## BASIC INFORMATION

### A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Project Name</th>
<th>Parent Project ID (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kyrgyz Republic</td>
<td>P162635</td>
<td>Enhancing Resilience in Kyrgyzstan Project</td>
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<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUROPE AND CENTRAL ASIA</td>
<td>02-Apr-2018</td>
<td>29-May-2018</td>
<td>Social, Urban, Rural and Resilience Global Practice</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Financing Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Project Financing</td>
<td>Government of the Kyrgyz Republic</td>
<td>Ministry of Emergency Situations</td>
</tr>
</tbody>
</table>

### Proposed Development Objective(s)

The Project Development Objectives are to support the recipient in strengthening its capacity to respond to disasters, in providing safer and improved learning environment for children, and in reducing adverse financial impacts of natural hazards on the government budget and population.

### Components

- Strengthening Disaster Preparedness and Response Systems
- Improving Safety and Functionality of School Infrastructure
- Enhancing Financial Protection
- Project Management and Monitoring & Evaluation
- Contingent Emergency Response Component

### Financing (in USD Million)

<table>
<thead>
<tr>
<th>Financing Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Development Association (IDA)</td>
<td>10.00</td>
</tr>
<tr>
<td>IDA Grant</td>
<td>10.00</td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
<td><strong>20.00</strong></td>
</tr>
</tbody>
</table>

### Environmental Assessment Category

B - Partial Assessment

### Decision

The review did authorize the preparation to continue
Other Decision (as needed)

B. Introduction and Context

Country Context

1. **After gaining its independence, the Kyrgyz Republic still strives to reduce social and economic vulnerability of its population.** The country has maintained economic growth since the independence, but in 2016, Gross Domestic Product (GDP) has decreased to US$ 6.6 billion from US$ 7.5 billion in 2014¹, following deterioration in the external environment (including fall in exports and remittances, decline in gold output and other factors). Despite significant efforts and overall downward trend of poverty during this period, according to the World Bank estimations, the poverty rate (measured by the national standards) remains high and above most countries in the Europe and Central Asia (ECA) region at 32.1 percent of the total population in 2015, which is projected to stagnate². Income distribution showed a significant gap with seven out of 10 poor persons inhabiting rural areas³, where utility services are also of an inferior quality. At the same time, a large majority of the population is clustered near the poverty line with broken steps for upward mobility (incomes too low to allow for savings and investments) and high risks of falling back (exposure to shocks and insufficient safety nets).

2. **The economy of the Kyrgyz Republic is fragile making it difficult for the country to support further poverty reduction efforts and to absorb shocks.** The country follows an export-oriented growth strategy. Exports and public finance are supported by exploitation of natural resources, which is largely relying on a single gold mine. Economic growth of the recent period was supported by urbanization, which has been driving one-time productivity and income gains, yet, much of this growth has concentrated in an informal sector. The growth was also supported by expansion of domestic consumption fuelled by remittances that accounted for 30 percent of GDP by 2013⁴. While the services sector was one of the key contributors to the country’s growth, agriculture and industry grew below overall average. The importance of remittances declined after 2013 as the stock of migrants abroad stabilized and the share of households receiving remittances declined. At the same time, the country has difficulties accommodating an excessive labour supply because of low business and industrial growth. Economy is further challenged by weak governance and political instability. Socio-economic disparities in urban and rural areas, exacerbated by ethnic and other divisions between rural south and urban north, have also generated communal tensions resulting in violent conflict at least twice during the last twenty years. The state has significantly eroded its fiscal buffers with the fiscal deficit of the budget climbing to one of the highest levels in the ECA region. As a result, the Kyrgyz Republic has limited fiscal space to respond to shocks, while a significant shock can severely impair fragile economy of the country and well-being of its population.

Sectoral and Institutional Context

3. **Natural hazard events are undermining hard-won development gains, exacerbating poverty in vulnerable groups and preventing economic growth of the Kyrgyz Republic.** The country is exposed to catastrophic damages and losses from less frequent but large intensity events such as earthquakes. Evidence shows that the largest proportion of economic

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¹ World Bank: Country data, Kyrgyz Republic
² To ensure comparability, the 2005 poverty rate is adjusted here using the 2013 poverty line
³ World Bank, Kyrgyz Republic Poverty Infographic, February 2016
⁴ World Bank: Personal remittances, received (% of GDP)
losses due to natural hazards tend to result from earthquakes. According to a recent nation-wide seismic risk assessment supported by the World Bank, the average annual economic losses associated to direct damage to buildings is expected to exceed US$ 280 million annually (i.e. 4.3% of 2016 GDP\(^5\)). Three events in May 1992, August 1997 and October 2008 alone have in total caused more than 130 fatalities, affected almost 150,000 people and resulted in almost US$ 200 million in economic losses\(^6\). The impact of floods on people and infrastructure is also remarkable. About 80,000 people are affected every year, and the expected average annual economic losses is US$ 70 million (i.e. 1.1% of 2016 GDP)\(^8\). Floods in 1998 and 2005 each caused over US$3 million worth of damage. More recently, in 2012, flooding in Osh, Batken and Jalal-Abad affected around 11,000 people\(^5\). The country is also highly prone to other natural hazards such as landslides, mudflows, glacial lake outburst floods, and avalanches. In addition, the country is highly vulnerable to the effects of climate change that exacerbate the threat posed by weather-related disasters, such as floods, landslides and mudflows, and ranks as the third most vulnerable country against climate change in the ECA region\(^10\).

