SFG1003 REV

REPULIC OF TAJIKISTAN
MINISTRY OF EDUCATION AND SCIENCE

HIGHER EDUCATION PROJECT

ENVIRONMENTAL MANAGEMENT FRAMEWORK (EMF)

Dushanbe
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Introduction

The International Bank for Reconstruction and Development and the International Development Association (in general - the Bank) and the Republic of Tajikistan concluded an agreement on Higher Education Project.

The overall objective of the project - is to improve the quality, relevance and equality / availability of higher education for students in Tajikistan and to redesign higher education curriculum to be more relevant to the labor market and establish mechanisms that measure its relevance. The Ministry of Education and Science (MoES) of the Republic of Tajikistan, with the support of local consultants, manages and implements the project.

Project Description

Project Components

The project consists of three components: (i) institutional-level improvements; (ii) system-level interventions; and (iii) project management, monitoring and evaluation.

COMPONENT 1: Institutional-Level Improvements (USD 11.0 million equivalent)

This component supports institutional-level improvements through the following two sub-components:

Sub-component 1.1: Just-in-Time Grants to Re-/Up-Skill Workforce (USD 1.0 million equivalent)

Based on a rapid assessment of employer demand and survey of the target audience, grants will be awarded to education service providers[1] to develop and deliver short-term programs/courses that align with the sectors, skills, and competencies in immediate demand. The target audience will be males and females in the job market, including returning migrants and secondary education graduates entering the labor market with limited work experience in need of up-skilling or retooling (e.g., entrepreneurship, business management, IT skills, etc.). The MoES will establish a steering committee (with representatives from MoF, MoEDT, MoLME, employers, etc.) to oversee the activity. Based on the outcomes of the employer assessment and survey of the unemployed, the MoES will publish a call for proposals. Education service providers will submit, and proposals will be reviewed by selected local employers. The steering committee will award grants on a competitive basis using a pre-defined set of scoring criteria guided by principles such as impact, sustainability,

[1] The current offerings of universities, colleges, vocational school, lyceums, and adult education centers will be inventoried and the skills and courses in demand will then be matched to the appropriate providers to avoid duplication.

equity and labor-market relevance. All education providers are eligible, including those located in the regions, and collaboration among providers will be encouraged. A communications campaign will ensure all eligible institutions and potential enrollees are aware of the activity.

Sub-component 1.2: Competitive Grant Program for Universities (USD 10.0 million equivalent)

The objective of this sub-component is to support the design and implementation of a Competitive Grant Program (CGP) that will fund demand-driven improvements at HEIs. By design, HEIs will self-identify and propose initiatives as a way to foster institutional diversity across the system. On a competitive basis, the CGP will support the best proposals aimed at the following two objectives: 1) labor-market relevance and 2) female student support services.[2]

Each of the two objectives has several activities associated with it. Under labor-market relevance, the proposed sub-projects should address improving labor-market relevance through updated curriculum, academic offerings, teacher development, career services, refurbishing laboratories, providing equipment, and learning materials with the support of pedagogical experts and employers. To improve the provision of support services to female students, the proposed sub-projects should create and strengthen mechanisms to encourage female students' enrollment and completion of higher education and their transition into the labor market, including but not limited to residential programs, mentoring programs with women in the workforce, speaker series, job search workshops, etc. Several NGOs are already providing support to female students, so universities will be encouraged to partner with these NGOs in their proposal.

COMPONENT 2: System-Level Interventions (USD 3.2 million equivalent)

This component supports interventions at the system level through the following three sub-components:

Sub-component 2.1: Quality Assurance Enhancements (USD 1.3 million equivalent)

[2] The MoES has been awarded a Recipient-Executed Grant to support the preparation of the project from the Europe and Central Asia Region Capacity Development (ECAPDEV) Trust Fund. Amongst other things, the Grant will fund two activities in preparation for the CGP. First, an international consultant will work with MoES/RMTC representatives to recommend specific activities to improve the labor market relevance of higher education in Tajikistan based on good global practices. Second, a consultant will also partner with MoES officials to perform a current state assessment of services targeting female students across Tajikistan's higher education system and then provide an overview of good global practices to increase the enrollment, retention, and graduation of female students as well as their subsequent transition into the workforce. The output should guide and inform applications from higher education institutions and NGOs to the Competitive Grant Program.

This sub-component supports capacity development for improving and quality. Activities to be supported include: a) implementing minimum standards for conducting and reporting graduate tracer studies; b) building capacity of the relevant government authority and HEIs to operate in a manner more consistent with European Standards and Guidelines (ESG) for quality assurance; and c) developing and piloting new standards and guidelines for institutional accreditation and internal quality assurance at three representative institutions.

Sub-component 2.2: System-wide Higher Education Curriculum Reform (USD 1.5 million equivalent)

This sub-component supports the reform of state-defined curriculum. University-level academic standards in Tajikistan have two components: 1) state-mandated requirements for general disciplines and 2) requirements of the academic specialty. The MoES/RMTC is currently responsible for the state-mandated standards for general disciplines as well as the standards for each specialty. Activities to be financed under this sub-component include: a) Conducting a detailed Skills Towards Employability and Productivity (STEP) measurement survey. This in-depth employer survey will provide a more comprehensive indication of what specialties, skills, and competencies are most important to Tajikistan's economy in both the near and medium terms; and b) Revising the state-defined curriculum for 5-7 academic specialties (based on the outcomes for the STEP survey and relevant salary/wage trends) with input from local and international experts as well as employers to reflect the cognitive and transversal skills in demand by Tajikistan's new and evolving economy. The activity will start with a revision to science, math, and language teacher training and then other academic specialties will be identified and sequenced according to the STEP survey results and other relevant data.

