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REPUBLIC OF AZERBAIJAN

HIGHER EDUCATION PROJECT

ENVIRONMENTAL MANAGEMENT FRAMEWORK

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1. Introduction

The Bank has been supporting efforts in basic education reforms since 1999 through the first Bank-funded Education Reform Project, and two phases of the Adaptable Program Loan (Education Sector Development Project (ESDP) I and II). As the country's economy continues growing and the demand for highly skilled workforce increases, the government has faced an urgent need to strengthen the higher education and skills development. The Education Strategy adopted in October 2013 has identified priority education reform areas. To respond to the Government's needs, the Country Partnership Strategy (CPS) for FY11-14 identified improving quality of and access to tertiary education as well as developing a highly skilled workforce for Azerbaijan to be competitive internationally as reform priorities.

The Bank has supported the achievement of the CPS goals through non-lending activities. While the government was in the process of formulating priorities for higher education reforms, the Bank team conducted a thorough analysis of the higher education sector and produced a policy note on human development focusing on higher education. The findings were presented and discussed as one of the four major reform sectors at the High Level Policy Forum in 2012. The team also continued providing technical advice for the development of the Education Strategy. The proposed Higher Education Project is designed to support the implementation of selected priority activities of the Education Strategy in a timely manner.

This Environmental Management Framework (EMF) is designed for use by the Project Coordination Unit (PCU) staff of the Higher Education Project (HEP), officials of the Ministry of Education, implementing agencies, engineers, environmental consultants, and other relevant parties. Specifically, the EMF is intended to assist all those who are working on the HEP, helping him/her, at each stage, to ensure that environmental concerns are duly taken into account by the project design and implementation, and effectively addressed in accordance with the environmental legislation of Azerbaijan and the World Bank Operational Policy 4.01 'Environmental Assessment'.

Since the majority of the activities under HEP relate to providing Technical Assistance aimed at improving the quality of education, the impact on the environment would be very limited. Project activities of a civil works nature with potential impact on the environment would essentially consist of sub-projects involving the renovation of facilities of selected higher education institutions, to be implemented under the Project. Environmental concerns will be considered and addressed during the selection and implementation of these sub-projects.

This EMF lays out procedures and implementation arrangements for ensuring full consideration of environmental safeguards, in accordance with the Bank's environmental assessment guidelines. It describes existing environmental regulations and standards in Azerbaijan relevant to the project and makes reference to institutions at the local and national levels responsible for issuing permits, licenses, and enforcing compliance of environmental standards.

The EMF also provides detailed guidelines for the PCU staff and the project proponents on environmental screening, appraisal, and monitoring applied to the sub-projects. Each sub-project will be individually screened and reviewed by specific type, by the PCU, for any negative impacts and mitigation measures. The sub-project proposal will incorporate an environmental review checklist (see template for Environmental Management Plan (EMP) Checklist presented in Annex 1), and the project appraisal document will adapt type-specific analysis, costs, and

mitigation measures. Training will be provided to technical specialists in the PCU to carry out the evaluation and monitoring of sub-projects according to agreed environmental standards.

The main part of the EMF relates to recommendations/requirements on the environmental assessment at different stages of the sub-project cycle. It also contains recommendations on possible/obligatory mitigation measures. Checklists are important tools to be used for environmental impact assessment. These will be supported by expert's reports and recommendations at each stage. The expert/engineer prepares the report using his expertise and specific results of his desk and field investigations of the proposed sub-project.

2. Environmental Legislation and the Institutional Framework in Azerbaijan

Environmental Legislation and Procedures. The Constitution of Azerbaijan adopted in 1995 and amended in 2002 provides for the rights of citizens to a healthy and clean environment (Section 39). The Constitution also outlines the delineation of responsibilities between the central and local government authorities. Within this Constitutional framework, environmental protection in Azerbaijan is principally governed by the Law on Environment Protection (1999). The Law establishes the main environmental protection principles, and the rights and obligations of the State, public associations and citizens regarding environmental protection. It establishes the requirements for the preparation of environmental impact assessments, environmental quality standards, and requirements for permitting the activities that affect the environment, prevention and reduction of environmental pollution, environmental monitoring and control, the role of the public and sanctions imposed on law violators. The other major law governing environmental issues is the Law on Ecological Safety (1999). This law focuses on the legal bases for protection of life and health of the person, society, its material and moral values, environment, including atmospheric air, space, water objects, richment of ground, landscape, plants and animals from danger, arising as a result of natural and antropogenic action. Other laws governing specific issues such as sanitary-epidemiological welfare, land reform, energy, health, water, forests, cadastre and land use, industrial and domestic wastes, ecological safety, water supply and wastewater, atmospheric protection and specially protected areas have been adopted since 1992. In addition, a large number (over 75) of Decisions of the Cabinet of Ministers have been issued to help interpret the body of environmental legislation and related Presidential Degrees and Orders.

According to Article 42 of the Law on Environmental protection, the Ministry of Ecology and Natural Resources (MENR) is the competent authority for reviewing the EIA request and documentation prepared by independent experts hired by the project developer prior to initiation of a new investment project. Other key laws forming the legal basis for EIA are the Law on Ecological Safety (1999) and the Provision on the Process of Environmental Impact Assessment in Azerbaijan (1996). The EIA application may be submitted to the head office of the MENR or to a local branch office. In the process of reviewing the EIA application the MENR evaluates the following criteria:

- Whether the proposed project envisions new technologies;
- The volumes and complexity of the proposed processes or technologies;
- The expected environmental consequences;

- Whether the proposed project would create significant changes for the local population; and
- Public response to the proposal.

Azerbaijan has ratified a number of International and bilateral conventions, treaties and agreements, including 15 Conventions related with environment. Each law of Republic of Azerbaijan includes a special chapter or article stating that if International Agreements provide rules which differ from existing relevant rules of Azerbaijan Legislation, the rules of international documents should prevail.

The Institutional Framework. At the national level, the Ministry of Ecology and Natural Resources (MENR) has the mandate for environmental protection, the sustainable use and regeneration of natural resources and the improvement of the environment. At the local level, the MENR operates through its local offices. Environmental clearances for new projects at the local level are provided by these local offices.

A simple screening of sub-project proposals under HEP will determine what type of environmental assessment is required, depending on the sub-project typology. Most sub-projects are likely to require no environmental assessment or a simple environmental review that identifies the environmental impacts and proposes mitigation measures. The proposal form, which inter alia covers environmental issues addressed through the EMP Checklists, will be completed by the sub-project proponent (relevant entity responsible for the sub-project within the respective higher education institutions) with assistance from the PCU, and will be reviewed by a PCU Engineer and Environmental Consultant. Environmental Management Plans (EMPs) may be developed for particular sub-projects and sites, if necessary.

