Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 03/27/2020 | Report No: ESRSA00517
**BASIC INFORMATION**

**A. Basic Project Data**

<table>
<thead>
<tr>
<th>Country</th>
<th>Region</th>
<th>Project ID</th>
<th>Parent Project ID (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgia</td>
<td>EUROPE AND CENTRAL ASIA</td>
<td>P169599</td>
<td></td>
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</tbody>
</table>

**Project Name**

Technology Transfer Pilot Project

**Practice Area (Lead)**

Finance, Competitiveness and Innovation

**Financing Instrument**

Investment Project Financing

**Estimated Appraisal Date**

2/26/2019

**Borrower(s)**

Ministry of Economy and Sustainable Development

**Implementing Agency(ies)**

Georgia’s Innovation and Technology Agency

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**Proposed Development Objective(s)**

The objective of the project is to test the potential for technology transfer (i.e. commercializing science research) in Georgia. The project will use industry best practices to detect projects with commercialization potential and approach potential investors with a view to initiating deals on behalf of Georgian research and development institutions.

**Financing (in USD Million)**

<table>
<thead>
<tr>
<th>Amount</th>
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<tbody>
<tr>
<td>Total Project Cost</td>
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**B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?**

No

**C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]**

The TTP will provide support in three core areas:

- Commercialization support by providing advice on all steps of the technology transfer process, from disclosure submission, to technology evaluation for commercial readiness, negotiation with commercial partners and, after transaction monitoring support.
• Development support by providing relevant product development services to advance commercialization transactions that still need proof of commercial readiness. These services will include legal services, commercial services, and technical services like industrial testing, etc.

• Other technical support to connect prospective researchers with industrial partners looking for relevant technologies. The TTPP will deploy services to facilitate deals between the industry and the R&D sector in Georgia. These services will include contract research, service contracts, business intelligence, and support in preparing project proposals for other donor programs.

This program will be executed by GITA (with technical assistance provided by the World Bank under a Bank-executed component on capacity building for GITA). Expected results include the establishment of a Technology Transfer Pilot Program, deployment of multiple service lines, and assistance in initiating technology transfer transactions.

D. Environmental and Social Overview
D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

Georgia is located in the South Caucasus and is one of the Black Sea riparian nation-states. It borders with Armenia, Azerbaijan, Russian Federation and Turkey. Georgia comprises of the following administrative units: capital city of Tbilisi, Autonomous Republic of Adjara, Autonomous Republic of Abkhazeti, and nine regions - Kvemo Kartli, Shida Kartli, Kakheti, Mtskheta-Mtianeti, Samtskhe-Javakheti, Imereti, Guria, Samegrelo-Zemo Svaneti, and Racha-Lechkhumi and Kvemo Svaneti. The project will be implemented countrywide, excluding the Autonomous Republic of Abkhazeti and several municipalities of Shida Kartli currently not under de facto jurisdiction of the national government of Georgia. The Project implementing entity - Georgian Innovation and Technology Agency (GITA) - operates in Tbilisi. GITA will be the beneficiary of TA provided through the project. Financing of technology transfer and applied research, which is one of the project components, will be open for any eligible beneficiaries, regardless their location. A list of activities eligible and ineligible for the Technology Transfer Project support is developed and will be made public as part of the Guidelines for Participants of the Technology Transfer Pilot Program (TTPP) prior to Project Approval. Each TTPP-supported activity will be screened at the application stage. A detailed Project Operations Manual (POM), including roles and responsibilities regarding environmental and social screening and risk management, is developed and will be finalized prior to Project Approval.