### 4. Aging and poorly maintained housing buildings and public infrastructure along with weaknesses in the regulatory environment and urban planning are the main drivers of seismic vulnerability in the Kyrgyz Republic

Existing stock of housing buildings and public infrastructure in the country was mostly built during the Soviet period (i.e. between the 1920s and 1991), and designed according to outdated standards prescribed by the seismic code of the time. As a result, most infrastructure in the country is currently at the end of its design life expectancy, and in need for intervention to meet current seismic code standards. Moreover, over the past three decades, lack of proper maintenance has accelerated decay of structural elements and other building components, which further increased vulnerability. Building regulations in the country were under the former Soviet norms until independence in 1991. After independence, a number of the Soviet norms were updated but still largely based on Soviet standards. Significant updates were made to the seismic code in terms of seismic provisions in 2009; however, these provisions lack updates on seismic hazard, design criteria, and new requirements for the safe anchorage and design of non-structural components. Moreover, the country has not adopted guidelines for seismic assessment and retrofit of existing infrastructure, which would facilitate the implementation of risk reduction actions at scale. With regards to land use planning, there is currently no legal requirement for local authorities to develop up-to-date plans to be periodically updated. As a result, many settlements do not have plans or the existing ones are not up-to-date. In addition, existing plans lack wider planning considerations for risk reduction and disaster planning, in order to avoid increased exposure of people and assets in high risk locations. In addition, enforcement of building regulations, building control procedures, including the process of issuing construction licenses, need to be strengthened to ensure transparency, efficiency and participation of qualified professionals.

### 5. The frequency of emergencies triggered by natural hazards poses a challenge for the government of the Kyrgyz Republic in terms of emergency response and post disaster recovery.

According to the Ministry of Emergency Situation (MoES), over 200 emergencies take place every year from floods, landslides, mudflows, avalanches, windstorms, among others. Despite its efforts to increase the institutional capacity for preparedness and response, further strengthening of its emergency response systems remains as priority of the government. Furthermore, the post disaster recovery capacity in the country is still very low. For instance, lack of ex-ante financial instruments prepared for the post-disaster causes delays in recovery and reconstruction and increases secondary impacts of disasters. This situation also forces the government to

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6. Percent of 2016 GDP, which is equal to $US 6.551 billion according to World Bank data


divert funds from other development programs to immediate disaster response and further rehabilitation. Overreliance on the ex-post approach leads to instability of fiscal planning and amplify disaster impact over time.

6. **In this context, the Government of the Kyrgyz Republic has been prioritizing disaster risk management (DRM) through national policies and strategies.** At the global level, the Kyrgyz Republic has signed the UN Frameworks for Disaster Risk Reduction (Hyogo 2005, Sendai 2015), declaring disaster resilience a national priority. The Government has developed and been implementing a sector-specific National Strategy for Comprehensive Safety of Population and Territories of the Kyrgyz Republic from Disasters and Emergencies (2012-2020), which outlined a set of measures in disaster risk management. More broadly, the Government has integrated disaster risk management into overarching national strategies, such as the National Sustainable Development Strategy (2013 - 2017). In addition, Taza Koom, a program for digital transformation of the Kyrgyz Republic, highlights the need to reduce disaster risks and provide ICT in emergencies as well as providing digital services and solutions for adaptation to climate change and mitigation of its consequences.

7. **Following the country’s priority on DRM, it has made progress in the following areas.** On risk identification, the hydromet observation network is being upgraded under the World Bank-financed Central Asia Hydrometeorology Modernization Project (P120788), and national-level probabilistic seismic risk assessment funded by GFDRR has been conducted, which provides a solid basis and a reference to inform design of policies and programs within the government development plans. On disaster preparedness and response, national-level crisis management centers in Bishkek and Osh were established in 2014 under GFDRR/World Bank support, with significant improvements of the emergency call ‘112’ system, early warning systems and disaster information management. Necessary mechanisms, such as the Disaster Risk Coordination Unit and the Rapid Emergency Assessment and Coordination Teams, have been established to coordinate disaster preparedness and response. On disaster risk reduction, in 2015, the Government has established the State Program on Safer Schools and Preschools of the Kyrgyz Republic 2015-2024 to improve the safety of all schools (2,222 schools and 806 preschools) by 2024, based on a country-wide vulnerability assessment of schools conducted with the support of UNICEF. On financial protection, the Government has been focused on individual households and introduced a disaster insurance program for private property and established the State Insurance Organization (SIO) to manage it.

8. **Despite these efforts, the country’s overall capacity to manage disaster risk is still at an incipient stage, and hence, it is critical to ensure continuity of the on-going efforts to strengthen preparedness and emergency response capacity, start the implementation of risk reduction investments in public infrastructure while creating an enabling environment to scale up and overcome the obstacles to operate the mandatory disaster insurance program.** Evidence has shown that the country will face new disasters in the medium term, and therefore enhancing preparedness and emergency response capacity must remain as an imperative policy in order to minimize the impact of emergencies on the population (i.e. reduced response time, early warning systems operating) though damages of assets and economic losses remain. To complement this, it is important to continue strengthening financial protection against disasters specifically in the housing sector, allowing the government to reduce financial, fiscal and economic impacts while promoting faster recovery and incentives for risk reduction measures. Finally, by initiating the implementation of the State Program on Safe Schools and Preschools of the Kyrgyz Republic, the government will not only prevent the catastrophic loss of lives (school infrastructure is the most vulnerable public infrastructure in the country) in high vulnerable school facilities, but also build the enabling environment to scale up vulnerability reduction interventions country wide. The proposed project supports these priorities as explained below.