Sub-component 2.3: Assessment of Higher Education Financing (USD 0.4 million equivalent)

This sub-component supports an assessment of Tajikistan's approach to financing higher education. It will produce recommendations for a more effective and performance-orientated allocation method that supports key policy objectives.

COMPONENT 3: Project Management, Monitoring and Evaluation (USD 0.8 million equivalent)

The activities to be financed support project management, communication, training, monitoring and evaluation, operating costs, and the project's audits.

Purpose of Environmental Management Framework (EMF)

The final list of the refurbishment sites will not be available by appraisal. Therefore, environmental assessment of the project-financed activities cannot be carried out at this time. The purpose of EMF is to provide a set of instructions to the Ministry of Education and Science (MoES), engineers, consultants and contractors on how to deal with project environmental issues, and to inform the public and other interested parties about the character and the scope of expected impact of the project on the environment.

The EMF is also to ensure that environmental concerns are duly incorporated in the project design and implementation. Specifically, the EMF provides a blueprint of action for (i) identifying all environmental implications of the planned civil works, (ii) defining what kind of environmental assessment and analysis is required for clarifying short term and long term environmental aspects of these works, (iii) developing a set of prevention and/or mitigation measures aimed at avoiding or decreasing possible harm to the environment, and (iv) producing a plan for monitoring environmental performance in the course of the construction and operation of the premises rehabilitation/constructed under the project. The EMF provides templates (Annexes 1 & 2 respectively) for developing site-specific environmental assessment reports, environmental mitigation and monitoring plans. For facilitating preparation of the required environmental documentation and ensuring compliance of the project implementation with all relevant regulations, the EMF includes a brief overview of the environmental legislation of Tajikistan and the World Bank's safeguard policies.

World Bank Safeguard Policies

All project-financed activities have to be in compliance with the national environmental rules and regulations, as well as with the environmental policies of the World Bank. The Bank requires environmental assessment of the construction of new buildings and environmental management planning for rehabilitation works. While it is not expected that the project will trigger any safeguard other than OP/BP 4.01 *Environmental Assessment*, a set of the World Bank's ten safeguard policies is presented in Table 1. It is the responsibility of the Government to ensure that these policies are triggered as required and adhered to.

Table 1: World Bank Safeguard Policies

Safeguard Policy	Summary of Core Requirements	Comments
OP/BP 4.01 Environmental Assessment	Screen early for potential impacts and select appropriate instrument to assess, minimize, and mitigate potentially adverse impacts.	Triggered. For addressing potential environmental impacts it will be applied the Environmental Management Framework, guiding the process of sub-projects Environmental Assessment.
OP/BP 4.04 Natural Habitats	Do not finance projects that degrade or convert critical habitats. Support projects that affect non-critical habitats only if no alternatives are available and if acceptable mitigation measures are in place.	Not triggered as all sub-projects will be implemented within the existing settlements
OP/BP 4.09 Pest Management	Support integrated approaches to pest management. Identify pesticides that maybe financed under the project and develop appropriate pest management plan to address risks.	N/A
OP/BP 4.10 Indigenous Peoples	Screen to determine presence of Indigenous Peoples in project area. Policy triggered whether potential impacts are positive or negative. Design mitigation measures and benefits that reflect Indigenous Peoples cultural preferences.	N/A
OP/BP 4.11 Physical Cultural Resources	Investigate and inventory cultural resources potentially affected. Include mitigation measures when there are adverse impacts on physical culture resources.	To be determined during the project implementation. In the case this OP is triggered, a site-specific EMP with avoiding and/or mitigation

		measures addressing potential impacts on cultural resources should be prepared
OP/BP 4.12 Involuntary Resettlement	Assist displaced persons in their effort to improve or at least restore their standards of living. Avoid resettlement where feasible or minimize it. Displaced persons should share in project benefits.	Triggered and a Resettlement Policy Framework will guide the process how to address the resettlement issues
OP/BP 4.36 Forests	Support sustainable and conservation oriented forestry. Do not finance projects that involve significant conversion or degradation of critical forest areas.	Not triggered as all sub-projects will be implemented within the existing settlements
OP/BP 4.37 Safety of Dams	For large dams, technical review and periodic safety inspections by independent dam safety professionals.	N/A
OP/BP 7.50 Projects on International Waterways	Ascertain whether riparian agreements are in place, and ensure that riparian states are informed of and do not object to project interventions.	N/A
OP/BP 7.60 Projects in Disputed Areas	Ensure that claimants to deputed are as have no objection to proposed project.	N/A

Note: For detailed explanation of each safeguard policy refer to the World Bank website, specifically, www.worldbank.org/environment/op_policies.htm

Related Environmental Laws and Regulations of the Republic of Tajikistan

There are several laws that are forming the basis of the environmental safeguard. These laws include:

1. Law of Republic of Tajikistan (RT) on Architecture (1997)
2. Law of RT on Waterways (2000)
3. Law of RT on Fire Precautions (1994, revised in 1996)
4. Law of RT on Waste of Production and Consumption (2002, revised in 2005)
5. Law of RT on Nature Protection (1994, revised in 1996, 1997, 2002, 2004, 2007.)
6. Law of RT on Ecological Expertise (2003г. reviewed in 2009г.)
7. Law of RT on Specially Protected Territories and Objects (1996г. Revised in 1998 and 2002)
8. Law of RT on Foreign Investments (1992, revised in 1996, 1997, 1999)
9. Land Code of RT (1996 revised in 1999, 2001, 2004,2006 and 2008)
10. Forestry Code of RT (1993 revised in 1997 and 2008)

It is also important to follow the laws that regulates the construction and activities related to rehabilitation of buildings. The specifications on rehabilitation and construction should include the guidelines on how to manage and dispose asbestos materials. In addition, they should reflect the measures mitigating negative impact of construction works, including noise, removal and disposal of wastes and safeguard measures.