D. 2. Borrower’s Institutional Capacity

GITA is an implementing agency of the ongoing World Bank-financed Georgia National Innovation Ecosystem (GENIE) project, which has maintained consistent Satisfactory environmental and social performance. This project involves capacity-building and institutional development for GITA, as well as the establishment of innovation centers across the country. Under GENIE project, GITA oversees civil works for the rehabilitation of public buildings and has successfully monitored compliance with OP 4.01 Environmental Assessment and OP 4.11 Physical Cultural Resources. A part-time social and environmental consultant is retained by GITA, and is responsible for preparing and monitoring site-specific Environmental and Social Management Plans for civil works related to the establishment of innovation centers. The consultant has benefitted from World Bank training in resettlement and social risk management, and has attended ESF roll-out sessions in country. Given the expanded scope of the ESF, some capacity-building for GITA staff will be necessary to ensure readiness for the new project. During the ongoing operation, GITA has demonstrated its commitment to full physical accessibility of the infrastructure built under the project. GITA used the services of a specialized NGO to conduct an accessibility audit of innovation center designs, and to conduct awareness training for
GITA staff on working with persons with disabilities. This commitment is expected to be retained under the new project.

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Environmental Risk Rating
Low
The project will not finance physical works. All activities may be grouped into technical assistance (TA) for capacity-building of the project implementing entity (GITA) and support to technology transfer. TA will include awareness-raising on the importance of including environmental sustainability into corporate policy and operations of GITA. TTPP, aimed at technology transfer from science to industry, will be governed by the Guidelines for Participants developed by GITA, subject to the Bank approval and disclosure. Activities required for technology transfer may include laboratory testing of samples that implies handling of chemicals, generation of small amounts of various organic and inorganic wastes, and minor emissions. While there is no risk of affecting human populations or natural environment from these activities, certain risk of health impacts on the laboratory personnel handling chemicals and indoor air pollution with fumes generated during laboratory tests do exist. The Guidelines include an explicit list of activities ineligible for TTPP support, tools for risk screening, and guidance on the preparation of activity-specific health and safety management plans as required. Neither TTPP nor any other component of the project will support directly or indirectly heavily polluting businesses, timber extraction and mining, technologies implying handling of radioactive or toxic substances, as well as production of weapons, spirits, cannabis and tobacco. Environmental screening and risk management procedures are described in the POM and the Guidelines for Participants.

Social Risk Rating
Low
No specific social risks have been identified. The majority of project activities will comprise training and capacity-building, setting up of investor mentorship and information networks, which will have no physical footprint. The technology innovations to be supported through the grant scheme will be screened and adhere to guidelines aligned with the ESF. The Guidelines for Participants, developed for the TTPP applicants, specify eligibility (including list of non-eligible activities), risk mitigation and monitoring responsibilities. The project needs to pay special attention to ensure that its services are accessible to all, including to people with disabilities, ethnic and linguistic minorities, and persons from various regions, ages and socio-economic background.

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:
Large part of the project proceeds will be used for capacity building of GITA through the delivery of TA which would not carry any direct or indirect environmental and social risks. Therefore, ESS1 is mostly relevant for activities supported by TTPP. These will be subject to screening against eligibility criteria, including environmental and social risk screening. List of eligible and non-eligible activities are provided in the POM and in the Guidelines for Participants developed by the Recipient. At this stage, no specific environmental and social impacts can be envisioned. General types of possible impacts relate to labor rights, occupational health and safety of the personnel involved - especially
safety of laboratory staff handling chemicals, environment pollution with small amounts of various organic and inorganic wastes, and minor emissions. The POM and the Guidelines for Participants describe generic types of negative impacts that may encountered during technology transfer and providing a menu of mitigation measures, including reference to sector-specific EHS Guidelines. The instruments to be used for risk identification and impact mitigation under TTPP-supported operations include producing of screening reports, obtaining agreement of beneficiaries to adhere to the applicable EHS Guidelines, obtaining agreement of all project staff and consultants to adhere to a Code of Conduct and labor, health and safety procedures as described in POM. Inclusion and equal opportunity measures and principles of the project are also detailed in the POM.

**ESS10 Stakeholder Engagement and Information Disclosure**

The Recipient has conducted stakeholder mapping and prepared a Stakeholder Engagement Plan (SEP), which is referenced in the ESCP. Directly-affected stakeholders are likely to include GITA staff receiving capacity-building, owners and employees of entities receiving training and/or other support under the project, as well as potential investors who will be targeted in the investor-cultivation and networking component. Other interested parties include Ministry of Economy and Sustainable Development, business associations, academic institutions, and the general public. A comprehensive grievance and redress mechanism (GRM) will be developed and maintained by GITA, similar to the ongoing GENIE project.

