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INITIAL ENVIRONMENTAL EXAMINATION

PROJECT/ACTIVITY DATA

Project/Activity Name:	Agricultural Input Market System
Geographic Location(s) (Country/Region)**:**	Nepal/ Lumbini, Bagamati, Sudur-paschim and Karnali provinces
Amendment (Yes/No), if Yes indicate # (1, 2...):	No
Implementation Start/End Date (FY or M/D/Y)**:**	2021/2026
If Amended, specify New End Date:	-
Solicitation/Contract/Award Number(s):	TBD
Implementing Partner(s):	TBD
Bureau Tracking ID:	TBD
Tracking ID of Related RCE/IEE (if any)**:**	Asia COVID 19 PIEE Asia 20-042
Tracking ID of Other, Related Analyses:	-

ORGANIZATIONAL/ADMINISTRATIVE DATA

Implementing Operating Unit(s): (e.g. Mission or Bureau or Office)	USAID Nepal, SEED Office
Other Affected Operating Unit(s):	
Lead BEO Bureau:	Asia
Funding Account(s) (if available)**:**	$24.9 million
Original Funding Amount:	$24.9 million
If Amended, specify funding amount:	-
If Amended, specify new funding total:	-
Prepared by:	Sujan Piya
Date Prepared:	3/17/2021

ENVIRONMENTAL COMPLIANCE REVIEW DATA

Analysis Type:	☒Environmental Examination	☐Deferral
Environmental Determination(s):	☒Categorical Exclusion(s) ☒Negative Determination with Conditions ☐Positive ☐Deferred (per 22 CFR 216.3(a)(7)(iv)	
IEE Expiration Date (if applicable)**:**	2026	
Additional Analyses/Reporting Required:	No	
Climate Risks Identified (#):	Low ___13___ Moderate ___2___ High ___#___	
Climate Risks Addressed (#):	Low __13___ Moderate ___2___ High ___#___	

THRESHOLD DETERMINATION AND SUMMARY OF FINDINGS

PROJECT/ACTIVITY SUMMARY

The Agricultural Input Market System activity focuses on improving agricultural productivity, competitiveness, resilience, and inclusivity in Nepalese agriculture by improving availability and accessibility of four critical inputs- Seed, Fertilizer, Irrigation and Agricultural Equipment. This activity builds on a current activity- Nepal Seed and Fertilizer (NSAF) but the scope of work is broader than NSAF. While NSAF is focused on seed and fertilizer, this one includes seed, fertilizer, irrigation and agricultural mechanization. The Activity adopts a market system development approach and strengthens the functioning of the input market system by closely working with the government and private sector stakeholders. Its main areas of work include building capacity of government and private sector, strengthening the policy environment, strengthening the agricultural input supply chain, and improving farmers' knowledge system on improved inputs and technology.

ENVIRONMENTAL DETERMINATIONS

Upon approval of this document, the determinations become affirmed, per Agency regulations (22 CFR 216).

TABLE 1: **ENVIRONMENTAL DETERMINATIONS**

Projects/Activities	**Categorical Exclusion Citation (if applicable)**	**Negative Determination**	**Positive Determination [1]**	**Deferral [2]**
Project/Activity 1 — The enabling environment for seed business strengthened	☐	☒	☐	☐
Project /Activity 2- Public and private sector (Seed Companies) stakeholders' technical capacity and partnership enhanced	☐	☒	☐	☐
Sub-activity 2.1 Building the technical capacity of public sector, seed companies and seed multipliers	☐	☒	☐	☐
2.2 Support seed companies and multipliers to access improved germplasm	☐	☒	☐	☐
Project/Activity 3- Seed companies' and seed producers' businesses improved through better access to business	☐	☒	☐	☐

[1] Positive Determinations require preparation of a Scoping Statement and Environmental Assessment.

[2] Deferrals must be cleared through an Amendment to this IEE prior to implementation of any deferred activities.

development services and stronger supply chain networks				
Sub-activity 3.1 facilitate financial institute for appropriate loan product development targeting seed entrepreneurs	☐	☒	☐	☐
3.2 Support to develop robust seed quality inspection system	☒	☐	☐	☐
3.3 Local service provider development by building capacity of agrovet on seed production technology	☐	☒	☐	☐
Project/Activity 4- Seed producer groups/cooperatives technical and institutional capacity built	☒	☐	☐	☐
Sub-activity 4.1 ICT platform development for seed business related information and networking	☒	☐	☐	☐
4.2 Technical training to seed producer groups/cooperatives	☒	☐	☐	☐
Project/Activity 5- Access to quality fertilizer, at the right time, and in the right quantity, improved	☐	☒	☐	☐
5.1 Strengthening fertilizer supply chain network	☐	☒	☐	☐
5.2 Systematize demand and supply of fertilizer by crop and location based on district soil fertility mapping	☒	☐	☐	☐
5.3 Support to promote voucher system	☐	☒	☐	☐
Project/Activity 6: Effectiveness and efficiency of the fertilizer subsidy mechanism improved	☒	☐	☐	☐
Project/Activity 7: Fertilizer use efficiency enhanced	☒	☐	☐	☐
7.1 Support to revise and develop location and crop specific fertilizer recommendation based on soil fertility status	☒	☐	☐	☐
7.2 ICT platform development to disseminate knowledge on balanced fertilizer use at farmers level	☒	☐	☐	☐
7.3 Facilitate private company/ies to establish soil testing centers	☒	☐	☐	☐

7.4 Promote soil health card for efficient use of fertilizer	☒	☐	☐	☐
Project/Activity 8: Commercial opportunities for balanced fertilizer production and distribution established	☐	☒	☐	☐
8.1 Piloting and business case development on the economic viability of blended fertilizer by different crop and geographic location	☒	☐	☐	☐
8.2 Technical assistance to the government and private sector on blended fertilizer technology	☐	☒	☐	☐
Project/Activity 9- Access to irrigation for commercially oriented agriculture increased	☐	☒	☐	☐
9.1 Enhance the performance of existing surface irrigation schemes	☐	☒	☐	☐
9.2 Facilitate financial institutions for appropriate loan product development for water MSMEs and water users	☐	☒	☐	☐
9.3 Strengthen private sector service providers to promote irrigation technology	☐	☒	☐	☐
Project/Activity 10- Water use efficiency enhanced	☒	☐	☐	☐
Project/Activity 11- Capacity of local government, civil society and private sector for sustainable watershed management enhanced	☒	☐	☐	☐
Project/Activity 12- Enabling environment for sustainable water resource management and irrigation system improved	☒	☐	☐	☐
12.1 Build the institutional capacity of local civil society for the participation in local plan development on watershed management	☒	☐	☐	☐
12.2 Inter-municipal level/inter-provincial level collaboration mechanism developed for upstream and downstream management of watersheds	☒	☐	☐	☐
Project/Activity 13- Uptake of modern agricultural equipment in primary production and value addition increased	☐	☒	☐	☐
13.1 Rapid deployment of time-	☐	☒	☐	☐

and labor-saving agricultural equipment in areas heavily affected by the COVID-19				
13.2 Appropriate loan product development for MSMEs and farmers for mechanization	☐	☒	☐	☐
13.3 Piloting and scaling up the successful custom hiring service system at the local level	☐	☒	☐	☐
Project/Activity 14 – Policy environment for agricultural equipment promotion improved	☐	☒	☐	☐
Project/Activity 15- Maintenance service system for agricultural equipment improved	☒	☐	☐	☐

CLIMATE RISK MANAGEMENT

For this activity, CRM screening showed no major climate risks and hence scored no Risk or Low climate risk rating for technical assistance and capacity development activities. However, in the area of fertilizer, irrigation, agricultural mechanization, and watershed management there are low to moderate risks which can be mitigated with climate resilience design and management practices. The implementation partner will be required to conduct climate screening to identify climate risks and mitigation measures during the annual activity planning process to develop a mitigation strategy/adaptation plan as an annex or separate section of each Annual Work Plan.

BEO SPECIFIED CONDITIONS OF APPROVAL

IMPLEMENTATION

In accordance with 22 CFR 216 and Agency policy, the conditions and requirements of this document become mandatory upon approval. This includes the relevant limitations, conditions and requirements in this document as stated in Sections 3, 4, and 5 of the IEE and any BEO Specified Conditions of Approval.

1. **IP Briefings on Environmental Compliance Responsibilities**

USAID/Nepal/ Agricultural Input Market System team shall provide potential implementing partners (IPs) with a copy of this IEE as an element of the procurement instrument. The potential bidder shall have a copy of IEE and in their technical and financial proposals and propose how the project with IEE conditions will be implemented. IEE conditions shall be negotiated, and ultimately be mandatory part of the award.

2. **Development of an EMMP**

The IP whose activities are subject to one or more conditions set out in Section Three of this IEE shall develop and provide to the COR/AOR/MEO/CIL for review and approval an Environmental Mitigation and Monitoring Plan (EMMP) that clearly documents how their project

will implement and verify all IEE conditions and monitoring and reporting mitigation measures that apply to their activities.

The EMMP shall identify how the IP will ensure that IEE conditions that apply to activities supported under sub-contracts and sub-grants are implemented. A sample EMMP format is included as ANNEX A to this IEE.

3. Integration and Implementation of EMMP

The IP shall integrate their EMMP into the project work plan, allocate budgets to implement all IEE conditions, and implement the EMMP and all IEE conditions and report on its implementation and findings as an element of regular project performance reporting.

The IP shall ensure that sub-contractors and sub-grantees integrate implementation of IEE conditions, where applicable, into their own project work plans and budgets, and report on their implementation and findings as an element of sub-contract or grant performance reporting.

4. Integration of compliance responsibilities in prime and sub-contracts and grant agreements

a. The AOR/COR shall ensure that any future contracts or agreements for implementation of a project, and/or significant modification(s) to current contracts/agreements shall reference and require compliance with the conditions set out in this IEE, as required by ADS 204.3.4.a.6 and ADS 303.3.6.e.
a. The IP shall ensure that future sub-contracts and sub-grants agreements, and/or significant modification(s) to existing agreements reference and require compliance with relevant elements of these conditions.

5. Assurance of sub-grantee and sub-contractor capacity and compliance

IP shall ensure that sub-grantees and sub-contractors have the capacity to implement the relevant requirements of this IEE. The IP shall, as and if appropriate, provide training to sub-grantees and sub-contractors in their environmental compliance responsibilities and in environmentally sound design and management (ESDM) of their activities.

6. New or modified activities

As part of its work plan and all annual work plans thereafter, IPs, in collaboration with their COR/AOR/MEO/CIL, shall review all ongoing and planned activities to determine if they are within the scope of this IEE.

If IP adds new activities or makes substantial modifications to existing activities, an amendment to this IEE addressing these activities shall be prepared for USAID review and approval. No such new activities shall be undertaken prior to formal approval of this amendment.

Any ongoing activities found to be outside the scope of the approved Regulation 216 environmental documentation shall be halted until an amendment to the documentation is submitted and written approval is received from USAID.

7. Compliance with Government of Nepal Requirements

Nothing in this IEE substitutes for or supersedes IP, sub-grantee, and subcontractor responsibility for compliance with all applicable Nepali laws and regulations and relevant international environmental, heath, and safety agreements, including ILO, WHO endorsed and ratified by the Nepal government. The IP, sub-grantees, and sub-contractors must comply with Nepali environmental regulation unless otherwise directed in writing by USAID; however, in case of conflict between host country and USAID regulations, the latter shall govern.

USAID APPROVAL OF INITIAL ENVIRONMENTAL EXAMINATION

PROJECT/ACTIVITY NAME: _____

Bureau Tracking ID: _____

Approval:	Adriana Hayes for Sepideh Keyvanshad. MD has delegated clearance to DMD due to COVID demands. Sepideh Keyvanshad, Mission Director	5/7/2021 Date
Clearance:	Cleared David Chalmers, SEED Acting Director	5/3/2021 Date
Clearance:	Cleared Shanker Khagi, Mission Environmental Officer	5/3/2021 Date
Clearance:	Cleared with suggestions on draft Netra Sharma, Climate Integration Lead	05/04/2021 Date
Clearance:	Cleared with comments through email Andrei Barannik, Regional Environmental Advisor for SCA and Afghanistan & Pakistan-	Date 04/29/2021
Clearance:	Cleared with minor edits Mark Driver, Regional Legal Officer	Date 05/06/2021
Clearance:	Cleared with minor edits Adriana Hayes, Deputy Mission Director	5/7/2021 Date
Concurrence:	William L Gibson Digitally signed by William L Gibson Date: 2021.05.18 10:39:09 -04'00' Will Gibson, Asia Bureau Environmental Officer	Date

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Environmental Compliance Database

INITIAL ENVIRONMENTAL EXAMINATION

CONTENTS

1.0 PROJECT/ACTIVITY DESCRIPTION

1.1 PURPOSE OF THE IEE

The purpose of this document, in accordance with Title 22, Code of Federal Regulations, Part 216 (22 CFR 216), is to provide a preliminary review of the reasonably foreseeable effects on the environment of the USAID intervention described herein and recommend determinations and, as appropriate, conditions, for these activities. Upon approval, these determinations become affirmed, and specified conditions become mandatory obligations of implementation. This IEE also documents the results of the Climate Risk Management process and construction risk management process in accordance with USAID policy (specifically, ADS 201mal/ ADS 303maw).

This IEE is a critical element of USAID's mandatory environmental review and compliance process meant to achieve environmentally sound design and implementation. Potential environmental and social impacts should be addressed through formal environmental mitigation and monitoring plans (EMMPs) and/or Environmental Assessments (EAs), if needed.

1.2 PROJECT/ACTIVITY OVERVIEW

Based on high levels of hunger and poverty, on April 24, 2010, Nepal was officially selected as one of twenty focus countries worldwide for the USG Feed the Future (FTF) Presidential Initiative. This activity is one of the initiatives under FTF program of USAID Nepal Mission. Other activities implemented under the FtF are Knowledge-based Integrated Sustainable Agriculture in Nepal II (KISAN II), Nepal Seed and Fertilizer (NSAF), FTF Integrated Pest Management (IPM), and the Cereal Systems Initiative for South Asia (CSISA) covid response activity. This Activity is focused on improving productivity, competitiveness, resilience, and inclusivity in the agriculture sector of Nepal by focusing on four critical production inputs- Improved seed, Irrigation, Agricultural mechanization and Fertilizer. The Activity focuses on strengthening market systems of the selected agricultural inputs with an objective of improving availability and accessibility of these inputs to smallholder, vulnerable, marginal, and women farmers for better income and household food security. The purpose of this Activity will be achieved by producing the following 15 outputs by implementing this Activity in 25 districts in Lumbini, Sudurpaschim, Karnali and Bagmati provinces.

1. The enabling environment for seed business strengthened
2. Public and private sector stakeholders' technical capacity and partnership enhanced
3. Seed companies' and seed producers' businesses improved through better access to business development services and stronger supply chain networks
4. Seed producer groups/cooperatives technical and institutional capacity built
5. Access to quality fertilizer, at the right time, and in the right quantity, improved
6. Effectiveness and efficiency of the fertilizer subsidy mechanism improved
7. Fertilizer use efficiency enhanced
8. Commercial opportunities for balanced fertilizer production and distribution established
9. Access to irrigation for commercially oriented agriculture increased
10. Water use efficiency enhanced
11. Capacity of local government, civil society and private sector for sustainable watershed management enhanced
12. Enabling environment for sustainable water resource management and irrigation system improved

13. Uptake of modern agricultural equipment in primary production and value addition increased
14. Policy environment for the promotion of agricultural equipment improved
15. Maintenance service system for agricultural equipment improved

1.3 PROJECT/ACTIVITY DESCRIPTION

TABLE 2: DEFINED OR ILLUSTRATIVE PROJECTS/ACTIVITIES AND SUB-ACTIVITIES

Project/Activity 1 — The enabling environment for seed business strengthened
Sub-activity 1.1 Build institutional capacity of seed association and support for policy advocacy
Project /Activity 2- Public and private sector stakeholders' technical capacity and partnership enhanced
Sub-activity 2.1 Building the technical capacity of seed companies and seed multipliers
2.2 Support seed companies and multipliers to access improved germplasm
Project/Activity 3- Seed companies' and seed producers' businesses improved through better access to business development services and stronger supply chain networks
Sub-activity 3.1 facilitate financial institute to offer loan services to seed entrepreneurs
3.2 Support to develop robust seed quality inspection system
3.3 Local service provider development by building capacity of agrovets on seed production technology
Project/Activity 4- Seed producer groups/cooperatives technical and institutional capacity built
Sub-activity 4.1 ICT platform development for seed business related information and networking
4.2 Technical training to seed producer groups/cooperatives
Project/Activity 5-Access to quality fertilizer, at the right time, and in the right quantity, improved
5.1 Strengthening fertilizer supply chain network
5.2 Systematize demand and supply of fertilizer by crop and location based on district soil fertility mapping
5.3 Support to promote voucher system
Project/Activity 6: Effectiveness and efficiency of the fertilizer subsidy mechanism improved
6.1 Engagement with the government to systematize its fertilizer subsidy program
Project/Activity 7: Fertilizer use efficiency enhanced
7.1 Support to revise and develop location and crop specific fertilizer recommendation based on soil fertility status
7.2 ICT platform development to disseminate knowledge on balanced fertilizer use at farmers' level
7.3 Facilitate private company/ies to establish soil testing centers
7.4 Promote soil health card for efficient use of fertilizer
Project/Activity 8: Commercial opportunities for balanced fertilizer production and distribution established
8.1 Piloting and business case development on the economic viability of blended fertilizer by different crop and geographic location
8.2 Technical assistance to the government and private sector on blended fertilizer technology
Project/Activity 9- Access to irrigation for commercially oriented agriculture increased
9.1 Enhance the performance of existing surface irrigation schemes
9.2 Facilitate financial institutions for appropriate loan product development for water MSMEs and water users
9.3 Strengthen private sector service providers to promote irrigation technology
Project/Activity 10- Water use efficiency enhanced
10.1 Capacity building of water user associations on better management of water schemes and on efficient water use
Project/Activity 11- Capacity of local government, civil society and private sector for sustainable watershed management enhanced

11.1 Support local governments for sustainable water management
Project/Activity 12- Enabling environment for sustainable water resource management and irrigation system improved
12.1 Build the institutional capacity of local civil society to participate in local plan development on watershed management
12.2 Inter-municipal level/inter-provincial level collaboration mechanism developed for upstream and downstream management of watersheds
Project/Activity 13- Uptake of modern agricultural equipment in primary production and value addition increased
13.1 Rapid deployment of time- and labor-saving agricultural equipment in areas heavily affected by the COVID-19
13.2 Appropriate loan product development for MSMEs and farmers for mechanization
13.2 Piloting and scaling up the successful custom hiring service system at the local level
Project/Activity 14 – Policy environment for the promotion of agricultural equipment improved
14.1 Policy dialogue on the removal or decrease of tariffs on spare parts
Project/Activity 15- Maintenance service system for agricultural equipment improved
15.1 Development of local human resources on agricultural equipment maintenance

Will this project/activity involve construction[3] as defined by ADS 201 and 303? Yes ☐ No ☒

2.0 BASELINE ENVIRONMENTAL INFORMATION

Nepal has a large diversity of topography, ecosystems and habitats. The country's abundant and diverse natural resource base plays an important role in supporting livelihoods of a majority of its citizens and, if managed well, has the potential to continue to do so for many years. Nepal's vast natural capital —the stock of natural ecosystems that yields a flow of valuable ecosystem goods and services to the present and future generations—are critical to ensuring food security, power development, and a robust tourism sector. Deteriorating natural resources, including biodiversity, water, and forests, poses a significant threat to the long-term health of Nepal's economy and may reverse many development achievements. Over 40 percent of Nepal's economy is tied to agricultural production, supporting the livelihoods of two thirds of the country's population. Tourism in Nepal is the second-largest foreign income earner after remittances.