9. **First, disaster preparedness and response capacities require further strengthening through expanding the crisis management systems, the equipment and training of rescue teams and enhance the access to hazard and risk information**
to involved institutions and communities. Gaps still remaining in emergency communication systems for the country to have full nation-wide coverage of such systems. Talas and Naryn Oblasts currently lack the emergency ‘112’ and dispatch system and operate the emergency call reception and dispatch services manually. In addition, while the MoES can issue public notification and warning through national TV channels, radio broadcasting and SMS, Bishkek and Osh Cities and Naryn, Talas, Osh and Batken Oblasts lack sufficient local communication means (i.e. electronic sirens) and equipment to intercept TV and radio broadcasting at the Oblast level, to alert the population about upcoming potential hazards. On the other hand, the MoES is expanding its Fire and Rescue Services at the regional level and increase its branches. The teams have been set up; however, they lack basic equipment to properly respond to emergencies.

10. The country also needs to improve the hazard/risk monitoring, assessment and information management on landslide and other mass movement hazards, which is the most frequent type of hazards in the country. Improvements are needed in collecting historical research data, strengthening operational surveys and monitoring and enabling sharing of information among involved institutions with proper standards and protocols. Progress in this area will ultimately facilitate improved hazard monitoring and assessment, generation of new hazard/risk information, improved early warning systems, emergency response planning and risk reduction activities.

11. Second, implementation of the State Program on Safer Schools at national level is a priority, which requires an intervention and investment strategy that addresses both short term risk reduction targets and a long-term plan. The education sector is a high priority because school buildings are the most vulnerable assets to earthquakes (Table 1). Although the total value of school buildings across the country is estimated to be US$ 1.5 billion, which is forty times less than the value of housing buildings, estimated economic losses as per cent of total value is highest in the education sector (26% for schools as compared to 18% for houses). The situation is even more critical in terms of estimated fatalities. Even though the housing sector serves six times more people than the education sector, expected fatalities are highest in schools with around 1.1% of school occupants (students and teachers) at risk of death under large intensity earthquakes. The large expected fatalities in schools are explained by the fact that a large proportion of school buildings were built with very vulnerable building types, namely adobe structures (ADO), unreinforced masonry (URM) and confined masonry (CM).

<table>
<thead>
<tr>
<th>Asset Portfolio</th>
<th>Estimated economic losses</th>
<th>Estimated fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US$ (billion)</td>
<td>% total portfolio value</td>
</tr>
<tr>
<td>School buildings</td>
<td>0.4</td>
<td>26%</td>
</tr>
<tr>
<td>Housing buildings</td>
<td>11.0</td>
<td>18%</td>
</tr>
<tr>
<td>Hospital buildings</td>
<td>1.9</td>
<td>n/a</td>
</tr>
<tr>
<td>Fire station buildings</td>
<td>0.04</td>
<td>n/a</td>
</tr>
<tr>
<td>Transport – Roads</td>
<td>1.0</td>
<td>3%</td>
</tr>
<tr>
<td>Transport - Bridges</td>
<td>0.02</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

12. With an estimated 1 million students and a portfolio of around 3,000 schools and pre-schools with over 5,500 school buildings, reducing the vulnerability of existing infrastructure to scale poses a complex challenge. More than two years after approval of the State Program on Safer Schools 2015-2024, implementation of this program has not initiated yet.

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This is largely due to lack of a cost-effective intervention strategy which would attract investment and low institutional capacity, among other financial and social challenges. The target of the State Program on Safer Schools is to improve the safety of all schools by 2024; however, for progress to be achieved, it is necessary to design a national intervention strategy based on solutions at scale while building the enabling environment in the education sector to implement it. To reach scale, this strategy will need to: (i) meet pre-established safety standards; (ii) apply affordable and cost-effective engineering solutions; (iii) maximize safety benefits; (iv) minimize disruption of the education service; and, (iv) integrate safety along with functional and energy-efficiency improvements. Along with the design of a national intervention strategy, actions will need to be taken to strengthen: (i) the regulatory environment and its capacity of enforcement; (ii) the institutional capacity of key stakeholders such as the Ministry of Education and Science (MoE) and the State Agency for Architecture, Construction and Communal Services (SAACCS); (iii) the school maintenance program which operates at the municipality level; and (iv) the management information system.

13. Building on the ongoing Urban Development Project (P151416) financed by the World Bank, the proposed project is strategically designed to enable scalability of these operations, and take the State Program on Safer Schools to implement nationwide. As a result, the outcomes of the proposed project aim to go beyond improving safety and quality of a batch of priority schools. It provides the foundation to inform the design of a long-term national strategy which can be scaled-up and implemented in schools countrywide. Experiences from similar Bank projects in other countries such as Turkey and Peru have shown that a strategic perspective and long-term vision is critical to accelerate safer school policies, facilitate long-term engagements, and leverage additional financing from various international financial institutions. Complementary analytical work which will inform the design of the project and the national strategy is being financed by GFDRR as part of an ongoing Bank-executed Technical Assistance within the Japan-World Bank Program on Mainstreaming Disaster Risk Reduction in Developing Countries.