The safety measures on delivery and storage of harmful and toxic materials, such as asbestos materials, varnish and paint, asbestos containing materials, and also removal of related waste are reflected in current legislative acts, standards and norms such as:

- SS (State Standards) – standards relevant to construction are to be applied to the Agency on Construction and Architecture under the Government of Tajikistan (GOT).
- SNiP (Construction Norms and Rules) - to be applied by the Agency on Construction and Architecture under the Government of Tajikistan (GOT).
- SN (Sanitary Norms)- to be applied by Ministry of Health of RT

Environmental Expertise Applicable to Various Types of Civil Works

The project is expected to implement a small-scale rehabilitation of existing buildings and laboratories with replacement of water and sewer pipes and replacement of laboratory equipment. General guidelines below specify the levels of environmental expertise applicable to various types of civil works:

Construction of new buildings in new territory will require an environmental assessment (EA) on each building. This will include provision of a subproject outline; physical description of the selected location and its surroundings; identification of the potential environmental and social impacts of construction and work of sites in this location, as well as potential impacts of the surrounding infrastructure on work of sites; measures of mitigation of certain social influences and environmental influence of subproject; and standard Environmental Management Plan (EMP) containing a detailed schedule for applying the proposed mitigation measures and a monitoring plan (Annex 1)

The MoES will be responsible for verifying findings of the EA and adequacy of the EMP, and for ensuring that a subproject meets environmental requirements of the national and local authorities of Tajikistan. The MOE will also ensure that all clearances from the environmental authorities, necessary for implementing a subproject are obtained. After approval of report on EA and upon receipt of the required permission, the MoES provides a formal environmental permit on realization of subproject and ensures that the EMP is incorporated into bidding documentation and later is attached to contract, which concluded with selected supplier of construction works.

Construction of new buildings and / or large-scale reconstruction of buildings on the territory of existing institutions will require simplified review of environmental aspects of the sub-project, which should be conducted based on the completion of checklist containing environmental issues, developed by the World Bank specifically for small construction works (Annex 2). MoES can add information to this list using internal expertise or contract concluded with the aim of conducting this work. Checklist allows defining types of possible effects on the environment of sub-project and developing a package of measures aimed at mitigating these effects in a more compressed format in comparison with Environmental Assessment Report. MoES will be responsible for loyalty and accuracy of information entered in the checklist, and will ensure that sub-project comply with national environmental regulations and standards. EMP should be an integral part of bidding documents and contracts for construction work, concluded in a frame of sub-project.

Small scale rehabilitation of the existing buildings and provision/repair of communications of the existing buildings will require development of a simple EMP. Such EMPs are likely to carry a generic list of environmental issues usually

being associated with small construction, such as generation of noise, dust, and vibration during operation of the construction machinery; temporary limitation or restriction of access due to location of a construction camp; congestion of traffic due to transportation of construction materials; soil and water pollution resulting from operation spills of fuel and lubricants; and accumulation of solid waste at construction camps and generation of construction waste.

There are a couple of environmental concerns associated with construction/rehabilitation of schools, which call for particular attention. These are: (i) ensuring the use of construction materials which do not carry risk for student's health, and (ii) handling/disposing of hazardous waste, which may be generated during rehabilitation of old buildings constructed with asbestos-containing materials. Annex 4 of this document provides special requirements for Asbestos Containing Materials (ACMs) handling. Conventional standards for ensuring safety at the construction sites and safety of workers should also be respected. EMPs for all sub-projects must identify these issues as applicable and provide adequate measures of risk mitigation. Detailed instructions for removal of asbestos-containing fragments of old buildings, their temporary storage, transporting, and disposal must be provided to contractors through the EMPs.

Application of Environmental Procedures During the Project Cycle

Screening of Sub-Project Proposals. Based on the nature of the project, the exact list of all institutions to be rehabilitated and repaired is not known upfront. Application of environmental procedures starts at the very early stage of project activities, which is approval of the sites selected for project intervention. In the result of this step the MoE will identify which type of the EA should be conducted, as well as the issues on what to focus within the EA process. Design of civil works should take into account environmental considerations, such as expected impact of rehabilitation work and operation of higher educational institutions on environment of the selected site, as well as adequacy of the environmental quality of the site.

Identifying the scope of environmental work at sub-project preparation. Once a sub-project is selected for financing and the general design of civil works is available, the MoES will classify it into one of the main types described in this Framework and define whether the sub-project calls for an EA, completion of an environmental

checklist, or development of a simple EMP. It is advisable that such decision-making does not rely only on the desk review of sub-project documentation, but also implies field visit to the sub-project site.

