



## **Implementation of the National Biosafety Mechanism in the Kyrgyz Republic in accordance with the Cartagena Protocol on Biosafety**

### **Part I: Project Information**

#### **GEF ID**

10813

#### **Project Type**

MSP

#### **Type of Trust Fund**

GET

#### **CBIT/NGI**

**CBIT No**

**NGI No**

#### **Project Title**

Implementation of the National Biosafety Mechanism in the Kyrgyz Republic in accordance with the Cartagena Protocol on Biosafety

#### **Countries**

Kyrgyz Republic

#### **Agency(ies)**

FAO

#### **Other Executing Partner(s)**

TBD

#### **Executing Partner Type**

Government

#### **GEF Focal Area**

Biodiversity

#### **Taxonomy**

Focal Areas, Biodiversity, Supplementary Protocol to the CBD, Biosafety, Influencing models, Convene multi-stakeholder alliances, Strengthen institutional capacity and decision-making, Transform policy and regulatory environments, Stakeholders, Civil Society, Academia, Non-Governmental Organization, Community Based Organization, Beneficiaries, Private Sector, Individuals/Entrepreneurs, Local Communities, Gender Equality, Gender Mainstreaming, Women groups, Gender-sensitive indicators, Sex-disaggregated

indicators, Gender results areas, Awareness Raising, Capacity Development, Knowledge Generation and Exchange, Capacity, Knowledge and Research, Learning, Innovation, Knowledge Exchange, Knowledge Generation

**Rio Markers**

**Climate Change Mitigation**

Climate Change Mitigation 0

**Climate Change Adaptation**

Climate Change Adaptation 0

**Duration**

36 In Months

**Agency Fee(\$)**

142,739.00

**Submission Date**

4/19/2021

**A. Indicative Focal/Non-Focal Area Elements**

<b>Programming Directions</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
BD-3-8	GET	1,502,511.00	2,400,000.00
<b>Total Project Cost (\$)</b>		<b>1,502,511.00</b>	<b>2,400,000.00</b>

## **B. Indicative Project description summary**

### **Project Objective**

To provide technical guidance and assistance for the implementation of the regulatory framework on biosafety at the national level, including the establishment of administrative systems and institutional arrangements, such as laboratories for LMO detection and human resource capacities.

<b>Project Component</b>	<b>Financing Type</b>	<b>Project Outcomes</b>	<b>Project Outputs</b>	<b>Trust Fund</b>	<b>GEF Amount(\$)</b>	<b>Co-Fin Amount(\$)</b>
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Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
1. Development and operationalization of biosafety policy, regulatory and institutional framework	Technical Assistance	<p>1.1. Policy and regulatory biosafety framework completed and aligned with the rights and obligations under the Convention on Biological Diversity and the Cartagena Protocol on Biosafety</p> <p><u>Indicators:</u></p> <ul style="list-style-type: none"> <li>- Established the process to reconcile various biosafety draft laws with a view to adopting a national biosafety policy, inclusive of liability and redress issues</li> <li>- National regulations and sectoral rules integrating and operationalizing biosafety principles and objectives</li> <li>- Increased capacity for biosafety policy and regulatory implementation across relevant institutions, in line with national laws and policies</li> </ul> <p>1.2. Administrative systems and institutional</p>	<p>1.1.1 National Policy Document on Biosafety drafted</p> <p>1.1.2 Exploratory discussions on acceding to the Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress initiated</p> <p>1.1.3 National biosafety regulations produced, in connection with existing national laws, including the law "On organic agricultural production in the Kyrgyz Republic" 2019</p> <p>1.1.4 Sectoral rules/ resolutions and guidelines for the transboundary movement, transit, handling, use, management and monitoring of living modified organisms (LMOs), and associated</p>	GET	440,000.00	862,556.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
2. Development of national capacity for the operationalization of biosafety measures in compliance with the Cartagena Protocol on Biosafety	Investment	<p>2.1 National capacity for LMO risk assessment, risk management and monitoring enhanced</p> <p><u>Indicators:</u></p> <ul style="list-style-type: none"> <li>- Agreed risk assessment procedures and mechanisms developed</li> <li>- Risk assessment, risk management and monitoring performed as required by the Cartagena Protocol</li> <li>- Functioning risk assessment, risk management and monitoring institutional mechanisms, including functioning contingency protocols</li> </ul> <p>2.2. National capacity for LMO identification, detection and enforcement enhanced</p> <p><u>Indicators:</u></p> <ul style="list-style-type: none"> <li>- Three functioning</li> </ul>	<p>2.1.1 Procedures and mechanisms for assessing environmental and health risks of LMOs developed and validated by the national authorities responsible for different uses of LMOs</p> <p>2.1.2 Specialized personnel trained to perform the tasks of risk assessment, risk management and monitoring, in accordance with gender equality and social inclusion principles</p> <p>2.1.3 Mechanisms established for risk assessment, management and monitoring, including contingency protocols for emergency response in case of accidents involving LMOs</p>	GET	720,000.00	990,342.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
3. Knowledge sharing process	Technical Assistance	<p>3.1 Gender-sensitive project monitoring system operational and providing systematic information on progress in meeting the project outcome and output targets</p> <p>3.2 Knowledge and results shared with relevant actor</p> <p><u>Indicators:</u></p> <ul style="list-style-type: none"> <li>- Functioning M&amp;E system and GEBs and co-benefits established</li> <li>- Timely reporting to the Cartagena Protocol</li> <li>- Process to share knowledge arising from the project established</li> </ul>	<p>3.1.1 Development of a performance framework (M&amp;E plan) defining roles, responsibilities, and frequency for collecting and compiling data to assess project performance.</p> <p>3.2.1 Outcomes of this project shared with inter alia, the CBD Secretariat, other Parties to the Cartagena Protocol, particularly from the region, and other stakeholders</p> <p>3.2.2 Submission of National Reports on implementation of the Cartagena Protocol on Biosafety</p> <p>3.2.3 Submission of project</p>	GET	205,919.00	328,920.00

Project Component	Financing Type	Project Outcomes	Project Outputs	Trust Fund	GEF Amount(\$)	Co-Fin Amount(\$)
				<b>Sub Total (\$)</b>	<b>1,365,919.00</b>	<b>2,181,818.00</b>
<b>Project Management Cost (PMC)</b>						
		GET	136,592.00		218,182.00	
		<b>Sub Total(\$)</b>	<b>136,592.00</b>		<b>218,182.00</b>	
		<b>Total Project Cost(\$)</b>	<b>1,502,511.00</b>		<b>2,400,000.00</b>	

**C. Indicative sources of Co-financing for the Project by name and by type**

<b>Sources of Co-financing</b>	<b>Name of Co-financier</b>	<b>Type of Co-financing</b>	<b>Investment Mobilized</b>	<b>Amount(\$)</b>
Recipient Country Government	Ministry of Agriculture, Water Resources and Regional Development of the KR (MAWRRR)	In-kind	Recurrent expenditures	450,000.00
Recipient Country Government	Ministry of Emergency Situations of the KR	In-kind	Recurrent expenditures	150,000.00
Recipient Country Government	State Customs Service under the Ministry of Economy and Finance of the KR	In-kind	Recurrent expenditures	300,000.00
Recipient Country Government	Ministry of Health and Social Development of the KR	In-kind	Recurrent expenditures	300,000.00
Recipient Country Government	State Inspection of Veterinary and Phytosanitary Safety under the MAWRRR	In-kind	Recurrent expenditures	300,000.00
Recipient Country Government	State Intellectual Property and Innovation Service under the Ministry of Economy and Finance of the KR	In-kind	Recurrent expenditures	300,000.00
Recipient Country Government	Institute of Biotechnology of the National Academy of Science of the KR	In-kind	Recurrent expenditures	300,000.00
GEF Agency	FAO	Grant	Investment mobilized	300,000.00
<b>Total Project Cost(\$)</b>				<b>2,400,000.00</b>

**Describe how any "Investment Mobilized" was identified**

The ?Investment mobilized? were identified during the PIF preparation phase through baseline analysis exercise (FAO projects MTF/KYR/021/STF and GCP /KYR/022/ROK). As this GEF project will be the first initiative in supporting the implementation of Cartagena Protocol on biosafety in Kyrgyzstan, there is little co-financing opportunities available at this time. However, six government agencies are committed to

this project and will provide co-financing. During the PPG phase, the design team, in consultation with the government, will continue to seek co-financing opportunities.