3. HEP PCU Approach to Environmental Policies and Procedures

The HEP PCU (hereinafter PCU) environmental policy will be guided by the HEP objective to strengthen the higher education system and increase the capacity of higher education institutions to provide high quality and relevant education to their graduates. This objective is to be achieved through the three project components which are as follows:

A. Project Components

The Project consists of three components: (i) strengthening the higher education system; (ii) building the capacity of higher education institutions; and (iii) project coordination, monitoring and evaluation. Components 1 and 2 will be launched simultaneously, and lessons learned from implementation would provide continuous feedback for the benefit of each component including sub-components.

Component 1: Strengthening the Higher Education System

This component supports the system-level capacity building for the Ministry of Education (MOE) and other relevant agencies dealing with higher education in improving the governance and regulatory framework to enhance institutional autonomy, strengthening the quality assurance mechanisms, strengthening the use of higher education financing as a policy instrument, and enhancing public awareness on higher education reforms.

Sub-component 1.1: Improving Higher Education System Governance

Sub-component Objective: To strengthen the capacity of the Ministry of Education and other relevant agencies dealing with higher education to ensure that autonomy and accountability are well-balanced and in alignment with the Bologna Declaration and international practices.

In particular, this sub-component will support the MOE and other agencies in improving the higher education governance framework to create an enabling environment for HEIs. The sub-component would support the following activities:

- Reviewing the relevant laws and regulations related to the governance of the HE system and drafting the needed amendments to the legislation;
- Reviewing and revising a policy framework for licensing and accreditation of HEI and selected programs;
- Strengthening the capacity of MOE and other agencies dealing with higher education in setting up the areas and levels of autonomy of HEIs and the rules for accountability requirements, developing a mid-term plan to gradually strengthen institutional autonomy;
- Strengthening the MOE's capacity in monitoring and evaluation of HEIs' performance, including:
  i) identifying relevant indicators that would enable the MOE to provide information about the performance of HEIs in a timely, objective and user-friendly way,
  ii) setting up a mechanism for the collection, processing, and analysis of the data in order to support evidence-based policy making; and
  iii) reporting and disseminating information to relevant stakeholders;
- Conducting studies as needed by the MOE or other relevant agencies.

Sub-component 1.2: Enhancing the External Quality Assurance Mechanisms

Sub-component Objective: To enhance QA mechanisms to ensure that the higher education degrees and diplomas issued by Azerbaijani institutions are locally and internationally recognized and credible, and offer valid representation of skills and competence.

This sub-component supports the MOE in developing a national QA system aligned with international quality standards on transparency, effectiveness, independence and focus on improvement.

At present, the MOE's Department of Legal Expertise and Licensing is responsible for the licensing of HEIs and their programs, through an initial review of their facilities and resources. Every five years, HEIs undergo a new review (currently called accreditation) as a result of which their license can be renewed. In case the standards for licensing are not met, the license of specific programs or even the whole institution may be revoked. The MOE has decided to

implement a comprehensive QA system, which is consistent with the requirements to signatories of the Bologna agreement. It plans to establish a QA mechanism under the MOE which meets international requirements of transparency, effectiveness, independence and focus on improvement. The Department of Legal Expertise and Licensing is the key entity responsible for QA whose capacity needs to be strengthened. The MOE will engage an EU funded twinning program commencing in mid-2015, focusing on the development of an Azerbaijan National Qualifications Framework (AzQF) for initial and secondary vocational education and training and higher education, and on the establishment of standards and guidelines for QA aligned with European standards and tested at three HEIs. On the basis of these activities, they will propose a blueprint for the European Association for Quality Assurance in Higher Education (ENQA) aligned external quality assurance processes to the MOE.

This sub-component is designed to build on these parallel activities, focusing on the development and implementation of detailed procedures for the definition and application of quality standards and procedures for the accreditation of HEI and selected programs; it will also address the need for capacity building of accreditation decision makers, technical staff and external reviewers for the administration and implementation of an effective external quality assurance process. The sub-component would support the following activities:

- Reviewing and redesigning the current structure of the MOE charged with the decision making and administrative operation of QA;
- Based on that revision, redesign the structure in order for it to carry out two main functions:
  (i) *decision making function*, which is the responsibility of recognized academic experts; and
  (ii) *technical function*, in charge of professional members with legal, academic, and information expertise;.
- Develop the capacity of the MOE to:
  (i) review and approve the main features of the QA mechanism and making accreditation decisions once HEIs or programs are evaluated, under the decision making function; and
  (ii) prepare proposals on the QA mechanism, standards and procedures, to be approved by the decision making function for implementation, under the technical function.
- Working with HEIs to bring them in as partners in the development of quality assurance standards and procedures, including
  - carrying out information and training workshops; and
  - inviting representatives from HEIs to take part in developing institutional and program quality criteria, and eventually, to be members of external review teams;
- Supporting the MOE in developing a QA mechanism, standards and guidelines;
- Developing a communicational process to disseminate information on the QA mechanism being developed;
- Developing a pilot process for evaluating HEIs and selected programs that will make it possible to fine tune the establishment of a QA mechanism and build the capacity of national experts implement quality accreditation standards and procedures;
  - Defining training needs for the members of the QA unit, HEI staff, external reviewers and other human resources linked to the implementation of a QA mechanism, and setting up capacity building activities;

- Providing training for the QA unit, HEI staff and external reviewers;
- Conducting pilot institutional and program accreditations;
- Developing a national QA system including guidelines, quality criteria and procedures based on the experimental QA process and aligned with national regulations and international good practice;
- Inviting international evaluators from a recognized QA network to review the Azeri QA system; and
- Establishing partnerships between the QA body and international QA organizations.

Sub-component 1.3: Reforming Higher Education Financing

Sub-component Objective: To secure an adequate mix of public and private funding for higher education, and to use public funding as a policy instrument to achieve the Ministry's strategic and policy objectives such as enhancing equity, quality, and efficiency.