Despite some notable successes in protecting Nepal's natural resources, significant threats remain. Invasive species, such as the terrestrial "mile-a-minute" vine and water hyacinth, are quickly taking over forest and freshwater areas. Poorly planned and constructed secondary roads are contributing factors to landslides, and larger infrastructure is reducing habitat connectivity. Unregulated agriculture is expanding into forest and wetland areas in the Terai, while migration is leaving terraces in the hills barren, un-maintained, and prone to collapse. Specific threats to freshwater ecosystems, and the water resources vulnerable people need to survive, including poorly sited, constructed, and managed dams, large-scale water diversion plans, urban domestic waste, aggregate mining from riverbeds, and agricultural pollution. The wide range of habitats and species found in Nepal means that areas of important biodiversity remain unprotected or under-protected.

[3] **Construction, as defined by ADS 201 and 303,** includes: construction, alteration, or repair (including dredging and excavation) of buildings, structures, or other real property and includes, without limitation, improvements, renovation, alteration and refurbishment. The term includes, without limitation, roads, power plants, buildings, bridges, water treatment facilities, and vertical structures. In the box below, describe any construction planned for this project/activity. Refer to ADS 201maw for required Construction Risk Management procedures.

Nepal is vulnerable to various natural disasters, including floods, droughts, and seismic hazards. The 2015 Gorkha earthquake and its aftershocks caused over $7 billion in loss and damages and resulted in nearly 9,000 lives lost, mostly in the hilly and mountain regions.

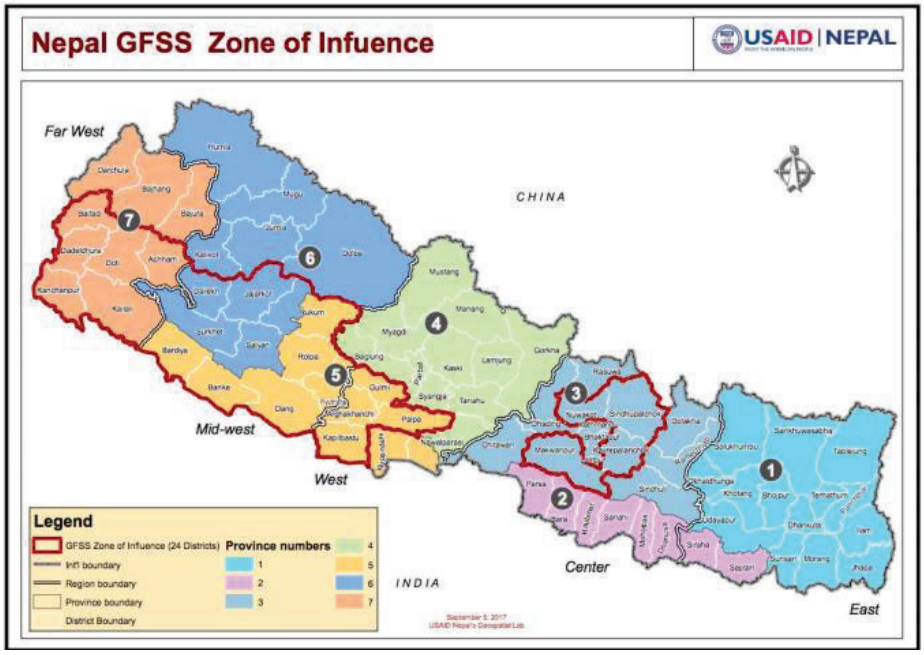
Further information on the status of the environment in Nepal could be found at:

https://www.adb.org/publications/country-diagnostic-environment-nepal.

https://openknowledge.worldbank.org/bitstream/handle/10986/32645/139924.pdf?sequence=2&isAllowed=y

2.1 LOCATIONS AFFECTED AND ENVIRONMENTAL CONTEXT (ENVIRONMENT, PHYSICAL, CLIMATE, SOCIAL, THREATENED AND ENDANGERED SPECIES)

This Activity focuses on the FTF Zone of Influence (ZOI) in order to complement and build on USAID's ongoing efforts to improve food and nutritional security and stimulate agriculture-led economic growth in that geographic area. The FTF ZOI was identified in the GFSS Country Plan due to the potential in those areas for agricultural growth as well as high levels of poverty, malnutrition, and vulnerability. As shown in the map, FTF Zone of Influence (ZOI) comprises 25 districts from Bagmati, Lumbini, Sudurpaschim, Karnali provinces. It includes both hilly and Terai plain areas. Hilly districts are geographically difficult terrain with rich biodiversity and are more vulnerable to climate induced risks. District selection will be finalized shortly, but may include, Achham, Baitadi, Dadeldhura, Doti, Kailali, Kanchanpur, Banke, Bardia, Dailekh, Dang, Jajarkot, Pyuthan, Rolpa, Rukum, Salyan , Surkhet, Arghakhanchi, Gulmi, Kapilvastu, Palpa, Makwanpur, Sindhupalchowk, Kavre, and Makwanpur.



2.2 APPLICABLE AND APPROPRIATE PARTNER COUNTRY AND OTHER INTERNATIONAL STANDARDS (E.G. WHO), ENVIRONMENTAL AND SOCIAL LAWS, POLICIES, AND REGULATIONS

The Government of Nepal (GON) has a policy of enforcing all environmental legislation, but the previous centralized GON never had a sufficient work force for consistent enforcement. Nepal has now transitioned to a federal state, with monitoring of the application of such codes and legislation mandated to the 753 municipal governments, 7 provincial governments and a federal government at the center. While they have the potential for high interest and ownership of such tasks, they still lack capacity. The legislation includes the Environmental Impact Assessment Guidelines 1993; Environmental Protection Act 2019; Environmental Protection Rules 2020. The Guidelines, Act, Rules, and other regulations provide the basic legal framework for all environmental assessments in Nepal with the aim:

- To manage natural and physical resources efficiently and sustainably,
- To balance development efforts and environmental conservation to fulfill the basic needs of the people in a sustainable manner,
- To safeguard national heritage,
- To mitigate the adverse environmental impacts of development projects and human actions, and
- To integrate the environment and development through appropriate institutions, adequate legislation and economic incentives, and sufficient public resources.

The Guidelines, Act, and Rules require that either an IEE or EIA is required for any development project. It is noted that the existing legislative frameworks are adequate in relation to proposed USAID activity. However, the GON has been inconsistent in the implementation of these.

2.3 COUNTRY/MINISTRY/MUNICIPALITY ENVIRONMENTAL CAPACITY ANALYSIS (AS APPROPRIATE)

Despite various policy measures, progress in mainstreaming environmental consideration is limited in Nepal mainly due to weak enforcement of environmental laws, regulation, and standards and poor environmental monitoring system. The government and private sectors' environmental capacities are low and the public sector has very limited awareness. Thus, lack of coordination, linkage, and integration between environmental and development activities is a key concern. Moreover, poor database management related to the environment is also a big problem. Poor bureaucratic capacity and political instability in the country have also hampered to bring environmental concerns at the forefront of the development work. Similarly, limited financial resources is another key issue in considering environmental concerns in development work.

3.0 ANALYSIS OF POTENTIAL ENVIRONMENTAL RISK

PROJECT/ACTIVITY 1: AGRICULTURAL INPUT MARKET SYSTEM

TABLE 3A. POTENTIAL IMPACTS – PROJECT/ACTIVITY 1

Project/Activity	Potential environmental and social impacts
Project/Activity 1 — The enabling environment for seed business strengthened	The current seed regulatory framework is inadequate: The Enabling the Business of Agriculture (EBA) index estimates that the time to register a new cereal variety is 611 days, while Nepal's quality of seed regulation score is 5 on a scale of 0-9. Similarly, as per Seed policy and regulation, private seed entrepreneurs are not permitted to multiply foundation seeds

	from breeder seeds. In this context, this activity focuses on creating an enabling environment for seed entrepreneurs through appropriate policy change.This activity does not incur any direct environmental and social impacts. However, an enabling policy environment for seed business may lead to the increased investment on high yielding hybrid varieties that may replace traditional varieties which could impact biodiversity adversely and increase dependency of smallholder farmers on external sources of seed. Similarly, the existing seed quality inspection system is also not effective to monitor the quality of seed; policies and regulations relating to biosecurity are also very scattered and not effective. This situation, if not dealt properly while creating a private sector friendly business environment, may lead to contaminated seeds in the market that may affect production as well as public health.
Project /Activity 2- Public and private sector stakeholders' technical capacity and partnership enhanced	This activity focuses on capacity building of public institutions, seed companies and seed multipliers through technical training and technical backstopping. This activity leads to increased production and multiplication of hybrid seeds which may replace the traditional varieties and adversely impact agro biodiversity and expose smallholder farmers to market induced risk. Most of the smallholder farmers in rural hilly areas use traditional varieties; these varieties are location specific and transferred through generation to generation. The replacement of such local varieties in various locations by improved seed may impact agro biodiversity.
Sub-activity 2.1 Building the technical capacity of seed companies and seed multipliers	It focuses on building a technical capacity of seed companies and seed multipliers through training, mentoring and support. This sub-activity leads to increased production and multiplication of improved seeds that may replace traditional varieties. Nepal is a part of the world's biodiversity hotspot and ranks the 49th in the world for biodiversity. Among 24,300 total species in the country, 28% are agricultural genetic resources (AGRs), termed as agrobiodiversity. There are 12 agroecosystems supporting 1026 species under crop component[4]. Improved seed production by private companies replaces traditional varieties which may pose an adverse impact on crop biodiversity and expose farmers to market and climate induced risks.
2.2 Support seed companies and multipliers to access improved germplasm	This sub activity mainly establishes linkages between national research companies and CGIAR to access improved germplasm for new variety development which leads to development of new improved seed varieties and may replace traditional existing varieties and impact agro biodiversity.
Project/Activity 3- Seed companies' and seed producers' businesses improved through better access to business development services and stronger supply chain networks	This activity is oriented towards building various business developed support services to seed multipliers and seed companies. This activity may lead to adverse social and environmental impact.
Sub-activity 3.1 facilitate financial institute for appropriate loan	This activity is focused on supporting and facilitating financial institutions to develop appropriate loan products for seed

[4] Agrobiodiversity and its Conservation in Nepal: https://www.nepjol.info/index.php/JNARC/article/view/28111

product development targeting seed entrepreneurs	entrepreneurs and does not directly generate any adverse environmental and social impacts. However, it may lead to higher investment on new and improved seed production and multiplication that may replace traditional low yielding but climate resilient varieties and affect the agro biodiversity.
3.2 Support to develop robust seed quality inspection system	This activity supports government to strengthen the seed quality inspection system and does not pose any adverse environmental and social impact
3.3 Local service provider development by building capacity of agrovet on seed production technology	This activity provides training to local market actors such as agrovets to build their technical know-how on seed production technology so that they can deliver technical information to farmers and seed multipliers. This does not directly pose any adverse environmental and social impacts. However, it will help to improve seed multiplication programs and increase availability of improved varieties in the market that may replace traditional varieties and narrow down agro biodiversity and expose farmers to the market induced risks and uncertainties.
Project/Activity 4- Seed producer groups/cooperatives' technical and institutional capacity built	This activity is mainly focused on improving technical and institutional capacity of seed producers' groups through training and mentoring and does not pose any direct environmental and social adverse impact
Sub-activity 4.1 ICT platform development for seed business related information and networking	This activity supports the development of ICT based virtual platforms that helps business networking and improve connectivity among market actors and farmers. This does not pose any adverse environmental and social challenges
4.2 Build entrepreneurship and business skills to systematize supply chain management	This activity provides training and other skill development support and facilitates seed entrepreneurs to expand supply chain networks to rural areas and does not pose any adverse environmental and social challenges
Project/Activity 5- Access to quality fertilizer, at the right time, and in the right quantity, improved	This activity basically focuses on systematizing fertilizer distribution systems to improve fertilizer access to the smallholder farmers. This activity may pose some adverse effect on the environment.
5.1 Strengthening fertilizer supply chain network	This sub-activity focuses on expanding the supply chain network of fertilizer distribution across various production zones and locations. It improves the timely availability of fertilizer by location and crop. It increases the access and use of chemical fertilizer which will adversely affect the environment.
5.2 Systematize demand and supply of fertilizer by crop and location based on district soil fertility mapping	This activity focuses on ensuring supply of fertilizer based on demand by location and crop as guided by district soil fertility status. This improves fertilizer use efficiency and reduces adverse environmental impact due to haphazard use of chemical fertilizer.
5.3 Support to promote voucher system	This sub-activity scales up a successful model of voucher system to improve fertilizer distribution and access. It may adversely impact the environment due to better access and use of chemical fertilizer.
Project/Activity 6: Fertilizer subsidy mechanism become more effective and efficient	This activity's major focus is to improve subsidy delivery mechanisms to make fertilizer subsidies on macronutrients (Nitrogen, Phosphorus and Potash) more efficient and effective. This activity does not include procurement of any fertilizer; thus the terms and condition of ADS 312 and Fertilizer financing guidance are not applicable. Its main focus is on developing a ICT based tracking system for the fertilizer subsidy provisioned by the Nepal government. This does not generate any adverse

	environmental and social impacts.
6.1 Engagement with the government to systematize its fertilizer subsidy program	This sub-activity supports government agencies to adopt new innovations such as ICT platforms to channelize subsidy mechanisms in fertilizer so as to improve the efficiency and effectiveness of fertilizer subsidy delivery. This does not pose any serious environmental and social impacts
Project/Activity 7:Fertilizer use efficiency enhanced	This activity improves fertilizer use efficiency through application of balanced nutrients at the right time and place. It does not pose extra environmental and social consequences; it would rather help to reduce the adverse environmental consequences due to haphazard use of chemical fertilizer.
7.1 Support to revise and develop location and crop specific fertilizer recommendation based on soil fertility status	This sub-activity supports the government institutions such as Ministry of Agriculture and Livestock Development (MOALD) and National Agricultural Research Council (NARC) and private fertilizer distributors such as local cooperatives and agrovets and farmers institution such as farmers group to revise the old and obsolete fertilizer recommendation with revised ones based on existing soil fertility status across different geographies. It helps to improve fertilizer use efficiency and does not pose further environmental and social challenges.
7.2 ICT platform development to disseminate knowledge on balanced fertilizer use at farmers level	This activity supports ICT based innovation and does not pose any adverse environmental and social impact
7.3 Facilitate private company/ies to establish soil testing centers	This sub-activity is focused on promoting soil testing services in the project areas and does not pose any adverse environmental and social impact
7.4 Promote soil health cards for efficient use of fertilizer	This sub-activity promotes use of soil health cards to the farmer level and makes them aware about soil health conditions, which ultimately enhances fertilizer use efficiency and does not pose any adverse environmental and social impact
Project/Activity 8: Commercial opportunities for balanced fertilizer production and distribution established	This activity basically deals with the promotion of blended fertilizer in Nepal to promote balanced use of fertilizer for higher fertilizer use efficiency and better crop productivity. It promotes more fertilizer use, though in balanced quantity, and may pose some environmental challenges
8.1 Piloting and business case development on the economic viability of blended fertilizer by different crop and geographic location	This sub-activity is basically piloting and testing of technical and economic feasibility of blended fertilizer and does not pose any adverse environmental and social impact
8.2 Technical assistance to the government and private sector on blended fertilizer technology	This sub-activity provides capacity building of the government and private organizations to produce and promote blended fertilizer use in Nepal. It may pose some negative environmental consequences
Project/Activity 9- Access to irrigation for commercially oriented agriculture increased	This activity mainly focuses on improving access to irrigation through better water resource management and may pose negative externalities in terms of environmental and social impacts if natural water resources are not sustainably managed
9.1 Enhance the performance of existing surface irrigation schemes	This sub-activity mainly focuses on building technical, institutional and management capacity of water users' associations/committees and local governments to improve the performance of irrigation schemes. The Activity will capitalize local government and community investment to rehabilitate existing non-functional or under functional irrigation schemes

	and does not invest directly in water scheme construction. Thus, it does not pose any adverse environmental and social impact. Rather, it contributes to enhance the proper use of existing schemes.
9.2 Facilitate financial institutions for appropriate loan product development for water MSMEs and water users	This sub-activity promotes loan schemes for water MSMEs and water users to invest in irrigation technology. This may lead to over-exploitation of natural water resources, if proper attention is not given for sustainable water harvest and use.
9.3 Strengthen private sector service providers to promote irrigation technology	This sub-activity develops local service providers such as irrigation equipment maintenance service providers, irrigation equipment suppliers. It may adversely impact the environment if it leads to overexploitation of natural water reservoirs.
Project/Activity 10- Water use efficiency enhanced	This activity focuses on improving water use efficiency by improving knowledge and skill of water users' associations and does not generate any adverse social and environmental impacts
10.1 Capacity building of water user associations on better management of water schemes and on efficient water use	This sub-activity focuses on building the technical and management capacity of water users' associations to manage existing water schemes and also use water more efficiently. It does not pose any adverse environmental and social impact
Project/Activity 11- Capacity of local government and civil society for sustainable water management improved	This activity mainly focuses on improving water governance through capacity building of government and civil societies and does not pose any adverse consequences to the environment and society at large.
11.1 Support local governments for sustainable water management	This sub-activity builds local government capacity in the area of planning, implementing and monitoring of water management projects. It does not pose any adverse environmental and social impact
Project/Activity 12- Enabling environment for sustainable water resource management and irrigation system improved	This activity focuses on creating an enabling policy environment to promote sustainable water management practices that includes promotion of climate adaptive water management practices, spring source conservation, judicious use of water resources and does not impact the environment adversely
12.1 Build the institutional capacity of local civil society for the participation in watershed management planning process	This sub-activity empowers local civil society and farmer groups and builds their knowledge system to participate and contribute in local water resource plan development and implementation. It does not pose any adverse environmental and social impact.
12.2 Inter-municipal level/inter-provincial level collaboration mechanism developed for upstream and downstream management of watersheds	This sub-activity focuses on improving collaboration and coordination between and among local and provincial governments for better watershed management. It does not pose any adverse environmental and social impact
Project/Activity 13- Uptake of modern agricultural equipment in primary production and value addition increased	This activity focuses on promotion of agricultural mechanization in primary agriculture operation and along the agricultural value chain and may pose some environmental challenges as increased mechanization promotes the use of fossil fuels
13.1 Rapid deployment of time- and labor-saving agricultural equipment in areas heavily affected by the COVID-19	This sub-activity promotes mini tillers, and other agriculture equipment to save labor and may pose some minor environmental challenges
13.2 Appropriate loan product development for MSMEs and farmers for mechanization	This sub-activity focuses on improving access to financial services to MSMEs and farmers which helps to accelerate the pace of agricultural mechanization. It may pose adverse environmental impacts as increased mechanization comes

	along with increased use of fossil fuels
13.3 Piloting and scaling up the successful custom hiring service system at the local level	This sub-activity contributes to the increased access and use of agriculture equipment at the farmers level and may pose adverse environmental challenges due to use of fossil fuel to run the farm equipment
Project/Activity 14 –Policy environment for the promotion of agricultural equipment improved	This activity facilitates government institutions to develop policy instruments to promote agricultural mechanization. It may generate some adverse impact on the environment.
14.1 Policy dialogue on the removal or decrease of tariffs on spare parts	This sub-activity advocates for reducing the tariff rate on spare parts of agricultural equipment with an objective of minimizing the cost of equipment maintenance and also creating opportunity for local assembling units development. It indirectly contributes to promote agricultural mechanization which may pose further environmental challenges.
Project/Activity 15- Maintenance service system for agricultural equipment improved	This activity mainly focuses on improving agricultural equipment maintenance services in rural areas and does not pose any extra adverse environmental and social impact
15.1 Development of local human resources on agricultural equipment maintenance	This sub-activity trains local service providers for maintenance service of agricultural equipment and does not pose any adverse environmental and social impact

4.0 ENVIRONMENTAL DETERMINATIONS

4.1 RECOMMENDED ENVIRONMENTAL DETERMINATIONS

The following table summarizes the recommended determinations based on the environmental analysis conducted. Upon approval, these determinations become affirmed, per 22 CFR 216. Specified conditions, detailed in Section 5, become mandatory obligations of implementation, per ADS 204.