**D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies), Focal Area and the Programming of Funds**

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>
FAO	GET	Kyrgyz Republic	Biodiversity	BD STAR Allocation	1,502,511	142,739	1,645,250.00
<b>Total GEF Resources(\$)</b>					<b>1,502,511.00</b>	<b>142,739.00</b>	<b>1,645,250.00</b>

**E. Project Preparation Grant (PPG)**

PPG Required **true**

**PPG Amount (\$)**

50,000

**PPG Agency Fee (\$)**

4,750

<b>Agency</b>	<b>Trust Fund</b>	<b>Country</b>	<b>Focal Area</b>	<b>Programming of Funds</b>	<b>Amount(\$)</b>	<b>Fee(\$)</b>	<b>Total(\$)</b>
FAO	GET	Kyrgyz Republic	Biodiversity	BD STAR Allocation	50,000	4,750	<b>54,750.00</b>
<b>Total Project Costs(\$)</b>					<b>50,000.00</b>	<b>4,750.00</b>	<b>54,750.00</b>

## Core Indicators

### Indicator 11 Number of direct beneficiaries disaggregated by gender as co-benefit of GEF investment

	<b>Number (Expected at PIF)</b>	<b>Number (Expected at CEO Endorsement)</b>	<b>Number (Achieved at MTR)</b>	<b>Number (Achieved at TE)</b>
<b>Female</b>	300			
<b>Male</b>	300			
<b>Total</b>	600	0	0	0

## Part II. Project Justification

### 1a. Project Description

#### I. Background information

##### 1) Background information and problem formulation

*Biodiversity in the Kyrgyz Republic:* The Kyrgyz Republic has a very rich wealth of biological diversity, and its unique biodiversity has a very high global significance. The Kyrgyz Republic is situated in the heart of Eurasia, and is surrounded by arid and extra arid plains of Central Asia, with its natural habitat experiencing severe impacts of the desert zone extending in the Eastern hemisphere, from the Sahara to the Gobi Desert. Through the Critical Ecosystem Partnership Fund, a joint initiative that includes GEF, Conservation International determined that the mountains of Central Asia within the Kyrgyz Republic territory are biodiversity hotspots. The Mountains of Central Asia Hotspot cover almost the entire Kyrgyz territory and are crucial to the conservation of wild and domesticated biodiversity. Due to the high elevations, there is a wide range of species and ecosystems spread over a relatively small surface area. In addition, the region harbors genetic resources of the wild relatives of several domesticated plants, such as wheat, apples, pears, almonds, walnuts and pistachios, as well as animals, including sheep and goats. It is also hosting more than 30 distinct ecosystems (CEPF and Zo? Environment Network, 2017).

*Biodiversity status:* In general, the loss of biodiversity in the Kyrgyz Republic is occurring at the ecosystem level, with most ecosystems impacted by human activity. One of the major threats to biodiversity in the Mountains of Central Asia Hotspot is habitat change, as most of the land in the semi-desert lowlands and foothills has been converted for agricultural use, mainly for the cultivation of cotton, cereals and other crops. There are also pollution threats to the hotspot which come from several sources, such as current and past applications of agricultural chemicals. Kyrgyz waters, including its biological jewel and major tourist attraction Issyk-Kul Lake, are compromised by both agricultural and municipal runoff pollutants but also introduced fish species. Therefore, the Kyrgyz Republic's biodiversity is at critical risk of erosion of its genetic resources. These genetic resources are extremely rich and varied, ranging from medicinal plants to wild crop relatives including valuable landraces and old local cultivars of peach, quince, cherry, pomegranate, persimmon and others.

*Agricultural sector:* The Kyrgyz Republic has a total area close to 200 000 sq. km. About 1.5 million ha is arable land of which around 1 million ha is irrigated and nearly 10 million ha is natural grazing land. Agriculture is one of the country's most important economic sectors, contributing to around 16% of GDP and employing about 30% of the country's workforce. Around 60% of the territory is devoted to agriculture and in 2018 the major agricultural products were potatoes (1447 thousand tonnes), primary vegetables (1076 tt), sugar beet (773 tt), maize (693 tt), wheat (616 tt), primary fruits (460 tt) and barley 429 tt). (FAO, 2020). Most of the agricultural production is concentrated in small individual (family) farms (averaging 2.8 ha), with an estimated number of peasant farms and individual

entrepreneurs of around 429 000 in 2018. As such, the biggest share (87.4% in 2015) of all kinds of agricultural lands is owned and cultivated by peasant farmers, (FAO, 2020). In 2018, the Kyrgyz Republic's parliament announced plans to convert the country to an agricultural model that is completely organic, in 10 years. Currently, the country possesses 15 000 ha certified organic land, which is a 0.1% share of organic agricultural production of the country's total area. With regard to food imports, the country's cereal imports dependency is low, about 17.8%, compared to its own cereal production.

*Biosafety & Biodiversity conservation efforts:* The Kyrgyz Republic ratified the Convention on Biological Diversity in 1996 and the Cartagena Protocol on Biosafety in 2005. The competent national authority is the State Agency on Environment Protection and Forestry. Other ministries and national institutions have also been engaged in the work covered by the Protocol, such as the Ministry of Agriculture, Food Industry and Land Reclamation (State Seed Inspectorate, State Commission on Agricultural Crop Testing, State Commission on Plant Quarantine), the Ministry of Health (Department of Disease Prevention, Sanitary and Epidemiological Control Service, Microbiology and Molecular Genetics), Ministry of Economy, Ministry of Education and Science, State Inspectorate for Veterinary and Phytosanitary Safety, the Institute of Biotechnology of the National Academy of Sciences and the State Customs Service.

The lack of a centralized framework leads to an existing governance of biosafety which is based on several discrete pieces of legislation, *inter alia*: Government Resolution on Approving the Concept of Ecological Safety (2007), Law on the Protection of the Health of Citizens (2005), Law on Access to Information under the Jurisdiction of State and Local Government Bodies (2006), Law on Organic Agricultural Production (2019), Government Decision on the Approval of the National Controlled List of Controlled Products (2014), Technical Regulation on the Safety of Medicines for Medical Use (2011), Technical Regulation on the Safety of Veterinary Medicines (2013), Technical Regulation on the Safety of Feed and Feed Additives (2014), Technical Regulation on the Safety of Medical Implants (2013), and National Strategy for the Development of Livestock Breeding for 2011-2015. Additionally, Decree No 506, 2007 that defines environmental protection and rational environmental management for the country and Decree No 599, 2011, which defines a set of measures for the country on environmental protection and management, provide the broader environmental protection goals for the country. More recently, following the rules applied to the EAEU, the Kyrgyz Republic has applied various technical regulations, including "on Food Safety" and "Food Products as regards Labeling" which establishes mandatory labelling for food products containing living modified organisms (LMOs) above the 0.9% threshold level, the same as the European Union levels. However, a specific Law on Biosafety and all derivative regulations still need to be finalized and approved, together with the development of the national technical capacity to ensure enforcement of the new law and its regulation, as well as public awareness, in order to coherently address biosafety challenges. The Kyrgyz Republic therefore currently lacks a comprehensive and integrated policy, regulatory and institutional framework on biosafety as well as national technical capacity to implement it.

*Potential impacts on biodiversity:* The Cartagena Protocol on Biosafety is an international legally binding treaty that aims to protect biological diversity from the potential risks posed by LMOs resulting from modern biotechnology. The potential risks include transgene flow to wild relatives, loss of genetic diversity, invasiveness, changes in agricultural practice that may be unsustainable, changes in ecosystem landscape and functions, among others. Therefore, the objective of the Protocol is to

contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of LMOs resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and focusing, in particular, on transboundary movements. It establishes several mechanisms, such as the advance informed agreement (AIA) procedure for ensuring that Parties are provided with the information necessary to make informed decisions before agreeing to the import of LMOs for intentional introduction into the environment, and a notification procedure in the event of unintentional transboundary movement. The Protocol contains a reference to the precautionary approach and reaffirms Principle 15 of the Rio Declaration on Environment and Development. The Protocol also establishes a *Biosafety Clearing-House* to facilitate the exchange of information on LMOs and to assist countries in the implementation of the Protocol. Without a legal and regulatory framework that fully implements the Protocol, important rights afforded to Parties, such as the AIA procedure, will be circumvented, potentially threatening the Kyrgyz Republic's biodiversity.

The Kyrgyz Republic has twenty-two classes of ecosystems and they are unevenly distributed throughout the country (Akimaliev et al. 2012). According to the Protocol, a risk assessment needs to be conducted in each receiving environment. Countries need to establish *a priori*, based on their national characteristics and biodiversity priority and specificities, risk assessment protocols to define which, if any, LMO can be introduced, and how it should be done to avoid damage to the environment, based on the precautionary approach. The lack of national standards and national capacity to perform risk assessment and risk management poses a threat to the country's biodiversity, as there is no data available on how a LMO will impact the biodiversity present in the Kyrgyz Republic's specific environments.

Climate change is an urgent and pressing issue for the Kyrgyz Republic, with the vulnerability of mountain ecosystems a particular concern raised by the country at the relevant international fora. The Kyrgyz Republic is a mountainous state; more than 94% of the territory consists of vulnerable, fragile mountain ecosystems. Over the past hundred years the average annual temperature in this country increased by 0.8 degrees C, which is higher than the global average. According to expert estimates, the area of glaciers in the country would be halved by 2050, and by 2100 they may disappear completely. The Kyrgyz Republic is concerned about the effects of global climate change on mountain ecosystems: the intensive melting of glaciers resulting in the reduction of water resources, rapidly increasing incidence of landslides, mudslides, floods with numerous casualties and extensive damage to the economy, reduction of biodiversity, land degradation and other negative consequences. In the long term, the change of the hydrological regime of mountain rivers in downward drainage will inevitably impact ecosystems, located in the lower reaches, which is especially important for the Central Asian region with an arid climate and intense demographic growth.