14. Third, it is necessary to further support the efforts of the government in reducing financial impact of natural disasters on households. These efforts focused on disaster insurance that could help reducing financial burden on the government budget and allow the affected people for faster and more sustainable recovery after natural disasters (through bigger and more timely payouts). It could also provide incentives for risk reduction, while still offering affordable insurance coverage. Currently, despite the mandatory nature of the Kyrgyz disaster insurance coverage for homeowners, only 6.5% of homes are insured (or over 74,000 homes) – however, the SIO can now pay in full no more than 200 claims in case of a major catastrophe event. The latter creates financial and reputational risks for the government and requires changes in the design and operation of the program. By enabling the SIO to become a professional insurance organization in charge of managing the national catastrophe insurance pool, the project will contribute toward making the mandatory disaster insurance program an effective financial protection mechanism against natural disasters for the population and the government budget.

15. The main challenges to the SIO in effectively implementing the program are due to inter alia: (i) its insufficient capitalization to assume highly correlated catastrophe risks under the program; (ii) excessive number of risks (many of which cannot be measured and priced) covered by the compulsory insurance product and the absence of a minimum deductible (as provided for by law); (iii) outdated operations and IT system and business processes; and, (iv) insufficient premium rates provided for by law charged to the consumers due to which the SIO cannot build adequate reserves, buy reinsurance and thus become financially sustainable. This results in exponentially growing risk of potential insolvency of the SIO with every new policy sold already in case of a relatively mild catastrophe event (once in every 100 years event), even though its portfolio of insurance policies still remains rather small (around 74,000 policies). In case of the SIO’s insolvency, the government will incur a major reputational damage since numerous policyholders will not be able to...
receive the contractual indemnity payments unless the government steps in to make them. Therefore, major efforts are needed today to ensure that the budget of the Government is effectively protected, while the population receives insurance indemnity payments in time and in full and the SIO remains solvent even after major disasters. For this, the SIO needs to be reformed into a professional insurance organization capable of implementing and managing the disaster insurance program. Further, a number of legal amendments will need to be introduced for this purpose, which will ensure, for example, that the insurance product sold by the SIO is actuarially sound. These amendments could also ensure the participation of other private insurers in the mandatory insurance program through the introduction of national risk pooling and reinsurance concepts.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)
The Project Development Objectives are to support the recipient in strengthening its capacity to respond to disasters, in providing safer and improved learning environment for children, and in reducing adverse financial impacts of natural hazards on the government budget and population.

Key Results
Achievement of the PDO will be monitored through the following proposed key outcome indicators:

- Population covered by improved emergency preparedness and response systems in the country
- Landslides of highest risks are monitored and have an associated emergency plan
- Number of students (disaggregated by gender) having access to safer and resilient school facilities
- Number of school facilities with improvements in functional conditions
- Reinsurance program introduced

D. Project Description

The proposed components of the ERIK Project are as below.

Component 1: Strengthening Disaster Preparedness and Response Systems (US$ 4 million)

16. The objective of this component is to strengthen the disaster preparedness and response systems of the Kyrgyz Republic to reduce the negative impacts from disasters the country is exposed to, primarily through expanding the crisis management systems to cover the whole country and increasing the capacity to monitor hazards to inform decision makers to prepare for their possible impacts. The Project will finance the following activities:

(a) Increasing the coverage of emergency warning and notification to the population, enhancing the capacity to receive, analyze and respond to emergency calls, and increasing the integration and redundancy of the communications among national, regional and district level crisis management systems. Based on the Feasibility Study on the creation of the unified information and management system in emergency and crisis situations in the Kyrgyz Republic” financed by the GFDRR/World Bank, this activity will include: (i) improvements in emergency 112 call and duty dispatching system for Bishkek City and Osh, Naryn, and Talas Oblasts, through purchasing, installation and operationalization of ICT equipment and software; (ii)
improvements in public emergency warning and notification system in Bishkek and Osh Cities and Naryn, Talas, Osh and Batken Oblasts as well as TV and radio interception system for all oblasts, through purchasing, installation and operationalization of ICT equipment and software, warning devices, etc.; and (iii) strengthening of crisis management centers through purchasing, installation and operationalization of ICT equipment and software. Consultant services will be applied where relevant for design and supervision activities.

(b) **Initiating and implementing part of the program on “Unified System for Integrated Monitoring and Forecasting the Emergencies” to strengthen monitoring and assessment of landslides and other mass movement hazards.** The longer-term objectives of this activity include: (i) producing maps of areas potentially affected by such hazards; (ii) defining the level of risks and deciding relevant actions for risk reduction and preparedness according to the level of risks; and, (iii) planning and implementing risk reduction and preparedness measures including issuing pre-warning and alerts for hazards that are possible to monitor. The activity will increase the capacity for conducting operational surveys and monitoring of landslides and other mass movement hazards in the Kyrgyz Republic through purchasing and operationalizing equipment and software for monitoring and strengthen the capacity to analyze and assess hazards through consultant services and training. The activity will also include upgrading a web-based platform to compile various hazard and disaster information and to share with various ministries and government agencies as well as the population. This activity will be implemented in a phased approach, with the first phase focusing on capacity building of preliminary operational survey of landslides including analysis of base topographic and establishing references for operational monitoring and the second phase focusing on scaling-up of the operational monitoring.

(c) **Strengthening search and rescue.** This activity will provide and install search and rescue equipment to address the needs of expanded fire and rescue branches of the MoES to properly respond to emergencies.