The government introduced a per student financing system in 2010 to enhance the quality of higher education. This sub-component supports the MOE in developing and implementing a comprehensive short-term and medium-term higher education financing reform strategy. A reformed financing model will be 1) aligned with the strategic and policy objectives of the MOE, 2) consistent with good international practice, and 3) informed by stakeholders in Azerbaijan's higher education system. The reform strategy may require legislative changes required for its implement which will inform sub-component 1.1. Activities under this component are the following:

- Assessing the existing higher education financing system. The assessment would address the following four elements:
    - Instruments of public funding for HEIs, including private ones (allocation of state budget, research funding, cost-sharing, etc.);
    - Diversification of financial sources for HEIs (tuition fees, market revenues, external research income, transfer activities, etc.) and the rules and regulations related to all these sources;
    - Financial autonomy and accountability of HEIs (lump sum vs. line-item allocations, freedom to spend money flexibly and build financial reserves, financial regulations, discretion to set salaries, etc.); and
    - Student funding and support (the individual financial situation of the student, loans, scholarships, etc.).
- Pilot at least one of the reforms recommended by the assessment.

Sub-component 1.4: Public Awareness Campaign and Monitoring Effectiveness of Higher Education Reforms

Sub-component Objective: To develop the MOE's capacity in designing and implementing a public awareness and information campaign, monitoring perceptions on the impact of higher education reforms, and feeding back lessons into the decision making process.

To date, reforms for higher education have taken place gradually on a small scale. The proposed project is one of the first large-scale projects that support higher education reforms comprehensively. Higher education stakeholders have been less exposed to global higher

education trends and reform needs. Therefore, the launching of a comprehensive public awareness and information campaign will be critical to gain public support to the reforms. At the same time, learning about the public perceptions on the relevance and the effectiveness of the reforms will provide significant inputs to the implementation of the project and the decision making process.

The objective of this sub-component is to build the MOE's capacity in enhancing public awareness in higher education reforms. It would provide support to the NGO and Media Unit of the Department of Information in the MOE in (i) designing and implementing a public awareness and information campaign to disseminate knowledge and information about the global trends in higher education reforms and reform needs in Azerbaijan to improve the quality and relevance of higher education services, and (ii) to monitor public perceptions on the relevance and effectiveness of these reforms. The campaign will introduce incremental and consultative change processes focusing on community building, partnership formation and consultation. Marketing techniques on information and communication will be used together with outreach and consultation methods. The key activities proposed under this component include:

- Designing and implementing the framework and marketing strategy for public awareness and information dissemination, including different options via television, radio, websites, mobile technology, and newspapers to disseminate information,
- Providing media representatives with an overall framework for the reforms; developing their awareness about higher education reform trends globally and locally, and training them on the main aspects to be covered;
- Training media on the main aspects to be covered;
- Training the staff of the MOE to carry out, supervise, and monitor the activities proposed under the public awareness campaign;
- Implementing and managing the qualitative assessments planned under each project component. Each assessment will be carried out at three different stages of the programs: (i) initial phase to provide a baseline for the assessment, (ii) a mid-term phase, and (3) an end-of-program phase; and
- Carrying out evaluations and surveys targeted to university students, faculty members, and administration as well as employers on their perceptions of the relevance of education.

Component 2: Building the Capacity of HEIs

The objectives of this component are two-fold: to support strengthening the management capacity of HEIs and to enhance the quality and relevance of their programs through three distinct capacity building activities at the institutional level.

Sub-component 2.1: Supporting HEIs in Building Leadership and Management Capacity

Sub-component Objective: To strengthen the capacity of HEIs' top and middle-level management in leading their institutions and setting up institutional structure to assure the quality and relevance of their programs.

This sub-component supports capacity building of HEIs in leadership and management by a comprehensive training program tailored to institutional leaders at different levels. Training will be organized with two complementary activities: the first, or horizontal training, will address leaders in similar positions in different institutions (e.g. rectors, vice rectors, deans); the second, or vertical training, will be institution based, bringing together leaders from the same institution. The sub-component would also finance short-term oversea internship and training program for selected management and administrators. This capacity building activity will be open to all HEIs (both public and private). The sub-component would finance the following activities:

- General needs assessment to identify capacity building needs of HEI and develop horizontal training program;
- In-country training for HEIs in two levels: general capacity building, for leaders and administrators in similar positions across HEI, and specific capacity building for individual HEI, bringing together leaders and administrators in different positions;
    - Topics for horizontal training will be determined after the needs assessment, and can cover all or some of the following:
        - Leadership, managerial and strategic planning to develop a comprehensive strategic plan;
        - Institutional needs assessment mechanisms and procedures;
        - Internal quality management mechanisms;
        - Institutional research, planning and assessment capacities to make necessary improvements;
        - Academic and management processes (e.g. designing new short-cycle or other higher education programs, professional development for staff, etc.);
        - Internal quality assurance mechanisms (incl. curricular revision and updating, evaluation processes at different institutional levels, developing and monitoring improvement plans);
        - Financial management (incl. budgeting, reporting, fee policies, etc.);
        - Human resource management (incl. recruitment, wage policies, professional development, etc.);
        - Information system (incl. using management software); and
        - Public relations and communications;
    - Vertical training (for individual HEI), which will include working with staff to design and carry out of a needs assessment in order to identify individual HEI capacity building needs and to select specific training topics.
- Short-term internships and training in oversea higher education institutions; and
- Evaluation of training programs.

Sub-component 2.2: Piloting and scaling-up selected reform activities

Sub-component Objective: To build HEIs' capacity to implement core reform activities and MOE's to develop a common approach to those core reform areas for a system-wide expansion.

This sub-component supports the MOE in piloting selected reform activities in one to three state HEIs each and developing reform models for a later roll-out (see table below for the list of selected activities and HEIs). In order to facilitate the introduction of specific reform activities, the project will develop a model for the introduction of significant actions aligned with the

priorities of the Azeri higher education policy. Their experience will then be used to adjust and implement those reform models in other interested HEIs, including private ones. The pre-selected topics include (i) Institutional Research (IR) and Internal Quality Assurance (IQA), (ii) Career Services and Graduate Tracking, (iii) Learning Management System (LMS), (iv) Student Services, and (v) regional workforce alignment. This sub-component would support the following activities:

- Developing the needed reform models;
- Supporting the implementation of the reforms in one to three selected state HEIs per reform during the pilot stage (see table below for the list of reforms determined by each HEI's priorities);
- Evaluating the implementation, and making necessary adjustments to the model for a roll-out to other HEI; and
- Supporting the implementation of the reforms in other HEIs for the second stage.