TABLE 4: **ENVIRONMENTAL DETERMINATIONS**

Projects/Activities	Categorical Exclusion Citation (if applicable)	Negative Determination	Positive Determination [5]	Deferral [6]
Project/Activity 1 — The enabling environment for seed business strengthened	☐	☒	☐	☐
Project /Activity 2- Public and private sector stakeholders' technical capacity and partnership enhanced	☐	☒	☐	☐
Sub-activity 2.1 Building the technical capacity of public sector, seed companies and	☐	☒	☐	☐

[5] Positive Determinations require preparation of a Scoping Statement and Environmental Assessment.

[6] Deferrals must be cleared through an Amendment to this IEE prior to implementation of any deferred activities.

seed multipliers				
2.2 Support seed companies and multipliers to access improved germplasm	☐	☒	☐	☐
Project/Activity 3- Seed companies' and seed producers' businesses improved through better access to business development services and stronger supply chain networks	☐	☒	☐	☐
Sub-activity 3.1 facilitate financial institute for appropriate loan product development targeting seed entrepreneurs	☐	☒	☐	☐
3.2 Support to develop robust seed quality inspection system	☒	☐	☐	☐
3.3 Local service provider development by building capacity of agrovet on seed production technology	☐	☒	☐	☐
Project/Activity 4- Seed producer groups/cooperatives' technical and institutional capacity built	☒	☐	☐	☐
Sub-activity 4.1 ICT platform development for seed business related information and networking	☒	☐	☐	☐
4.2 Technical training to seed producer groups/cooperatives	☒	☐	☐	☐
Project/Activity 5- Access to quality fertilizer, at the right time, and in the right quantity, improved	☐	☒	☐	☐
5.1 Strengthening fertilizer supply chain network	☐	☒	☐	☐
5.2 Systematize demand and supply of fertilizer by crop and location based on district soil fertility mapping	☒	☐	☐	☐
5.3 Support to promote voucher system	☐	☒	☐	☐
Project/Activity 6: Effectiveness and efficiency of the fertilizer subsidy mechanism improved	☒	☐	☐	☐
Project/Activity 7: Fertilizer	☒	☐	☐	☐

use efficiency enhanced				
7.1 Support to revise and develop location and crop specific fertilizer recommendation based on soil fertility status	☒	☐	☐	☐
7.2 ICT platform development to disseminate knowledge on balanced fertilizer use at farmers level	☒	☐	☐	☐
7.3 Facilitate private company/ies to establish soil testing centers	☒	☐	☐	☐
7.4 Promote soil health card for efficient use of fertilizer	☒	☐	☐	☐
Project/Activity 8: Commercial opportunities for balanced fertilizer production and distribution established	☐	☒	☐	☐
8.1 Piloting and business case development on the economic viability of blended fertilizer by different crop and geographic location	☒	☐	☐	☐
8.2 Technical assistance to the government and private sector on blended fertilizer technology	☐	☒	☐	☐
Project/Activity 9- Access to irrigation for commercially oriented agriculture increased	☐	☒	☐	☐
9.1 Enhance the performance of existing surface irrigation schemes	☐	☒	☐	☐
9.2 Facilitate financial institutions for appropriate loan product development for water MSMEs and water users	☐	☒	☐	☐
9.3 Strengthen private sector service providers to promote irrigation technology	☐	☒	☐	☐
Project/Activity 10- Water use efficiency enhanced	☒	☐	☐	☐
Project/Activity 11- Capacity of local government and civil society and private sector for sustainable water management enhanced	☒	☐	☐	☐
Project/Activity 12- Enabling environment for	☒	☐	☐	☐

sustainable water resource management and irrigation system improved				
12.1 Build the institutional capacity of local civil society for the participation in local plan development on watershed management	☒	☐	☐	☐
12.2 Inter-municipal level/inter-provincial level collaboration mechanism developed for upstream and downstream management of watersheds	☒	☐	☐	☐
Project/Activity 13- Uptake of modern agricultural equipment in primary production and value addition increased	☐	☒	☐	☐
13.1 Rapid deployment of time- and labor-saving agricultural equipment in areas heavily affected by the COVID-19	☐	☒	☐	☐
13.2 Appropriate loan product development for MSMEs and farmers for mechanization	☐	☒	☐	☐
13.3 Piloting and scaling up the successful custom hiring service system at the local level	☐	☒	☐	☐
Project/Activity 14 – Policy environment for agricultural equipment promotion improved	☐	☒	☐	☐
Project/Activity 15- Maintenance service system for agricultural equipment improved	☒	☐	☐	☐

4.2 CLIMATE RISK MANAGEMENT

This section summarizes the methodology used and findings of the CRM Screening, in accordance with ADS 201mal. The project design team, in consultation with the CIL, considered the potential effect of climate risks/stressors on the sustainability of the project (changing precipitation patterns, rising temperature, floods, droughts, forest fires, landslides, etc.) in addition to the impact of project activities on the climate (increased greenhouse gas emissions, land use changes, etc.). See Annex 1 for the complete CRM table.

5.0 CONDITIONS AND MITIGATION MEASURES

5.1 CONDITIONS

The environmental determinations in this IEE are contingent upon full implementation of the following general implementation and monitoring requirements, as well as ADS 204 and other relevant requirements.

5.1.1 During Pre-Award:

5.1.1.1 Solicitations: The design team, in coordination with the A/CO, shall ensure solicitations include environmental compliance requirements and evaluation criteria. A/CO will ensure technical and cost proposal requirements include approach, staffing, and budget sufficient for complying with the terms of this IEE.

5.1.1.3 Awards: The A/COR, in coordination with the A/CO, will ensure all awards and sub-awards, include environmental compliance requirements.

5.1.2 During Post-Award:

5.1.2.1 Post-Award Briefings: The A/COR and/or the cognizant environmental officer(s) (e.g., MEO/CIL) shall provide post-award briefings for the IP on environmental compliance responsibilities.

5.1.2.3 Work Plans and Budgeting: The A/COR will ensure the IP integrates environmental compliance requirements in work plans and budgets to comply with requirements, including EMMP implementation and monitoring.

5.1.2.4 Staffing: The A/COR, in coordination with the IP, will ensure all awards have staffing capacity and financial resources to implement environmental compliance requirements.

5.1.2.5 Records Management: The A/COR shall maintain environmental compliance documents in the official project/activity file and upload records to the designated USAID environmental compliance database system.

5.1.2.6 Host Country Environmental Compliance: The A/COR will ensure the IP complies with applicable and appropriate host country environmental requirements including host country commitment to the international obligation unless otherwise directed in writing by USAID. However, in the case of a conflict between the host country and USAID requirements, the more stringent shall govern.

5.1.2.7 Work Plan Review: The A/COR will ensure the IP verifies, at least annually or when activities are added or modified, that activities remain with the scope of the IEE. Activities outside of the scope of the IEE cannot be implemented until the IEE is amended.

5.1.2.8 USAID Monitoring Oversight: The A/COR or designee, with the support of the cognizant environmental officer(s) (e.g., MEO, REA, BEO), will ensure monitoring of compliance with established requirements (e.g., by desktop reviews, site visits, etc.).

5.1.2.16 Environmental Compliance Mitigation and Monitoring Plan: The A/COR will ensure the IP develops, obtains approval for, and implements Environmental

Mitigation and Monitoring Plans (EMMPs) that are responsive to the stipulated environmental compliance requirements.

5.1.2.17 Environmental Compliance Reporting: The A/COR will ensure the IP includes environmental compliance in regular project/activity reports, using indicators as appropriate; develops and submits the Environmental Mitigation and Monitoring Reports (EMMRs); and completes and submits a Record of Compliance (RoC) describing their implementation of EMMP requirements in conjunction with the final EMMR or at the close of sub activities (as applicable). And where required by Bureaus or Missions, ensure the IP prepares a closeout plan consistent with contract documentation for A/COR review and approval that outlines responsibilities for end-of-project operation, the transition of other operational responsibilities, and final EMMR with lessons learned.

5.1.2.18 Corrective Action: When noncompliance or unforeseen impacts are identified, IPs notify the A/COR, place a hold on activities, take corrective action, and report on the effectiveness of corrective actions. The A/COR initiates the corrective action process and ensures the IP completes and documents their activities. Where required by Bureaus or Missions, ensure Record of Compliance is completed.

5.2 AGENCY CONDITIONS

5.2.1 Sub-award Screening: The A/COR will ensure the IP uses an adequate environmental screening tool to screen any sub-award applications and to aid in the development of EMMPs.

5.2.2 Compliance with human subject research requirements: The AM, A/COR shall assure that the IP and sub-awardees, -grantees, and -contractors demonstrate completion of all requirements for ethics review and adequate medical monitoring of human subjects who participate in research trials carried out through this IEE and ensure appropriate records are maintained. All documentation demonstrating completion of required review and approval of human subject trials must be in place prior to initiating any trials and cover the period of performance of the trial as described in the research protocol.

5.3 MITIGATION MEASURES

The mitigation measures presented in this section constitute the minimum required based on available information at the time of this IEE and the environmental analysis in Section 4. These measures shall provide general direction for completing the project/activity Environmental Mitigation and Monitoring Plan (EMMP) and/or the EA and PERSUAP, if required.

Category A: Negative Determination with Conditions

PROJECT/ACTIVITY 1: The enabling environment for seed business strengthened

Pursuant to CFR 216.3(a) (2) (iii), a **Negative Determination with Conditions** is recommended for this activity. This may have potentially minor to moderate adverse impacts on the agro biodiversity. The COR and MEO shall coordinate with the relevant implementing partners to ensure that;

1. The activity will facilitate creating a policy environment for the promotion of climate adaptive crop varieties

2. Promote policy environment to commercialize disease and climate resilient traditional varieties
3. Diversify crop variety options to the farmers to minimize adverse impacts on agro biodiversity

Tentative program budget: 3%

PROJECT ACTIVITY 2: **Public and private sector stakeholders' technical capacity and partnership enhanced**

Pursuant to CFR 216.3(a) (2) (iii), a **Negative Determination with Conditions** is recommended for this activity. This may have potentially minor to moderate adverse impacts on the agro biodiversity and climate resilience. The COR and MEO shall coordinate with the relevant implementing partners to ensure that

1. The activity will also sensitize and build capacity of seed companies to promote diverse seed varieties that includes promising local varieties along with hybrid seeds.

Tentative program budget: 4%

PROJECT ACTIVITY 3: Seed companies; and seed producers; businesses improved through better access to business development services and stronger supply chain networks

Business development service includes access to financial services, technical and information services, and access to raw material services. Pursuant to CFR 216.3(a) (2) (iii), a **Negative Determination with Conditions** is recommended for this activity. This may have potentially minor to moderate adverse impacts on the agro biodiversity. The COR and MEO shall coordinate with the relevant implementing partners to ensure that;

1. While developing/strengthening business development services such as financial services, information and technical services targeting seed companies and seed multipliers, emphasis will be given to make these services relevant and appropriate for diverse types of seed production including, hybrid seed, open pollinated varieties and promising local varieties to ensure that agro biodiversity will be maintained and dependence on imported seed reduced.

Tentative program budget: 5%

PROJECT ACTIVITY 4: Access to quality fertilizer, at the right time, and in the right quantity, improved

Pursuant to CFR 216.3(a) (2) (iii), a **Negative Determination with Conditions** is recommended for this activity. This may have potentially minor to moderate adverse impacts on the natural environment. The COR and MEO shall coordinate with the relevant implementing partners to ensure that;

1. Fertilizer will not be used haphazardly that may impact environment negatively
2. Systematizing fertilizer distribution will be complemented by more efficient fertilizer use by introducing and promoting soil testing services
3. It will promote the concept of right dose, right time and right method in fertilizer application so that it won't contaminate external environment

Tentative program budget:: 5%

PROJECT ACTIVITY 5: Commercial opportunities for balanced fertilizer production and distribution established

Pursuant to CFR 216.3(a) (2) (iii), a **Negative Determination with Conditions** is recommended for this activity. This may have potentially minor to moderate adverse impacts on the natural environment. The COR and MEO shall coordinate with the relevant implementing partners to ensure that;

1. The use of blended fertilizer will be based on location, crop specifics and will be applied only with proper soil fertility and nutrient status check
2. Different types of blends for different crops and geographic locations will be developed and distribution systems will be developed to channel the blended product to meet specific needs of a crop
3. Proper demand and supply analysis will be done to avoid haphazard distribution of blended fertilizer

Tentative program budget: 3%

PROJECT ACTIVITY 6: Access to irrigation for commercially oriented agriculture increased

Pursuant to CFR 216.3(a) (2) (iii), a **Negative Determination with Conditions** is recommended for this activity. This may have potentially minor to moderate adverse impacts on the natural environment. The COR and MEO shall coordinate with the relevant implementing partners to ensure that;

1. The activity will not support unsustainable extraction of water and its use in crop production
2. It will give an utmost concern on sustainable use of water for irrigation
3. It will give due emphasis to tap unused water resource for irrigation
4. It will promote clean energy for water pumping
5. Water user association/farmers group will be capacitated to utilize water more efficiently and effectively
6. The activity will promote climate adaptive methods and technology to preserve spring source and water recharge zone

Tentative program budget: 6%

PROJECT ACTIVITY 7: Uptake of modern agricultural equipment in primary production and value addition increased

Pursuant to CFR 216.3(a) (2) (iii), a **Negative Determination with Conditions** is recommended for this activity. This may have potentially minor to moderate adverse impacts on the natural environment. The COR and MEO shall coordinate with the relevant implementing partners to ensure that;

1. Energy efficient agricultural equipment will be promoted
2. Climate adaptive technology such as zero tillage equipment will be promoted in case of Maize planting operation
3. Promotion of modern agricultural equipment for post-harvest operation will ensure efficiency in value addition and processing and better waste management to reduce environmental damage

Tentative program budget: 5%

PROJECT ACTIVITY 8: Policy environment for the promotion of agricultural equipment improved

Pursuant to CFR 216.3(a) (2) (iii), a **Negative Determination with Conditions** is recommended for this activity. This may have potentially minor to moderate adverse impacts on the natural environment. The COR and MEO shall coordinate with the relevant implementing partners to ensure that;

1. Policy prioritizes the promotion of energy efficient agricultural equipment and use of clean energy for agricultural equipment to avoid potential environmental degradation.

Tentative program budget: 3%

Category B: Categorical Exclusion

PROJECT ACTIVITY 9: Seed producer groups/cooperatives technical and institutional capacity built

Pursuant to 22 CFR 216.2 © (2) (i) and (iii) Categorical Exclusion (CE) is recommended for this activity. No environmental and monitoring plan is required for CE activities

Tentative program budget: 10%

PROJECT ACTIVITY 10: Effectiveness and efficiency of the fertilizer subsidy mechanism improved

Pursuant to 22 CFR 216.2 © (2) (i) and (iii) Categorical Exclusion (CE) is recommended for this activity. No environmental and monitoring plan is required for CE activities

Tentative program budget: 7%

PROJECT ACTIVITY 11: Fertilizer use efficiency enhanced

Pursuant to 22 CFR 216.2 © (2) (i) and (iii) Categorical Exclusion (CE) is recommended for this activity. No environmental and monitoring plan is required for CE activities

Tentative program budget: 8%

PROJECT ACTIVITY 12: Water use efficiency enhanced

Pursuant to 22 CFR 216.2 © (2) (i) and (iii) Categorical Exclusion (CE) is recommended for this activity. No environmental and monitoring plan is required for CE activities

Tentative program budget: 15%

PROJECT ACTIVITY 13: Capacity of local government, civil society, and private sector for sustainable watershed management enhanced

Pursuant to 22 CFR 216.2 © (2) (i) and (iii) Categorical Exclusion (CE) is recommended for this activity. No environmental and monitoring plan is required for CE activities

Tentative program budget: 8%

PROJECT ACTIVITY 14- Enabling environment for sustainable water resource management and irrigation system improved

Pursuant to 22 CFR 216.2 © (2) (i) and (iii) Categorical Exclusion (CE) is recommended for this activity. No environmental and monitoring plan is required for CE activities

Tentative program budget: 3%

PROJECT ACTIVITY 15: Maintenance service system for agricultural equipment improved

Pursuant to 22 CFR 216.2 © (2) (i) and (iii) Categorical Exclusion (CE) is recommended for this activity. No environmental and monitoring plan is required for CE activities

Tentative program budget: 5%

6.0 LIMITATIONS OF THIS INITIAL ENVIRONMENTAL EXAMINATION

The determinations recommended in this document apply only to projects/activities and sub-activities described herein. Other projects/activities that may arise must be documented in either a separate IEE, an IEE amendment or Memo to the File (MTF) if the activities are within the same project/activity, or other type of environmental compliance document and shall be subject to an environmental analysis within the appropriate documents listed above.

it is confirmed that the projects/activities described herein do not involve any actions listed below. Any of the following actions would require additional environmental analyses and environmental determinations:

- Affect endangered and threatened species or their critical habitats per §216.5, FAA 118, FAA 119;
- Provide support to extractive industries (e.g. mining and quarrying) per FAA 117;
- Promote timber harvesting per FAA 117 and 118;
- Support agro-processing or industrial enterprises per §216.1(b)(4);
- Lead to privatization of industrial facilities or infrastructure with heavily polluted property per §216.1(b)(4);
- Research, testing, or use of genetically engineered organisms per §216.1(b)(1), ADS 211
- Assist the procurement (including payment in kind, donations, guarantees of credit) or use (including handling, transport, fuel for transport, storage, mixing, loading, application, clean-up of spray equipment, and disposal) of pesticides or activities involving procurement, transport, use, storage, or disposal of toxic materials. Pesticides cover all insecticides, fungicides, rodenticides, etc. covered under the Federal Insecticide, Fungicide, and Rodenticide Act per §216.2(e) and §216.3(b).

7.0 REVISIONS

Per 22 CFR 216.3(a)(9), when ongoing programs are revised to incorporate a change in scope or nature, a determination will be made as to whether such change may have an environmental impact not previously assessed. If so, this IEE will be amended to cover the changes. Per ADS 204, it is the responsibility of the USAID A/COR to keep the MEO/REA and BEO informed of any new information or changes in the activity that might require revision of this environmental analysis and environmental determination.

ATTACHMENTS:

Annex 1: Climate Risk Management Summary Table for Activity .