Environmental review at sub-project appraisal. As a part of checking sub-project documentation prior to bidding report on EA document (checklist) and/or EMP must be reviewed to ensure that all environmental risks are identified and relevant measures are prescribed for their mitigation. This will help ensure that all environmental risks are identified and appropriate measures are taken to reduce the negative impact. It is important to check whether to apply appropriate measures proposed to mitigate the negative impact, and whether they are included in the project documentation.

It is important to check if the proposed mitigation measures are properly costed and budgeted in the sub-project documentation. Existence of all required environmental permits should also be checked and ensured at this stage. Tender documentation prepared for procuring civil works under a sub-project should include an EMP, which later becomes an attachment to contract.

Environmental supervision of sub-project implementation. Environmental compliance of civil works under all sub-projects should be monitored as planned in EMPs. The overall responsibility for environmental supervision of works rests with the MoES. Environmental monitoring is expected to be a part of contract supervision and may be carried out by MoES or in a frame of additional concluded contract. Environmental monitoring data, including dates of site visits and important findings, should be documented and kept in files. If environmental supervision reveals any outstanding issues, the MoES should timely react through the development of corrective measures, ensuring their enforcement. If need be, the MoES should notify relevant government authorities on the environmental problems. The MoES will report on environmental compliance of sub-projects' implementation to the World Bank as a part of regular reporting on project progress.

Public Consultation and Disclosure

This Environmental Management Framework and also sub-project report on the Environmental Assessment (EA) should be subject to public disclosure through web site of MoES and in hard copy at the local and English languages. The disclosure is followed by the public consultations on Environmental Management Framework. Public opinion must be recorded and included in final version of the EMF. The EMF

shall then be re-disclosed to include the Minutes of the Meeting. Checklist and / or Environmental Management Plan (EMP) are also subject to public consultation taking into account interests of stakeholders. These reports are considered complete only after they reflect the public opinion.

Institutional Arrangement to Ensure the Implementation of the EMF Requirements.

i) MOES safeguards capacity and understanding of the World Bank safeguards policies.

The grant will be implemented by the Ministry of Education and Science which has assigned its Department of Capital Construction (DCC) as the main subdivision responsible for the project implementation, including responsibilities with regards to environmental and social safeguards. The Ministry and DCC have adequate experience in implementing such projects, as well as in ensuring compliance with the environmental and social requirements as they have already implemented a similar WB project – Tajikistan Fast Track Initiative Catalytic Fund Grant 3 project (FTI – 3). Several environmental reviews conducted by the Bank's team concluded that overall, environmental safeguards are being well taken care of under FTI-3. The DCC managers and its staff have a good understanding of the EMF, EAs/EMPs and environmental risks associated with construction and demolition civil works. MoE has also recruited well qualified engineers to supervise the works, including environmental aspects. Supervision and implementation support to the DCC is provided at the central level by the Consultant Civil Works Engineer, at the oblast level by 2 Consultant Regional Engineers, and at the site level by 13 Consultant-Site Engineers. All DCC engineers and relevant MoE staff have received training on the EMF; the training materials were prepared by the Consultant Civil Works Engineer, who also delivered the training. Based on the FTI-3 EMF the DCC prepared site-specific EMPs for all proposed investments. EMP implementation is being monitored and properly documented.

ii) ***Delineation of responsibilities for the EMF implementation between the MoES, contractors, and independent consultants***

- The head of DCC, Engineer Consultant and engineer-specialist of DCC MoES RT are responsible for developing the Environmental Management Framework, disclosure of information, as well as conducting public consultations.

- Contractor and engineer of higher education institution are responsible for preparation of EMP checklists / EMPs and implementing of activities indicated therein.
- The head of DCC, Engineer Consultant and engineer-specialist of DCC MoES RT will check and clear EMP checklists / EMPs and are responsible for monitoring of EMP implementation by the higher education institutions and their contractors

iii) ***Reporting on the implementation of the EMF***

Engineers of higher education institution will present a monthly report on the implementation of the EMP/ EMP checklist to DCC MoES. Reports on implementation of project include special section with content of implementation of environmental and health and safety measures in accordance with the requirements of the World Bank and National environmental requirements. EMPs and EMP checklists shall be cleared by the World Bank before the disclosure.
Implementation of the project will be observed by the World Bank (during observation mission) and local ecological and construction inspectors.

Capacity Building:

Trainings on different issues and application of EMP will be conducted by engineers and consultants of DCC of MoES, engineers of higher education, contractors and directors of educational institutions.

Annex 1. Environmental Management Plan Format

Phase	**Environnemental Impact(s)**	**Mitigating Measure(s)**	**Cost**		**Institutional Responsibility**		**Remarks**
			Install	Operate	Install	Operate	
Construction							
Operation							
Decommissioning							

Annex 1/2

Example of an Environmental Monitoring Plan for small scale construction project

PHASE	WHAT is the parameter to be monitored?	WHERE is the parameter to be monitored?	HOW is the parameter to be monitored??	WHEN is the parameter to be monitored? (frequency)?	WHY is the parameter being monitored?	COST	RESPONSIBILITY
Designing	Implementation of EMP guidelines (RECOMMENDATIONS)	Design project for construction, reconstruction and adaptation.	Review of elaborates and adaptation designs.	Prior approval for construction as part of project monitoring program.	Recommended due to national legislation requiring a construction permit.	Should be part of the Project	Ministry of Environment Designer, Contractor