(d) **Improving disaster awareness of the public.** This activity will improve the training and learning quality and outreach for the public by introducing e-learning system and training outreach on DRM.

**Component 2: Improving Safety and Functionality of School Infrastructure (US$ 12 million)**

17. The objective of this component is to improve the safety and functionality of existing state school infrastructure by supporting the Government in the implementation of the State Program on Safer Schools. Specifically, Component 2 aims to:

(a) Maximize the number of school children protected from earthquakes by implementing cost-effective interventions which are primarily intended to protect life safety;

(b) Reduce economic losses and minimize disruptions in the normal operation of schools and the education service caused by earthquakes;
(c) Improve functional conditions and learning environment of schools, including water and sanitation and energy efficiency; and

(d) Develop capacity in the education sector to take implementation of the State Program on Safer Schools to scale.

18. To achieve these objectives, interventions designed and implemented under Component 2 are intended to upgrade school facilities to at least a seismic performance objective of life safety.\(^{12}\)

19. The project will finance the following main activities under Component 2:

(a) **Civil works to improve safety and functionality of existing priority school facilities.** This activity will include: (i) feasibility studies and detailed design of interventions including on-site inspection of facilities; (ii) building works and construction supervision; and (iii) construction of temporary classrooms to avoid disruptions in the normal operation of schools during building works, among other complementary activities. Two main lines of intervention will be implemented (Table 2): (i) replacement of existing buildings by new safer buildings; and (ii) seismic retrofitting of existing buildings.

### Table 2. Lines of intervention to be financed under Component 2

<table>
<thead>
<tr>
<th>Lines of intervention</th>
<th>Objectives</th>
<th>Application</th>
<th>Complementary interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Replacement of existing buildings and systems</td>
<td>Reduce seismic vulnerability (improve seismic performance up to a minimum of life safety), and improve functional conditions and quality of learning environment</td>
<td>If seismic retrofitting is not viable from a safety and/or economic viewpoint</td>
<td>Construction of new classrooms</td>
</tr>
<tr>
<td>2. Seismic retrofitting of existing buildings</td>
<td>If current seismic performance of existing school building does not meet life safety</td>
<td>Functional rehabilitation: - Water and sanitation - Energy efficiency (e.g. insulation of building envelope, replacement of windows/doors) - Capital repairs Construction of new classrooms</td>
<td></td>
</tr>
</tbody>
</table>

Seismic retrofitting will be accompanied by functional rehabilitation of the school buildings, while both replacement and seismic retrofitting might include construction of additional classrooms to cover current or future needs.

\(^{12}\) In a building that complies with a life safety performance objective, injuries may occur during large intensity earthquakes; however, the overall risk of life-threatening injury as a result of structural damage is expected to be very low. In this sense, this performance objective aims to protect occupants’ life (children, teachers). This performance objective does not ensure that economic losses and disruptions to the education service will be low as a consequence of earthquakes.
(b) **Capacity building in the education sector to take implementation of the State Program on Safer Schools to scale.** This activity will support the preparation of a long-term national intervention and investment plan, which will enhance the capacity of the Government to implement the State Program. This plan will include: (i) an intervention strategy to improve the safety and functionality of school infrastructure countrywide; (ii) an investment strategy to finance the implementation of the plan; and (iii) explicit prioritization criteria to maximize the benefits of the investment with clear short to long term goals. This activity will also contribute to creating the enabling environment needed to implement the State Program by designing and delivering a capacity building program for key stakeholders in the country.

(c) **Design and integration of school infrastructure module in management information system.** This activity will support the design and production of a web-based school infrastructure module and its integration into existing information system to assist the MoE and other relevant agencies on the management of school assets, and contribute to monitoring implementation of the State Program on Safer Schools.

### Component 3: Enhancing Financial Protection (US$ 3 million)

20. The objective of Component 3 is to turn the SIO into a professional modern insurance organization capable of effectively implementing and managing the mandatory disaster insurance program for private residential property. This will be done with a view of the SIO eventually assuming the role of the operator of domestic insurance pool, which will enable local private insurers to participate in sales of mandatory insurance product through an automated web-based production platform and fully reinsure the risk with the pool. The pool will then transfer most of the risk to the global reinsurance market.

21. The main activities under Component 3 will be:

(a) **Review of the SIO business processes and procurement of the customized web-based insurance production system.** As the basic step, this activity will support a comprehensive review of the SIO’s business processes. This will allow to understand how to enhance efficiency of the operations by streamlining the business processes and requirements. It will also allow to adequately customize the web-based insurance production system to support the core functions of the company. The main output of the activity will be the web-based system that can be used by the SIO (and other insurers at a later stage) country-wide for insurance sales and claims management. The system will fully integrate all core business functions of the company (i.e., underwriting, quoting, policy issuance, claims inputs and claims processing, risk management, financial and regulatory reporting, and data shortage and management) and maintain a centralized database of policies and claims records. The objective of the above is to improve the operations of the SIO by increasing its efficiency, transparency, introduction of core risk management functions and enabling access to reinsurance.

(b) **Optimization of SIO core business processes.** The activity will focus on building the internal capacity of the SIO in core business areas. It will be based on the review of business processes prepared during the previous activity. Inter alia, the activity will involve: (a) development of a risk model for earthquake; (b) development of internal pricing terms for core risks; (c) development of an outward reinsurance function, inclusive of accumulation control; (d)
development of rapid claims assessment capabilities and improving the technical soundness of the current claims assessment procedure. The activity is expected to result in an overhaul of the SIO insurance operations and will be carried through expert advisory services, development and transfer of technical know-how, preparation of operational manuals and training of the staff.