ANNEX 1. **ACTIVITY** CLIMATE RISK MANAGEMENT SUMMARY TABLE

Nepal is projected to be highly vulnerable to climate change and ranked 128th out of 181 in the 2019 ND-GAIN index and the agriculture sector is identified as a vulnerable sector due to climate risks[7]. In Nepal, rises in maximum and minimum temperatures are expected to be stronger than the rise in average temperature, likely amplifying the pressure on human health, livelihoods, and ecosystems. Temperature increase is expected to be strongest during the winter months. The adverse impacts of climate change have already taken a toll on the environment in the form of glacier melting, extreme precipitation, drought, heatwave, river flooding and glacial lake outburst. The vulnerability of Nepal's communities, particularly those living in poverty, in remote areas, and operating subsistence agriculture, increases the risk posed by climate change. Thus, various interventions under this Activity may be impacted by the climate risks.

Tasks/Defined or Illustrative Interventions	**Climate Risks[8]**	**Risk Rating[9]**	**How Risks are Addressed[10]**	**Opportunities to Strengthen Climate Resilience[11]**
The enabling environment for seed business strengthened	Climate risks may not directly impact the outcome of this activity as it is mainly focused on creating a policy environment for private sector entrepreneurs. This includes capacity building, policy analysis and engaging with the government to create private sector friendly seed policies such as making the seed registration process easy and quick, allowing the private sector to maintain inbred line and production of hybrid seed. Climate risks may indirectly impact the effectiveness of seed policy if it does not address the potential climate risks such as rise in maximum and minimum temperature, rise in average temperature which is projected to be higher than	Low	The potential impact of climate risks such as rise in temperature, erratic rainfall, rise in maximum and minimum temperature on crop varieties would be given a due concern while advocating/developing policy environment for the private sector.	This activity provides opportunities to introduce and mainstream climate resilience at the policy level by developing standard guidelines and measures to promote climate resilient seed systems

[7] https://www.adb.org/sites/default/files/publication/677231/climate-risk-country-profile-nepal.pdf

[8] List key risks related to the defined/illustrative interventions identified in the screening and additional assessment.

[9] Low/Moderate/ High

[10] Describe how risks have been addressed in activity design and/or additional steps that will be taken in implementation. If you chose to accept the risk, briefly explain why.

[11] Describe opportunities to achieve multiple development objectives by integrating climate resilience or mitigation measures

	global average in case of Nepal, and erratic rainfall pattern.			
Public and private sector stakeholders' technical capacity and partnership enhanced	Climate risks do not pose any adverse impact on the outcome of this activity as it focuses mainly on technical training and capacity building of public and private sectors. However, the effectiveness of training would be lower if climate induced risks are not given a proper attention in the capacity development program.	Low	Technical capacity building program also includes building technical knowledge of public and private sectors on climate induced risks in Nepal such as heatwaves and cold waves, rise in temperature, drought and floods and its potential impact on crop varieties adaptability to respond to climate risks such by developing heat and drought tolerant seed varieties	Integration of climate adaptation issues in technical training provides opportunity to make the agriculture input market system and its function more responsive to climate risks.
Seed companies; and seed producers' businesses improved through better access to business development services and stronger supply chain networks	This activity will not be impacted by climate risks directly as it focuses on improving access to business development services that includes financial service, research service, information services, raw material services to the agricultural input entrepreneurs. However, climate risks may indirectly impact the outcome of this activity. The climate induced risks may jeopardize the supply system of business development services to input entrepreneurs such as timely unavailability of raw materials, disturbances in information dissemination system, financial institute may divert financial service to other areas when there is climate induced risks for agricultural inputs	Low	Vulnerability of different kinds of business development services to climate risks will be assessed and mitigation strategy will be developed to minimize climate risk by introducing climate smart business model for these services	There is an opportunity to make business development services more climate risk proof through innovative business strategy and through adopting potential climate risks mitigation measures such as buffer stocks
Seed producer groups/cooperatives technical and institutional capacity built	This activity will not be impacted by climate risks as it is mainly focused on technical training and backstopping on seed production. However, Nepal's agriculture is projected to be highly vulnerable to climate change. Thus, the effectiveness of training and capacity development programs will be compromised if community institutions	Low	Technical training and capacity development programs will include separate sessions on climate change to educate participants and consider addressing potential climate risks that affect seed production.	It provides an opportunity to increase awareness and knowledge of seed producers towards potential climate risks which helps to promote a climate resilient seed production system.

	are not made aware about climate induced risks and its mitigation measures are not included in the activity.			
Access to quality fertilizer, at the right time, and in the right quantity, improved	This activity focuses on improving access to fertilizer in rural areas and will not be directly impacted by climate risks. However, there are some risks such as climate induced disasters such as landslides, floods, and erratic rainfall which may disturb the supply chain system of fertilizer.	Low	Risk will be addressed through training and awareness programs to ensure that private companies consider all potential climate induced risks that may hamper their supply network while developing/strengthening fertilizer distribution systems.	There is an opportunity to make distribution systems for fertilizer more responsive and resilient to current and future climate induced risks by considering these elements in strengthening supply systems for fertilizer, such as creating buffer stock in the strategic location
Effectiveness and efficiency of the fertilizer subsidy mechanism improved	This will not be impacted by climate risks directly as the focus of the activity is to improve government subsidy mechanisms through introducing digital means in delivering subsidies for various agricultural inputs. There might be chance that climate induced risks may reduce the effectiveness of subsidy program itself if the subsidy mechanism could not differentiate the areas with various climate risks and tailor the mechanism accordingly	Low	While developing or improving subsidy mechanisms, consideration will be given to make subsidy mechanisms responsive to climate induced risk. This includes identification of target communities and geographic areas that are highly vulnerable to climate risks in terms of using agricultural inputs and technology and facilitate government to develop appropriate climate resilient subsidy products and mechanisms	There is an opportunity to introduce climate information system into the existing subsidy mechanism to make it more responsive to climate risk and promote more climate resilient mechanisms at the farm level
Fertilizer use efficiency enhanced	This activity intends to promote the judicious use of balanced fertilizer to improve fertilizer use efficiency. Climate induced risks may affect the outcome of this activity indirectly. Climate change may affect the soil physical and chemical structure and impact soil nutrient status which may reduce the positive impact of fertilizer use.	Low	The use of digital soil mapping (developed by NSAF) and use of balanced fertilizer against the soil nutrient status of a particular area is a key strategy to improve fertilizer use efficiency. The activity will give a due emphasis to improve farmers' knowledge on climate change and its impact on soil fertility and help them to respond by applying the right quantity of fertilizer with the right combination at the right time to minimize the impact of climate risks	There is an opportunity to improve farmers' knowledge on how to respond against climate change impact by adapting climate resilient practices such as judicious use of fertilizer, combination of organic and non-organic fertilizer, application of micronutrient along with macro nutrient and applying fertilizer at the right time to minimize the

				adverse impacts of climate change.
Commercial opportunities for balanced fertilizer production and distribution established	Climate change does not pose any adverse impact on achieving the outcome of this activity	Low	While establishing and promoting commercial opportunities for balanced fertilizer, it will consider the potential impacts of climate change on soil fertility status and build a case for developing appropriate blends of fertilizer to overcome the adverse impact.	Introduction of blended fertilizer is an opportunity to introduce a climate resilient system as it provides flexibility to respond to the climate risk by developing various appropriate blends against the current practice of blanket recommendation of macronutrients.
Access to irrigation for commercially oriented agriculture increased	Climate risk may generate some adverse impacts on the outcome of this initiative. Climate risks are mainly related to drying up of natural water reservoirs, damage of irrigation canals due to flooding and landslides, groundwater depletion that will affects the availability of water for irrigation	Medium	To minimize adverse effects, the activity will develop a framework of sustainable water management and build capacity of local government and other concerned stakeholders so that adverse effects of climate change on water resources can be minimized. It will also build the technical skill and knowledge of water user association and farmers to protect spring sources and adopt adaptation mechanisms such as rainwater harvesting, spring source protection, river-bank protection and so on.	Introduction of sustainable water management systems and adaptation mechanisms in irrigation water resource management will promote resilience to climate change
Water use efficiency enhanced	This activity's main focus is to use water more efficiently for maximum crop production and productivity. This requires using water in the right quantity, at the right time for the selected varieties and crops. Climate change may adversely impact the way crops respond to water use and may reduce water use efficiency	Medium	Training and awareness programs and selection of right technology, crop and varieties would be the strategy to subside the impact of climate risk on the outcome of this activity	High water use efficiency means either maintaining the same productivity with little water or gaining productivity with the same amount of water. Water use efficiency is closely linked with energy efficiency as huge energy is used for pumping groundwater and other sources of water. This

				enhances climate resilience
Capacity of local government, civil society, and private sector for sustainable watershed management enhanced	Climate change will have some adverse impact on watersheds management due to climate induced forest fires, flooding and landslides, drying up of natural water reservoirs, damage of irrigation canals due to flooding and landslides, disturbances on groundwater recharge, and so on. These will add risks for the sustainable watershed functions and services, including life and livelihoods of poor people.	Medium	While developing capacity of the concerned stakeholders on sustainable watersheds management, separate climate change related training and awareness sessions will be included with an emphasis to improve overall understanding on potential climate risks that might affect watershed function and services, and appropriate mitigation measures will be planned such as low-tillage farming, agro-forestry and so on	There are opportunities to achieve the objective of a resilient agriculture system by making the water management system resilient to climate change. Similarly, this activity will promote various adaptation measures against climate change and improve adaptive capacity of Nepalese agriculture
Enabling environment for sustainable water resource management and irrigation system improved	Climate risk does not adversely affect the outcome of this activity. Only issue is that if the climate factors considered for developing policies are not commensurate with the future climate change scenario, then, the policy and governance system may not yield intended results.	Low	Potential climate risks screening to understand its impact on water resource management and provision of mitigation measures would be a key area of consideration for creating/strengthening enabling environment for sustainable water resource management and irrigation system	Provides opportunities to promote/strengthen water resource management systems that are climate resilient
Uptake of modern agricultural equipment in primary production and value addition increased	Climate risks such as landslides, floods, new disease outbreaks, drought, erratic monsoons may indirectly impact the outcome of this activity. Because these risks will adversely impact the return on the investment in agriculture which may discourage farmers to adopt modern agricultural equipment which needs high capital investment. Similarly, recurrent floods, and landslides and drought may impact the effective utilization of agricultural equipment in the field that discourage its uptake.	Low	This risk can be dealt effectively if we promote various climate adaptation mechanisms in agriculture so that the rate of return on investment in agriculture will be improved that will motivate farmers to invest more on agricultural mechanization and modernization. In the design of this activity, promotion of climate adaptive input and technology has been given a due priority. Similarly, the activity will also give priority to promote climate adaptive agricultural equipment such as zero tillage equipment, dryer, cold chain to subside the impact of climate	The improvement in the uptake of modern agricultural equipment coupled with climate adaptive agricultural practices contribute to achieve high labor and land productivity

			change on the uptake on agricultural equipment.	
Policy environment for agricultural equipment promotion improved	Climate risk does not adversely affect the outcome of this activity. However, selection of the right equipment-type based on the climatic conditions would be essential for the effectiveness of this activity to get desired outcomes/results.	Low	While facilitating policy change for agriculture equipment, potential impact of climate risk on the adoption of agricultural equipment will be considered and alternative options will be available for the users to select right equipment corresponding to their requirement based on the climatic conditions.	Considering climate risk impact on agricultural equipment will ensure the promotion of climate resilient agricultural equipment which will contribute to climate resilient agriculture development in Nepal
Maintenance service system for agricultural equipment improved	There are no specific climate risks for this activity. However, floods, landslides and other natural calamities may impact the farmers' access to maintenance service if the road and transport system get damaged by natural disasters.	Low	Focus will be given to develop maintenance service centers at strategically safe locations so that it will be accessible and functional even during climate-induced natural disasters. This entails assessment of how service systems are impeded due to severe climate induced landslides and other natural disasters in the past, identity safe-zones, and develop strategies to subside such potential risks in the future to continue the services uninterrupted.	This activity will help to contribute to the objective of climate resilient service system development

Asia 20-042

ASIA BUREAU AND OFFICE OF AFGHANISTAN AND PAKISTAN AFFAIRS (OAPA) PROGRAMMATIC INITIAL ENVIRONMENTAL EXAMINATION (PIEE) – EMERGING THREATS (COVID 19)

Project/Activity Name:	EMERGING THREATS (COVID-19)
Geographic Location(s) (Country/Region)**:**	ASIA AND OAPA
Implementation Start/End Date (FY or M/D/Y)**:**	APRIL 2020- March 2022
Solicitation/Contract/Award Number(s):	Multiple
Implementing Partner(s):	Multiple
Bureau Tracking ID:	ASIA & OAPA COVID P-IEE
Tracking ID of Related RCE/IEE (if any)**:**	E&E Bureau 2020-EE-005, Middle East 2020-ME-024, RFS-20-02-004

ORGANIZATIONAL/ADMINISTRATIVE DATA:

Implementing Operating Unit(s):	ASIA AND OAPA Missions
Other Affected Operating Unit(s):	GH
Lead BEO Bureau:	ASIA with OAPA
Funding Account(s) (if available)**:**	N/A
Prepared by and Date:	ASIA and OAPA; APRIL 2020

ENVIRONMENTAL COMPLIANCE REVIEW DATA:

Analysis Type:	IEE	
Environmental Determination(s):	Categorical Exclusion and Negative Determination with Conditions	
IEE Expiration Date (if applicable)**:**	September 2022	
Additional Analyses/Reporting Required:	Operating Unit-level Memorandum to File (MTF)	
Climate Risks Identified (#):	Low __#__ Moderate __#__ High __#__	

	Provide reference to Climate Risk and Vulnerability Analysis for (Regional) Mission-level CDCS
(Programmatic) Pesticides Evaluation Report and Safer Use Action Plan (P)PERSUAP	Mission-level Programmatic PERSUAP to be amended for additional pesticides and/or for disinfectants by Memorandum to File, if adding those approved by US EPA and US CDC
FAA 118/119 Report	Mission-level FAA 118/119 report for CDCS should be consulted to review actions needed to protect forests, natural habitats, eco-systems and to stop wild-life exploitation and trafficking in order to avoid and prevent root causes for current and potentially (re-) emerging pandemics and spread of dangerous virus and other diseases
Other USG and USAID Statutory Requirements as Applicable and Warranted in view of "emergency" type operation	Mandatory Gender as well as other relevant analysis of water, natural resources management status at a country level as completed at the Mission level for CDCS or PAD shall be utilized as appropriate to satisfy mandatory provisions at an activity level; any specific related waivers applicable and approved to a specific country or Mission's operation shall be noted in MTF

SUMMARY OF FINDINGS

PURPOSE AND SCOPE

This COVID-19 Programmatic Initial Environmental Evaluation (COVID-19 PIEE) is intended to provide Asia and OAPA Missions or Regional Operating Units (OUs) with preliminary analysis and recommendations to inform and facilitate their compliance with the Agency's mandatory Environmental Procedures (see 22 CFR 216 and ADS 204, and relevant Agency Strategies and ADS) as they initiate new interventions in response to the COVID-19 pandemic. The intent of the document is to facilitate and streamline the coverage of new interventions in response to COVID-19. This regional document captures the generally-applicable analysis of potential environmental and social, including occupational health and safety (OHS), risks and impacts, and recommended monitoring, mitigation, and reporting that can be utilized as a resource for further analysis at the Mission- or Regional OU-level.

This PIEE anticipates that Missions or Regional OU's will document the application of appropriate safeguards to their activities using Memoranda to the File (MTF). For their OU's COVID-19 response interventions, A/CORs, assisted by Mission Environmental Officers (MEOs) and Climate Integration Leads (CILs) or Regional OU equivalents, will develop for approval MTFs using safeguards information contained herein. The Asia and OAPA Bureau Environmental Officers (Asia BEO and OAPA BEO) and Regional Environmental Advisors for Central and South Asia and Office of Afghanistan and Pakistan Affairs/Officer for South East Asia and Pacific Islands (REA SCA & OAPA) and for East Asia and Pacific Islands (REA EAP) are available for consultation.

While this document recommends environmental determinations (and, as appropriate monitoring, mitigation, and reporting requirements), it is not a decisional document. USAID's Environmental Procedures require that a Mission Director or Regional OU equivalent proposes an environmental determination for the OU's planned activities. The Mission or Regional OU's MTF can incorporate the analysis and recommendations of this COVID-19 PIEE by reference and thereby operationalize them in advance of an irreversible obligation of funding. Time and effort will be saved by OUs not needing to repeat the analysis found in this COVID-19 PIEE.

These MTFs can, in most cases, be very brief. It is the intent that each MTF will:

- Recommend the necessary environmental determination for new awards being issued expressly for COVID-19 response actions; and
- Avoid the need to amend existing IEEs/RCEs for ongoing mechanisms at the Mission-level to which COVID-19 response interventions are being added.

If they prefer Missions or Regional OUs could document the application of appropriate safeguards to their activities using a supplemental initial environmental examination (SIEE).

LIMITATIONS OF THIS COVID-19 PIEE

This COVID-19 PIEE fulfills the narrowly defined task of helping to meet the environmental impact assessment requirements of the Agency's Environmental Procedures. It ***does not*** provide official guidance on how USAID programs and Missions should respond to COVID-19.

USAID COVID-19 Task Force is the source of such official guidance.

REVISIONS

Changes in the scope and nature of approved activities, life of project (LOP) duration, and LOP funding level, approved herein, shall be through an amendment to this PIEE.

Changes in the scope and nature of approved activities, LOP duration and LOP funding level, approved in Mission- and Regional OU-level MTFs, shall be through an amendment to the original MTF. If these types of changes will likewise require an amendment if SIEEs are involved.

ENVIRONMENTAL DETERMINATION FOR ACTIVITY GROUPS AND TYPES

This COVID-19 PIEE's analysis addresses the two broad activity groups and eight types that could be expected as near-term interventions for COVID-19 response and that fall under the following environmental determinations:

Group A. Categorical Exclusion: Communications, outreach, analysis, planning, and other actions that typically have minimal, if any, impacts on the environment or human health and safety. That is, when there is no use of regulated commodities and PPE in a class setting and when there is no direct contact with potentially affected people and when such activities are conducted through videoconferencing without gathering of any number of people in situ.

Group B. Negative Determination with Conditions:

1. Laboratory or research strengthening (e.g., vaccine research, equipment purchases, operation of laboratories, procurement and supply management, waste management, including disposal of personal protective equipment (PPE))
2. Support to formal, informal, or temporary healthcare facilities and systems (e.g., transportation and provision of equipment, operation of facilities, procurement and supply management, support for waste management, including disposal of PPE);
3. Support for use of disinfectants/germicides (pesticides;)
4. Water, Sanitation, and Hygiene (WASH) (e.g. construction/rehabilitation of water points, hand washing stations, provision of soap and hygiene kits to households);
5. Food security (e.g. food storage and distribution);
6. Small-scale construction and rehabilitation (e.g., installation of mobile units, latrine construction, temporary hospital/health post construction);
7. Small and medium enterprises in support of COVID-19 response (e.g. personal protective equipment (PPE) production, sanitizer production).

This list of activity groups and types is illustrative only. Other activities undertaken in response to COVID-19 that are not addressed in this COVID-19 PIEE can be addressed by the subject Mission or Regional OU through its MTF.