Given these existential threats from climate change, any further risks posed to biodiversity by LMOs would exacerbate an already fragile and vulnerable situation. Implementation of a national biosafety framework in accordance with the Cartagena Protocol on Biosafety would therefore greatly assist the Kyrgyz Republic in addressing the potential risks posed by LMOs to biodiversity.

### 1.1) Threats

*Transboundary transport of LMOs:* The Kyrgyz Republic is a land-locked country with several transport routes including the Eurasian Land Bridge, also known as the New Silk Road and the Belt and Road Initiative (from 2013). These roads have been used by freight services that connect China to Europe. In this case, genetically modified grain spilled from moving trains or trucks could create a substantial impact to wild crop relatives, wildlife and protected areas. The issue of LMOs in transit may be important to address specifically.

*Importing of LMO food or other products for local consumption:* Production and global trade of LMOs are also rapidly increasing and are facilitated due to trade agreements. For example, China currently grows 2.9 million hectares of genetically modified cotton and papaya. The Kyrgyz Republic's food security and local industry context might mean that the importation of some of these LMOs for direct consumption or for propagation under local conditions. Food safety and LMO food labelling issues will need to be addressed well, in coherence with the technical regulations prescribed by the EAEU.

*Environmental release of LMOs:* The environmental release of LMOs poses threats to biodiversity and agricultural biodiversity through *inter alia* transgene flow and contamination of sexually reproducible species leading to fitness advantages (loss of genetic diversity), negative impacts on non-target animal species feeding on transgenic crops, and impacts at ecosystem level by potential weediness of transgenic crops competing with wild species in border areas and forest fragments. LMOs might be released in the environment either intentionally for growing or unintentionally, or even unauthorized. Currently, the country has no administrative measures or technical capacity to identify potential sources for such releases, to monitor and manage the risks posed by them and to gather and share information on LMOs being commercialized and grown in the region.

*Use of agrochemicals associated with LMOs:* Half of the world's LMO production is herbicide-tolerant crops. The associated agrochemical is sprayed in the entire cultivation area several times throughout the crop's life cycle. The use of herbicide-tolerant crops in other countries has shown that the spread of herbicide-resistant weeds has brought about substantial increases in the number and volume of herbicides applied. As a consequence of the intensive use of such agrochemicals, farmers became dependent on them and lost important options for weed control in their fields. In Kyrgyz Republic, FAOSTAT estimates that approximately 607 tonnes of pesticide were used, representing approximately 70% increase in pesticide use since 2010 (350 tonnes). Therefore, the use of LMO herbicide-tolerant crops and their associated chemicals would add an extra burden to the country as increasing amounts of agrochemicals would generate even larger residues in the environment (e.g. soil). The Kyrgyz Republic has no experience and capacity in dealing with the potential impacts of such large-scale agrochemical use.

## 1.2) Barriers

*1. Lack of coherent legal and regulatory framework:* Although several regulations relevant to biosafety have been adopted, these are sparse, not fully implemented and do not cover all aspects of the Cartagena Protocol. Under existing regulations, there is a need to fully operationalize LMO detection and identification as well as a risk assessment system throughout all sectoral competent authorities. The lack of an effective legal and regulatory framework and guidelines to conduct LMO identification and risk assessment constitute major barriers to the implementation of a national biosafety framework.

*2. Limited institutional, technical and human resource capacities:* Despite political will and efforts to implement and operationalize the Cartagena Protocol in the Kyrgyz Republic, the lack of national capacity, including laboratories and human resources competence, hinders the compliance with several provisions of the Cartagena Protocol. Insufficient capacities for detection and identification of unauthorized LMOs and no risk assessment and risk management measures have been comprehensively established. There is also limited knowledge about biosafety and biotechnology by students and in the university, which limits the advancement of national competence.

*3. Lack of information and understanding regarding the economic, legal and social impacts of LMOs:* Countries have the right to take socio-economic considerations into account during the LMO decision-making process. The impacts of the potential implications of the use of LMOs on local communities, small farmers and national food security, including the impact on the country's policies and laws on organic agriculture, need to be better understood and integrated into the overall assessment process, alongside the risk assessment. Additional considerations may be necessary for the light of geopolitics in the post-Soviet era and the potential impacts of current and future trading agreements for the import or export of LMO products.

## 2) Baseline scenario (including baseline projects)

The baseline scenario provides a solid basis for the planned activities and targets of this GEF/FAO project. Without GEF support, the implementation of the Cartagena Protocol on Biosafety in Kyrgyz Republic will remain insufficient, and the country will be unable to effectively address the rapid developments in modern biotechnology. While there have been past attempts to enact biosafety laws and regulations, these efforts have been stymied and are likely to continue to proceed at a slow pace. In the absence of GEF support, the government will not be able to strengthen technical and human resource capacities in biosafety, which are necessary to enable the country to safeguard its biodiversity and its vulnerable ecosystems from the potential risks of LMOs. This may result in the irreversible loss of biodiversity and ecosystems of regional and global significance.

The Kyrgyz Republic ratified the Cartagena Protocol on Biosafety in 2006. Recognizing the importance of ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, the country committed itself to develop and implement this Protocol through a national biosafety framework based on sound science and the precautionary principle.

There had been an effort to implement a National Biosafety Framework in 2005 developed under the UNEP/GEP Project GF/2716-01-4319 "Development of the National Biosafety Framework in the Kyrgyz Republic". However, the draft Law on Biological Safety was not adopted by the Parliament. Subsequent attempts to enact a draft Law on Safety of Genetic Engineering Activities in 2013, and a draft Law on the Prohibition of the Cultivation, Production, Import and Sale of Products containing Genetically Modified Organisms were unsuccessful due to the need to reconcile conflicting regulations on living modified organisms (LMOs) and the need to harmonize with obligations arising from the newly established Eurasian Economic Union (EAEU).

There is also institutional drift in the country to cope with the developments of modern biotechnology. Limited national institutional, technical and human resource competences hinders the successful implementation of several provisions of the Cartagena Protocol.

In the country, there are projects on supporting the implementation of organic agriculture policies and increasing the capacities of farmers in the Kyrgyz Republic through support to establish the legal and institutional framework for organic farming in the Kyrgyz Republic. The main objectives of this project are to support the establishment of the legal and institutional framework on organic farming production and organic certification system; and strengthen the capacity of farmers in organic production and marketing.

Moreover, the project on Lifecycle Management of Pesticides and Disposal of POPs Pesticides in Central Asian countries and Turkey is implemented in the Kyrgyz Republic. The project objective is to reduce persistent organic pollutants (POPs) releases from obsolete pesticide stockpiles and contaminated sites and strengthen the capacity for the sound management of pesticides. Specific objectives of this project is to safely destroy up to 900 tonnes of POPs and obsolete pesticides and remediate a pesticide-contaminated site; to strengthen the institutional and regulatory framework for managing pesticides through their life cycle and increase the successful uptake of alternatives to chemical pesticides on key crops.

The Kyrgyz Republic has submitted two national reports since the adoption of the Cartagena Protocol on Biosafety. In these national reports, submitted in 2011 and 2015, the country states that it has partially established a national framework for conducting risk assessments prior to taking decisions regarding LMOs. However, it also describes that the current framework does not include procedures for identifying and/or training national experts to conduct risk assessments; and less than 10 people have been trained in risk assessment, monitoring, management and control of LMOs. In addition, the country states that it does not have the capacity to detect, identify, assess and/or monitor living modified organisms or specific traits that may have adverse effects on the conservation and sustainable use of biological diversity, taking into account risks to human health. And that predictable and reliable funding for building capacity for the effective implementation of the Protocol is also not available. According to the latest report submitted in 2015, the Kyrgyz Republic has never carried out a risk assessment procedure or made any decisions on the cultivation or import of LMOs.

Also, in 2018 the Eurasian Economic Union (EAEU) introduced additional requirements for labeling products containing genetically modified organisms (GMOs). New standards included in the Union technical regulations ?Food Products regarding their Labelling? will allow consumers to make a more informed and correct choice of food products. The transition process for countries to implement these new standards ended in 2020, but most of the member countries are still struggling with it, the Kyrgyz republic among them. This new requirement has created a different political will for the government to move forward with the implementation of the Cartagena Protocol.

### 3) Alternative scenario (including expected outcomes)

Through this project, critically important knowledge and capacity-development activities will be carried out, including a full-project implementation plan to support internal coordination, strengthen the policy, regulatory and institutional framework, and promote technical biosafety training. Also, through dedicated coordination, interventions and allocated resources can be adjusted to meet the most

important national needs and priorities in a timely manner, efforts that would be otherwise difficult in the absence of GEF support.