Selected topics	IR and IQA	Career services / graduate tracking	LMS	Student services	Regional workforce alignment
Baku State University		x		x	
Azerbaijan State Pedagogical University	x				
Azerbaijan State Oil Academy			x		
Azerbaijan Technical University		x			
Azerbaijan State Economics University	x				
Azerbaijan Architecture and Construction University	x				
Azerbaijan University of Languages			x	x	
Azerbaijan Technological University in Ganja			x		x

Sub-component 2.3: Supporting Development Initiatives to Improve Quality and Relevance

Sub-component Objective: To support HEIs in developing and implementing demand-driven, proposal-based projects to improve the quality and relevance of their programs.

This sub-component supports the MOE in developing a transparent and efficient mechanism to support HEIs in implementing proposal-based development initiatives to improve the quality and relevance of study programs. The activity is open to all HEIs (public and private). Activities under this sub component are the following:

- During the first year, the MOE invites all interested HEIs to participate in workshops on the program and training on proposal development and provides, as needed, technical assistance for proposal development.
- During the second year, the MOE calls for proposals. Proposals will be evaluated according to a clear and transparent selection process.
- Selected projects will be implemented in the next few years. Detailed description of the programs, objectives, eligibility and selection criteria, and implementation mechanisms are defined in an Operational Manual. Initiatives to be funded include, but not limited to:

- Working with employers to improve curriculum contents, create internship opportunities, and involve industrial practitioners in teaching to better meet labor market needs;
- Enhancing partnerships between HEIs and colleges leading to regional development;
- Enhancing partnerships between Baku and regional HEIs/colleges in improving curriculum and faculty capacity;
- Developing additional education to match labor market demands;
- Developing preparation courses for students with weaker academic competence at entry;
- Improving learning resources, electronic library resources and student support centers.
- Professional development of teaching staff; and
- Developing student learning assessment tools.

- Carrying out technical reviews on the quality and relevance improvement projects implemented by the HEIs

Component 3: Project Coordination, Monitoring and Evaluation

Component Objective: To coordinate various project activities, ensure efficient implementation, monitoring and evaluation of the project, and to fulfill the fiduciary responsibility.

The **objective** of this component is to provide support for the coordination and monitoring of the project implementation activities, including evaluation of the effectiveness of the investment. The component would provide financing and support for the Project Coordination Unit (PCU) that facilitates and coordinates the project implementation within the Ministry of Education. The PCU ensures lessons learned from the respective sub-components be fed back to the next cycle of activities under the same sub-components and other related sub-components. All renovation that will be implemented under the Project have to be in compliance with Azerbaijan environmental rules and regulations, as well as with environmental policy of the World Bank. According to both local and internationally recognized regulations, environmental assessment (EA) and monitoring are required at the entire cycle of sub-projects preparation and implementation. As the sub-project sites are not pre-determined and will be identified in the course of the Project implementation based on the demand, the sub-project specific EMP Checklists will be prepared as part of the sub-project design documentation.

Potential Challenges. While not triggering serious environmental concerns, the proposed small scale renovation and modernization of the existing structures pose a number of challenges. First, the extent of decay in the building can rarely be determined prior to dismantling existing construction. As a consequence, the cost of repairs and the time and materials required to complete work cannot be reliably estimated in advance. Second, architectural and mechanical plans are rarely implemented rigorously and the actual (final) drawings are rarely provided. The design of works therefore must be based on detailed field studies. Third, repairs of buildings should be executed if possible during the summer academic recess in order to minimize disruption of higher education institutions. Fourth, discovery of any serious structural and mechanical problems during either the survey or construction phase poses serious ethical, legal and financial challenges. Professional engineers and architects cannot ethically fail to deal with problems that pose a serious threat to the health or lives of students. Moreover, both the Bank

and the Government are obliged by public opinion and by law to correct life-threatening problems of which they are aware. The sub-projects, though small in size will have implications for staffing of the PCU, owing to the logistical and procedural work involved. A core group of engineers and an environmental consultant would be necessary within the PCU to implement the renovation work involved, and would in addition call for engaging the services of local engineering/architectural consulting firms.

The improvement of classrooms in selected higher education institution's premises may encounter two kinds of problems. The first concern is the safety hazards created by the decay or misuse of structures. The second concern is the need to re-optimize the design of major elements needed for premises to reflect new technologies and changes in input prices.

Consultation with Stakeholders. The key stakeholders are the higher education institutions' rectors, management, faculty, and students. Stakeholders will be consulted on a case-by-case basis, depending on the nature of the proposed sub-projects, during the screening process, during the development of plans to address potential environmental impacts, and during sub-project supervision to assess environmental aspects of sub-projects. Typically, PCU environmental consultant and engineers will hold discussions on-site with the stakeholders during screening and both the stakeholders and the municipality in preparing and reviewing environmental assessments and respective EMP Checklists. Whenever possible, experts within the rayon will participate directly in the preparation of environmental assessments and plans. The higher education institutions' rectors must obtain all necessary permits and clearances from the local branch of the MENR before final approval by the PCU of any sub-project proposal. During sub-projects implementation, the PCU environmental consultant will monitor the environmental compliance.

Coverage of Environmental Assessments. The coverage and depth of the EA process depend on the nature, scale and potential impact of a proposed sub-project. It is anticipated that project-funded sub-projects, as a rule, will not trigger a full-scale environmental impact assessment process. The EA is broad in scope and takes into account the natural environment as well as human health and socio-cultural aspects, focusing in on those issues and potential impacts that are determined as critical for a stakeholder based project's environmental soundness and sustainability. The EA runs in parallel with the process of visiting the selected sub-project, designing it, and implementing it.

Key considerations to be taken into account during EA process include:

- compliance with existing environmental regulations in Azerbaijan;
- linkages with overall/social assessment;
- analysis of alternatives;
- consultation with relevant stakeholders including NGOs; and
- disclosure of information

As in the case of economic, financial, institutional and engineering analyses, the EA is part of sub-project preparation and therefore is the sub-project proponent's responsibility. The EA is carried out at all key stages of the project cycle, as described below.

4. Environmental Assessment at Different Stages of Sub-Project Preparation and Implementation

The stages of sub-project preparation and implementation are defined in the PCU Operational Manual. Upon completion of each stage, specific forms are to be filled in by the authorized staff, including sections of environmental evaluations. To ensure that environmental analysis is performed in a comprehensive manner, specific checklists must be used by engineers and the environmental consultant, and may, if necessary, involve other consultants.

The three stages of the environmental assessment during the sub-project cycle for higher education institutions' premises are:

- The Preliminary Stage
- The Final Stage
- The Implementation Stage

These stages are outlined below.