PHASE	**WHAT** is the parameter to be monitored?	**WHERE** is the parameter to be monitored?	**HOW** is the parameter to be monitored??	**WHEN** is the parameter to be monitored? (frequency)?	**WHY** is the parameter being monitored?	**COST**	**RESPONSIBILITY**
Construction	Parameters given in construction permit - all special conditions of construction issued by different bodies	Main Project documentation	A part of regular inspection by the Ministry of Environment and the Construction Inspection	During construction and prior to issuance of the Operation permit	Regular review stipulated in the Law, and if any public complaint is sent to the Ministry of Environment, or the Construction Inspection.	Included in the construction phase, costs of Contractors	Supervision Engineer, inspectorate of the Ministry Environment and Construction Inspection

PHASE	**WHAT** is the parameter to be monitored?	**WHERE** is the parameter to be monitored?	**HOW** is the parameter to be monitored??	**WHEN** is the parameter to be monitored? (frequency)?	**WHY** is the parameter being monitored?	**COST**	**RESPONSIBILITY**
	Construction waste management (including hazardous)	Supporting documents for waste, which is submitted to the competent communal enterprise	A part of regular inspection by the Ministry Environment Construction Inspection	After reporting on waste management	Needed in accordance with the waste-related regulations	Expenditure of the Ministry Environment and the Construction Inspection and low costs for the Contractor	Supervision Engineer, inspectorate of the Ministry Environment and Construction Inspection

PHASE	**WHAT** is the parameter to be monitored?	**WHERE** is the parameter to be monitored?	**HOW** is the parameter to be monitored??	**WHEN** is the parameter to be monitored? (frequency)?	**WHY** is the parameter being monitored?	**COST**	**RESPONSIBILITY**
Operation	Waste management	Based on the supporting documents for waste, which is submitted to the Ministry of Environment	Reports to the Ministry of Environment	After reporting to the Ministry of Environment on waste management.	Should be monitored in line with the regulations on waste management.	Costs of the project beneficiary and the Ministry of Environment	Project beneficiary, competent communal company and the Ministry of Environment

Annex 2. Environmental Management Checklist for Small Construction and Rehabilitation Activities

General Guidelines for use of EMP checklist:

For low-risk topologies, such as school and hospital rehabilitation activities, the ECA safeguards team developed an alternative to the current EMP format to provide an opportunity for a more streamlined approach to preparing EMPs for minor rehabilitation or small-scale works in building construction, in the health, education and public services sectors. The checklist-type format has been developed to provide "example good practices" and designed to be user friendly and compatible with safeguard requirements.

The EMP checklist-type format attempts to cover typical core mitigation approaches to civil works contracts with small, localized impacts. It is accepted that this format provides the key elements of an Environmental Management Plan (EMP) or Environmental Management Framework (EMF) to meet World Bank Environmental Assessment requirements under OP 4.01. The intention of this checklist is that it would be applicable as guidelines for the small works contractors and constitute an integral part of bidding documents for contractors carrying out small civil works under Bank-financed projects.

The checklist has three sections:

Part 1 includes a descriptive part that characterizes the project and specifies in terms the institutional and legislative aspects, the technical project content, the potential need for capacity building program and description of the public consultation process. This section could be up to two pages long. Attachments for additional information can be supplemented when needed.

Part 2 includes an environmental and social screening checklist, where activities and potential environmental issues can be checked in a simple Yes/No format. If any given activity/issue is triggered by checking "yes", a reference is made to the appropriate section in the following table, which contains clearly formulated management and mitigation measures.

Part 3 represents the monitoring plan for activities during project construction and implementation. It retains the same format required for EMPs proposed under normal Bank requirements for Category B projects. It is the intent of this checklist that Part 2 and Part 3 be included into the bidding documents for contractors, priced during the bidding process and diligent implementation supervised during works execution.

CONTENTS

PART A: GENERAL PROJECT AND SITE INFORMATION

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/Issue	**Status**	**Triggered Actions**
Will the site activity include/involve any of the following?	A. Building rehabilitation	[ ] Yes [ ] No	See Section **A** below
	B. New construction	[ ] Yes [ ] No	See Section **A** below
	C. Individual wastewater treatment system	[ ] Yes [ ] No	See Section **B** below
	D. Historic building(s) and districts	[ ] Yes [ ] No	See Section **C** below
	E. Acquisition of land[3]	[ ] Yes [ ] No	See Section **D** below
	F. Hazardous or toxic materials[4]	[ ] Yes [ ] No	See Section **E** below
	G. Impacts on forests and/or protected areas	[ ] Yes [ ] No	See Section **F** below
	H. Handling / management of medical waste	[ ] Yes [ ] No	See Section **G** below
	I. Traffic and Pedestrian Safety	[ ] Yes [ ] No	See Section **H** below

[3] 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.

[4] 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 (sidewalks, 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 on, 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	Infrastructure for medical waste	(a) In compliance with national regulations the contractor will insure that newly constructed and/or rehabilitated health care facilities include sufficient

waste	management	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	(a) 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

Activity	**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?)	**Who** (Is responsible for monitoring?)
1. Type of activity						
2. Type of activity						
3. Type of activity						

Annex 3. Mitigation measures in implementation of rehabilitation works in laboratories and international best practices higher institution laboratories operations

1. Mitigation measures

Some types of civil works, including reconstruction and expansion of laboratories, educational classes and other similar rooms, can be financed by the project. These works can have some impact on the environment. However, such impact is weak and limited to changes of already existing structures.