The draft Implementation Plan for the Cartagena Protocol and Capacity-Building Action Plan (2021-2030) that is expected to be adopted by Parties to the Protocol in 2021 are important existing initiatives and best practice documents that will inform this project. The Implementation Plan is a framework of broad desirable achievements and accomplishments to help guide Parties in their implementation of the Protocol and to measure progress in this regard for the period 2021-2030. It is designed to be anchored in and complementary to the post-2020 Global Biodiversity Framework, which is also expected to be adopted by CBD Parties in 2021. The Capacity-Building Action Plan provides examples of capacity-building activities that can support the achievement of the goals and outcomes of the Implementation Plan. It is complementary to the CBD's long-term strategic plan for capacity development.

The *project goal* is therefore to support the establishment at the national level of a comprehensive and effective regulatory framework on biosafety in accordance with the Cartagena Protocol on Biosafety and to create technical capacity for the implementation and enforcement of the Protocol at the national level.

*Project objectives* are to provide technical guidance and assistance for the implementation of the regulatory framework on biosafety at the national level, including the establishment of administrative systems and institutional arrangements, such as laboratories for LMO detection and human resource capacities.

The GEF-funded alternative will enable the achievement of the project goal and objectives through the following three interlinked project components: (1) Development and operationalization of biosafety policy, regulatory and institutional framework; (2) Development of national capacity for the operationalization of biosafety measures in compliance with the Cartagena Protocol on Biosafety; and (3) Project management and reporting.

These components are summarized in more detail below:

### **Component 1: Development and operationalization of biosafety policy, regulatory and institutional framework**

Under this component, a policy and regulatory biosafety framework is expected to be completed and aligned with the Convention on Biological Diversity and the Cartagena Protocol on Biosafety, to support the establishment of sound decision-making processes and regulatory enforcement on biosafety. Specific outputs to achieve this outcome will involve the drafting of a National Policy Document on Biosafety by an inter-ministerial working group, to guide coherent national biosafety implementation as well as the establishment of a cross-sectoral process to reconcile the various draft biosafety laws, with a view to finalizing a coherent national biosafety policy; enactment of national biosafety regulations in line with existing national laws and building on existing processes to update, reconcile and synergize previous efforts to draft biosafety legislation; and the development of sectoral rules or resolutions and guidelines for the transboundary movement, transit, handling, use, management and monitoring of LMOs, including socio-economic considerations and LMO labelling, with the latter applying the relevant technical regulations of the EAEU. These will help build the foundation for a coherent policy and regulatory framework, starting from an overarching national policy that sets the

parameters, to national biosafety regulations that codify the policy, and sectoral rules addressing various key aspects of implementation. At the same time, exploratory discussions on acceding to the Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress will be initiated, in order to assess the steps needed for Kyrgyzstan to become a Party to this Supplementary Protocol to the Cartagena Protocol, so as to be better able to address this important aspect of biosafety implementation. These activities will all be necessary to provide a comprehensive and robust framework for the implementation of the Cartagena Protocol in Kyrgyzstan.

In all these processes, it will be crucial to train relevant government officials across different ministries and agencies that are involved in implementing the biosafety policy, regulatory and institutional framework, through a dedicated training program. This will involve fostering awareness, understanding and familiarity with the said framework. Where appropriate, efforts will also be made to include sub-national actors so as to help scale the project.

Another expected outcome is the implementation of administrative systems and institutional arrangements for biosafety at the national level. Clear delineation of tasks is necessary for the various government agencies to play their appropriate roles and to handle any applications for LMOs in a systematic manner that also brings certainty for LMO applicants. A centralized administrative system will be developed and established to handle applications for all types of LMOs, and national technical and decision-making bodies for biosafety will be constituted with appropriate multi-disciplinary membership, in order to ensure the smooth functioning of biosafety decision-making. As such, appropriate institutional arrangements and procedures for biosafety regulation, risk assessment, risk management and monitoring, clear identification of LMO imports and decision-making will have to be designed and implemented. This will be augmented by the development of specific technical guidelines and manuals so that the relevant government officials are appropriately guided. Lessons learnt and best practices from other Cartagena Protocol Parties will also help in the development of these activities.

In addition, the collection, generation and sharing of up-to-date national biosafety information in a manner that will promote transparency and accountability of decision-making will be achieved through the establishment of a National Biosafety Clearing-House. This strengthened information management system will provide regulatory bodies and stakeholders with access to national information on biosafety. The National Biosafety Clearing-House will also contribute to the Component 2 outcome on public awareness, education and public participation, as well as Component 3 outcome on knowledge sharing.

## **Component 2: Development of national capacity for the operationalization of biosafety measures in compliance with the Cartagena Protocol on Biosafety**

This component will focus on building national capacity in several areas of biosafety: LMO risk assessment, risk management and monitoring; LMO identification, detection and enforcement; and socio-economic considerations in decision-making.

As a first step, the procedures and mechanisms for assessing environmental and health risks of LMOs will need to be developed and validated by the national authorities responsible for different uses of LMOs, with suitable mechanisms, protocols and procedures established for risk assessment, management and monitoring, including contingency protocols for emergency response in case of

accidents involving LMOs. This will allow robust, transparent and science-based analysis and decision-making in biosafety consistent with international practices and standards. Sufficient scientific and technical capacities will be built for specialized personnel to perform the tasks of risk assessment, risk management and monitoring, including through workshops and training courses.

In the area of LMO identification, detection and enforcement, it is critical to establish the necessary infrastructure, as well as institutional, technical and human capacities. The proposed project will assist in adapting and upgrading three reference laboratories.

The core functions of the laboratories and institutions and their needs for infrastructures and equipment, which will be addressed by incremental GEF investment, are as follows:

(i) two laboratories to serve as central LMO biosafety laboratories fully equipped with state-of-the-art LMO detection equipment such as multiplex quantitative real-time PCR, ELISA readers, spectrophotometer for DNA quantification, gel imaging and documentation system and other tools for basic molecular biology procedures. According to the existing infrastructure in the country, the best fit labs in this case would be two laboratories from DPZGSES - one in Bishkek and the second in Osh. The purpose of these laboratories are:

- a. development and validation of methods for DNA detection and identification and provide these services for other partner institutions in biosafety implementation
- b. development of molecular characterization methods required for pre-market risk assessment and to serve as a backup service laboratory for DNA detection and identification
- c. development of LMO monitoring methods required for post-release monitoring and monitoring of unauthorized LMOs
- d. both laboratories will be involved in providing training in biosafety-related activities, DNA detection and identification techniques to risk assessors and other concerned agencies and in providing technical resource persons for public awareness and outreach activities

(ii) one upgraded analytical laboratory for compositional/nutritional and agronomic and phenotypic analyses with state-of-the-art analytical equipment such as HPLC-MS, amino acid analyzer and related-analytical instruments. These laboratories could be the Osh Center for Testing, Standardization and Metrology at the Center for Metrology and Science of the Ministry of Energy of the Kyrgyz Republic or the Jalal-Abad Center for Testing, Standardization and Metrology. The purpose of these laboratories are to:

- a. develop or adapt methods for compositional and nutritional analysis to comply with food and feed and environmental safety assessment required by the country's biosafety regulations and the Cartagena Protocol
- b. develop or adapt methods for the agronomic and phenotypic characterization to comply with food and feed and environmental safety assessment required by the country's biosafety regulations and the Cartagena Protocol

The laboratory will also be involved in training and outreach activities on LMO food and feed safety assessments. The laboratories workflow will be established according to existing guidelines under the *Network of Laboratories for the Detection and Identification of Living Modified Organisms* from the

Cartagena Protocol. The proposed project will also help to establish sampling and analytical methodologies and procedures to identify and quantify LMOs, which will assist in establishing a scientific basis for resolving legal disputes on LMO labelling and non-compliance. Manuals, tools and Standard Operating Procedures (SOPs) for different sampling and detection techniques will be developed and made available for laboratories and regulatory authorities.

Training of laboratory personnel for LMO identification and detection will be carried out, including at regional laboratories, through a series of workshops and training courses. Specialized personnel will be also trained to perform the tasks of monitoring and detection of LMOs at airports and customs checkpoints. Core laboratory staff members will be trained as trainers for LMO analysis and detection as well as for operation and maintenance of detection instruments in order to create a critical mass of scientific and technical personnel who can sustain the national reference laboratories and to implement risk assessment, LMO detection and monitoring systems. The staff of customs and other regulatory authorities will also be trained to understand the accreditation process for risk assessment, LMO detection and the corresponding LMO certificates issued, to test presence of LMOs as well as to seek laboratory confirmation, and a network of control authorities will be established. There will also be specific activities to explore possibilities of establishing a national training center on identification and detection of LMOs, in consultation with the relevant agencies. Finally, exchange of experiences with other countries in the region in the development and use of easy to use, reliable and cost-effective sampling and detection techniques for LMOs will be promoted.