4.1 Environmental Assessment at the Preliminary Stage

The goals of the preliminary environmental assessment are:

- to collect evidence that the proposed sub-project does not violate existing environmental regulations;
- to evaluate potential adverse environmental impacts;
- to highlight the need of specific prevention and/or mitigation measures;
- to make recommendations on the level of environmental efforts at further stages of the project; and
- identify opportunities for positive environmental impacts.

The steps of the preliminary environmental assessment consist of:

- Carrying out a preliminary environmental desk assessment using available documentation for the sub-project (see Annex 3);
- Visiting the project site, meeting with the higher education institution's rector and other stakeholders, and carrying out a field preliminary environmental assessment (see Annex 4); and
- Analyzing the affected environment, potential impacts and preparing recommendations on mitigation measures (see Annex 1)

The technical expert(s), if required, is (are) expected to:

- Assess the affected environment;
- Investigate land use and resource use restrictions in the project area, if applicable;
- Check whether the sub-project proposal complies with other environmental laws and regulations of Azerbaijan;
- Estimate a range and a scale of potential environmental impacts;
- Make recommendations on the need for specific preventive and/or mitigation measures;
- Make recommendations on the level of environmental assessment at the project preparation stage
- Assess the need and make recommendations on the involvement of environmental consultant(s)

4.2 Environmental Assessment at the Final Stage

The goals of the environmental assessment at the Final Stage are:

- to check that the sub-project design and other relevant documentation have all the necessary permits and approvals and does not violate existing environmental regulations;
- in case of potential adverse environmental impact, to check that appropriate prevention and mitigation measures have been planned and necessary resources have been allocated to implement them; and
- to make recommendations on the level and mechanisms of environmental monitoring at further stages of the stakeholder based project.

The steps of the final environmental assessment are as follows:

- Visit the project site and carry out field assessment. Meet separately with the key stakeholders and if necessary, with technical experts;
- Compare results and recommendations of the Preliminary Environmental Assessment with sub-project documentation; make sure that necessary environmental permits (including land use, resource use, dumping of debris, and sanitary inspection) and approvals are in place
- .

The PCU environmental consultant is expected to:

- Examine the project documentation to check that:
    - environmental assessment was performed in accordance with regulations and that it followed the recommendations of the preliminary environmental assessment;
    - the documentation includes all the necessary permits and approvals;
    - appropriate prevention and mitigation measures have been planned and necessary resources have been allocated, or an alternative decision was made (and supported with necessary documents) that makes such measures unnecessary;
    - the project documentation and findings of the final site visit have been presented to public and that the project does not create public objections;
- Make recommendations on the level and mechanisms of environmental monitoring on construction and operational stages

Findings of the Final Environmental Assessment are summarized in the sub-project specific EMP Checklists. The key steps and the respective responsibilities in obtaining the environmental clearance for sub-projects is illustrated in Chart 1 of Annex 2.

4.3 Environmental Monitoring at the Implementation Stage (construction and operational)

At the construction and operational stage, the main goal of the PCU environmental consultant is to monitor proper implementation of environmental protection and mitigation measures prescribed by the project design documents, as well as to monitor prompt liquidation or mitigation of unexpected adverse environmental impacts.

To achieve this goal, PCU environmental consultant should be guided by the EMP Checklists They should also use Field Inspection Checklist (Annex 5).

In case the project fails to meet environmental protection requirements, the PCU shall report to the stakeholders concerned.

5. Environmental Management Plan (EMP) and Disclosure and Consultation Process [1]

The proposed HEP would finance the renovation of selected higher education institutions' premises (essentially the conversion of classrooms into premises to be identified during the Project implementation, which are referred to as sub-projects. This section outlines strategies and summarizes the disclosure and consultation process for mitigating the environmental risks associated with these sub-projects. Annex 1 also presents the draft Environmental Management Plan (EMP), which has been disclosed and discussed with various stakeholders.

Programs to repair and modernize existing structures pose a number of serious challenges. First, the extent of decay in the selected buildings can rarely be determined prior to tearing out or dismantling existing construction. As a consequence, the cost of repairs and the time and materials required to complete work cannot be reliably estimated in advance. Second, architectural and mechanical plans are rarely implemented faithfully and as-built drawings are rarely provided. The design of works therefore must be based on detailed field studies. Third, repairs of buildings ought to be executed if possible during the summer academic recess in order to minimize disruption of higher education institution. Scheduling of construction is further complicated by the likelihood of encountering unforeseen problems. Finally, discovery of serious structural and mechanical problems during either the survey or construction phase poses very serious ethical, legal and financial challenges. Professional engineers and architects shall deal with problems that pose a serious threat to the health or lives of students. Moreover, both the Bank and the Government are obliged by public opinion and by law to correct life-threatening problems of which they are aware.

Higher education institution's renovation projects generally address two kinds of problems. First, they rectify safety hazards created by the decay or misuse of structures. Second, they re-optimize the design of major elements to reflect new technologies and changes in input prices.

The Government of Azerbaijan places serious emphasis on environment protection and landscape preservation. Therefore, as part of the preparatory work the MoE prepared this EMF to establish the processes for addressing environmental risks from the renovation of higher education institutions' premises to be supported under the Project.

The Environmental Management Framework Disclosure and Consultation Process

The MOE has carried out a disclosure and consultation process on the EMF through publication of the invitation for public consultation at the MOE official web-site. The invitation referred to the EMF document posted at the same website and requested feedback on it for its relevance or further improvement. Fourteen days were allowed for the feedback from anyone whom the EMF might concern. Information on this invitation together with the relevant links has been sent to

[1] This section should also be regarded as a self-contained stand-alone document. It would therefore contain some repetitive material from the previous sections.

people involved in designing HEP from the higher education institutions. The text of the invitation posted at the MOE website on November 12, 2014 has been as follows:

Invitation for public consultations on Environmental Management Framework document within Higher Education Project

The Ministry of Education is pleased to inform about ongoing negotiations between the Government of Azerbaijan Republic and the World Bank to obtain IBRD loan for implementation of the proposed Higher Education Project (HEP). HEP will continue for 5 years and will have objective to strengthen the higher education system and increase the capacity of higher education institutions to provide high quality and relevant education to their graduates

.