Missions or Regional OUs should timely seek advice from a cognizant USAID environmental safeguards officer, e.g., MEO, CIL, REA/SCA & OAPA, REA/EAP, BEO/Asia, or BEO/OAPA, when the scope and nature of proposed activities may pose risk of significant adverse environmental or social impacts and, therefore, a Positive Determination (requiring an environmental assessment) would be the more appropriate threshold decision. This revised decision will be documented and approved in an initial environmental examination (IEE) that would supplemental to the PIEE.

A **Categorical Exclusion** is recommended, in accordance with 22 CFR 216.2(c)(2.), for types of activities noted above in Group A. (of the Environmental Determination for Activity Groups and Types section) when there is no direct contact with potentially affected people and when such activities are conducted through videoconferencing without gathering of any number of people in situ without associated activities that are likely to have adverse environment, health or safety impacts.

A **Negative Determination with Conditions** is recommended for activity types in Group B that will be implemented in response to COVID-19, i.e., those that are not communications, outreach, analysis, planning, or other actions that can be done remotely or with adequate social distancing. This PIEE recommends that categorical exclusions are not the appropriate determination for some activities that would typically qualify (for categorical exclusion) because COVID-19 is a disease that is inherently going to affect every activity and pose risks to human health and the environment. Thus, even normal Categorical Exclusions activities will have components requiring mitigation of very infectious disease effects. Even education, technical assistance, or programs intended to develop the capability of recipient countries to engage in development planning, if delivered in a group setting, will require implementation and monitoring of safeguards to reduce workplace exposure and infectious agent transmission.

Pursuant to 22 CFR 216.2(b)(1)(ii), the COVID-19 response activities covered herein do not qualify for an exemption from environmental examination without Assistant Administrator or Administrator review and clearance, and Council on Environmental Quality consultation.

CONDITIONS OF THIS PIEE

1. As a streamlined mechanism to meet environmental compliance requirements, USAID Missions are instructed to operationalize this COVID-19 PIEE through the development, by Activity Teams, A/CORs, MEOs, CILs, or Regional OU equivalent of MTFs for Mission-specific COVID-19 response activities and submission of MTFs for BEO/Asia and BEO/OAPA concurrence.
2. This PIEE provides a preliminary analysis of environmental impacts and recommends a range of suitable environmental impact mitigation measures (summarized in Section 3 and 5 and detailed in Annex 2 and 3). The MTFs prepared by Asia and OAPA Missions or Regional OUs will direct their IPs to develop and implement Environmental Mitigation and Monitoring Plans (EMMPs). The MTFs shall direct IPs to incorporate climate risk screening (ADS 201mal[1]) and construction risk management (using the guidance and tool established in ADS 201maw[2] and ADS 303maw) at an activity level and, as appropriate, pursue mitigation, monitoring, and reporting related to these risks.

3. If further analysis of an activity's scope, scale and nature reveals the likelihood of significant adverse environmental or social impacts, then a Positive Determination (requiring an environmental assessment) shall be the appropriate threshold decision. This revised decision shall be documented and approved in a supplemental (to this PIEE) Initial Environmental Examination (SIEE) approved by a cognizant Mission Director or Regional OU equivalent and concurred to by a cognizant BEO.

CLIMATE RISK MANAGEMENT

[1] https://www.usaid.gov/sites/default/files/documents/1868/201mal_042817.pdf and https://www.climatelinks.org/tools

[2] https://www.usaid.gov/sites/default/files/documents/1865/201maw.pdf and https://docs.google.com/forms/d/e/1FAIpQLSfauPIQT5N4U-16VRfq4d7xChO8gqVP5T313OHco-yJ2eKPKg/viewform and https://www.usaid.gov/sites/default/files/documents/1868/303maw.pdf

Climate Risk Management screening was not completed for this COVID-19 PIEE and will be required for COVID-19 MTFs in Asia Missions or Regional OU for activities outlined in B. of the Environmental Determination of Activity Groups and Types section above. It is expected that many COVID-19 response activities will be implemented through existing projects, for which climate risk screening has been completed. In these cases, additional climate risk screening will not be required.

However, for new COVID-19 response activities that will continue beyond the immediate pandemic response, CRM screening should be conducted. Within one year of the Mission's COVID-19 MTF approval date, Asia and OAPA Missions shall evaluate their COVID-19 response actions and conduct CRM screening for those: 1) NOT already screened, and 2) expected to continue for another year or more. Please see Annex 6 for guidance and information on CRM and the connection between climate and COVID-19.

USAID APPROVAL OF INITIAL ENVIRONMENTAL EXAMINATION

PROJECT/ACTIVITY NAME: COVID-19 PROGRAMMATIC IEE

Preparer:	By Email Andrei Barannik, REA SCA & OAPA	4/9/2020 Date
Approval:	By Email Anna Mary Coburn, Asia/TS	4/9/2020 Date
Approval:	By Email Brendan Barcelo, OAPA/TS	4/8/2020 Date
Concurrence:	By Email Chris Payne, BEO/OAPA	4/9/2020 Date
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Other: Agency Environmental Coordinator, GH BEO, Missions' OAA and RLOs, MEOs, CILs, REA/EAP

INITIAL ENVIRONMENTAL EXAMINATION

1.0 PROJECT/ACTIVITY DESCRIPTION

1.1 PURPOSE OF THE PROGRAMMATIC IEE

This COVID-19 Programmatic Initial Environmental Evaluation (COVID-19 PIEE) is intended to provide Asia and OAPA Missions and Regional OU with preliminary analysis and recommendations to inform and facilitate their compliance with the Agency's mandatory Environmental Procedures (see 22 CFR 216 and ADS 204) as they initiate new interventions in response to the COVID-19 pandemic. To ensure cross-Agency coordination and a consistent approach, this PIEE was developed in consultation with the Global Health BEO, Acting Agency Environmental Coordinator, and E3's General Counsel.

This COVID-19 PIEE is a critical element of the mandatory environmental review and compliance process that USAID follows to achieve environmentally sound design and implementation. Addition details about the purpose of this COVID-19 PIEE include:

1. The PIEE will streamline environmental impact assessment of new interventions in response to COVID-19 through a single Asia Bureau and OAPA programmatic analysis and direct development and approval of MTFs, using safeguards information contained herein, for each Mission or Regional OU's COVID-19 response intervention.
2. For ***ongoing activities*** already covered by an environmental impact assessment document (IEE or Request for Categorical Exclusion (RCE)) that will be asked to initiate new COVID-19 response interventions, this COVID-19 PIEE is intended to avoid the need to amend those existing IEEs/RCEs. Instead, the intent is that the Mission or Regional OU's MTF (supplemental to this COVID-19 PIEE) will ensure these newly-added interventions comply with USAID's legal safeguards requirements. The MTF shall include identification of new elements needed in an implementing partner's (IP) Environmental Mitigation and Monitoring Plan (EMMP;) for activities with approved Categorical Exclusion, preparation of an EMMP is not required. EMMP shall be approved by A/COR and MEO and CIL or Regional OU equivalent.
3. For COVID-19 response actions planned through ***new awards***, not yet covered by an IEE or RCE, the Mission or Regional OU's MTF shall align new activities with the Environmental Determination (see Environmental Determinations for Activity Groups and Types sections A and B above) for those awards' COVID-19 response actions. That alignment shall be based upon analysis and recommendations in this PIEE. To the extent those awards are exclusively focused on the COVID-19 response, the MTF will suffice as documentation of compliance with USAID's legal safeguards requirements.
4. **This COVID-19 PIEE is not a decision document**. While this document recommends environmental determinations (and, as appropriate monitoring, mitigation, and reporting requirements), USAID's Environmental Procedures require that a Mission Director or Regional OU equivalent proposes an environmental determination for the OU's planned activities. The Mission or Regional OU's MTF can incorporate the analysis and

recommendations of this COVID-19 PIEE by reference and thereby operationalize them in advance of an irreversible obligation of funding. Time and effort will be saved by OUs not needing to repeat the analysis found in this COVID-19 PIEE.

This COVID-19 PIEE provides an examination of the potential environmental, OHS, and social risks and impacts from activities expected to be a part of USAID's COVID-19 responses, as well as recommended environmental determinations and appropriate mitigating, monitoring and reporting requirements for those activities. The document's analysis addresses a list of illustrative activities. Other activities undertaken in response to COVID-19 that are not addressed in this COVID-19 PIEE can be addressed by the Mission or Regional Office through their MTF and/or a Supplemental IEE, when and if a Positive Threshold Decision is expected and an environmental assessment process will be triggered.

MTFs

Each Asia and OAPA Mission or Regional OU that intends to initiate a response to the COVID-19 pandemic should in consultation with MEO, cognizant REA and BEO, prepare MTF, either OU-wide or activity-specific, as appropriate and most effective in view of the scope, scale and nature of projects' portfolio, following the template included in this COVID-19 PIEE. The MTF shall:

- Identify the expected COVID-19 response activities;
- Describe additional mitigating, monitoring and reporting actions that IPs shall be asked to undertake and to include in their EMMPs;
- Describe the new activities being initiated in response to COVID-19 that are not covered by a current OU-level IEE or RCE, and recommend threshold determinations and mitigating, monitoring and reporting measures for those activities. The MTF shall be the document that provides the mandatory environmental compliance review and environmental determination decision(s) for those activities.
- In rare cases, not be necessary for COVID-19 response interventions. In cases where an OU representative, e.g., Agreement/Contracting Officer's Representative (AOR/COR) or Mission Environmental Officer (MEO), believes that an already-approved IEE contains adequate human health and environmental protection conditions for the anticipated response, he/she/they will communicate a recommendation to dispense with an MTF to the Regional BEO for a final decision.

This COVID-19 PIEE aims to help OU's more rapidly and easily respond to the Agency's mandatory Environmental Procedures, avoiding delays in initiation of COVID-19 response actions and improving their overall effectiveness.

If they prefer, Missions or Regional OUs could document the application of appropriate safeguards to their activities using a supplemental initial environmental examination (SIEE) instead of an MTF.

Other Relevant Guidance

This document must be viewed in the full context of guidance, recommendations, and policy direction being developed and issued by USAID and by partner governments regarding the COVID-19 pandemic. This COVID-19 PIEE references Agency guidance and procedures available at the time of preparation. In preparing their MTFs (or other IEEs, as and/or when warranted) related to their COVID-19 response actions, Mission and Regional OU should remain alert to new guidance, recommendations, and policy that may relate to the design and implementation of those actions.

1.2 INTERVENTION CATEGORIES/ACTIONS

For purposes of this COVID-19 PIEE, USAID's COVID-19 response is expected to include work in the support areas listed below. This list is illustrative, not exhaustive; any response activities not found in this list shall be considered in Mission's or Regional OU's MTF.

Group A Activity Type:

1. Communications, outreach, analysis, planning, and other actions that typically have no impact on the environment;

Group B Activity Type:

1. Laboratory or research strengthening, including waste management and contaminated personal protective equipment (PPE)
2. Support to formal and informal/temporary healthcare facilities and systems, including waste management and contaminated PPE;
3. Support for use of disinfectants/germicides;
4. Water, Sanitation, and Hygiene (WASH);
5. Food security;
6. Small-scale construction and rehabilitation;
7. Small and medium enterprises in support of COVID-19 response.

1.3 ACTIVITY OVERVIEW

The 2020 COVID-19 pandemic is a new disease that is distinct from other respiratory illnesses. Although coronavirus and influenza infections may present with similar symptoms, the virus responsible for COVID-19 is different with respect to community spread and severity. There is still much to discover about the disease and its impact in different contexts. Preparedness, readiness, and response actions -- including social distancing -- will continue to be driven by rapidly accumulating scientific and public health knowledge. It is likely that USAID interventions related to COVID-19 will be driven by Agency-wide efforts and Mission-specific interventions in the form of new activities and pivots to existing activities.

On March 18, 2020, the U.S. Government announced the release of $62 million from the Emergency Reserve Fund (ERF) for Contagious Infectious-Disease Outbreaks at USAID to address the pandemic of COVID-19. COVID-19, the disease caused by the novel coronavirus SARS-CoV-2, is at the center of a widespread global pandemic. In responding to the global public health emergency, USAID is working to boost the capacity of laboratories across the developing world in order to ensure future preparedness against this novel coronavirus. USAID has issued a determination to make the funds from the ERF available to combat the increasing health threat in developing countries affected by, or at high-risk of the COVID-19 pandemic. This funding fulfills the U.S. Department of State's pledge of up to $100 million for international efforts to combat COVID-19.

Missions and Bureaus, through new and existing mechanisms, may support the development of approaches and tools related to preparedness, readiness, communication, supplies and

equipment, training, capacity building, and humanitarian response actions driven by the rapidly accumulating scientific and public health knowledge. To help immediately combat COVID-19, USAID interventions aim to strengthen host governmental and IP COVID-19 preparedness and response to reduce transmission and, to the extent possible, limit the impact of the virus. USAID, with the support of its partners, is taking steps to organize an effective response to contain and end this outbreak, while protecting staff and partner staff. This effort includes logistics, communication, developing a response plan and - with an unknown time frame - the eventual vaccination strategy.

1.4 ACTIVIY GROUPS AND TYPES

To facilitate the environmental impact evaluation for this COVID IEE, this document has been organized into two primary Activity Groups (A and B) and eight Activity Types. An Activity Type is not an individual, named activity, but instead represents a range of types of predictable and similar activities that will require similar monitoring and mitigation measures.

The COVID-19-specific Activity Groups and Types analyzed in this PIEE are noted in Table 1:

TABLE 1: ILLUSTRATIVE ACTIVITIES

Activity Type A1 – Communications, outreach, analysis, planning
Activity Type B1 – Laboratory or research strengthening
Activity Type B2 – Support to formal and informal/temporary healthcare facilities and systems
Activity Type B3 – Use of disinfectants/germicides
Activity Type B4 – WASH
Activity Type B5 – Food Security
Activity Type B6 - Small Scale Construction and Rehabilitation
Activity Type B7 - Small and medium enterprises in support of COVID-19 response

2.0 BASELINE ENVIRONMENTAL INFORMATION

2.1 LOCATIONS AFFECTED AND ENVIRONMENTAL CONTEXT (ENVIRONMENT, PHYSICAL, CLIMATE, SOCIAL, THREATENED AND ENDANGERED SPECIES)

Within the Asia region, the pandemic context may present complicating factors such as insufficient health care facilities and supplies, differing or confusing government guidance and mandates, and limited capacity to enforce measures to reduce infections (e.g., stay-at-home or quarantine orders). Additionally, Asia has many at-risk populations (e.g., immunocompromised individuals and areas where malnutrition is an issue), therefore potentially exacerbating the demands on the healthcare system. The labor migration common across much of Asia also

poses risk of infecting communities far from disease centers (and accompanying healthcare facilities) and increases the risk of reinfection of communities that are recovering from outbreaks. Outbreak scale, populations affected, local conditions and capacity for response, and infrastructure will strongly dictate the types of actions necessary and the scale of USAID's and other donor's interventions. It is likely that interventions will take place in healthcare facilities, private homes, schools, and other public and private buildings.

As outbreaks progress, communities may face additional challenges where USAID commonly operates. For example, mandated business closures may result in loss of household income, increased poverty, and food insecurity. In the longer term, as farming and business stop, agricultural productivity could significantly decrease and food insecurity is likely to follow. The longer-term social impacts are still unknown.

2.2 APPLICABLE AND APPROPRIATE PARTNER COUNTRY AND OTHER INTERNATIONAL STANDARDS (E.G. WHO), ENVIRONMENTAL AND SOCIAL LAWS, POLICIES, AND REGULATIONS

Because this COVID-19 PIEE addresses Asia, the MTFs shall specify applicable standards, laws, policies, and regulations for each country in relation to the COVID-19 outbreak. During the pandemic, standards can quickly evolve, and therefore, local officials should be consulted to identify applicable laws, policies, and regulations at the time of the intervention.

The USG has issued guidance for the US which, as appropriate, can serve as additional reference for USAID activities. Local authorities are also likely to develop their own guidance and protocols. Online information may change as the knowledge about an outbreak evolves, therefore, any references should be regularly consulted.

- CDC's Cleaning and Disinfection of Households: Interim Recommendations for U.S. Households with Suspected or Confirmed Coronavirus Disease 2019
- CDC's Coronavirus Disease Site
- CDC's How to Protect Yourself
- CDC's Information for HealthCare Professionals
- CDC's Information for Laboratories
- CDC's Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008 Update: May 2019
- EPA's List N: Disinfectants for Use Against SARS-CoV-2
- WHO's Country & Technical Guidance - Coronavirus disease (COVID-19)

3.0 ANALYSIS OF POTENTIAL ENVIRONMENTAL IMPACT

Each of the activities in this PIEE are evaluated for the potential direct, indirect, and cumulative environmental and social (i.e., health and well-being) impacts. Activities are generally associated with those taking place at health facilities, warehouses, in offices, and in transport as well as the natural environment when related to community disinfection waste management, WASH provision or construction.

In general, the anticipated environmental impacts of COVID-19 response actions include the following:

Human (occupational) health and safety risks and impacts exist from:

- Use and waste management of toxic chemicals (which may be pesticides in accordance with US EPA) used in laboratories;
- Disposal of PPE
- Exposure to expired or unusable commodities and other healthcare wastes accessed by the community through scavenging or inappropriate disposal;
- Fumigation of food commodities;
- Use of disinfectants/germicides (aka pesticides) in health facilities, businesses, public spaces, and households;
- Occupational safety of construction, laboratory, healthcare workers, and during Small and Medium Enterprise (SME) production activities; and
- Exposure to COVID-19 at gathering, informational sessions, and during essential work.

Environmental and social impacts exist from:

- Introduction of pharmaceutical and other hazardous waste into the environment;
- Use of disinfectants and release to the environment during ULV fogging and surface cleaning;
- Associated with small scale construction such as solid waste, ground- and surface-water contamination from poorly designed water supply and sanitation systems; and
- Associated with SME production activities.

The potential environmental impacts of the activity types considered in this COVID-19 PIEE are described in detail in Annex 2 and provide a preliminary analysis for Missions and Regional OUs to utilize in preparing their MTFs or SIEEs.

4.0 ENVIRONMENTAL DETERMINATIONS

A **Categorical Exclusion** is recommended for activities outlined in Group A (See Section 1.4 Activity Groups and Types) when there is no direct contact with potentially affected people and when such activities are conducted through videoconferencing without gathering of any number of people in situ.

A **Negative Determination with Conditions** is recommended for activities outlined in Group B (See Section 1.4 Activity Groups and Types) implemented in response to COVID-19. No categorical exclusions are applicable to these activities because even the implementation of activities that would typically qualify for a Categorical Exclusion, such as laboratory or research strengthening, presents the risk of COVID-19 transmission if the implementation of those activities would congregate people. As appropriate a negative determination with conditions will apply to Group A activities, such as communications, outreach, analysis, and planning, if the implementation of those activities would congregate people.

Pursuant to 22 CFR 216.2(b)(1)(ii), the COVID-19 response activities covered herein do not qualify for an Exemption from environmental examination without Assistant Administrator or Administrator review and clearance, and Council on Environmental Quality consultation. As noted in ADS 204, the International Disaster Assistance (IDA) Exemption applies only to IDA-funded activities, or non-IDA-funded activities that meet ALL of the criteria as described in ADS 204.3.10 c 1-4. The Agency is conducting proactive advance planning, and therefore, ALL of the non-IDA Exemption criteria do not apply, i.e., “This (Exemption) does not include situations in which the need for the activity was foreseeable and has become urgent merely as a result of the Agency’s lack of advance planning.”