The issue of socio-economic considerations is particularly important for a country like the Kyrgyz Republic, where small and family farmers constitute the majority of farmers, and where a policy decision has already been taken to promote organic agriculture, which excludes the use of LMOs. Capacity will need to be built among relevant government agencies and ministries to be able to take these socio-economic considerations into account, which also need to be integrated into biosafety decision-making processes through clear procedures and guidelines. At the same time, given the obligations already existing within the Customs Union/Eurasian Economic Union, there is a need to apply the relevant technical regulations on labelling for LMO food and food products, in close coordination with the Ministry of Economy, Ministry of Health and Ministry of Agriculture, while enhancing capacity in this area.

Finally, this component will also enhance public awareness, education and public participation in decision-making on biosafety. A public awareness and participation strategy will be designed and implemented to promote awareness, participation and communication in biosafety issues. The proposed project will implement targeted awareness-raising activities, including among policymakers to establish a political will to incorporate biosafety into national development plans and programs, as well as with all relevant stakeholders such as government officials, researchers, farmers, NGOs, the private sector and the public in general. At the same time, to provide for public access to information on biosafety, the National Biosafety Clearing-House will be established, as outlined in Component 1. Communication materials will be produced, in Russian and local languages, and made publicly available in digital and printed formats. In addition, existing gaps in primary, secondary and university level education for biosafety will be identified, and filled through the strengthening of curricula. In line with obligations under the Cartagena Protocol and the Aarhus Convention, the project will also seek to establish public participation mechanisms so as to be able to systematically collate inputs and take them into account in decision-making.

### **Component 3: Knowledge sharing process**

A project monitoring system will be put in place to ensure the effectiveness of the project management process and timely implementation of the planned activities, including regular reporting and the final evaluation. This will be carried out through the development of a performance framework (M&E plan) defining roles, responsibilities, and frequency for collecting and compiling data to assess project performance, project progress reports every six months, and presentation and dissemination of the report to the steering committee and executing partners every six months.

Knowledge sharing will be an important part of the project, so as to both learn from the lessons of other biosafety initiatives, as well as to share experiences that could be relevant. In addition, activities under Components 1 and 2 related to the development of a National Biosafety Clearing House, and activities to implement public awareness, education and public participation are key elements of the knowledge sharing approach of the project.

Outcomes of this project will be shared with the CBD Secretariat, other Parties to the Cartagena Protocol, particularly from the region, and other stakeholders. This can be done inter alia by submitting project reports, case studies and other relevant information to the Biosafety Information Resource Centre (BCH-BIRC) which is managed by the Secretariat of the Convention on Biological Diversity (SCBD) and provides access to electronic catalogues of biosafety-related publications and information resources with the objective to increase accessibility to available biosafety information and resources developed by policymakers, educators, researchers and the general public.

The project will also assist the national technical personnel in preparing and submitting quality reports to the Cartagena Protocol, which includes the National Reports on implementation of the Cartagena Protocol on Biosafety (CPB-NR). These reporting obligations for Parties are important to contribute to the monitoring of measures implementing the Protocol, and to the review and assessment of the effectiveness of the Protocol. They will also provide the opportunity for the Kyrgyz Republic to share the progress, gap and challenges it faces in its national implementation.

#### 4) Alignment with GEF strategies

The Global Environment Facility (GEF) is designated as the financial mechanism of the Convention on Biological Diversity (CBD) as well as of the Cartagena Protocol on Biosafety under the CBD. The Cartagena Protocol's objective is to help ensure an adequate level of protection in the field of safe transfer, handling, and use of living modified organisms (LMOs) resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, also taking into account risks to human health, and specifically focusing on transboundary movements. Projects to support countries with Cartagena Protocol on Biosafety implementation and compliance are eligible for funding through the biodiversity STAR allocation.

The proposed project will contribute to the conservation and sustainable use of Kyrgyz's biodiversity of global significance through strengthening capacities to manage potential risks arising from LMOs. It is aligned with BD-3-8 'Further development of biodiversity policy and institutional frameworks through the implementation of the Cartagena Protocol on Biosafety' as it will (i) help develop that National Policy on Biosafety and associated regulations to ensure its implementation, (ii) build relevant national capacity to support the implementation of the CPB, and (iii) build national capacity for LMO

risk assessment, risk management and monitoring. Implementing a robust policy, regulatory and institutional biosafety framework will allow the country to ensure that potential risks of LMOs are properly assessed and managed before environmental release, thereby generating significant global environmental benefits.

5) Incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing

Despite being a member of the Cartagena Protocol and biosafety being an important priority for the government of the Kyrgyz Republic, the implementation of the Protocol is still lacking mostly because of a lack of enough funds to allow the country to initiate proper implementation. This project will act as the first concrete and coordinated funding instrument for the Protocol implementation. The country has low technical capacity and technical knowledge for implementation and operationalization of the Cartagena Protocol and, as a consequence, there is still a very limited number of capacitated human resources to implement it.

Component 1 will contribute to the mitigation of barriers 1 and 3, creating a coherent legal and regulatory framework. Policy proposals on the topic will be drafted, national biosafety regulations produced, in connection with existing national laws. Also, a centralized administrative system on how to handle applications for LMOs in transit, destined for contained use, intentional introduction into the environment, and for direct use as food or feed, or for processing, will be established and technical and decision-making bodies for biosafety will be constituted. Risk assessment, risk management and monitoring, clear identification of LMO imports will be put in place. And the National Biosafety Clearing- House will be established.

Component 2 will contribute to the mitigation of barriers 2 and 3, by supporting the establishment of procedures and mechanisms for assessing environmental and health risks of LMOs, risk assessment, management and monitoring, including contingency protocols including training of personal. Also, the project will adjust existing laboratory facilities for LMO detection, training of laboratory personnel for LMO identification and detection, develop public awareness and participation strategy and create a governmental system for public access to information on biosafety in accordance with the Cartagena Protocol on Biosafety.

Component 3 will have incremental GEF funding to monitor and evaluate project progress and compliance with indicators, and final external evaluation, systematization of experiences and lessons learned, preparation of outreach and dissemination materials, and project outputs and results. The project will also support the national technical personnel to prepare timely and quality reports for submission to the Cartagena Protocol.

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6) Global Environmental Benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The proposed project is consistent with GEF focal area objective BD - 3-8: Further development of biodiversity policy and institutional frameworks through the Implementation of the Cartagena Protocol on Biosafety. It will also support the implementation of activities that are aligned with the COP guidance to the GEF, in particular the key elements in the recently adopted framework and action plan

for capacity building for effective implementation of the CPB at the sixth COP serving as the Meeting of the Parties to the CPB (COP-MOP 6) and the Strategic Plan for Biosafety, 2011-2020 agreed at COP-MOP 6. This will be addressed through Components, Outcomes and Outputs designed in the project and will be achieved through building and enhancing individual and institutional capacities in operationalizing the system of risk assessment, risk management, risk communication and monitoring and detection of LMOs.

#### 7) Innovation, sustainability and potential for scaling up

The project will be the first of its kind in the region, focusing on implementation of a national policy, regulatory and institutional biosafety framework in accordance with the Cartagena Protocol on Biosafety. The project can act as an example for the region, and may be able to provide technical support to the regional counterparts once experience is gained via the project.

Sustainability of the project is assured through the strong commitment of the State Agency for Environment Protection and Forestry, which is the national competent authority of the Cartagena Protocol. Strengthening of regulatory frameworks and enhancement of institutional and technical capacities of stakeholders including government officials, academics and the public, including public participation mechanisms, will additionally contribute to the sustainability of the project. Outreach campaigns to create awareness on the importance of biosafety will ensure continuous knowledge development maximizing the project's long-term impacts in the country.

It is relevant to highlight that despite the low co-financial commitment from the government, six different government agencies have committed to this project. This shows a strong political will for the full implementation of the Cartagena Protocol at the national level. During the PPG phase, the financial sustainability of the laboratories will be extensively discussed and which governmental agency should take over the responsibility of them will be defined later in accordance with those discussions.

There is potential for scaling up as the biosafety system in the country matures. The project will kick start activities, which will need continual development, enhancement and implementation. Regional cooperation with other Parties to the Cartagena Protocol in the region may also lead to further scaling-up.