There is a probability of environmental impacts related to the reconstruction of laboratories within existing buildings. The international best practices below, specify measures on environmental management related to construction and operation of laboratory facilities.

During civil works

Construction waste. According to specifications, all construction waste containing asbestos has to be organized, collected and stored on separate disposal facilities. Contractor is required to follow local standard requirements for environmental protection and methods of recycling. Documentation on refurbishment of laboratories has to include information on designated place waste disposal and the quantity of waste from each site. All valuable materials (doors, windows, bathroom equipment, etc.) have to be sorted and transported to the designated storage location. Valuable materials are subject to processing in a frame of project or sale. Wood waste is stored separately and transferred to processing, but not to utilization. Burning in open air or illegal burial is not permitted. Appropriate authorities will define platforms for recycling in form of soil, clay and sand and will give out preliminary permissions to recycling. It is necessary to avoid accumulation of construction waste on site; waste will be regularly taken out from the designated temporary disposal sites.

Pollution of ground waters. It is required to create necessary conditions for safe removal of sewage during works on restoration and reconstruction and to follow requirements for environmental protection and sanitation during performance of work on restoration of sanitary and technical equipment, sewers pipes and sewers treatment facilities.

Use of appropriate construction materials. All materials must have corresponding permissions on quality and safety (certificate of conformity and sanitary and epidemiologic conclusion). The priority should be given to materials satisfying recognized international or national standards. For performance of internal works on painting of gypsum cardboard or plaster preference should be given to nontoxic, not allergic paints on water basis, but not to latex or oil paints, from point of view of impact on health of evaporations of such paints at inhalation.

Safety on construction site. To avoid presence at the site works of unauthorized trespassers, construction site must be fenced. Temporary inconvenience in connection with construction

works should be minimized through planning and coordination of work with contractors, local communities and authorities.

During laboratory operations

Possible environmental issues	**Mitigation measures**	**Monitoring strategy and measures to respond on emergencies**
1. Atmospheric emissions	• For the laboratory staff the training on methods that can help to reduce emissions will be conducted. • Purchase of equipment that does not contain ozone depleting substances (refrigerators, air conditioners, fire extinguishers, etc.), and proper maintenance of equipment containing ozone depleting substances. • The list of sources of emissions of dangerous substances with indication of corresponding category will be developed for each laboratory. • There will be prepared list of actual and potential sources of emissions in the laboratory (flue and vent pipes, etc.)	• Twice a year, will assess the impact of atmospheric pollutants. • Will perform periodic inspection of control systems. • Annual certification of persons responsible for emissions control will be conducted (control system of emissions). • Regular inspection and maintenance of ventilation system.
2. Sewage disposal	• Detailed list of sources of wastewater discharge and locations will be developed. • Appropriate procedures on minimization of hazardous liquid waste shall be developed (for example, pre-treatment with use of neutralizing materials, etc.) • Encourage use on site systems of	• There will be periodic maintenance of sewerage system. • Laboratory procedures will be periodically checked for compliance with regulatory requirements • Regular training

	septic tanks or appropriate hazardous wastewater treatment systems based on wastewater characteristics. After proper cleaning waste water will be discharged to city sewer system. • Laboratory personnel will be trained in methods of minimizing and managing process of wastewater.	sessions on minimization of wastewater shall be conducted
3. Hazardous and radioactive waste	• Different kinds of waste, such as unused chemicals, waste solvents, etc. will be identified for proper system of collection, transportation and disposal. • Special method of separation and recycling of used lead-acid and alkaline batteries will be adopted. • For laboratory personnel training on safety when working with dangerous materials will be conducted. • Procedure of minimization of waste will be prepared and introduced.	• The assessment of influence of dangerous and radioactive waste will be conducted twice a year. • 4 times in a year all employees of laboratory will pass medical examination. • good records shall be kept on laboratory personnel training, dangerous substances and their disposal • Laboratory will conduct regular audits.
4. Usage of hazardous chemical substances	• At working with hazardous chemicals in order to minimize potential impact necessary precautions (gloves, masks and aprons) shall be ensured, in accordance with the requirements / manufacturer's recommendations on use of various types of chemicals. • Appropriate marking of all	• Periodical assessment of influence of chemicals shall be conducted. All workers will pass periodical medical examinations. • Procedure of periodic visual check of marking, symbols and signs shall

	dangerous chemicals, for example, flammable and combustible materials, oxidizers, toxic agents, for accurate identification of risks and taking measures of precaution. • The matrix for selection, use and service of personal protection equipment shall be developed • During laboratory maintenance ventilating/exhaust system for prevention of influence of vapors and evaporations of dangerous chemicals shall be designed and implemented. • Where the laboratory processes shall involve the use of radioactive materials appropriate devices for radioactive measurements and protection against radiation will be bought and will be used further during the work with radioactive materials. • Appropriate procedures of localization of leaks will be developed for different types of dangerous materials. • For all workers will be organized training on first medical aid. • For personnel of laboratory will be provided training on treatment of dangerous chemicals. Will be organized program of training of instructors.	be developed. The corresponding records will be kept. • Authorized persons will conduct inspection of compliance to standard requirements. • Schedule of periodic servicing and check of serviceability of equipment of technical control and efficiency of mitigation measures shall be developed. • Reporting, recording and investigation of all incidents / negative events during the work with dangerous chemicals shall be organized. Records will be periodically verified by responsible specialist of laboratory.
5. Storage of dangerous	• Procedure of division of chemicals will be developed and	• Criteria will be developed for periodic