(c) **Risk management and regulatory compliance.** The activity will assist the SIO with developing and incorporating the essential risk management functions into its insurance operations. These will include setting up the company’s underwriting policies, risk appetite, investment guidelines, reinsurance guidelines and anti-money laundering and anti-fraud policies. The activity will also support the SIO and the SSFMRS with developing the regulatory compliance and data reporting standards. The main outputs of the activity will include: (a) internal risk management system; (b) risk-based solvency margin requirements for SIO and regulatory monitoring compliance tools; and, (c) trainings of the SIO and the SSFMRS staff on all essential regulatory reporting and compliance functions.

(d) **Procurement of equipment for the regional SIO offices.** Due to lack of resources, the SIO insurance agents operate without essential technical means for their professional activities. None of the 54 SIO’s regional offices is sufficiently equipped to enable insurance agents to effectively sell insurance policies and accept claims. The activity will finance installation of desk computers, printers, internet routers and essential office furniture for 54 regional offices thus creating working spaces for at least 400 agents. In addition, to ensure real-time backup and storage of policy and claims data, the activity will finance installation of two professional servers in the main office.

**Component 4: Project Management and Monitoring & Evaluation (US$ 1 million)**

22. The component will support operating costs of the PIU in the implementation of the project activities in an efficient and transparent manner and build the institutional capacity to sustain the implementation of the project beyond the life of the project. The component will cover technical, safeguards and fiduciary aspects for project implementation and project management support, including monitoring and evaluation and reporting.

**Component 5: Contingent Emergency Response Component (CERC) (US$ 0)**

23. The objective of this component is to improve Kyrgyzstan’s capacity to respond to disasters. Following an eligible crisis or emergency, the Borrower may request the Bank to re-allocate project funds to support emergency response and reconstruction. This component would draw from the uncommitted credit/grant resources under the project from other project components to cover emergency response. An emergency eligible for financing is an event that has caused or is likely imminently to cause, a major adverse economic and/or social impact to the Borrower, associated with a disaster. Rapid disbursement will allow the Government of the Kyrgyz Republic to request a reallocation of project funds to partially cover emergency response and recovery costs.

24. The Project Operational Manual (POM) will include a specific annex for the CERC, which lays out the provisions for activating and implementing the CERC.
E. Implementation

Institutional and Implementation Arrangements

25. Given the multi-sectoral feature of the proposed Project and the increasing need to mainstream DRM across key sectors in the Kyrgyz Republic, the MoES, as the authorized agency with the mandate to coordinate DRM in the Kyrgyz Republic, is assigned with coordinating and supervising role of the overall project implementation. In addition, building the institutional capacity of MoES through such overall supervision role is expected to contribute to sustaining the impact of the project beyond the life of the DRM program as well as to further scale up investments in DRM (see Figure 5 for a schematic diagram of institutional and implementing arrangements).

26. The implementation arrangement consists of the MoES, hosting and supervising the Project Implementation Unit (PIU) of the Project. This PIU is building on the existing Project Coordination Unit of the KyrgyzHydroment under the MoES, which has been implementing the Central Asia Hydromet Modernization Project (P120788) since 2011, and was upgraded to be housed directly under the MoES to prepare and implement this proposed project. The PIU has experience in implementing activities related to weather and river flow forecasting and sharing of information in coordination with other ministries and agencies. In addition, the MoES has experience implementing the establishment of national crisis management centers as Recipient-executed Trust Fund, including procurement and installation of specialized ICT equipment. The PIU will be responsible for: overall program coordination and implementation; financial management; preparation and submission of audited financial reports; administration of third-party audits; procurement activities including preparation of terms of references (ToRs) and bidding documents, evaluation reports, contract management, and so on, in consultation with relevant ministries and agencies, Technical Coordination Councils and Tender Committees; management of environmental and social safeguards aspects; preparation and submission of progress reports of all components and activities; monitoring of the Results Framework; hiring and management of consultants, as needed for project management and coordination, fiduciary and safeguards aspects for all the project components, as well as for technical inputs and quality control for Component 1.

27. MoE and SAACCS will be responsible for technical inputs and quality control for Component 2, while SSFMRS will be responsible for technical inputs and quality control for Component 3. Component 1, 2 and 3 will each have a Technical Coordination Council to endorse relevant ToRs and bidding documents for their respective activities and an Tender Committee to evaluate biddings of respective procurement packages. In order to promote stronger coordination among relevant agencies to prioritize, design, execute and monitor school retrofitting/reconstruction under Component 2, a Technical Working Group chaired by MoE, including SAACCS and MoES was established and has been contributing to the preparation of Component 2 activities. One technical coordinator for each Component 1, 2 and 3 will be recruited to coordinate between the MoES PIU and the focal ministries and agencies in the components and to ensure technical compliance. Component 5 will be implemented by MoES PIU in close coordination with MoF and relevant line ministries.
28. For project-level decision making, such as project restructuring and reallocation of funds between different components, a Project Coordination Council will be established consisting of relevant ministries and agencies of the Project. Furthermore, critical decision making of school selection under Component 2 will be dealt in the Project Coordination Council. It is expected that the Project Coordination Council will consist of MoES (implementing agency), MoF, MoE, SAACC, the SSFMRS, chaired by the Vice Prime Minister.