HEP consists of following components and sub-components:

- *Component 1: Strengthening the Higher Education System;*
  - *Sub-component 1.1: Improving Higher Education System Governance;*
  - *Sub-component 1.2: Enhancing the External Quality Assurance Mechanisms;*
  - *Sub-component 1.3: Reforming Higher Education Financing;*
  - *Sub-component 1.4: Public Awareness Campaign and Monitoring Effectiveness of Higher Education Reforms*
- *Component 2: Building the Capacity of HEIs;*
  - *Sub-component 2.1: Supporting HEIs in Building Leadership and Management Capacity;*
  - *Sub-component 2.2: Piloting and scaling-up selected reform activities;*
  - *Sub-component 2.3: Supporting Development Initiatives to Improve Quality and Relevance*
- *Component 3: Project Coordination, Monitoring and Evaluation.*

Since the majority of the activities under HEP relate to providing Technical Assistance, the impact on the environment would be very limited. Activities of civil works nature with potential impact on the environment would essentially consist of sub-projects involving the renovation of facilities of selected higher education institutions, to be implemented under the sub-component 2.3 'Supporting Development Initiatives to Improve Quality and Relevance'. Environmental concerns will be considered and addressed during the selection and implementation of these sub-projects. With regard to these renovation activities and in order to avoid possible hazard to environment, Environmental Management Framework (EMF) has been developed.

The EMF is intended to assist all those who are working on HEP, helping to ensure that environmental concerns are duly taken into account by the sub-project design and implementation, and effectively addressed in accordance with the environmental legislation of Azerbaijan and the World Bank Operational Policy 4.01 'Environmental Assessment'. This EMF lays out procedures and implementation arrangements for ensuring full consideration of environmental safeguards, in accordance with the Bank's environmental assessment guidelines.

The EMF is available for public review. We look forward to hearing from you, if you have any questions or comments we may be able to answer and use your recommendations in improving of the EMF document.

We welcome your feedback on the EMF document to be sent via e-mail or other means to the address below before November 26, 2014

Coordination Unit for World Bank financed projects at the Ministry of Education

Address: Azure Business Center, 10th floor, room 60.
15 Nobel Avenue, AZ1008,
Baku, Republic of Azerbaijan
Tel: + 994 (12) 488 66 47/48;
Fax: +994 (12) 488 66 49
Email: rustamov@edu.gov.az.

Above mentioned announcement and the EMF in English and Azeri languages were placed at the Internet WebPages on the following address: www.edu.gov.az. on November 12, 2014.

In addition to the above disclosure, sub-project specific EMP Checklists will be disclosed and discussed with the beneficiaries and stakeholders of the respective sub-projects, once these documents become available in the course of the project implementation. The EMF and subsequent EMP Checklists will be part of the Standard Bidding Document (SBD) for the civil work procurement to ensure that the bidders are obliged to adhere to the agreed EMP Checklists and the winning contractors are legally accountable to follow the agreed procedures. Their contract documents will include the respective EMP checklists.

Annex 1

EMP Checklist for Construction and Rehabilitation Activities

PART A: GENERAL PROJECT AND SITE INFORMATION

INSTITUTIONAL & ADMINISTRATIVE				
Country	**Azerbaijan**			
Project title				
Scope of project and activity	Small construction works for buildings rehabilitation within the Project			
Institutional arrangements (Name and contacts)	WB (Project Team Leader)	Project Management	Local Counterpart and/or Recipient	
Implementation arrangements (Name and contacts)	Safeguard Supervision	Local Counterpart Supervision	Local Inspectorate Supervision	Contactor
SITE DESCRIPTION				
Name of site				
Describe site location			Attachment 1: Site Map [ ]Y [ ] N	
Who owns the land?				
Description of geographic, physical, biological, geological, hydrographic and socio-economic context				
Locations and distance for material sourcing, especially aggregates, water, stones?				
LEGISLATION				
Identify national & local legislation & permits that apply to project activity				
PUBLIC CONSULTATION				
Identify when / where the public consultation process took place				
INSTITUTIONAL CAPACITY BUILDING				
Will there be any capacity building?	[ ] N or [ ]Y if Yes, Attachment 2 includes the capacity building program			

PART B: SAFEGUARDS INFORMATION

ENVIRONMENTAL /SOCIAL SCREENING			
	Activity	**Status**	**Triggered Actions**
Will the site activity include/involve any of the following??	A. Building rehabilitation	[**X**] Yes [ ] No	See Section **A** below
	B. New construction	[ ] Yes [**X**] No	See Section **A** below
	C. Individual wastewater treatment system	[ ] Yes [**X**] No	See Section **B** below
	D. Historic building(s) and districts	[ ] Yes [**X**] No	See Section **C** below
	E. Acquisition of land[2]	[ ] Yes [**X**] No	See Section **D** below
	F. Hazardous or toxic materials[3]	[**X**] Yes [ ] No	See Section **E** below
	G. Impacts on forests and/or protected areas	[ ] Yes [**X**] No	See Section **F** below
	H. Handling / management of medical waste	[ ] Yes [**X**] No	See Section **G** below
	I. Traffic and Pedestrian Safety	[**X**] Yes [ ] No	See Section **H** below

[2] Land acquisitions includes displacement of people, change of livelihood encroachment on private property this is to land that is purchased/transferred and affects people who are living and/or squatters and/or operate a business (kiosks) on land that is being acquired.

[3] Toxic / hazardous material includes but is not limited to asbestos, toxic paints, noxious solvents, removal of lead paint, etc.