chemicals	introduced according to their classification and criteria of compatibility. • Will be prepared procedure of storage of minimum stocks concerning each type of dangerous chemicals. • Will be defined appropriate criteria of storage for flammable, combustible and volatile chemicals. Will be provided separate storage of empty containers and containers with chemicals. • For workers will be organized program of training for appropriate methods of storage of dangerous chemicals and their influence on health.	check and schedule of regular visual survey. • Periodic revisions of procedures will be conducting that to provide safer working conditions with highly toxic, cancerogenic, reactive or mutagen materials where applicable. • The authorized employee of laboratory will conduct periodic checks of ventilating system.
6. Utilization of dangerous chemicals	• Dangerous chemical substances / waste will be separated properly handled and be stored in separate containers. • Will be defined appropriate system of collecting and recycling. • For personnel of laboratory will be organized training on procedures of collecting and recycling.	• Local environmental authorities will conduct periodic monitoring procedures for handling and waste disposal (to be specified).
7. Fires and explosions	• It is required to choose and install appropriate fire-fighting equipment in right places. New technologies will be used (smoke sensors, thermoelectric elements and fire alarm system, according to requirements).	• Will be conduct periodic inspections of condition of fire-fighting equipment. • The plan of elimination of emergency will be periodically reconsidered and updated.

8. Application of principles of sustainable development	• Will be taken measures on rational use of water • Will be undertaken measures directed on saving of electricity	• The authorized employee of laboratory together with representatives of local authorities will conduct inspections on expense of electric power and water with purpose of definition of current use of equipment and corresponding expenses.

Annex 4. Special requirements for Asbestos Containing Materials (ACMs) handling

The use of ACM as a new material in construction or renovation activities will not be supported under the project. Existing facilities where the ACM will be replaced/removed should apply a series of mitigation measures and monitoring activities which would ensure a proper handling of these materials avoiding any potential impacts on the workers' health. At the initial stage of project implementation the contractor should identify the locations where the ACM is present, its condition (e.g., whether it is in friable form or has the potential to release fibers), define the procedures for supervision and monitoring, as well as develop procedures on avoiding ACM destruction, and conduct training of its staff in handling the ACM. These measures and activities are briefly specified in the Part C of the EMP Checklist presented in the Annex 2 and would include the following steps and requirements:

a. Determine if the project could include the replacement, maintenance or demolition of: (a) Roofing, siding, ducts or wallboard; (b) Thermal insulation on pipes, boilers, and ducts; and (c) Other potentially asbestos-containing materials.
b. Once the presence of ACM in the existing infrastructure has been presumed or confirmed and their disturbance is shown to be unavoidable, incorporate the following requirements in the civil works to be performed:

- (i) containment of interior areas where removal will occur;
  (ii) protection of walls, floors and other surfaces with plastic sheeting;
  (iii) providing decontamination facilities (showers) for workers and equipment;

(iv) removal of the ACM using wet methods and promptly placing the material in impermeable containers;
(v) final clean-up with special vacuums and dismantling of the enclosure and decontamination facilities in a careful manner;
(vi) disposal of the removed ACM and contaminated materials in an approved landfill, burying it;
(vii) inspection and air monitoring during the civil works by an entity independent of the contractor removing the ACM (might be done by environmental and/or sanitary inspectors);
The MoE should require that the contractor provides training of workers and supervisors, adequate equipment and supplies for the scope of works, including adequate closing, gloves and respirators.

These issues and requirements should be reflected in the contract clauses. These clauses should also specify that the selected contractor notifies the relevant authorities (environment and/or sanitary inspections) of the removal and disposal and cooperates fully with representatives of the relevant agencies during all inspections and inquiries.

Annex 5. Minutes of the round table discussions *(translated from Russian)*

On the Environmental Management Framework
OF THE PROJECT ON HIGHER EDUCATION

07.05.2015 Dushanbe

PARTICIPANTS OF THE ROUND TABLE:

1. Zaripov A. Head of the Department of Capital Construction within the Ministry of Education and Science of the Republic of Tajikistan
2. Aminov R.H. Representative of the Ministry of Emergency Situations & Civil Defense within the Government of the Republic of Tajikistan
3. Yusufjohnov S. Representative of the Committee on Architecture & Construction within the Government of the Republic of Tajikistan
4. Melikov M. Representative of the Ministry of Health & Social Protection of the Republic of Tajikistan
5. Sidikov N. Representative of the Ministry of Labor, Migration & employment of the Republic of Tajikistan
6. Sharipov S. representative of the State Committee on Land use & Geodesy of the Republic of Tajikistan
7. Shoev A. Lead Specialist of the DCC within the ministry of Education & Science of the Republic of Tajikistan
8. Madjidov A. Civil Works Consultant of the GPE-4

AGENDA OF THE ROUND TABLE

1. Opening and introductory (Zaripov A., Shoev A.)
2. Disscussion of the “Framework Plan of Environment protection Measures (EMF)” of the Project on Higher Education, of the GPE-4 Grant.