#### **1b. Project Map and Coordinates**

**Please provide geo-referenced information and map where the project interventions will take place.**



**2. Stakeholders**

Select the stakeholders that have participated in consultations during the project identification phase:

**Indigenous Peoples and Local Communities**

**Civil Society Organizations** Yes

**Private Sector Entities** Yes

If none of the above, please explain why:

Stakeholders	Mandate (or activities)	Role in project	Means of future engagement
<i>National stakeholder</i>			

<p>Ministry of Emergency Situations of the KR (MES)</p>	<p>MES is a state body of executive authority responsible for implementation of the policy and regulation of relations in the environmental protection, ensuring environmental safety and environmental management, as well as hunting, and protected natural areas.</p> <p>MES is the competent authority for the implementation of the Cartagena Protocol under CBD Convention</p>	<p>MES will take part in project design and lead the process. Also, as a Chair of the PSC, they will control project task execution.</p> <p>Organization and control of project tasks execution (project design and consultations).</p> <p>Co-chairing of the Project Steering Committee.</p>	<p>They will co-chair the Project Steering Committee and will be involved in the project execution</p>
<p>The State Inspection of Veterinary and Phytosanitary Safety under the MAWRRR</p>	<p>It is a state body of executive authority, which exercises authority in veterinary and state supervision and control in the veterinary and phytosanitary safety.</p>	<p>Organization of laboratories for GMO analysis and control over agricultural products, seeds and feed.</p>	<p>It will be involved in the PPG phase, training and capacity building process and in the Component 2 implementation</p>

<p>Kyrgyz Accreditation Center under the Ministry of Economy of the Kyrgyz Republic</p>	<p>It is the central body of executive authority, which carries out functions on development and implementation of the state policy in the macroeconomic, anti-monopoly, tariff, licensing, investment, foreign economic, fiscal policy, policy in the public-private partnership, state material reserves, economic and regional development, state property management, technical regulation and metrology, as well as in the development of Halal industry, trade, business development and optimization of the regulatory legal framework for business regulation, development of free economic zones.</p> <p>It is the state administration body for customs affairs on the territory of the Kyrgyz Republic, managing the activities of customs institutions of the republic in accordance with the customs legislation of the Kyrgyz Republic, agreements on this matter with member states of the Commonwealth of Independent States, as well as other states.</p>	<p>Conducts the formulation and development of a national system of accreditation in accordance with international practice and standards;</p> <p>provides services on accreditation with the purpose to create conditions for competence confirmation of bodies on conformity assessment, to increase trust to them and creation of conditions for their activity recognition.</p> <p>Solving the issues with accreditation of laboratories where GMO analyses will be conducted.</p>	<p>It will be involved in the PPG phase, training, development of the guidelines and standards and all actions related to the laboratories.</p>
<p>State Customs Service under the Ministry of Economy and Finance</p>	<p>The State Intellectual Property and Innovation Service (Kyrgyzpatent) is an authorized state executive body implementing a unified state policy in the field of intellectual property protection and innovation development.</p>	<p>Ensures the participation of customs authorities in the implementation of measures to protect the life and health of citizens, the environment, and the interests of domestic consumers when</p>	

<p>The Ministry of Agriculture, Water Resources and Regional Development of the KR (MAWRRR).</p> <p><b>Including:</b></p>	<p>It is an authorized state body of executive authority implementing the state policy in the agro-industrial complex, including livestock breeding, fish farming (aquaculture), crop production, plant quarantine, land melioration, land, water resources, irrigation and melioration infrastructure, food and processing industry, as well as state regulation and control over production and turnover of ethyl alcohol and alcoholic products.</p>	<p>Control over variety and sowing qualities of seeds and planting material of agricultural and other plants.</p> <p>Field inspection of seed sowings and plantings, ground control of seed batches.</p>	<p>It will be involved in the PPG phase, training, legal framework and overall all project activities</p>
<p>Department for agriculture crop expertise of the Ministry of Agriculture, Food Industry and Melioration of the Kyrgyz Republic</p>		<p>Expertise of sowing qualities of seeds and plantings of agricultural crops, quality of grain and products of their processing;</p>	
<p><b>and</b></p>			
		<p>Carrying out expertise and monitoring of the quality of grain of agricultural crops and products of its processing (flour, bran, waste), coming to the grain receiving enterprises and other economic entities, regardless of ownership.</p>	
<p>Department of Organic Agriculture</p>		<p>Control over the quality of production of agricultural producers' agricultural organic products and increase their exports to near and far abroad.</p> <p>Innovative</p>	

<p>Department of Disease Prevention and State Sanitary and Epidemiological Surveillance under the Ministry of Health and Social Development of the KR</p>	<p>It is a government entity subordinate department under the Ministry of Health of the Kyrgyz Republic, which aims to organize and implement preventive and anti-epidemic activities to combat infectious, parasitic and priority non-infectious diseases to ensure sanitary and epidemiological well-being, to assess the effectiveness of implemented programs and projects in public health, to provide supervision in sanitary and epidemiological well-being of the population, safety of goods, products, environmental facilities and conditions, prevention of harmful effects of environmental factors on human health.</p>	<p>GMO analysis and control.</p>	<p>It will be involved in the PPG phase, training and in Components 1 and 2 implementation</p>
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<p>Department of Medicines Provision under the Ministry of Health and Social Development of the KR</p>	<p>It is a government entity subordinate department of the Ministry of Health of the Kyrgyz Republic whose purpose is:</p> <ul style="list-style-type: none"> <li>regulation of circulation of medicines and medical devices through mechanisms provided by the legislation of the Kyrgyz Republic in medicines and medical products; conducts pharmaceutical inspections of pharmaceutical subjects for compliance with the requirements of the rules of proper pharmaceutical practices;</li> <li>evaluates the quality of medicines and assesses the quality and safety of medical products;</li> <li>carries out certification of authorized persons of medicine producers in accordance with the law of the Eurasian Economic Union;</li> <li>exercises control and supervision over compliance with requirements in the circulation of medicines and medical products.</li> </ul>	<p>Discussion of the situation with import and export of medicines based on GMOs.</p>	<p>It will be involved in the PPG phase, training and in Components 1 and 2 implementation</p>
<p>Institute of Biotechnology of the National Academy of Sciences and Universities (Ministry of Education and Science of the Kyrgyz Republic)</p>	<p>It is the central body of executive authority carrying out the state policy and carrying out management in education and science and state control over accessibility and quality of education, ensuring the constitutional right of citizens of the Kyrgyz Republic to education. The main goal of the Ministry is the formulation of the state policy in education, science and science-technology activity.</p>	<p>Organization of an education center on the basis of the Institute of Biotechnology of the National Academy of Sciences and develop training programs of molecular genetic and diagnostic research for students, postgraduates and masters.</p>	<p>It will be involved in the PPG phase, training, in Components 1, 2 and support the KM activities</p>

<p>Business Development and Investment Council under the Government of the Kyrgyz Republic</p>	<p>It is a consultative and advisory body coordinated by the Government of the Kyrgyz Republic, which ensures the development and preparation of recommendations and proposals for government bodies on improving the business environment and investment climate in the Kyrgyz Republic and implementation of activities necessary to accelerate socio-economic development of the country.</p>	<p>Advisory services</p>	<p>It will be involved in the PPG phase, engagement of the private sector, training and capacity building activities</p>
<p>Public Council for Transition to a Green Economy in the Kyrgyz Republic</p>	<p>It is a consultative and advisory body. The Council is formed to monitor, evaluate and coordinate the implementation of the green economy concept in the Kyrgyz Republic; and to develop relevant recommendations on the basis of monitoring and evaluation, define the strategy, tactics and mechanisms of the Concept implementation that ensure economic modernization based on green and sustainable development principles.</p>	<p>Advisory services</p>	<p>It will be involved in the PPG phase, training and in Components 1, 2 implementation. Also will support KM activities</p>
<p><b>Civil society, NGOs</b></p>			<p> </p>
<p>Rural Development Fund</p>	<p>RDF supports initiatives based on local needs and aimed at poverty alleviation and sustainable rural development. RDF actively engages local communities, government agencies, and donors to identify priority areas and ways to realize rural development goals</p>	<p>Public and agricultural producers' awareness among local governments.</p>	<p>It will be involved in the PPG phase, training and in Components 1, 2 implementations and support the KM activities</p>
<p>Aarhus Centre</p>	<p>Aarhus Centre Bishkek ensures public access to information and the decision-making system, in order to ensure the rights of citizens to a healthy environment.</p>	<p>Participation in the preparation and discussion of amendments to environmental legislation and support the awareness-raising for the members of the Parliament on the implementation of international conventions.</p>	<p>It will be involved in the PPG phase, training and will be strongly involved in Component 1 and 2 implementation as well as the KM activities</p>

Agency of Development Initiatives (ADI)	ADI helps to achieve social harmony, prosperity and the creation of a developed society by promoting and supporting local development initiatives	Public and agricultural producers' awareness among rural women, small-scale farmers, rural schools and youth.	It will be involved in PPG phase, training, and will be the beneficiary of the KM activities
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**In addition, provide indicative information on how stakeholders, including civil society and indigenous peoples, will be engaged in the project preparation, and their respective roles and means of engagement**

Number of state and public institutions will be involved in the implementation of the project, and the main implementing body will be the State Agency for Environmental Protection and Forestry under the Government of the Kyrgyz Republic (SAEPF). Each will have its own clear area of responsibility and each will have financial responsibility for the implementation of its activities, with the State Agency for Environment Protection and Forestry under the Government of the Kyrgyz Republic (SAEPF) taking overall responsibility for oversight and coordination of the Project.