F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

Schools are going to be renovated/rebuilt in several regions in Kyrgyzstan in rural areas and cities. Many schools (in particular in Osh Oblast) in the rural areas are located in the limited space in the narrow valleys. They are situated along the roads, which are, in many cases, the only access route to the region. These factors should be taken into consideration when developing traffic safety plans, allocating areas for temporary waste storage and disposal, planning for construction camps, and deciding on the seasonality/timing of the civil works. As the project includes a CERC, which is triggered in case of a disaster, an Immediate Response Mechanism Operations Manual (OM) should be prepared with provisions for activating and implementing the CERC as well as the requirements for the preparation of safeguards instruments applicable to the activities under the component.

G. Environmental and Social Safeguards Specialists on the Team

Kristine Schwebach, Social Safeguards Specialist
Aimonchok Tashieva, Social Safeguards Specialist
Rustam Arstanov, Environmental Safeguards Specialist

SAFEGUARD POLICIES THAT MIGHT APPLY

<table>
<thead>
<tr>
<th>Safeguard Policies</th>
<th>Triggered?</th>
<th>Explanation (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Assessment OP/BP 4.01</td>
<td>Yes</td>
<td>The Project Component 2 will include reconstruction and/or retrofitting of the educational facilities identified from each structural typology from geographical areas at greatest disaster risk. It will also include civil works aimed at energy efficiency improvement. These activities usually include replacement of doors and windows, retrofitting of walls, foundations and roofing with additional</td>
</tr>
</tbody>
</table>
structural elements, replacement of roofs. Such activities are associated with certain health, safety and environment risks including dust, noise, and vibration, generation of construction waste including hazardous waste (asbestos containing materials), occupational health and safety hazards such as works at height and in confined spaces. Not all the sites might be known at the time of the project Appraisal by the Bank. Therefore, the proposed instrument is an Environmental and Social Management Framework, and site-specific Environmental and Social Management Plans (ESMPs) will be prepared for those sites that are known prior to Appraisal. In addition, ESMF will include safeguard requirements for the CERC with an indicative list of activities related to the likely emergencies.

The Social Assessment to be conducted in potential project sites will consider social impacts, risks and mitigation measures associated with project activities.

<table>
<thead>
<tr>
<th>Natural Habitats OP/BP 4.04</th>
<th>No</th>
<th>The existing footprint and access roads will be used for civil work purposes. None of the sites is located near the natural habitats.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forests OP/BP 4.36</td>
<td>No</td>
<td>The project will not involve any activities related to forestry. None of the sites is located close to the forests.</td>
</tr>
<tr>
<td>Pest Management OP 4.09</td>
<td>No</td>
<td>Project interventions will not include those related to agriculture or transportation and purchase of agricultural chemicals.</td>
</tr>
<tr>
<td>Physical Cultural Resources OP/BP 4.11</td>
<td>No</td>
<td>The existing footprint will be used for construction purposes. Schools were built in 1960s, 70s and 80s and are not an architectural heritage.</td>
</tr>
<tr>
<td>Indigenous Peoples OP/BP 4.10</td>
<td>No</td>
<td>Not applicable for the Kyrgyz Republic.</td>
</tr>
<tr>
<td>Involuntary Resettlement OP/BP 4.12</td>
<td>Yes</td>
<td>The reconstruction/retrofitting of educational facilities is anticipated to be done within existing footprints without any particular need for land acquisition. Nevertheless, OP 4.12 on Involuntary Resettlement is triggered as a precautionary measure in case some temporary minor land acquisition and structure relocation will occur in the future out of necessity for access roads or other works. The Resettlement Policy Framework (RPF) prepared by the client to address potential adverse</td>
</tr>
</tbody>
</table>
The Project Component 2 will include civil works in the educational facilities: (i) replacement of existing buildings by new safer buildings or (ii) seismic retrofitting of existing buildings. The latter will most probably include replacement of doors and windows, retrofitting of walls, foundations and roofing with additional structural elements, replacement of roofs, energy efficiency improvements. These activities are associated with certain health, safety and environment risks including dust, noise, and vibration, generation of construction waste including hazardous waste (asbestos containing materials), occupational health and safety hazards such as works at height and in confined spaces. New social impacts due to involuntary acquisition of assets and changes in land use, as well as negative impact on economic livelihood. Findings of the Social Assessment that will be conducted to evaluate the current socio-economic situation in the potential project sites is expected to feed into the RPF as well as the outline of the project’s citizen engagement strategy, its grievance redress mechanisms (GRM) and targeted interventions for women and vulnerable groups with due attention to the multi-ethnic composition of communities residing at school locations.

Should the final sub-project designs determine that the land acquisition with impacts on the livelihood and economic activity of local communities would be required, the site-specific Resettlement Action Plans (RAPs) (based on the RPF) will be prepared. No reconstruction/retrofitting at such sites would commence until the RAPs are duly implemented including consultations with project affected people and payments of compensations. The GRM developed for the RPF will be wide enough to be applied to all project-related grievances.

### KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

#### A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

   None of the facilities that are to be rehabilitated/reconstructed, newly constructed under the project will be located by the side of the rivers downstream of the existing or planned dams, or will depend on dam performance and functionality.

   The project will not affect any rivers.