5.0 CONDITIONS AND MITIGATION MEASURES

5.1 CONDITIONS

The environmental determinations in this COVID-19 PIEE are contingent upon full implementation of the following general implementation and monitoring requirements, as well as ADS 204 and other relevant requirements.

- USAID Missions shall operationalize this COVID-19 PIEE through the development and submission for BEO/Asia and BEO/OAPA concurrence of MTF for Mission- or Regional Office specific COVID-19 response activities.
- This PIEE provides a preliminary analysis of environmental and social impacts and recommends a range of risk mitigation measures (summarized in Section 3 and 5 and detailed in Annex 2 and 3). With reference to this COVID-19 PIEE, the MTFs prepared by Asia and OAPA Missions and Regional OU shall direct their IPs to develop and implement an EMMP based on those measures.

General Conditions Recommended for COVID-19 MTFs

Activities shall at a minimum include the following conditions:

- Interventions must build awareness, circulate truthful and verified information, providing and requiring training and capacity building around best environmental and health and safety practices in the context of COVID-19 pandemic;
- Follow Agency and international guidelines for COVID-19 response (see Section 2.2 for examples);
- Ensure access to technical expertise for implementing sound environmental and health and safety practices for COVID-19 activities;
- Comply with relevant host country and international standards and regulations; and
- Develop and implement EMMPs and planning documents for actions involving actions with direct environmental (including OHS) or social impacts such as drinking water, medical waste, disinfection materials, construction, etc.

ANNEXES

1. Memorandum to the File Template
2. Illustrative Environmental Impacts of Activities
3. Illustrative Mitigation Measures for Use in SIEEs
4. Approved Disinfectants and the Pesticide Procedures Analysis
5. Practical Guidance for the Use of Disinfectants
6. Climate Risk Management

ANNEX 1: MEMORANDUM TO THE FILE TEMPLATE

SUPPLEMENTAL MEMORANDUM TO THE FILE TEMPLATE INSTRUCTIONS

(These are template instructions; please delete this page as you finalize this document).

Background:
The purpose of the **Memorandum to the File (MTF)** is to provide a focused environmental analysis for activities and interventions analyzed in the (Coronavirus Disease 2019) COVID-19 Programmatic IEE (COVID-19 PIEE). This PIEE/MTF process is intended to streamline the coverage of new interventions in response to COVID-19 through the identification of foreseeable impacts and prescribed mitigation measures without the need for each mission or operating unit to develop the analysis independently.

This template is used for:

1. ***Ongoing activities*** already covered by an environmental compliance document (Initial Environmental Examination [IEE] or Request for Categorical Exclusion [RCE]) that will incorporate new COVID-19 response interventions
2. COVID-19 response actions planned through ***new awards*** not yet covered by an IEE or RCE, the Mission's or Regional Office's MTF will provide the necessary threshold decision for those awards' COVID-19 response actions, based upon the analysis and recommendations in this PIEE. To the extent those awards are exclusively focused on COVID-19 response, the MTF should suffice to provide them environmental compliance coverage.

How to use this template:

1. The first page is standard metadata
2. All **headings and existing text** are standard.
3. **Highlighted text** may be updated and/or deleted as appropriate. Please remove all highlighting as you finalize the document.
4. **Be sure no Personally Identifiable Information (PII) information is contained within the document** prior to submitting for BEO approval.
5. **Delete this page as you finalize this document**.

Reminder: Mission Environmental Officers, Regional Environmental Officers, and Bureau Environmental Officers are resources for USAID staff developing projects and compliance documents. Please engage them early and often. Additional guidance and help is also available at https://www.usaid.gov/environmental-procedures.

USAID's Environmental Compliance Database of approved 22 CFR 216 documentation provides examples of approved IEEs and other environmental compliance documents, which may assist with language for similar projects.

MEMORANDUM TO THE FILE

PROJECT/ACTIVITY DATA

Project/Activity Name:	COVID-19 Response
Geographic Location(s) (Country/Region)**:**	
Implementation Start/End Date (FY or M/D/Y)**:**	
If Amended, specify New End Date:	
Solicitation/Contract/Award Number(s):	
Implementing Partner(s):	
Bureau Tracking ID:	
Tracking ID of related Programmatic IEE:	
Tracking ID of Other, Related Analyses:	

ORGANIZATIONAL/ADMINISTRATIVE DATA

Implementing Operating Unit(s): (e.g. Mission or Bureau or Office)	
Other Affected Operating Unit(s):	
Lead BEO Bureau:	
Funding Account(s) (if available)**:**	
Original Funding Amount:	
If Amended, specify funding amount:	
If Amended, specify new funding total:	
Prepared by:	
Date Prepared:	

ENVIRONMENTAL COMPLIANCE REVIEW DATA

Analysis Type:	☐Environmental Examination	☐Deferral
Environmental Determination(s):	☐Categorical Exclusion(s) ☐Negative ☐Positive ☐Deferred (per 22 CFR 216.3(a)(7)(iv)	
PIEE/IEE Expiration Date (if applicable)**:**		
Additional Analyses/Reporting Required:	☐EMMP/EMMR	
Climate Risks Identified (#):	Low ___#___ Moderate ___#___ High ___#___	
Climate Risks Addressed (#):	Low ___#___ Moderate ___#___ High ___#___	

USAID APPROVAL OF MEMORANDUM TO THE FILE:

Bureau Tracking ID: _____

Clearance:			
	[NAME], Mission Environmental Officer/Climate Integration Lead [*as appropriate*]		Date
Clearance:			
	[NAME], Regional Environmental Advisor [*as appropriate*]		Date
Clearance:			
	[NAME], Regional Legal Officer [*as appropriate*]		Date
Concurrence:			
	[NAME}, Asia or OAPA Bureau Environmental Officer [*required*]		Date

DISTRIBUTION:

Project file; MEO tracking, OAA, RLO

MEMORANDUM TO THE FILE (CONSULT BEO FOR UPDATED FORM)

1.0 PROJECT/ACTIVITY DESCRIPTION

1.1 PURPOSE OF THE MEMORANDUM TO THE FILE

This memorandum to the file (MTF) responds to the (Coronavirus Disease 2019 (COVID-19) Programmatic Initial Environmental Evaluation (COVID-19 PIEE) and is intended to ensure compliance with the Agency's mandatory Environmental Procedures (see 22 CFR 216 and ADS 204) as [OPERATING UNIT] initiates new interventions in response to the COVID-19 pandemic. It is the intent that this MTF will:

- Recommends the necessary threshold decision for new awards being issued expressly for COVID-19 response actions; and
- Avoid the need to amend existing IEEs/RCEs for ongoing mechanisms at the Mission- or Reginal Office-level to which COVID-19 response interventions are being added.

The purpose of this document, in accordance with Title 22, Code of Federal Regulations, Part 216 (22 CFR 216), is to provide a preliminary review of the reasonably foreseeable effects on the environment of the USAID intervention described herein and recommend determinations and, as appropriate, conditions, for these activities. Upon approval, these determinations become affirmed, and specified conditions become mandatory obligations of implementation. This MTF also documents the results of the Climate Risk Management (CRM) process in accordance with USAID policy (specifically, ADS 201mal).

This MTF builds on the COVID-19 PIEE and provides further details based on additional project/activity design and country specific information. Potential environmental impacts should be addressed through formal environmental mitigation and monitoring plans (EMMPs) and/or other measures as described in Section 5.

This MTF is a critical element of USAID's mandatory environmental review and compliance process meant to achieve environmentally sound design and implementation.

1.2 PROJECT/ACTIVITY OVERVIEW

This MTF calls upon the analysis presented in the COVID-19 PIEE for the following activity types that could be expected as near-term interventions for COVID-19 responses:

[NOTE TO MISSIONS OR REGIONAL OU: REMOVE ANY ACTIVITY TYPE THAT WILL NOT BE IMPLEMENTED THROUGH THIS MTF]

- Communications, outreach, analysis, planning, and other actions that typically have no impact on the environment.
- Laboratory or research strengthening (e.g., vaccine research, equipment purchases, operation of laboratories, procurement and supply management, waste management,

including contaminated personal protective equipment (PPE))
- Support to formal and informal/temporary healthcare facilities and systems (e.g., provision of equipment, operation of facilities, procurement and supply management, support for waste management, including contaminated PPE);
- Support for use of disinfectants/germicides;
- Water, Sanitation and Hygiene (WASH) (e.g. provision of soap and hygiene kits to households);
- Food security (e.g. food distribution);
- Small-scale construction and rehabilitation (e.g., installation of mobile units, latrine construction, temporary hospital/health post construction);
- Small and medium enterprises in support of COVID-19 response (e.g. PPE production, sanitizer production).

This list is representative, not exhaustive. Other activities undertaken in response to COVID-19 that are not found addressed in the COVID-19 PIEE will be addressed in this MTF.

1.3 PROJECT/ACTIVITY DESCRIPTION

Concise narrative of actions/interventions added for COVID-19 response

TABLE 2: LIST OF **Activity Types/Interventions**

Activity Type/Intervention
Activity Type 1:
Intervention 1.1:
Intervention 1.2:
Activity Type 2:
Intervention 2.1:
Intervention 2.2:

Will this activity/intervention involve construction[3] as defined by ADS 201 and 303? Yes ☐ No ☐

[3] **Construction, as defined by ADS 201 and 303,** includes: construction, alteration, or repair (including dredging and excavation) of buildings, structures, or other real property and includes, without limitation, improvements, renovation, alteration and refurbishment. The term includes, without limitation, roads, power plants, buildings, bridges, water treatment facilities, and vertical structures. In the box below, describe any construction planned for this project/activity. Refer to ADS 201maw for required Construction Risk Management procedures.

2.0 BASELINE ENVIRONMENTAL INFORMATION

In development of this MTF, *refer back to the COVID-19 PIEE for stated expectations for what is to be detailed in this country- or regional- level MTF. This section should describe the environmental context of the development challenge relevant to the country/location and nature of activities to be implemented. Avoid providing extraneous details. Applicable laws and related international agreements relevant to the activity should be provided, ideally with hyperlinks for more information. Only provide what will be useful and relevant for implementing partners to ensure environmental sound design and workplans.*

2.1 LOCATIONS AFFECTED AND ENVIRONMENTAL CONTEXT (ENVIRONMENT, PHYSICAL, CLIMATE, SOCIAL, THREATENED AND ENDANGERED SPECIES)

2.2 APPLICABLE AND APPROPRIATE PARTNER COUNTRY AND OTHER INTERNATIONAL STANDARDS (E.G. WHO), ENVIRONMENTAL AND SOCIAL LAWS, POLICIES, AND REGULATIONS

2.3 COUNTRY/MINISTRY/MUNICIPALITY ENVIRONMENTAL CAPACITY ANALYSIS (AS APPROPRIATE)

3.0 ANALYSIS OF POTENTIAL ENVIRONMENTAL RISK

Note to Preparer: This section should provide a list of the activity types and defined or illustrative actions that will be implemented under this MTF. Analysis about many activity types can be found in the COVID-19 PIEE. Activity types that are not provided in the COVID-19 PIEE should have an analysis of environmental impact here.

PROJECT/ACTIVITY 1**: TITLE XXX**

TABLE 3A. POTENTIAL IMPACTS – ACTIVITY TYPES/INTERVENTIONS

Activity Type/Intervention	**Potential environmental and social impacts**
Activity Type 1:	
Intervention 1.1:	
Intervention 1.2:	
[*Add rows as needed*]	

[*Add narratives and summary tables as needed for additional project/activity components.*]

4.0 ENVIRONMENTAL DETERMINATIONS

4.1 RECOMMENDED ENVIRONMENTAL DETERMINATIONS

A **Categorical Exclusion** is recommended, in accordance with 22 CFR 216.2(c)(2.), for communications, outreach, analysis, planning activities when there is no direct contact with potentially affected people and when such activities are conducted through videoconferencing without gathering of any number of people in situ.

A **Negative Determination with Conditions** is recommended for all other activity types implemented in response to COVID-19.

Pursuant to 22 CFR 216.2(b)(1)(ii), these activities do not qualify for an Exemption from environmental examination without Assistant Administrator or Administrator clearance and Council on Environmental Quality consultation.

4.2 CLIMATE RISK MANAGEMENT

Climate Risk Management (CRM) screening was not completed for this COVID-19 PIEE and is not required for COVID-19 MTFs in ASIA or OAPA operating units (OU). The COVID-19 response meets the criteria for exemption from CRM screening per ADS Reference 201mal because this urgent, short-term response is a “tailored process for screening contingency programming”. In addition, many of the COVID-19 response actions will be implemented through existing projects and activities that have already undergone CRM screening.

However, for new COVID-19 activities that will continue beyond the immediate pandemic response, CRM screening should be conducted. Within one year of the OU’s COVID-19 MTF final approval date, ASIA or OAPA OUs should evaluate their COVID-19 response actions and conduct CRM screening for those: 1) NOT already screened, and 2) expected to continue for another year or more. Please see Annex 6 for guidance and information on CRM and the connection between climate and COVID-19.

5.0 MITIGATION MEASURES AND CONDITIONS

5.1 MITIGATION MEASURES

Note to Preparer: This section should draw relevant information on mitigation measures from the COVID-19 PIEE tailored to the activity types covered in this MTF.

The mitigation requirements presented in this section constitute the minimum required based on available information at the time of this COVID-19 PIEE and the environmental analysis in Section 3. To fulfill the requirements of this COVID-19 PIEE — and directly address correlated social and environmental impacts — the IP(s) must implement these mitigation measures. To do so, this COVID-19 PIEE requires that these mitigation requirements be translated into specific, implementable, monitorable mitigation measures via an EMMP, as presented in the MTFs. This COVID-19 PIEE provides example mitigation measures in Annex ## for COVID-19 response actions.

PROJECT/ACTIVITY

TABLE 5A. SUMMARY OF MITIGATION MEASURES

Activity Type/Intervention	Mitigation Measure(s)
Activity Type 1:	
Intervention 1.1:	
Intervention 1.2:	
[*Add rows as needed*]	

[*Add summary tables as needed for additional project/activity components*.]

5.2 CONDITIONS

The environmental determinations in this IEE are contingent upon full implementation of the following general implementation and monitoring requirements, as well as ADS 204 and other relevant requirements.

1. This MTF prepared by [ASIA or OAPA OU] will commit to ensuring that implementing partners implement mitigation measures that are relevant to the COVID-19 response activities they will undertake. Those recommendations are summarized in Section 5 and detailed in Annex 3 of the COVID-19 PIEE.

5.2.1 During Pre-Award:

5.2.1.1 Pre-Award Briefings: As feasible, the design team and/or the cognizant environmental officer(s) (e.g., MEO, REA, BEO) will provide a pre-award briefing for potential offerors on environmental compliance expectations/responsibilities at bidders' conferences.

5.2.1.2 Solicitations: The design team, in coordination with the A/CO, will ensure solicitations include environmental compliance requirements and evaluation criteria. A/CO will ensure technical and cost proposal requirements include approach, staffing, and budget sufficient for complying with the terms of this MTF.

5.2.1.3 Awards: The A/COR, in coordination with the A/CO, will ensure all awards and sub-awards, include environmental compliance requirements.

5.2.2 During Post-Award:

5.2.2.1 Post-Award Briefings: The A/COR and/or the cognizant environmental officer(s) (e.g., MEO, REA, BEO) will provide post-award briefings for the IP on environmental compliance responsibilities.

5.2.2.3 Workplans and Budgeting: The A/COR will ensure the IP integrates environmental compliance requirements in work plans and budgets to comply with requirements, including EMMP implementation and monitoring.

5.2.2.4 Staffing: The A/COR, in coordination with the IP, will ensure all awards have staffing capacity to implement environmental compliance requirements.

5.2.2.5 Records Management: The A/COR will maintain environmental compliance documents in the official project/activity file and upload records to the designated USAID environmental compliance database system.

5.2.2.6 Host Country Environmental Compliance: The A/COR will ensure the IP complies with applicable and appropriate host country environmental requirements unless otherwise directed in writing by USAID. However, in the case of a conflict between the host country and USAID requirements, the more stringent shall govern.

5.2.2.7 Work Plan Review: The A/COR will ensure the IP verifies, at least annually or when activities are added or modified, that activities remain with the scope of the MTF. Activities outside of the scope of the MTF cannot be implemented until the a supplemental MTF is prepared.

5.2.2.8 Supplemental MTF or IEE Amendment: If new activities are introduced or other changes to the scope of this MTF occur, a supplemental MTF or IEE Amendment will be required.

5.2.2.9 USAID Monitoring Oversight: The A/COR or designee, with the support of the cognizant environmental officer(s) (e.g., MEO, REA, BEO), will ensure monitoring of compliance with established requirements (e.g., by desktop reviews, site visits, etc.).

5.2.2.10 Environmental Compliance Mitigation and Monitoring Plan: The A/COR will ensure the IP develops, obtains approval for, and implements Environmental Mitigation and Monitoring Plans (EMMPs) that are responsive to the stipulated environmental compliance requirements.

5.2.2.11 Environmental Compliance Reporting: The A/COR will ensure the IP includes environmental compliance in regular project/activity reports, using indicators as appropriate; when required by the MTF, develop and submit Environmental Mitigation and Monitoring Reports (EMMRs); and complete and submit a Record of Compliance (RoC) describing their implementation of EMMP requirements in conjunction with the final EMMR or at the close of sub activities (as applicable). And where required by Bureaus or Missions, ensure the IP prepares a closeout plan consistent with contract documentation for A/COR review and approval that outlines responsibilities for end-of-project operation, the transition of other operational responsibilities, and final EMMR with lessons learned.

5.2.2.12 Corrective Action: When noncompliance or unforeseen impacts are identified, IPs notify the A/COR, place a hold on activities, take corrective action, and report on the effectiveness of corrective actions. The A/COR initiates the corrective action process and ensures the IP completes and documents their activities. Where required by Bureaus or Missions, ensure Record of Compliance is completed.

5.3 AGENCY CONDITIONS

5.3.1 Sub-award Screening: The A/COR will ensure the IP uses an adequate environmental screening tool to screen any sub-award applications and to aid in the development of EMMPs.

5.3.2 MTFs or Supplemental IEEs (SIEEs) will be prepared pursuant to the terms of the presiding PIEE for any new project/activity being planned. The MTF or SIEE will provide more thorough analysis of the planned activities, additional geographic context and baseline conditions as well as specific mitigation and monitoring requirements.

5.3.3 Other Supplemental Analyses: The A/COR will ensure supplemental environmental analyses that are called for in the MTF are completed and documented.

5.3.4 Positive Determination: If a Positive Determination threshold determination was made, the A/COR will ensure a Scoping Statement, and if required an Environmental Assessment (EA), is completed and approved by the BEO before the subject activities are implemented.

5.3.7 Compliance with human subject research requirements: The AM, A/COR shall assure that the IP and sub-awardees, -grantees, and -contractors demonstrate completion of all requirements for ethics review and adequate medical monitoring of human subjects who participate in research trials carried out through this MTF and ensure appropriate records are maintained. All documentation demonstrating completion of required review and approval of human subject trials must be in place prior to initiating any trials and cover the period of performance of the trial as described in the research protocol.