STATEMENTS & DISCUSSIONS:

1. Shoev A opened the meeting and presented participants of the Round Table. Further he indicated that the International Bank for Reconstruction & Development & International Association of Development (in general referred as, the Bank) and the Republic of Tajikistan concluded Agreement on the Higher Education Project. The general objective of the project is an increase of quality, relevance and equity\ accessibility of higher education for the students of Tajikistan. The project is designed to fill in gaps in realization of the National Strategy of Education Development (NSED), in particular in relation to improvement of infrastructure, material and technical aspects of the education system, improvement of the management and work aimed on provision of quality education services. Ministry of Education and Science (MES) of the Republic of Tajikistan with the support of the local consultants will manage and implement the project. The project is comprised of three components: i) improvement at the institutional level; ii) interventions at the system level; and iii) the project management, M&E.

   Further, Shoev A., mentioned that in accordance with the requirements of the Bank, the MES prepared the Environmental Management Framework (EMF) for the Higher Education Project. This EMF and site-specific Environmental Management Plans (EMPs)

that will be developed under the sub-project activities, including new constructions have to be made public through the MES web site in local language and English. After publicizing, the public hearing to be carried out regarding the EMF. Public opinions to be indicated in the meeting' minutes and included into the final draft of the EMF, after that the plan should be re-disclosed. These reports to be considered as completed only after integration of public opinion and then disclosed again.

In connection to the above-mentioned the MES send the EMF to all stakeholders for consideration and agreement. Up to date all concerned ministries and departments provided their written comments and recommendations concerning the EMF project.

Today on 7th May 2015 representatives of these organizations invited to discuss the proposed changes and amendments, and agreement on the final draft of the EMF.

In particular, the representatives of the ministries and departments indicated:

Melikov M. – the Ministry of Health and Social Protection of the Republic of Tajikistan provided its comments upon consideration of the EMF project to the MES on 10.04.2015, #1-4\2151-1656. In particular, indicated that point 4 of the chapter "Corresponding Environmental Laws and Regulations in Tajikistan", to exclude from the text "The Law on Water ways", because this law is not approved in Tajikistan. He also indicated that it is necessary to include in this chapter of the EMF draft "the Law of Provision of sanitary and epidemiology protection of the population" (2003).

Aminov R. –indicated that the Committee of Emergency Situations & Civil Defense within the Government of the Republic of Tajikistan in general fully supports this project. In particular he proposed in Amendment 3, "Measures on aftermath mitigation", point 6, Utilization of dangerous chemical substances, the line on "Monitoring and measures of reaction to ES" to be read as follows "Local law enforcement agencies to carry out periodical monitoring, jointly with other interested organizations and supervision agencies".

Ysufjohnov S. – indicated that the Committee of Architecture and Construction within the Government of the Republic of Tajikistan provided its comments after consideration of the EMF project in written form on 16.04.2015, #4\711. In particular, in point 4, chapter "Corresponding Environmental Laws and Regulations of Tajikistan", to exclude from the text "The law of RT on architecture" (1997), and include Town-planning Code (2011). The letter also runs about inclusion into part "C" (measures on mitigation of negative impact), point "D" (toxic materials) provide explanation about the harm of ACM because safe utilization of the ACM is established by the State standard or TR of the producer.

Shoev A & Majidov A. – expressed their opinion regarding utilization of ACM in construction, and in particular noted that according to the Bank policy asbestos and asbestos containing materials shouldn't be used for construction and rehabilitation works, information on harmfulness of this material is provided in Amendment 4. In connection to above there is no necessity to include explanations on ACM harmfulness into the part "C" (measures on impact mitigation) point "D" (toxic materials").

Sidikov N. & Sharipov S. – in their statements also supported this project and expressed their hopes that this project will contribute to the infrastructure improvement and

technical aspect of the system of education and provision of quality educational services.

Zaripov A. – at the end of the meeting thanked all participants for active participation in the work of the Round Table that aimed to contribute to the quality of prepared EMF within the frameworks of the Higher Education Project. He also noted that all comments provided in written form from concerned ministries and departments, and comments and recommendations stated during the meeting will be inserted into final version of the EMF, and posted on the MES web site after agreement with the Bank, for public use.

Signed by the
Head of the Department of Capital Construction
Within the Ministry of Education and Science
Of the Republic of Tajikistan **A. ZARIPOV**

List of participants with signatures

Список участников встречи

МОН РТ, 14-00

По вопросу «Рамочного Плана Природоохранных Мероприятий (РППМ)»

№	Наименование организации	Ф.и.о.	Должность,	Подпись
1	Кумитаи ҲФ ва МҶ-и назди ҲҶТ	Аминов Росия Хайрудиновна	Сардори шуъбаи ҳифзи радиатсионӣ ва химиявии РҲ.А	[illegible] 7.05.2015
2	Кумитаи меъморӣ ва сохтмон	Юсуфҷонов Сафармуҳаммад	Корманди илмии КВД Сохтмон	[illegible] 7.05.2015
3	ХНД СЭ-и ВТ ва ХИА	Меликов Муродали	и.в. мудири шуъбаи ...	935600680 [illegible]
4	Вов. мехнат, муҳоҷират ва шуғли аҳолӣ	Смоилҷоев Козим	и.в. Сардори раёсати ТИК	918854835 [illegible]
5	Кум. давл. идораи замин ва геодезӣ	Шарипов Шарофиддин	Сармуҳандиси КВД «Фабрикаи харитасозӣ»	919-50-60-18 [illegible]
6	УКС при МОН РТ	Маҳмудов Абдусаттор	Консультант ГПО-1 по строител. работам	[illegible] 7.05.2015
7	УКС МОН. РТ.	Шоев Абдурахим	Главный спец-т УКС МОН. РТ.	[illegible]