**B.2. Specific Risks and Impacts**

A brief description of the potential environmental and social risks and impacts relevant to the Project.

**ESS2 Labor and Working Conditions**

ESS2 is relevant both to GITA staff as well as to the employees of any other organizations contracted to provide services under the project (training, etc.). The task team has reviewed GITA’s HR policy and verified that it is aligned with ESS2. Additionally and in order to address minor gaps, GITA has prepared a labor management procedure as part of POM. It includes, among other measures, a Code of Conduct to which all contracted parties have to adhere. Beneficiary requirements include adherence to the labor management procedures specified in POM, including key aspects of labor rights and occupational health and safety, and verification that all project workers have been made aware of the provisions of this plan.

**ESS3 Resource Efficiency and Pollution Prevention and Management**

The Guidelines for Participants require applicants to consider least-polluting and resource-efficient technologic solutions for their applied research. Arrangements for recycling and reuse of non-hazardous by-products / waste, if feasible, will be considered as a comparative advantage while evaluating proposals.

**ESS4 Community Health and Safety**

ESS 4 is not considered relevant to the project. Activities to be supported by the project are not expected to cause any risks for community health and safety. Sector-specific EHS Guidelines will be followed where applicable.
ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement
ESS 5 is not considered relevant to the project. As no activities under the project envision civil works, it is unlikely that impacts on private land, assets or involuntary resettlement will occur. Any activities that involve involuntary impacts on land or assets are explicitly deemed ineligible in the ESCP and POM as well as in the Guidelines for Participants, so that all beneficiaries are aware of this requirement and that it is adhered to. Transactions on a willing-buyer willing-seller basis will be adequately documented. The process for documenting these is be described in the POM and the Guidelines for Participants and the adherence to this process will be monitored during project implementation.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources
ESS 6 is not considered relevant to the project. Project-supported activities are not expected to affect biodiversity. In an unlikely case of the proposed applied research requiring experiments on living organisms, extraction of and manipulation on rare, endangered, nationally or internationally protected species, it will not be supported from the project proceeds and applications for TTPP support of such research will be turned down as ineligible according to the rules set forth in the Guidelines for Participants.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities
ESS 7 is not considered relevant to the project. No indigenous groups are known to reside in Georgia.

ESS8 Cultural Heritage
ESS 8 is not considered relevant to the project. None of the activities to be supported by the project are expected to affect tangible or intangible cultural heritage. Procedures to be established for screening of TTPP applications will filter out any activities with potential impacts on cultural heritage.

ESS9 Financial Intermediaries
ESS 9 is not considered relevant for the project. The project design does not envision involvement of financial intermediaries.

B.3 Other Relevant Project Risks
The project, through its TA component, is expected to contribute to a wide range of innovation-oriented activities led by GITA, including those happening under the ongoing Bank-financed GENIE project as well as others ongoing without the Bank's support. The Bank team will be reviewing GITA's general work plans and operation reports throughout the project life to be confident that no operation of this project-beneficiary institution is inappropriate and may carry reputation risk for the Bank.

C. Legal Operational Policies that Apply
OP 7.50 Projects on International Waterways
No
Project activities will not affected or be affected by international waterways.
OP 7.60 Projects in Disputed Areas

Project activities will not be implemented in disputed areas.