6.0 LIMITATIONS OF THIS MTF

The determinations recommended in this document apply only to projects/activities and sub-activities described herein. Other projects/activities that may arise must be documented in either a separate MTF, SIEE, Supplemental MTF, or SIEE amendment if the activities are within the same project/activity, or other type of environmental compliance document and shall be subject to an environmental analysis within the appropriate documents listed above.

Other than projects/activities determined to have a Positive Threshold Determination, it is confirmed that the projects/activities described herein do not involve actions normally having a significant effect on the environment, including those described in 22 CFR 216.2(d).

In addition, other than projects/activities determined to have a Positive Threshold Determination and/or a pesticide management plan (PERSUAP), it is confirmed that the projects/activities described herein do not involve any actions listed below. Any of the following actions would require additional environmental analyses and environmental determinations:

- Support project preparation, project feasibility studies, or engineering design for activities listed in §216.2(d)(1);
- Affect endangered and threatened species or their critical habitats per §216.5, FAA 118, FAA 119;
- Provide support to extractive industries (e.g. mining and quarrying) per FAA 117;
- Promote timber harvesting per FAA 117 and 118;
- Provide support for regulatory permitting per §216.1(b)(2);
- Lead to privatization of industrial facilities or infrastructure with heavily polluted property per §216.1(b)(4);
- Research, testing, or use of genetically engineered organisms per §216.1(b)(1), ADS

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- Assist the procurement (including payment in kind, donations, guarantees of credit) or use (including handling, transport, fuel for transport, storage, mixing, loading, application, clean-up of spray equipment, and disposal) of pesticides or activities involving procurement, transport, use, storage, or disposal of toxic materials. Pesticides cover all insecticides, fungicides, rodenticides, etc. covered under the Federal Insecticide, Fungicide, and Rodenticide Act per §216.2(e) and §216.3(b).

7.0 REVISIONS

Per 22 CFR 216.3(a)(9), when ongoing programs are revised to incorporate a change in scope or nature, a determination will be made as to whether such change may have an environmental impact not previously assessed. If so, a supplemental MTF will be prepared to cover the changes. Per ADS 204, it is the responsibility of the USAID A/COR to keep the MEO/REA and BEO informed of any new information or changes in the activity that might require revision of this environmental analysis and environmental determination.

ANNEX 2. ILLUSTRATIVE ENVIRONMENTAL IMPACTS OF ACTIVITIES

Activity	Potential environmental and social impacts
Activity 1 Communications, outreach, analysis, planning, and other actions that typically have no impact on the environment	
No categorical exclusions are recommended for this category because even the implementation of activities that would typically qualify for a Categorical Exclusion, such as a communication activity, presents the risk of COVID-19 transmission if the implementation of those activities would tend to congregate people. Indirect social impacts are also possible depending on methodology and approach for data collection and surveillance. Illustrative examples include: ● Vector transmission between workers and the community if health and safety protocols (e.g., social distancing and hygiene behaviors) are not followed. ● Risk of social unrest or physical harm to data collectors in locations where public sensitization has not previously taken place or public misinformation results in fear of outsiders (as witnessed during the Ebola crisis).	
Activity 2 — Laboratory or research strengthening	
2.1 Support or provide technical assistance to **develop processes, SOPs, and standards** for specimen transport, laboratory diagnostics, and services	These actions primarily involve research, analyses, and information sharing actions that have no direct physical impact on the environment; however, if these activities are not cognizant of the environmental impact associated with carrying out the SOPs or standards, localized environmental harm (spread of pathogens, air pollution, contamination of soil and water) is possible due to inappropriate waste management, treatment of specimens that create disease transmission pathways to the community or workers, spills or occurrence of accidents.
2.2 **Training, technical assistance, and capacity building** of professional and paraprofessionals on laboratory establishment and/or operation, including training workers in methods for PPE use, diagnostics, and waste management	a. Laboratories carry both environmental and human health and safety risks to the local community and workers. Training, technical assistance, and capacity building can directly lead to generation of wastes during the training events and demonstrations. Indirectly, the support as it is instructional in nature, can also lead to environmental or health and safety impacts once the training is complete (e.g., they lead directly to how staff manage wastes). Incorrect PPE use, sample acquisition, handling, storage and management of healthcare waste can spread the disease through several mechanisms. Transmission of disease through infectious waste and environmental risks of used test kits and reagents are the greatest and most immediate threat. Impacts related to waste management are addressed in Section 2.3. b. Additionally, water supply of laboratories, if not properly

	treated, can also result in discharge of pathogens or chemicals into groundwater or surface waters. See infrastructure Section 10 if support extends to laboratory water systems.
2.3 **Operation of a laboratory** including all critical components such as procurement, storage, management, and disposal of laboratory commodities and samples, including, but not limited to diagnostic kits, laboratory supplies, reagents, and discarded PPE	a. Negative environmental impacts associated with laboratory testing, operation, and research include the use of hazardous and toxic chemicals and result in the generation of various solid and hazardous wastes, including chemical and biological wastes. Air emissions resulting from laboratory operations may generate hazardous air pollutants that can be harmful to human health and the environment. In addition, water used during laboratory research may become contaminated and require control or treatment prior to discharge to avoid contamination of water systems and surrounding water systems used by the local community. Sanitation of the laboratory also may result in hazardous or chemical wastes requiring neutralization or special treatment (e.g., bleaches, organic solvents, soaps). b. There are also environmental risks associated with the storage and disposal of commodities, reagents, and laboratory supplies. Unused or untested commodities may also require disposal, treatment, or storage. c. Health and safety standards are also important to consider at laboratories as workers may contact hazardous chemicals, which could be neurotoxic, carcinogenic, acutely toxic, or genotoxic, etc. Additionally, laboratory work can have safety issues associated with it from equipment operation, use of syringes, and broken glassware and exposure to pathogens in patient samples.
2.4 Contribution to **research of vaccine and treatment protocol development**	USAID may contribute or be a minor donor to the overall effort of vaccine or treatment development and scaling. Research in a controlled environment in WHO and/or ISO certified laboratories contribute to overall waste burden, but it is expected that these sanctioned facilities proper handle waste and prevent discharge of pathogens or chemicals to the environment. Vaccine development and bioengineering associated with it carries unknown environmental and social risks.
Activity 3 – Support to formal and informal/temporary healthcare facilities and systems (see Activity 1 for other support without environmental implications)	
3.1 Support or provide technical assistance to **develop processes, SOPs, and standards** for aspects of healthcare such as waste management, disinfection, specimen transport and storage, rapid diagnostics, and service delivery	These actions primarily involve research, analyses, and information sharing actions that have no direct physical impact on the environment; however, if these activities are not cognizant of the environmental impact associated with carrying out the SOPs or standards, localized environmental harm (spread of pathogens, air pollution, contamination of soil and water) is possible due to inappropriate waste management, treatment of specimens that create disease transmission pathways to the community or workers, spills or occurrence of accidents.
3.2 **Training, technical assistance, and capacity**	Support to health facilities carry both environmental and human health and safety risks to the local community and workers.

building of health care workers, staff, community healthcare workers, and volunteers in areas of PPE use, waste management, procurement, storage, and disposal of commodities, and disinfection	Training, technical assistance, and capacity building can directly lead to generation of wastes during the training events and demonstrations. Indirectly, the support as it is instructional in nature, can also lead to environmental or health and safety impacts once the training is complete (e.g., they lead directly to how staff manage wastes). Incorrect PPE use, sample acquisition, handling, storage and management of healthcare waste can spread the disease through several mechanisms. Transmission of disease through infectious waste and environmental risks of used test kits and reagents are the greatest and most immediate threat. Impacts related to waste management are addressed in Sub-activity 3.3. Not including proper safety standards in training program can lead to negative health impacts on personnel .
3.3 Procurement or logistics support (distribution and transport) for healthcare commodities, diagnostic kits, PPE, and equipment for response to emerging threats	a. Procurement and logistics support of health commodities can have environmental and social impacts associated with the management of expiring, damaged, or oversupply of commodities. More specifically, -Inappropriate supply or lack of adherence to established supply management protocols (e.g., first in first out) may result in increased waste. -An oversupply of health commodities increases the probability of products expiring on the shelf and requiring disposal or containment. Damaged and expired pharmaceuticals create a waste stream that may include potentially hazardous waste along with its associated environmental impacts. -The management of large quantities of pharmaceuticals or healthcare supplies also creates greater potential for diversion during waste handling or by theft of the commodities, which then poses a risk to the local community. -Procurement or acceptance of donated health commodities that are defective, expired, or counterfeit may lead to public health impacts due to the potential of these unsafe and/or ineffective commodities to be accessed by consumers. Adverse health and environmental impacts may also occur if defective, expired, or counterfeit health commodities are not properly managed. b. The production of the commodity, its packaging, and the shipping can result in non-recyclable materials, plastic wastes and chemical waste. c. Production of commodities may require significant energy and water use, which contribute to the overall environmental footprint of the product. d. Production and shipping can also contribute to greenhouse gas (GHG) emissions as well as waste management including incinerator use and emissions from landfills.

3.4 Assessment of incineration and waste disposal capacity for health entities to ensure proper disposal and limit vectors of disease via improperly managed healthcare waste;	Assessments do not directly have environmental or health impacts; however, recommendations arising from those assessments, can result in environmental harm when inappropriate. As noted in Sub-activities 3.2 and 3.3, there are health and soil, water, and air pollution risks from inappropriate waste management.
3.5 Procurement, distribution, and use of **waste management equipment and systems**	Improper handling, storage and disposal of the waste generated in these facilities or activities can spread disease through several mechanisms. Transmission of disease through infectious waste is the greatest and most immediate threat from healthcare waste. Waste management is important in mitigating risk, but waste management in its procedures, equipment operation, and maintenance has its own associated risks. As in many developing countries, waste management is impaired by the lack of waste separation often resulting in incomplete or ineffective treatment from inappropriate treatment or destruction processes applied to inappropriate types, moisture content, or volume of waste. If waste is not treated in a way that destroys the pathogenic organisms, dangerous quantities of microscopic disease-causing agents-viruses, bacteria, parasites or fungi-will be present in the waste. Disposal of waste via landfilling may lead to leaching of hazardous waste into the soil and surrounding water sources. In addition, improperly managed or unsecured landfills may allow scavengers to collect disposed health commodities and reuse them or circulate in the community, which could result in health impacts. Waste handlers are particularly at risk as they have exposure to possible punctures and other breaks in the skin, mucous membranes in the mouth, by being inhaled into the lungs, being swallowed, or being transmitted by a vector organism. Handlers also often maintain equipment so may be exposed to ash which can contain heavy metals and PAHs. Others who come in direct contact with the waste are also at risk including healthcare workers, cleaning staff, patients, visitors, waste collectors, disposal site staff, waste pickers, etc. Defunct and obsolete equipment can pose a health and safety threat and serve as a location for breeding vectors or are a safety risk to children of scavengers when not disposed of properly or recycled. Often this equipment is placed behind local health facilities and is never properly dismantled and removed.
Activity 4 - Support for the use of disinfectants/germicides	
4.1 Procurement, distribution, training, and use of **germicides** on surfaces -in community setting -in private homes	Environmental and health risks of using germicides are dependent on the specific germicide used, method of application, and target, among numerous other factors. In the case of community use, applicators may be less knowledgeable of the risks, appropriate preparation (e.g., dilution) of the germicide. Additionally, they may inappropriately apply the

	germicide (e.g., not adhering to contact time requirements). Therefore, specific risks cannot be identified but a very general review of associated risks is presented below. **Occupational and public exposure risks.** Use of germicides by the public and community workers may increase the risk of these persons for developing respiratory illnesses (e.g., asthma) and contact dermatitis, especially when engineering controls (e.g., closed containers, adequate ventilation) and PPE (e.g., gloves) are not being used. **Risks inherent to making homemade products .** Where manufacturer products are not available, homemade germicides are sometimes prepared. Improper use of chemicals may cause allergic reactions and dermatitis, mixing some solutions, such as cleaning materials that contain ammonia and chlorine may form a deadly gas, some chemicals are irritating to eyes and to the respiratory system. Some of the chemical disinfectants are flammable and explosive. **Ineffective treatment risk.** Pathogens can be ineffectively treated if there is use of an inappropriate product (i.e., pathogens if intrinsically resistant), application of the product improperly (i.e., incorrect duration, concentration, pH, temperature), failure to remove inorganic debris (i.e., improper cleaning) prior to disinfection, insufficient contact of the disinfectant with the surface to be treated, insufficient concentration of active product. **Environmental risks.** Germicides are selected for their toxic properties and therefore these products may harm beneficial microorganisms, plant and animal life. Some chemicals can contribute to pollution of air, water and soil and some may persist and bioaccumulate during their manufacture, use, or disposal.
4.2 Procurement, distribution, training, and use of **ULV or fogging germicides** -in a community setting	ULV and fogging in public spaces, including city streets, public transportation, schools, community buildings, mosques and churches is typically conducted using ultra-low concentration sodium hypochlorite (dilute bleach); however, the active ingredient used may vary depending on the type of pathogen. The environmental and health risks associated with germicides are dependent on the specific germicide used, method of application, and target, among numerous other factors. Therefore, specific risks cannot be identified but a very general review of associated risk is provided in Sub-activity 4.1. ULVs in particular can pose respiratory threat to workers spraying and to certain sensitive populations, such as those with respiratory illness. Some skin sensitivity may also be possible in the general population. and patients if inappropriately conducted in the healthcare setting.
4.3 Procurement, distribution, training, and use of **germicides**	See Sub-activity 4.1

-on surfaces in a medical facility setting	
4.4 Procurement, distribution, training, and use of **ULV or fogging germicides** - in a health facility setting	Environmental and health risks to germicides are dependent on the specific germicide used, method of application, and target, among numerous other factors. Therefore, specific risks cannot be identified but a very general review of associated risk is provided in Sub-activity 3.4. ULVs in particular can pose respiratory threat to workers and patients if inappropriately conducted in the healthcare setting. Older methods of fogging such as the use of formaldehyde, phenol-agents, and quartenary ammonium have shown adverse effects on health in facilities and many are no longer approved by EPA. Newer methods may not have entirely evaluated associated environmental risks.
Activity 5 – WASH (see Category 7 for construction of latrines)	
5.1 Distribute **WASH supplies to households and pre-position disinfection equipment** and related items	Provision of soap, hygiene kits and other WASH supplies generally have minimal impact on the environment as solely solid waste are the primary impact. However, distribution of disinfection supplies such as those for surfaces, in the case of outbreaks, or chlorine tabs for drinking water have greater potential risks. Undertreatment of drinking water supplies or disinfection sprays that are too dilute may lead to resistance or may contribute to disease transmission if the water is perceived safe. Overtreatment could result in gastrointestinal issues and dermatitis in humans and localized mortality events of aquatic invertebrates and fish.
5.2 Supply drinking water via installation of **household point of use treatment systems**	Point of use water treatment is a short-term measure to provide safe drinking water from unsafe polluted water sources until a longer-term solution is available to the population. It presents strong benefits if required treatment levels and procedures are followed. Health risks related to excessive dosing of water are minimal; the risk is rather of under-treatment and re-contamination (most likely to occur during transportation or storage) that renders the POU treatment ineffective.
5.3 **Technical assistance** for the design and implementation of supplemental water and sanitation facilities	Poor design, operation, or maintenance of WASH systems can have negative indirect impact on the environment as noted below. Potential adverse impacts from water supply activities: ● Depletion of freshwater resources (surface and groundwater) ● Chemical degradation of the quality of potable water sources (surface and groundwater) ● Creation of stagnant (standing) water ● Degradation of terrestrial, aquatic, and coastal habitats ● Human health risks from a water source that becomes biologically or chemically contaminated. Potential adverse impacts from sanitation activities: ● Increased human health risks from contamination of

	surface water, groundwater, soil, and food by excreta, chemicals and pathogens ● Ecological harm from degradation of stream, lake, estuarine and marine water quality and degradation of land habitats.
Activity 6 – Food Security	
6.1 Procurement and distribution of food commodities	Provision of food can increase the amount of solid waste in the area of the food distributions. Also, inappropriately planned interventions can disrupt the local supply chain and lower the income of farmers and merchants typically supplying food to local households. Inefficient supply chains and provision of food that is not can lead to food spoilage and increased waste if not properly managed. Providing food that is not palatable to the local communities may also result in waste. Food distributions also in outbreak situations can be a carrier of pathogens or draw together large groups that facilitates transmission. Depending on the mode of transportation, distribution can lead to increased GHG emissions, traffic, and noise pollution Social impact regarding who has access to the food commodities and equitable distribution.
6.2 Safe handling of food commodities	
6.3 Fumigation of food commodities	Fumigation uses dangerous chemicals, of which the impacts may include: ● Negative health impacts to applicators and on-site workers and visitors (including transporters) ● Negative health impacts of residents near fumigation sites ● Negative impacts to water quality, soil and non-target organisms if fumigant disperses from the site ● Negative health impacts due to poor solid waste management (such as improper disposal of dead birds and rodents killed by fumigants) of fumigation residues/byproducts ● Need for ancillary treatment of fungal diseases as phosphine may not be effective in control of fungal contamination
Activity 7 - Small Scale Construction and Rehabilitation, such as construction, rehabilitation and expansion of: health facilities, screening posts, laboratories, temporary shelters, latrines, staging areas, and isolation units	

7.1 Refurbishment/rehabilitation	Environmental impacts from small-scale construction and rehabilitation requiring mitigation include: ● Generation of solid waste and potential for soil and groundwater contamination, improper siting, site grading, drainage, and lack of erosion control can compromise waterways, water sources, and sensitive areas ● Potential for air pollution (both indoor and outdoor), noise pollution, traffic, congestion, odor, and visual quality impacts ● Socioeconomic impacts ● Occupational and public health and safety impacts include: ● exposure to asbestos, lead, VOCs, spills, construction accidents ● Resource depletion and indirect impacts from energy and water use
7.2 Construction of latrines	Construction of water supply and sanitation infrastructure in or near sensitive areas like wetlands or estuaries can destroy flora, fauna, and/or their habitats, leading to losses in biodiversity and ecosystem functioning. It can also cause reductions in ecosystem services such as regulation of water flows and water quality, non-consumptive use (for generating power and transport/navigation, aesthetics, and recreational value). Soil erosion of exposed soils during construction can cause sedimentation into nearby water bodies, reducing the hydraulic capacity and water quality of surface water, and increasing risk of flooding and biodiversity loss.
7.3 Construction of boreholes or water systems	
7.4 Connecting to existing utilities (water, electricity)	In connecting to existing utilities, it is possible that the need for the construction/rehabilitation will be greater than that supplied by the system. In these cases, the utility may divert resources from the community or be cost prohibitive to continue to operate the facility after handover.
7.5 Backup energy generation	Backup energy generation is often through utilization of diesel generation. Diesel generators are costly and also produce significant air emissions.
7.6 Installation of temporary units (quarantine units, staging areas, offices, mobile supply warehouses, screening facilities)	The construction of temporary units have similar impacts to those of general construction noted above, but the above risks are heightened due to (1) the higher likelihood that infectious diseases that may be present in human excreta, (2) the vulnerability of patient populations to poor environmental health conditions, and (3) the particular hazards of health care waste. Failure to provide infrastructure for appropriate management of health care waste in facility construction/rehabilitation, and failure to observe appropriate design standards for sanitation provision can have significant, adverse consequences.
Activity 8 - Small and medium enterprises (SMEs) in support of COVID-19 response	

Training, capacity building, small grants, technical assistance and purchase of equipment of supplies for small and medium scale enterprises (SMEs). Illustrative new SMEs responding to COVID-19 may include but not limited to: -PPE production -Sanitizer production -Delivery services -Technology development -Use of UAVs to deliver samples/products	SMEs can cause significant environmental and related public health difficulties, which vary as broadly as the types of enterprises. SMEs can be more pollution-intensive than larger enterprises (per unit of production). When they are numerous and/or concentrated in particular areas, they can create environmental problems of alarming proportions. The adverse environmental impacts of SMEs can impose heavy social and economic burdens on their communities—degrading the ecosystem and food sources, undermining the health of neighbors and workers, and consuming fuel and resources beyond the point of renewability. These burdens in turn place significant costs upon not only the culpable SMEs but also other businesses—such as costs of procuring fuel, and costs of lost worker productivity due to sickness or injury. Environmental Problems caused by SMEs include: • Chemical and hazardous waste • Air pollution and particulate dust • Water pollution • Soil erosion • Natural resource depletion • Solid waste • Odor • Noise • Health and safety risks Many decisions made by SMEs have the potential to harm the environment and public health. Specific examples include: • Location decisions • Purchasing decisions • Processing/manufacturing decisions • Housekeeping decisions • Waste disposal decisions Overall, adverse impacts are often caused by poor practices that go uncorrected because operators don't have the right technical information. Insufficient knowledge can lead to improper use of chemicals, inadequate treatment or disposal of solid and liquid waste, uncontrolled chemical air pollution, and production techniques that make intensive use of nonrenewable resources. Health and safety problems, in particular, are compounded by ignorance of industrial safety and environmental standards, as well as by lack of awareness of protective devices that are generally inexpensive and easy to obtain.