**3. Gender Equality and Women's Empowerment**

**Briefly include below any gender dimensions relevant to the project, and any plans to address gender in project design (e.g. gender analysis).**

According to the "Human Development Report - 2019" Kyrgyzstan took 122nd place out of 189 countries in terms of human development<sup>[1]</sup>. According to the assessment there are three main dimensions of human development: a long and healthy life, knowledge and a decent standard of living. And the human development index (HDI) is based on four components: Inequality-adjusted development (IHDI); Gender development index (GDI); Gender Inequality Index; Multidimensional poverty index. Just to illustrate how the components present a picture in the respective areas the example of the gender inequality index is illustrated below:

HDI component	Definition	Place	This indicator considers the following factors
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Gender Inequality Index	Built based on reproductive health indicators, capacity building and economic activity, which are analyzed by male and female genders	87th out of 162 countries for this indicator with a value of 0.381 for 2018.  For comparison, neighboring Tajikistan and Uzbekistan are ahead of Kyrgyzstan, gaining 84th and 64th place respectively.	In Kyrgyzstan, 98.3% of women have secondary education compared to men (98.3%).  19.2% of parliamentary seats are held by women.  76 maternal deaths per 100,000 live births.  32.8 teenage births per 1000 women aged 15-19 years.  48% participation of women in the labor market compared with 75.8% participation of men.
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**TABLE 01**

The recent data on the status of employment of the population in the Kyrgyz Republic for 2019 illustrates that 18% of the population is employed in the agriculture, forestry and fishery sector (20.8% women and 16.5% men, out of which 61.6% of women and 38% men are self-employed, see Table 01 )<sup>[2]</sup>. In 2019, there was a decrease in the share of women employed in small enterprises, in comparison with 2015 it was reported that in most types of economic activities. The largest share of men employed in small businesses in 2019 accounted for the rural economy, forestry and fish farming - 81.3%, construction -80.4%, water supply, purification, waste treatment and receipt secondary raw materials - 72.3%<sup>[3]</sup>.

Women in Kyrgyzstan face numerous threats and insecurities, in different spheres of their lives from economic and political marginalization and experience different forms of gender-based violence (domestic violence, bride theft). Also they are

underrepresented in most of the decision-making processes, have limited access to infrastructure developments that affect their health and ability to have equal access to national resources. As it was reported in the latest report on Beijing+25 despite measures were taken to advance women's leadership and participation in the decision making processes in Kyrgyzstan, the percentage of female MPs decreased to 15.8% in 2018 against 20% in 2015. Similarly, the percentage of women in local legislative bodies decreased from 19% in 2016 to 11% in 2018[4]<sup>4</sup>.

Little statistical data is available on gender and biodiversity in Kyrgyzstan. However, there is a number of small scale or qualitative research that can offer some information about the differences in how women and men access and use forest resources and in their knowledge about biodiversity. Women tend to have less access to forest land[5]<sup>5</sup>, but at the same time women have a great deal of knowledge about traditional techniques for preserving biodiversity and it knowledge is especially important for conservation and sustaining the biodiversity of Kyrgyzstan's forests[6]<sup>6</sup>.

The CGIAR Research Program on Forests, Trees and Agroforestry showed that women and young people are more available to learn about and engage in innovation processes in agriculture and natural resource management than men[7]<sup>7</sup>. Women in rural Kyrgyzstan need to be equally and actively involved in processes to conserve and sustainably use biodiversity because they play critical roles as primary land managers and resource users, and they face disproportionate impacts both from biodiversity loss and gender-blind conservation measures. While women are taking on responsibility for managing small-scale agriculture, they do not have an equivalent voice in decision-making related to land use, nor equal access to needed resources. Biodiversity loss also poses a disproportionate burden for women and girls by increasing the time required to obtain necessary resources such as water, fuel wood, and medicinal plants, which reduces the time they can spend on income generating activities and education.

The proposed project will pay special attention to the involvement of women in decision-making, policy planning and formulating them in a gender-sensitive way, and capacity building. Adequate gender screening of the project will take place in the preparation phase in order to ensure equal benefits for both men and women. The project will make every effort possible to ensure women participate in all project

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activities, including in data collection and analysis, policy development and planning, and awareness-raising activities. This includes:

Component 1:

- ? a gender expertise for policies and regulations to be produced in the area of national biosafety regulations
- ? assisting government officials and relevant organizations to develop research methodologies that assess socio-economic dimensions in a participatory way with inclusion of gender experts
- ? include gender-related provisions to the technical guidelines and manuals on risk assessment, risk management and monitoring, with the emergency response plans that ensure women's participation at the decision-making levels and other related gender indicators

Component 2:

- ? national capacity for LMO will ensure gender-sensitive approach: in the training for the specialized and laboratory personnel and mechanisms, that include contingency protocols
- ? public awareness will be tailored to specific needs of men and women, as well as the participation and decision-making will ensure inclusive and equal representation
- ? gender balance will be ensured in the public monitoring and relevant gender-related indicators will be ensured within the process of this monitoring

Component 3:

- ? the project in its Component 3 will ensure that monitoring system is gender-sensitive and ensures all relevant data to be disaggregated by sex and gender related qualitative data is available where appropriate.

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[1] <https://www.kg.undp.org/content/kyrgyzstan/en/home/presscenter/articles/2020/1/hdr-2019--kyrgyzstan-takes-122nd-place-in-terms-of-human-develop.html>

[2] <http://www.stat.kg/ru/publications/sbornik-zhenshiny-i-muzhchiny-kyrgyzskoj-respubliki/>

[3] Ibid

[4] Beijing+25: National-Level Review of the Kyrgyz Republic on the Implementation of the Beijing Declaration and Beijing Platform for Action. Progress and Challenges. May 15, 2019

[5] Undeland, A. 2007. Women and Pastures in Chong Alai Valley of the Kyrgyz Republic. Case Study. Bishkek, Rural Development Fund.

[6] Ibid

[7] Elias, M.\*, Elmirst, R.\*, Ibraeva, G., Sijapati Basnett, B., Ablezova, M., Siscawati, M. (2018). Understanding gendered innovation processes in forest landscapes: Case studies from Indonesia and Kyrgyz Republic. GENNOVATE Report to the CGIAR Research Programs on Forests, Trees and Agroforestry (FTA). Bioversity International, Rome. Available at <https://pilresearch.com/bioversity-international/>

**Does the project expect to include any gender-responsive measures to address gender gaps or promote gender equality and women empowerment?** Yes

**closing gender gaps in access to and control over natural resources;**

**improving women's participation and decision-making; and/or** Yes

**generating socio-economic benefits or services for women.**

**Will the project's results framework or logical framework include gender-sensitive indicators?**

Yes

#### **4. Private sector engagement**

**Will there be private sector engagement in the project?**

Yes

**Please briefly explain the rationale behind your answer.**

The regulation of the LMOs in the country and the implementation of the Cartagena Protocol will have a direct impact on the private sector involved in the importation and transportation of products that may contain LMO, new regulations will need to be enforced and may have economic impacts (both positive and negative) and other implications for these companies.

During the PPG phase, the project will map all the sectors potentially affected by the new regulation and open and broader consultation will take place to assure the engagement of the private sector in the process, as well the compliance of the new framework by them.

On December 2, 2018, the countries of the Eurasian Economic Union (EAEU) introduce additional requirements for labeling products containing genetically modified organisms (GMOs). New standards

included in the Union technical regulations ?Food Products regarding their Labelling? will allow consumers to make a more informed and correct choice of food products.

## 5. Risks to Achieving Project Objectives

**Indicate risks, including climate change, potential social and environmental risks that might prevent the Project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the Project design (table format acceptable)**

Risk	Rating	Mitigation Measure
Lack of sufficient financial and technical support for the laboratories	Low	This risk will be mitigated under Component 2 under item 2.2. National capacity for LMO identification, detection and enforcement will be enhanced and the co-financing strategy will assist in ensuring sustained financial support.
Trade agreements which may oblige harmonization of biosafety regulations with trading partners that are not Party to the Cartagena Protocol, risking a lower standard of protection	Moderate	This risk will be mitigated under Component 1 of the project that will strengthen the intersectoral coordination mechanism to enhance cooperation on biosafety, in particular with the Ministry of Trade, as well as build biosafety awareness and capacity of relevant officials.
Lack of close cooperation between key institutional stakeholders, such as Environment, Agriculture, etc.	Moderate	This risk will be mitigated under Component 1 of the project that will strengthen the intersectoral coordination mechanism to enhance cooperation on biosafety. Form agreement such as Memorandum of Understanding, if appropriate.
Potential conflicts between the private sector and government agencies	Low	This risk will be mitigated under Component 2 of the project, particularly in relation to public awareness, education and public participation, so that misunderstandings or concerns about the project and the national biosafety approach can be sufficiently addressed.
Low technical capacity in operationalizing biosafety policy halting the project's progress	Low	Capacity development for LDN will be provided under Components 1 and 2, which will mitigate the risk. Component 2 will in addition provide capacity building for replication of the LDN in other regions.