   Not applicable for Kyrgyz Republic.
The construction and demolition of old school buildings, in addition to the typical impacts described above, will likely be associated with larger volumes of construction waste, environmental and health and safety impacts from construction camps, possible interaction with sensitive ecosystems such as rivers and mountains which typically surround rural schools in the target regions. In addition, construction works in schools, especially boarding schools, may require a temporary relocation of pupils and inhabitants and, this may pose additional health and safety risks in transportation and hygiene. Risks mentioned above are expected to be site-specific, minor and short-lived with low to moderate probability and severity of harm. The project was assigned environmental category “B” based on the OP 4.01 Environmental Assessment. No potential large scale, significant and/or irreversible impacts are expected. As regards Component 5, CERC, it will be difficult to describe potential risks and mitigation measures associated with emergency response and likely vulnerable locations. The environmental screening procedure will be in place to make sure that no Category A activities are financed. The Inter-Governmental Committee created a methodology for selecting schools identifying those most impacted by natural hazards. Using the methodology, the Inter-Governmental Committee will prioritize schools for upgrades. Feasibility studies will be conducted on top priority schools during which estimated budgets will be prepared. Based on these findings, final school selections will be made by the Steering Committee. A total of 200 schools have been listed for potential upgrades. Of these, a small number of schools will be selected in some oblasts. The PIU expects the project budget will cover no more than 50 school upgrades. Three regions have been identified which have only one school which may lead to being excluded as there would not be alternate schools in which to temporarily relocate students during upgrades. A Social Impact Mitigation Plan (SIMP) will be prepared for school upgrades causing temporary relocation of students to alternate to address negative impacts in order to ensure student learning is not hampered by project activities. Additionally, the SIMP will address measures for staff who may experience negative impacts on income as a result of student relocation. Student and community safety measures will be included in the environmental and social management planning. Due to the upgrades contained within schools, it is expected that the project will have very low impacts on land as most school upgrades will occur on existing school campuses. When a school is first constructed, enough land is allotted to allow for future expansion and provision of sporting fields. Campus land may be used by staff for growing of gardens. If project activities cause impact on garden areas, the gardens will be relocated within the school campus or the alternate plots provided by the local government. In the unlikely event that there is land acquisition, impact on assets, or negative impact to livelihoods a Resettlement Action Plan will be prepared to mitigate impacts. Although the PIU itself does not have the staffing capacity to monitor environmental and social impacts, the PIU will hire a monitoring firm during civil works which will cover all relevant oblasts. The PIU will select among a number of existing firms within the Kyrgyz Republic with capacity to provide environmental and social oversite throughout the entire country. In the southern region of Kyrgyz Republic there are areas with a mixture of schools which teach in Uzbek, Tajik, Russian, or Kyrgyz. In order to avoid ethnic tensions, the PIU will ensure an equal number of schools from each will be included in project upgrades.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:
Activities under the project may in the long run have positive impacts on environment and people due to safer schools and reduced exposure to hazardous substances such as asbestos. No adverse indirect and/or long term impacts are expected. It is unlikely that school upgrades will require land acquisition; however, assurances will need to be made for any staff who may experience loss of income during any relocation of students.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.
Project design alternatives will be determined in the design documentation considering safer options. At the project
Appraisal stage no project alternatives were considered.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The Borrower has involved a qualified environmental and social consultant. They have developed and agreed with the World Bank specialists an Environmental and Social Management Framework (ESMF) document and Resettlement Policy Framework (RPF). Apart from describing expected environmental and social impacts from the anticipated works, the ESMF defines the environmental screening and assessment process for site-specific interventions and outlines the requirements for and the template of the site-specific Environmental and Social Management Plans (ESMPs). ESMF will become an integral part of the project POM. Site-specific ESMPs will become an integral part of the bidding documentation for construction contractors. The RPF provides standards, procedures and guidance in preparation of Resettlement Action Plans if, although unlikely, land acquisition is required.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

ESMF and RPF documents were disclosed in the local language and public consultation was held with the key stakeholders, interest groups and NGOs during March 2018. Site-specific ESMPs will undergo the same procedure but at the specific project locations. If students must be temporarily relocated, Social Impact Mitigation Plans will be prepared to ensure students do not experience negative impacts in their learning. A Resettlement Action Plan will be prepared if involuntary land acquisition or impact on economic livelihood occurs. Economic livelihood may be a temporary situation in cases where students are relocated to areas where staff would not be required until student return to original schools. In addition, the feedback and recommendations, including aspects of labor influx management, have been incorporated into both the framework documents to be used during implementation.

B. Disclosure Requirements

<table>
<thead>
<tr>
<th>Environmental Assessment/Audit/Management Plan/Other</th>
<th>For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of receipt by the Bank</td>
<td>Date of submission for disclosure</td>
</tr>
<tr>
<td>26-Feb-2018</td>
<td>24-Mar-2018</td>
</tr>
</tbody>
</table>

"In country" Disclosure

Kyrgyz Republic
02-Mar-2018

Comments


Resettlement Action Plan/Framework/Policy Process
C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

**OP/BP/GP 4.01 - Environment Assessment**

Does the project require a stand-alone EA (including EMP) report?
Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?
Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?
Yes

**OP/BP 4.12 - Involuntary Resettlement**

Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?
Yes

If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?
Yes

**The World Bank Policy on Disclosure of Information**

Have relevant safeguard policies documents been sent to the World Bank for disclosure?
Yes

Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?
Yes
All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?
Yes

Have costs related to safeguard policy measures been included in the project cost?
Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?
Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?
Yes

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Borrower/Client/Recipient

Government of the Kyrgyz Republic

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|                               | 27-Mar-2018              |