans to replace it next year with government assistance. Analysis on waste water was conducted regularly. Results of lab samplings showed that there was no serious pollution.</p> <p>Wool waste recycling research and experiment was completed successfully. According to the management quality of insulation material needs in improvement in order to meet construction material standard requirement.</p> <p>Workers were provided with PPE regularly;</p> <p>All units were provided with fire extinguishing equipment and tools.</p> <p>In-house lab was upgraded with new textile testing equipment manufactured by Tesdan LLC, Italy in order to conduct analysis of wool and cashmere fibers, yarns etc. in compliance with International standards.</p> <p>Work condition was improved due to renovation of the entire factory building and facilities.</p> <p>Soil and air samplings were under acceptable level required by national standards.</p>	Improve chemicals storage.
2	Darkhan Nekhii -Waste water -Sludge - Chemicals handling -Work place condition		Improve waste handling and house-keeping at the plant. Improve internal monitoring and reporting.
3	Mongol Shevro -Waste water -Sludge -Chemicals handling -Work place condition	Implementation of EPP and EMP for 2011 was satisfactory.	Fulfill measures required by state inspection in timely manner. Improve internal monitoring and reporting.
4	Mon Fresh -Waste water -Chemicals handling		Fulfill measures required by state inspection in timely manner Improve internal monitoring and reporting.
5	Mogol Noos		Improve internal monitoring

	<ul style="list-style-type: none"> -Waste water -Sludge removal -Work condition 		and reporting.
6	Mon Meat Trade <ul style="list-style-type: none"> -Waste water, -Meat safety, -Occupational hygiene, -Solid waste (at slaughter house) 	<p>1. Implementation of EPP and EMP for 2012 at the meat processing plant in Ulaanbaatar was good.</p> <p>-</p> <p>2. Renovation and upgrading of the slaughterhouse building in Khentii aimag was almost completed. Slaughtering line was installed and ready to be operational. ere delayed because of short season for construction work (Most of the planned measures related to the slaughterhouse building were delayed due to late receipt of loan).</p>	<p>Fulfill EMP in timely manner.</p> <p>Improve internal monitoring and reporting.</p>
7	Altai Cashmere <ul style="list-style-type: none"> -Waste water -Work condition 	<p>PMU monitoring was held in December 2012 and January 2013.</p> <p>During the monitoring the PMU found that:</p> <ul style="list-style-type: none"> -Air conditioning system in scouring and combing shops operates inadequately and needs in improvement ; -Employees were provided with protective apparel and equipment in timely manner, changing room and shower for workers is well maintained; -Fire extinguishing system and tools were in place; -The company uses environmentally safe chemical substances for its cashmere scouring operation. Scouring agents and solvents are procured from England (Stephenson Specialty Chemicals) which manufactures these textile chemicals in compliance with international standards; -The process water is not reused, -Due to installation of new whole garment production machine and printing machine productivity was improved, -Solid waste was removed in timely manner in accordance with the contract, -Chemicals storage was under renovation, -Analysis on waste water was conducted regularly. Results of lab samplings showed that there was no serious pollution. Soil and air samplings were under acceptable level required by national standards, All employees (182 workers) were involved in health check-ups. 24 of them were diagnosed with varicose veins. The company plans to take care about these workers in accordance with medical recommendation, -State inspection was conducted in accordance with Law on State Inspection by Professional Inspection Department (PID) of Ulaanbaatar city in January 2012. In compliance with the state inspection requirements the company established special committee responsible for internal inspection (including on waste handling, air and soil pollution, environmental impact assessment of the company)'. 	<p>Study and introduce waste water reuse in cashmere scouring shop in order to save water;</p> <p>-Improve air ventilation system in cashmere scouring and combing shops;</p> <p>- Improve internal monitoring and reporting.</p> <p>.</p>

The following issues were found as common weaknesses at the most of the PE companies:

1. Poor internal monitoring due to lack of an assigned staff,
2. Poor reporting practice and skills,
3. Unjustified delays of follow-ups after the state inspections
4. Management unsatisfactory understanding of environmental protection concerns
5. Lacking of knowledge national laws and regulations etc.

In order to improve environmental performance at these companies ARDP PMU plans to take following measures in future:

1. Visit company/project field more often (on monthly/quarterly basis);
2. Communicate with management who is in charge for environmental protection, occupational safety and health, food safety issues at the plant more often;
3. Communicate with local professional and inspection agencies regarding the environmental issues of the plant regularly,
4. Assist to educate and train management of companies on environmental protection management, including planning, monitoring and reporting etc.

Prepared by environmental specialist in PMU of ARDP
2 February 2013