Climate change		Since the current project does not have any field interventions, there are no essential risks for the proposed activities. However, climate change and biological processes have a tight bond. In this regard, even the interventions at the institutional level should take into account the climate change impact, mitigation and adaptation measures. The detailed information can be found in the additional document ?Climate change screening?
<p>COVID-19:</p> <p>(i) Restrictions due to the COVID-19 pandemic may lead to reduced ability of the project to organize trainings and meetings.</p> <p>(ii) COVID-19 may affect the availability of co-financing, in particular the resource allocations from Government.</p>	Moderate	<p>(i) The project may not be able to organize face-to-face meetings and trainings, which may impact the participation. If restrictions continue during implementation, the project would use alternative means for consultations, meetings and trainings, such as virtual meetings. Project implementation may be slightly delayed, but overall project delivery is not expected to be affected by the COVID-19 pandemic. The project will use biosecure implementation such as webinars and online sessions would be used in lieu of face-to-face training.</p> <p>(ii) It is not anticipated that the availability of co-financing will be significantly affected by COVID-19.</p>

## 6. Coordination

**Outline the institutional structure of the project including monitoring and evaluation coordination at the project level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.**

The executing agency for the project will be defined during the PPG phase. FAO will act as Implementing Agency, and as such will provide technical backstopping to the Executing Agency.

In light of the complex mix of stakeholders and the project's intent to effect change across different sectors, Project Steering Committee (PSC) will be established and led by State Agency for Environmental Protection and Forestry and be composed of representatives of key agencies and initiatives that share interests with the proposed project. The following national actors will be involved in the PSC: Ministry of Agriculture, Ministry of Health, Ministry of Economy, the State Customs Service, the State Inspectorate for Veterinary and Phytosanitary Security, representatives of relevant public organizations, Civil Society organization and academia.

The proposed project will coordinate with other initiatives supporting the Protocol, including the following:

Global project *Support to Preparation of the Fourth National Biosafety Reports to the Cartagena Protocol on Biosafety*? (Sep 2020 ? Aug 2021, USD 1.4 million GEF grant, GEF ID: 10639), implemented by UNEP.

FAO project *Enhancing capacity for food safety management in the Kyrgyz fruit and vegetable industry*?, which aims to increase share of domestic and EAEU markets for Kyrgyz fruit and vegetable products. (Jan 2020 ? Dec 2022, USD 570 000, FAO ID: MTF/KYR/021/STF)

FAO project *Supporting the implementation of organic agriculture policies and increasing the capacities of farmers*? to support the establishment of the legal and institutional framework on organic farming production and organic certification system; and strengthen the capacity of farmers in organic production and marketing. (July 2019 ? July 2021 TBD, FAO ID: GCP /KYR/022/ROK)

Kyrgyzstan actively supports international environmental initiatives and promotes its own, including

? Developing organic agricultural policies and practices, including revision of the legal framework and training

? On September 30, 2020 the Summit of Biodiversity during the 75th session of UN General Assembly, the Kyrgyz Republic has introduced the following draft resolution on the conservation of the world's biodiversity: "Nature knows no borders: transboundary cooperation is a key factor in the conservation and sustainable use of biodiversity".

? Country's main focus is to strengthen international cooperation in areas such as:

- o Conservation of biodiversity and healthy ecosystems;
- o Promoting transboundary cooperation in the field of biodiversity;
- o Applying the principles of the green economy to achieve sustainable development;
- o Developing regional cooperation initiatives for the sustainable use of biodiversity.

## **7. Consistency with National Priorities**

**Is the Project consistent with the National Strategies and plans or reports and assessments under relevant conventions?**

**If yes, which ones and how: NAPAs, NAPs, ASGM NAPs, MIAs, NBSAPs, NCs, TNAs, NCSAs, NIPs, PRSPs, NPFE, BURs, INDCs, etc**

The Kyrgyz Republic ratified the Convention on Biological Diversity in 1996. In 2006, they ratified the Cartagena Protocol on Biosafety and later, in 2015, the Nagoya Protocol on Access and Benefit-sharing.

The proposed project is aligned with "The Environmental Security Concept" of the Kyrgyz Republic, approved by the Presidential Decree No 506 in 2007, which established basic policy principles in the field of environmental protection and rational use of natural resources, including biodiversity. In 2011, the government approved Decree No 599 establishing a set of measures to ensure the environmental safety of the Kyrgyz Republic for 2011- 2015.

The government's broad vision for environmental conservation in the development policy framework has been recently approved by Government Decree through the adoption of biodiversity conservation priorities for 2014-2024. These priorities have been formulated with the current National Biodiversity Strategy and Action Plan being taken into account. These priorities have been translated into four strategic targets focused on: 1) integrating biodiversity conservation issues into the activities of State bodies and public organizations by 2020; 2) reducing the impact on biodiversity and promoting its sustainable use; 3) improving the protection and monitoring of ecosystems and species diversity; and 4) improving the social importance of biodiversity and ecosystem services, increasing the benefits of sustainable ecosystem services and traditional technologies.

The project is also consistent with the national law "On organic agricultural production in the Kyrgyz Republic" 2019, which excludes the use of LMOs and products made of or with the help of LMOs. In particular, the development of LMO detection capacities under the project would assist greatly in implementing the organic agriculture policy of the government, while meeting obligations established under the EAEU Technical Regulations for LMO food and feed labelling.

The Second Regular National Report on the Implementation of the Cartagena Protocol on Biosafety (2011) provides information on the country's lack of instruments in place for the implementation of their national biosafety framework, including institutional capacity and the need for human resources capacity development and training, which the proposed project aims to address.

## **8. Knowledge Management**

**Outline the knowledge management approach for the Project, including, if any, plans for the Project to learn from other relevant Projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.**

"The knowledge generated through the project will be systematically integrated with all relevant project activities to improve efficiency and sustainability and it will be widely disseminated and made available to stakeholders and the public in general through public awareness campaigns, dissemination of guidelines and workshops. As per its innovative feature in Kyrgyzstan and in the region, the project will generate substantial new knowledge on the operationalization of biosafety measures in Kyrgyzstan.

Public awareness, education and public participation in decision-making on biosafety will be promoted and for that communication and visibility material of biosafety measures and the Cartagena protocol will be generated. The project will also support a coordinated governmental system for public access to information on biosafety in accordance with the Cartagena Protocol on Biosafety, including the

National Biosafety Clearing-House.

In addition, a public awareness and participation strategy will be developed in accordance with obligations under the Aarhus Convention, Cartagena Protocol on Biosafety and the law "On access to information under the jurisdiction of state bodies and local self-government bodies of the Kyrgyz Republic?".

Finally, additional in-depth consultations will take place during the PPG to examine and evaluate: (i) potential available material and lesson learned from previous actions on biosafety (ii) the main knowledge gaps (iii) obtain current feedback from stakeholder groups and possible beneficiary groups. During the PPG stage, relevant ongoing and past projects and initiatives will be identified as potential resources for the planning of project design and implementation. To date, more than 136 capacity-building projects have been initiated in different countries/regions, according to the information registered in the Biosafety Clearing House. A systematic plan will be developed to learn from these experiences, and to gather best practices for application in the project. Information will also be gathered from relevant multilateral environmental agreements including the CBD, Cartagena Protocol and the Aarhus Convention, as well as relevant national experiences from other Parties e.g. the European Union, which have generated numerous biosafety knowledge products, manuals, guidance and toolkits, all of which can be used to positively shape the project's activities.

## 9. Environmental and Social Safeguard (ESS) Risks

Provide information on the identified environmental and social risks and potential impacts associated with the project/program based on your organization's ESS systems and procedures

**Overall Project/Program Risk Classification\***

PIF	CEO Endorsement/Approval	MTR	TE
Low			

### Measures to address identified risks and impacts

Provide preliminary information on the types and levels of risk classifications/ratings of any identified environmental and social risks and potential impacts associated with the project (considering the GEF ESS Minimum Standards) and describe measures to address these risks during the project design.

**Supporting Documents**

Upload available ESS supporting documents.

Title	Submitted
<b>CC screening_Implementation of the National Biosafety Framework in the Kyrgyz Republic</b>	
<b>FAO ES Screening Checklist CN Kyrgyz</b>	
<b>Project Risk Certification</b>	

**Part III: Approval/Endorsement By GEF Operational Focal Point(S) And GEF Agency(ies)**

**A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT (S) ON BEHALF OF THE GOVERNMENT(S): (Please attach the Operational Focal Point endorsement letter with this template).**

<b>Name</b>	<b>Position</b>	<b>Ministry</b>	<b>Date</b>
Dinara Kutmanova	Director	THE STATE AGENCY ON ENVIRONMENTAL PROTECTION AND FORESTRY	3/31/2021

**ANNEX A: Project Map and Geographic Coordinates**

Please provide geo-referenced information and map where the project intervention takes place