PART C: MITIGATION MEASURES

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
0. General Conditions	Notification and Worker Safety	(a) The local construction and environment inspectorates and communities have been notified of upcoming activities (b) The public has been notified of the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works) (c) All legally required permits have been acquired for construction and/or rehabilitation (d) The Contractor formally agrees that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment. (e) Workers' PPE will comply with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots) (f) Appropriate signposting of the sites will inform workers of key rules and regulations to follow.
A. General Rehabilitation and /or Construction Activities	Air Quality	(a) During interior demolition debris-chutes shall be used above the first floor (b) Demolition debris shall be kept in controlled area and sprayed with water mist to reduce debris dust (c) During pneumatic drilling/wall destruction dust shall be suppressed by ongoing water spraying and/or installing dust screen enclosures at site (d) The surrounding environment (side walks, roads) shall be kept free of debris to minimize dust (e) There will be no open burning of construction / waste material at the site (f) There will be no excessive idling of construction vehicles at sites
	Noise	(a) Construction noise will be limited to restricted times agreed to in the permit (b) During operations the engine covers of generators, air compressors and other powered mechanical equipment shall be closed, and equipment placed as far away from residential areas as possible
	Water Quality	(a) The site will establish appropriate erosion and sediment control measures such as e.g. hay bales and / or silt fences to prevent sediment from moving off site and causing excessive turbidity in nearby streams and rivers.
	Waste management	(a) Waste collection and disposal pathways and sites will be identified for all major waste types expected from demolition and construction activities. (b) Mineral construction and demolition wastes will be separated from general refuse, organic, liquid and chemical wastes by on-site sorting and stored in appropriate containers. (c) Construction waste will be collected and disposed properly by licensed collectors (d) The records of waste disposal will be maintained as proof for proper management as designed. (e) Whenever feasible the contractor will reuse and recycle appropriate and viable materials (except asbestos)
B. Individual wastewater treatment system	Water Quality	(a) The approach to handling sanitary wastes and wastewater from building sites (installation or reconstruction) must be approved by the local authorities (b) Before being discharged into receiving waters, effluents from individual wastewater systems must be treated in order to meet the minimal quality criteria set out by national guidelines on effluent quality and wastewater treatment (c) Monitoring of new wastewater systems (before/after) will be carried out (d) Construction vehicles and machinery will be washed only in designated areas where runoff will not pollute natural surface water bodies.
C. Historic building(s)	Cultural Heritage	(a) If the building is a designated historic structure, very close to such a structure, or located in a designated historic district, notification shall be made and approvals/permits be obtained from local authorities and all construction activities planned and carried out in line with local and national legislation. (b) It shall be ensured that provisions are put in place so that artifacts or other possible "chance finds" encountered in excavation or construction are noted and registered, responsible officials contacted, and works activities delayed or modified

		to account for such finds.

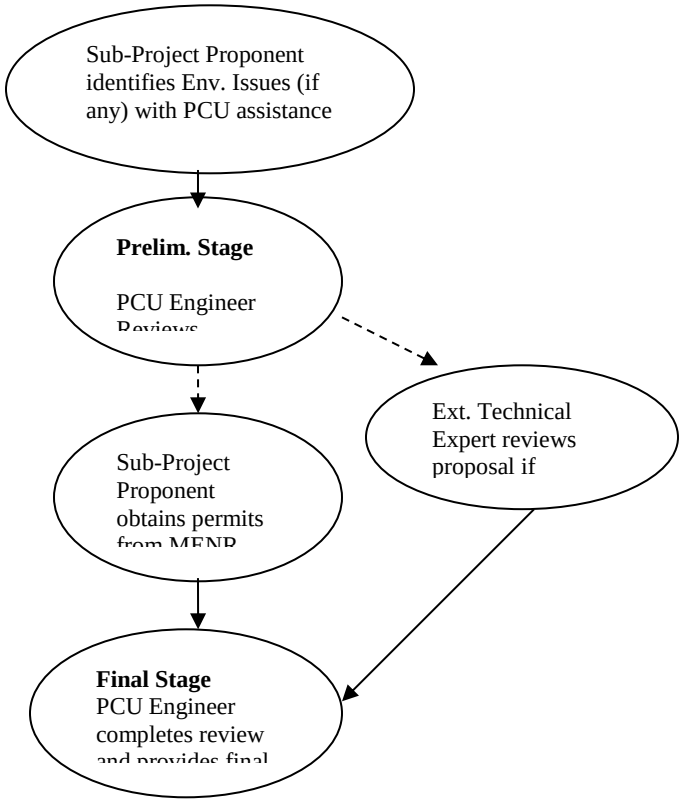
ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
D. Acquisition of land	Land Acquisition Plan/Framework	(a) If expropriation of land was not expected but is required, or if loss of access to income of legal or illegal users of land was not expected but may occur, that the Bank's Task Team Leader shall be immediately consulted. (b) The approved Land Acquisition Plan/Framework (if required by the project) will be implemented
E. Toxic Materials	Asbestos management	(a) If asbestos is located on the project site, it shall be marked clearly as hazardous material (b) When possible the asbestos will be appropriately contained and sealed to minimize exposure (c) The asbestos prior to removal (if removal is necessary) will be treated with a wetting agent to minimize asbestos dust (d) Asbestos will be handled and disposed by skilled & experienced professionals (e) If asbestos material is be stored temporarily, the wastes should be securely enclosed inside closed containments and marked appropriately. Security measures will be taken against unauthorized removal from the site. (f) The removed asbestos will not be reused
	Toxic / hazardous waste management	(a) Temporarily storage on site of all hazardous or toxic substances will be in safe containers labeled with details of composition, properties and handling information (b) The containers of hazardous substances shall be placed in an leak-proof container to prevent spillage and leaching (c) The wastes shall be transported by specially licensed carriers and disposed in a licensed facility. (d) Paints with toxic ingredients or solvents or lead-based paints will not be used
F. Affected forests, wetlands and/or protected areas	Protection	(a) All recognized natural habitats, wetlands and protected areas in the immediate vicinity of the activity will not be damaged or exploited, all staff will be strictly prohibited from hunting, foraging, logging or other damaging activities. (b) A survey and an inventory shall be made of large trees in the vicinity of the construction activity, large trees shall be marked and cordoned off with fencing, their root system protected, and any damage to the trees avoided (c) Adjacent wetlands and streams shall be protected from construction site run-off with appropriate erosion and sediment control feature to include by not limited to hay bales and silt fences (d) There will be no unlicensed borrow pits, quarries or waste dumps in adjacent areas, especially not in protected areas.
G. Disposal of medical waste	Infrastructure for medical waste management	(a) In compliance with national regulations the contractor will insure that newly constructed and/or rehabilitated health care facilities include sufficient infrastructure for medical waste handling and disposal; this includes and not limited to: ▪ Special facilities for segregated healthcare waste (including soiled instruments "sharps", and human tissue or fluids) from other waste disposal; and ▪ Appropriate storage facilities for medical waste are in place; and ▪ If the activity includes facility-based treatment, appropriate disposal options are in place and operational
H Traffic and Pedestrian Safety	Direct or indirect hazards to public traffic and pedestrians by construction activities	(b) In compliance with national regulations the contractor will insure that the construction site is properly secured and construction related traffic regulated. This includes but is not limited to ▪ Signposting, warning signs, barriers and traffic diversions: site will be clearly visible and the public warned of all potential hazards ▪ Traffic management system and staff training, especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians where construction traffic interferes. ▪ Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement ▪ Active traffic management by trained and visible staff at the site, if required for safe and convenient passage for the public. ▪ Ensuring safe and continuous access to office facilities, shops and residences during renovation activities, if the buildings stay open for the public.