III. BORROWER’S ENVIRONMENTAL AND SOCIAL COMMITMENT PLAN (ESCP)

<table>
<thead>
<tr>
<th>DELIVERABLES against MEASURES AND ACTIONS IDENTIFIED</th>
<th>TIMELINE</th>
</tr>
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<tbody>
<tr>
<td><strong>ESS 1 Assessment and Management of Environmental and Social Risks and Impacts</strong></td>
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</tr>
<tr>
<td>REGULAR REPORTING: Prepare and submit regular monitoring reports on the implementation of the ESCP. - Every 6 months during the project implementation.</td>
<td>01/2022</td>
</tr>
<tr>
<td>INCIDENTS AND ACCIDENTS NOTIFICATION: Promptly notify any incident or accident related or having an impact on the Project which has, or is likely to have, a significant adverse effect on the environment, the public or workers employed under the project. - Promptly (within 48 hours) after taking notice of the incident or accident.</td>
<td>01/2022</td>
</tr>
<tr>
<td>ORGANIZATIONAL STRUCTURE: Maintain an Environmental and Social Specialist to monitor compliance with ESCP and manage environmental and social risks throughout Project implementation - Specialist to be recruited before the start of the project implementation and retained throughout the project life.</td>
<td>01/2022</td>
</tr>
<tr>
<td>ENVIRONMENTAL AND SOCIAL ASSESSMENT: Apply environmental and social screening procedure to applications for TTPP support as described in the POM and mainstream screening outcomes into the decision-making on technology transfer support. - Throughout the project life</td>
<td>01/2022</td>
</tr>
<tr>
<td>MANAGEMENT TOOLS AND INSTRUMENTS: Finalize and adopt POM and adhere to it. Produce environmental and social screening reports for all reviewed grant applications justifying screening outcomes. – Finalize POM prior to project Approval. Comply with POM and produce screening reports throughout the project life.</td>
<td>01/2022</td>
</tr>
<tr>
<td>PERMIT, CONSENTS AND AUTHORIZATIONS: Obtain or assist in obtaining, as appropriate, the permits, consents and authorizations that are applicable to the project from relevant national authorities. Comply or cause to comply, as appropriate, with the conditions established in these permits, consents and authorizations throughout project implementation. - Prior to initiating activities that require permits, consents and authorizations.</td>
<td>01/2022</td>
</tr>
<tr>
<td><strong>ESS 10 Stakeholder Engagement and Information Disclosure</strong></td>
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<tr>
<td>SEP PREPARATION: Implement Stakeholder Engagement Plan (SEP). - Throughout project life.</td>
<td>01/2022</td>
</tr>
<tr>
<td>PROJECT GRIEVANCE MECHANISM: Implement project GRM as set forth in the SEP. - Throughout the project life.</td>
<td>01/2022</td>
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<tr>
<td><strong>ESS 2 Labor and Working Conditions</strong></td>
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LABOR MANAGEMENT PROCEDURES: Adhere to Labor Management Procedures (LMP) integrated into the POM. - Throughout the project life. 01/2022

GRIEVANCE MECHANISM FOR PROJECT WORKERS: Develop and maintain a GRM for project workers. - Develop GRM prior to project Approval. Maintain it throughout the project life. 01/2022

OHS MEASURES: Implement occupational, health and safety (OHS) guidelines included in the POM. - Develop OHS Guidelines prior to beginning of project activities and implement them throughout the project life. 01/2022

ESS 3 Resource Efficiency and Pollution Prevention and Management

RESOURCE EFFICIENCY: Ensure adherence to the requirement on the application of least polluting and resource-efficient technologic solutions by beneficiaries. – Throughout implementation of the TTPP. 04/2020

ESS 4 Community Health and Safety

ESS 5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

ESS 6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

ESS 7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

ESS 8 Cultural Heritage

ESS 9 Financial Intermediaries

B.3. Reliance on Borrower’s policy, legal and institutional framework, relevant to the Project risks and impacts

Is this project being prepared for use of Borrower Framework? No

Areas where “Use of Borrower Framework” is being considered:

Implementation of neither the entire project nor its individual components will not rely on the Recipient's framework.

IV. CONTACT POINTS

World Bank

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V. FOR MORE INFORMATION CONTACT

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VI. APPROVAL

Task Team Leader(s): Ifeyinwa Onugha, Maja Andjelkovic

Practice Manager (ENR/Social) Satoshi Ishihara Cleared on 27-Mar-2020 at 14:57:14 EDT