PART D: MONITORING PLAN

Phase	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Cost (if not included in project budget)	Who (Is responsible for monitoring?)
During activity **preparation**	site access traffic management availability of waste disposal facilities	at the site at the site in site vicinity	check if design and project planning foresee diligent procedures	before launch of construction	safety of general public, timely detection of waste disposal bottlenecks	marginal, within budget	Contractor, Engineer
During activity **implementation**	hazardous waste inventory (asbestos) construction material quality control (eg. paints / solvents)	on site Contractor's store / building yard	visual / analytical if in doubt visual / research in toxic materials databases	before start of rehabilitation works before approval to use materials	public and workplace health and safety	marginal, within budget; (prepare special account for analyses at PMU?)	Contractor, Engineer
During activity **supervision**	dust generation noise emissions wastewater volumes & quality waste types and volumes	on site and in immediate neighborhood, close to potential impacted residents	visual consultation of locals visual, analytical if suspicious count of waste transports off site	daily daily daily / continuous every batch	avoidance of public nuisance avoidance of negative impacts on ground/ surface waters ensuring proper waste management and disposal	marginal, within budget	Contractor, Engineer

Annex 2

Chart 1: Environmental Assessment of Sub-Projects
Summary of Key Activities



Annex 3

PRELIMINARY ENVIRONMENTAL DESK ASSESSMENT CHECKLIST

If the Stakeholder based project Proposal doesn't contain all the necessary information for the desk appraisal, please obtain it during the field appraisal.

Issues of land and resource use, environmental permits and licenses

- Are there land use permits in p lace?
- Will there be a need for use of resources? If yes, specify.
- During construction and operational stages, will the project activity use any resources that need permits or licenses (forest use, water use, gravel for road construction etc). Are these permits in place?

Project site description

- Is there full information about current land users/owners? If no, list what is missing.
- Does any part of the project site fall under specific environmental regulations, e.g. nature reserve protected area, or national park?
- Does the project fall under regulations of specific law

Potential environmental impacts and compliance with environmental regulations

- Will any wastes be generated during construction/operational/closure stages of the project? Are any of the wastes toxic or hazardous? Methods of decommissioning/treatment.
- Will the project create any emissions?
- Will the project create/increase risks of natural or ethnogeny disasters (landslides, flooding, avalanches etc).
- Please describe expected disturbance and nuisance produce during construction and operation (soil, waterways, flora, fauna, noise etc)
- Does the project activity fall under the nature protection category?

Relevant Environmental Regulatory Authorities *(Provide name, address, contact. Collect missing information during the site visit)*

- Local authority that has project site/activities under its jurisdiction. Is there environmental specialist?
- Environmental protection authority
- Sanitary-Epidemiological Station
- Forestry authority; Nature reserve, park (if applicable)
- Any other environmental protection authority

Annex 4

FIELD PRELIMINARY ENVIRONMENTAL ASSESSMENT CHECKLIST

Location

- Obtain a site map, or make a sketch of the site plan.
- Mark the location of the site on a map of the local area, or indicate the geographical impact area

Site Survey Questionnaire

Current activity and site history

- Who is the site contact? Name, position, contact
- What is the site size (m2) that will be used for project activities?
- What is the current use of the site? Provide a brief overview.
- What were previous uses of the site? Give names and dates, if possible.

Environmental Location

- Are there any sensitive habitats nearby? e.g., nature reserves protected areas, historical landmarks etc.
- Is anything known about the geology/hydrogeology beneath the site? Are there water courses on the site?
- Does the site contain any slopes? If yes, describe (hills, ravines etc.).
- Is the site located on a floodplain? In water-protection area?
- Does the site ever experience flooding? Landslides? Are there signs of water logging, bogging, and water erosion?
- What are neighbors to the site? E.g. dwellings, fields, industries, higher education institutions, watercourses. Estimate distance, if possible.
- Will transportation be impacted?
- Neighbor land users. Are there nature reserves, protected territories, historic monuments, etc.

Environmental Licenses/Pollution Control

- Does the site require any permits/licenses issued by regulatory authorities to operate? Such as for air emissions, noise, water intake and discharge, waste disposal. Are copies available?
- What environmental authorities are in charge of control? Names, addresses, contact (in case there is not enough information from desk evaluation).

Water Quality Issues

- Does the site use water for any purposes? If yes, give details.

- Does the site produce any effluent? If yes, give details, e.g. how much and where does it go
- Is there a drainage system on site for surface water and / or sewage effluent? Is a plan available?
- How is waste water managed (wells, septic tanks)

Potential for Soil disturbance and Contamination

- What is the ground surface like at the site? (e.g. agricultural land, forest etc.)
- Will the project activities damage the soil during construction/operational stages?
- Will the project activities change landscape significantly (e.g. draining wetland areas, changing water courses)?

Biological environment

- Describe the type of vegetation on the site.
- Is there any information about rare/protected species of fauna and flora (e.g. Red book species?)? If yes, is there a risk to the species?
- Obtain or create a listing of mammals, birds, fish, reptiles, natural plants and common cultivated plants in the area.
- List the negative impacts to be expected or anticipated if the project initiated.

Visual Inspection Procedure

Points to remember while walking about:

- Try and get a site plan (or sketch one) so you can mark details on it
- Take plenty of photos if you have permission
- Walk over as much of the site as possible, including the boundary, to see if outside activities are affecting the site, or if site activities will affect neighbors
- Make notes of any odors, smoke or dust emissions, water spills etc.

CONCLUSIONS OF THE APPRAISAL ENGINEER with regard to:

1. Scale of impacts on the environment caused by the proposed sub-project;
2. Incorporation of obligatory mitigation measures, which were not primarily included in the proposed sub-project;
3. Realistic possibility of mitigating the negative impacts;
4. Necessity of applying Limited Environmental Assessment for the sub-project;
5. Transfer of sub-project to the second phase of appraisal.

Appraisal Engineer _____

Date _____ Signature_____

Annex 5

FIELD INSPECTION CHECKLIST

Have a site plan and project documentation;

Walk over as much of the site as possible, to see if project activities are affecting the site, or if site activities are affecting neighbors; visit sites where nature protection measures are implemented;

Compare the list of recommended prevention and mitigation measures with activities;

Make notes on the site maintenance;

Meet local people to find out their opinion about the project activities;

Take photos;

Prepare an inspection report and submit it to supervisor.