ANNEX 3. ILLUSTRATIVE MITIGATION MEASURES (FOR USE IN SIEES)

This table provides illustrative mitigation measures for a range of activities and sub-activities that may be included in COVID-19 responses. As appropriate, they should be integrated into SIEEs and their accompanying EMMPs. Available resources are provided for use as a supplementary reference where appropriate; however, contractual/agreement obligations and direction of the A/COR take precedence. It is highly encouraged that websites are revisited regularly as information if quickly evolving.

Activity/Sub-Activity	Mitigation Measures
Activity 1 – Communications, outreach, analysis, planning	
a) Seek to be informed about ways to prevent COVID-19 transmission over the course of the activities, including where appropriate, training staff and beneficiaries on social distancing, PPE use, and disinfection. Guidance can be found from local authorities or at CDC's Coronavirus Disease Site: https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html WHO Getting your Workplace Ready for COVID-19: https://www.who.int/docs/default-source/coronaviruse/getting-workplace-ready-for-covid-19.pdf?sfvrsn=359a81e7_6 UNICEF, WHO, IRCF Key Messages and Actions for COVID-19 Prevention and Control in Schools https://www.who.int/docs/default-source/coronaviruse/key-messages-and-actions-for-covid-19-prevention-and-control-in-schools-march-2020.pdf?sfvrsn=baf81d52_4 b) Where appropriate and available, the use of remote training and other non-face to face communications should be utilized when possible until the risk of infection pandemic passes. c) Follow local authorities regulations on the size of gatherings and travel advisories for COVID-19. d) Staff should be offered options for teleworking and/or to opt out of activities that they feel may put them at higher risk of infection, especially those that are particularly at risk (e.g., immunocompromised, those with respiratory infections, older adults) See CDCs' People who Need Extra Precautions: https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fspecific-groups%2Fpeople-at-higher-risk.html	
Activity 2 — Laboratory or research strengthening	
2.1 Support or provide technical assistance to **develop processes, SOPs, and standards** for specimen transport, laboratory diagnostics, and services	a) Use of host country developed processes, SOPs and standards should be promoted; however, they must be assessed to evaluate whether they adequately address potential health and safety and environmental impacts of the operation of laboratory and diagnostic services and their wastes. b) When gaps exist, ensure the development and promotion of implementation of the SOPs/EHS manuals in accordance with best management practices. Among the elements to consider in SOPs/EHS, are: **Storage-** ambient conditions (e.g., temperature or humidity), security, stock inventory and records, fire control, and waste management.

	Safety- safe practices for laboratory workers such as proper use of PPE and training in infection control to reduce potential transmittal of disease from samples. c) When adequate **waste management procedures** are not available, develop and implement a Waste Management Plan that addresses management of waste streams associated with laboratory operations. USAID provides guidance on WMPs at: https://www.usaid.gov/documents/1865/integrated-waste-management-plan-iwmp. Refer to the following documents for guidance on COVID-19 when developing a laboratory EHS Manual: WHO. Laboratory Biosafety Manual- Third Edition (2004) WHO Coronavirus Technical Guidance. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/laboratory-guidance Recommended components of the EHS Manual include: ● Chemical hygiene plan ● Safety Data Sheets (SDS) for chemicals used in the lab ● Use of appropriate personal protective equipment (PPE) ● Inspection and permit records ● Integrated Waste Management Plan, if applicable ● Spill prevention plan ● Injury and illness prevention plan ● Training requirements and records Additional references: ● John Snow, Inc./USAID DELIVER Project in collaboration with WHO. *Guidelines for the Storage of Essential Medicines and Other Health Commodities* (2003). ● USAID DELIVER Project. *Guidelines for Warehousing Health Commodities* (Second Edition 2014).
2.2 **Training, technical assistance, and capacity building** of professional and paraprofessionals on **laboratory establishment and/or operation**, including training workers in methods for PPE use, diagnostics, and waste management	**Training/curricula/supervision** that creates waste as part of the training must address appropriate best management practices concerning the proper management of laboratory waste, sample handling and disposal, and PPE use. PPE must be provided to trainers, if dictated by the type of training. **Training on waste management and PPE use** must be in accordance with the best standard of practice promoted by local authorities at the time of the training (or as developed in 2.1), but also note any standards that would have more complex expectations

	outside of emergency operations (e.g., barrel incineration may be practiced at the time of an outbreak, but the IP should discuss national standards in the training typically required outside of emergency operation, such as double-chambered incineration). See the USAID Sector Environmental Guidelines for Healthcare Waste (https://www.usaid.gov/environmental-procedures/sectoral-environmental-social-best-practices/sector-environmental-guidelines-resources#hw) for additional resources, particularly in the section titled, "Minimum elements of a complete waste management program." See also WHO's "Safe Management of Wastes from Healthcare Activities." WHO Coronavirus Technical Guidance. Laboratory Guidance: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/laboratory-guidance
2.3 **Operation of a laboratory** including all critical components such as procurement, storage, management, and disposal of laboratory commodities and samples, including, but not limited to diagnostic kits, laboratory supplies, reagents, and discarded PPE	**General Operation.** a) For each laboratory supported, assess the existing laboratory SOPs/EHS to evaluate whether they adequately address potential health and safety and environmental impacts of the operation of laboratory and diagnostic services and their wastes. b) If no SOP/EHS manual exists or gaps are identified, develop and implement a SOP/EHS manual in the laboratory in accordance with best management practices. c) The staff must be trained and provided guidance materials for activities related to the SOPs/EHS. d) Provide to the A/COR and/or develop and implement a laboratory SOP/EHS Manual. Recommended components of the SOPs/EHS Manual include: ● Chemical hygiene plan ● Safety Data Sheets (SDS) for chemicals used in the lab ● Use of appropriate personal protective equipment (PPE) ● Inspection and permit records ● Integrated Waste Management Plan, if applicable ● Spill prevention plan ● Injury and illness prevention plan ● Training requirements and records Refer to the following document for guidance when developing a laboratory EHS: ● EHS Manual: WHO. Laboratory Biosafety Manual- Third

	Edition (2004) ● WHO Coronavirus Technical Guidance. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/laboratory-guidance ● CDC Laboratory Biosafety Manual. https://www.cdc.gov/coronavirus/2019-ncov/lab/lab-biosafety-guidelines.html **Waste Management.** When adequate waste management procedures are not available upon review of the laboratory SOPs/EHS manuals, develop and implement a WMP that addresses management of waste streams associated with laboratory operations. USAID provides guidance on WMPs at: https://www.usaid.gov/documents/1865/integrated-waste-management-plan-iwmp. WMPs should address, as appropriate for the laboratory, the storage of wastes, containers and labeling, safe waste treatment and disposal practices and procedures, inspection protocols and frequency, and documentation requirements (e.g., waste manifests). Commodities which expire or are damaged are subject to all relevant requirements under the WMP. Refer to the following documents for guidance when developing a WMP: ● WHO. *Safe Management of Wastes from Health-Care Activities* (2014) ● WHO. *Preparation of National Health-Care Waste Management Plans in Sub-Saharan Countries* (2005) ● USAID. Integrated Waste Management Plan (WMP) (2019) ● USAID. Sectoral Environmental Guidelines for Healthcare Waste. (2019) ● USAID. Sectoral Environmental Guidelines for Solid Waste. (2018) ● GH Environmental Management Portal (portal access may be obtained through the COR) sections for additional guidance specific to GH activities, including: ○ *Waste Management – General Information* ○ *Healthcare Waste Management* ○ *Incineration* **Sample or Supply Transport.** When IPs are responsible for sample transport or supply transport, develop and implement SOPs for the safe transport of samples and supplies being transported in bulk in motorized vehicles. Distribution considerations include but are not limited to: transport needs and availability, fleet management and monitoring, theft prevention procedures, accident and spill response, incident reporting, and vehicle maintenance.

	Refer to the following documents for guidance when developing SOPs: ● USAID DELIVER Project. *The Logistics Handbook: A Practical Guide for the Supply Chain Management of Health Commodities* (2011) ● WHO Guidance for laboratories shipping specimens to WHO reference laboratories that provide confirmatory testing for COVID-19 virus https://apps.who.int/iris/bitstream/handle/10665/331639/WHO-2019-nCoV-laboratory_shipment-2020.3-eng.pdf ● CDC Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for Coronavirus Disease 2019 https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html **Storage.** Develop and implement SOPs for the safe and effective storage of commodities and samples to reduce damage and/or early expiration. Storage considerations include, but are not limited to: storage ambient conditions (e.g., temperature or humidity), security, stock inventory and records, fire control, and waste management. **PPE Provision.** Where IPs are operating laboratories, they should support staff and facilities guidance and training for proper use and disposal of PPE appropriate to laboratory activities and waste handling as a result of those activities. When IPs are responsible for PPE provision, it should be provided in accordance with the best standard of practice achievable but strive to provide fully appropriate PPE as dictated by the services the laboratory is providing. Any substitutions or alternatives to PPE provision or use, made necessary by the emergency, should be documented in the regular reporting (e.g., utilizing scarves rather than respirators for respiratory protection). WHO currently recommends medical masks, gowns, gloves, and eye protection for workers handling laboratory samples: https://apps.who.int/iris/bitstream/handle/10665/331498/WHO-2019-nCoV-IPCPPE_use-2020.2-eng.pdf
2.4 Contribution to **research of vaccine and treatment protocol development**	Where USAID is a minor donor to vaccine or treatment development, there are no associated mitigation measures. For trials involving human subjects, the IP may have a completed and approved Institutional Review Board (IRB) review with an attached study protocol, by the appropriate agency(ies), and provided to the AFR BEO PRIOR to initiation of trial with human subjects. The IRB review will be incorporated as an IEE attachment post-signature.

Activity 3 - Support to formal and informal/temporary healthcare facilities and systems	
3.1 Support or provide technical assistance to **develop processes, SOPs, and standards** for aspects of healthcare such as waste management, disinfection, specimen transport and storage, rapid diagnostics, and service delivery	See Conditions of Sub-activity 2.1.
3.2 **Training, technical assistance, and capacity building of health care workers, staff, community healthcare workers, and volunteers** in areas of PPE use, waste management, procurement, storage, and disposal of commodities, and disinfection	**Training/curricula/supervision** that creates waste as part of the training must address appropriate best management practices concerning the proper management of healthcare waste, sample handling and disposal, and PPE use. PPE must be provided to trainers, if dictated by the type of training. **Training on waste management, storage of commodities, disinfection, and PPE use** must be in accordance with the best standard of practice promoted by local authorities at the time of the training, but also note any standards that would have more complex expectations outside of emergency operations (e.g., barrel incineration may be practiced at the time of an outbreak, but the IP should discuss national standards in the training typically required outside of emergency operation, such as double-chambered incineration). PPE for healthcare workers depends on the setting, personnel and type of activity. See WHO Rational use of personal protective equipment (PPE) for coronavirus disease (COVID-19): https://apps.who.int/iris/bitstream/handle/10665/331498/WHO-2019-nCoV-IPCPPE_use-2020.2-eng.pdf References include: USAID Sector Environmental Guidelines for Healthcare Waste (https://www.usaid.gov/environmental-procedures/sectoral-environmental-social-best-practices/sector-environmental-guidelines-resources#hw) for additional resources, particularly in the section titled, “Minimum elements of a complete waste management program WHO’s “Safe Management of Wastes from Healthcare Activities. CDC Guideline for Disinfection and Sterilization of Healthcare Facilities (2008). Updated May 2019. https://www.cdc.gov/infectioncontrol/pdf/guidelines/disinfection-guidelines-H.pdf CDC Strategies to Optimize the Supply of PPE and Equipment https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html

	Considerations for Selecting Protective Clothing used in Healthcare for Protection against Microorganisms in Blood and Body Fluids https://www.cdc.gov/niosh/npptl/topics/protectiveclothing/ WHO Coronavirus disease (COVID-19) outbreak: rights,roles and responsibilities of health workers, including key considerations for occupational safety and health https://www.who.int/publications-detail/coronavirus-disease-(covid-19)-outbreak-rights-roles-and-responsibilities-of-health-workers-including-key-considerations-for-occupational-safety-and-health
3.3 Procurement or logistics support (distribution and transport) for healthcare commodities, diagnostic kits, PPE, and equipment for response to emerging threats	**Procurement.** a) Procure health commodities that comply with host country and international regulatory, shipping, and packaging requirements to ensure that only appropriate products enter the supply system. This includes products that are manufactured at facilities that meet good manufacturing practice (GMP) certification requirements, as recommended by the World Health Organization (WHO) or are pre-qualified by WHO. b) Develop and implement an inspection and quality assurance process for assessing and monitoring product quality. Considerations include, but are not limited to: o Selecting reliable and vetted suppliers; o Using existing quality assurance mechanisms established by WHO (see references below); o Establishing a system to report poor quality, expired, or defective products; and o Performing regular pre- and post-shipment testing. c) Maintain copies of procurement records (e.g., manufacturing records, Certificate of Analysis, test data, regulatory certificates, etc.) and copies of quality documentation on file. d) Refer to the following documents for guidance on the procurement and quality assurance process: ● WHO. *National Medicines List/Formulary/Standard Treatment Guidelines* (accessed September 30, 2016) ● WHO. *Prequalification Programme: A United Nations Programme Managed by WHO* (accessed September, 2016) ● USAID DELIVER Project. *Procurement Strategies for Health Commodities: An Examination of Options and Mechanisms within the Commodity Security Context* (2006) ● WHO. *Operational Principles for Good Pharmaceutical Procurement* (1999) ● WHO. *Certification Scheme on the Quality of Pharmaceutical Products Moving in International Commerce* (accessed September 30, 2016) **Storage.** See Sub-activity 2.3. **Distribution** Develop and implement SOPs for the safe distribution of health commodities being transported in bulk in motorized vehicles. Distribution

	considerations include, but are not limited to: transport needs and availability, fleet management and monitoring, theft prevention procedures, accident and spill response, incident reporting, and vehicle maintenance. Refer to the following documents for guidance when developing SOPs: ● John Snow, Inc./USAID DELIVER Project in collaboration with WHO. *Guidelines for the Storage of Essential Medicines and Other Health Commodities* (2003). ● USAID DELIVER Project. *Guidelines for Warehousing Health Commodities* (Second Edition 2014). Task Order 4. ● WHO Guidance for laboratories shipping specimens to WHO reference laboratories that provide confirmatory testing for COVID-19 virus https://apps.who.int/iris/bitstream/handle/10665/331639/WHO-2019-nCoV-laboratory_shipment-2020.3-eng.pdf ● CDC Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for Coronavirus Disease 2019 https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html
3.4 Assessment of waste management capacity for health entities to ensure proper disposal and limit vectors of disease via improperly managed healthcare waste;	The IP must have access to technical expertise to (a) assess planned activities for potential impact on medical waste issues (generation, handling, disposal) and to develop, monitor, and report on implementation of management and waste management plans, and (b) ensure that training and technical assistance materials are accurate and reflect sound medical waste. Further references on waste management plans are provided in Sub-activity 2.3.
3.5 Procurement, distribution, and use of **waste management equipment and systems**	**Sub-contracting for waste management services.** In selecting contracted waste service providers, the IP must undertake reasonable efforts to ascertain that the providers are compliant with host country environmental, health, and safety requirements, and employ responsible practices for the disposal of waste resulting from the testing process. **For sub-contract of off-site recycling, treatment, and disposal.** Ensure sub-contractor providing recycling, treatment, or disposal service have SOPs established for properly transporting, treating, and disposing of healthcare waste offsite in conformance with host country requirements and international best practices. Considerations include but are not limited to: waste exportation protocols (if applicable), operational and monitoring requirements, and appropriate transport, treatment, and/or disposal documents and records. Maintain contractor licenses and transportation documentation and records on file (e.g., consignment note or manifest form). **Procurement, distribution or use of waste systems directly by the IP.** If procuring, distribution or using waste management equipment of systems, the IP must develop and implement a Waste Management Plan (WMP) (or comparable Standard Operating Procedures [SOP]) that provides procedures for managing wastes in conformance with international best practices and host country requirements. Management considerations include, but are not

	limited to: waste minimization procedures, proper handling of wastes (including personal protective equipment [PPE]), storage of wastes, containers and labeling, safe treatment and disposal practices and procedures, inspection protocols and frequency, and documentation requirements (e.g., waste manifests). For waste produced by the IP supported activities, the wastes are subject to the relevant requirements under the WMP. Refer to the following documents for guidance when developing a WMP: ● WHO. *Safe Management of Wastes from Health-Care Activities* (2014) ● WHO. *Preparation of National Health-Care Waste Management Plans in Sub-Saharan Countries* (2005) ● USAID. Integrated Waste Management Plan (WMP) (2019) ● USAID. Sectoral Environmental Guidelines for Healthcare Waste. (2019) ● USAID. Sectoral Environmental Guidelines for Solid Waste. (2018) Note: If the implementer does not have adequate resources to properly handle healthcare waste on-site according to host country requirements and international best practices, contractor support or coordination with another USAID award may be acquired to ensure healthcare waste is properly managed. **Exportation of wastes.** Exportation of waste across international boundaries has specific international and Agency requirements, which will be addressed on a case by case basis. The A/COR, MEO, and funding agency BEO must provide approvals of the process for managing the transportation and potential international shipment of hazardous waste for disposal. If the international disposal of hazardous waste is to be conducted by a third party, the Request for Proposal (RFP) for these 3rd party services for the international shipment must be approved by the A/COR with concurrence by the BEO. Solicitation of services for international exportation of hazardous material for disposal may not be initiated without approval of the RFP. Exportation of wastes must be in accordance with the Basel Convention and export and receiving country regulations. Additional information can be found at ● Basel Export-Import Control Tool: Allows you to view information on the regulatory requirements, applicable treaties, available facilities, competent authorities, and other country-specific information pertaining to the transboundary movement of hazardous or other wastes . ● Basel Convention - Guidance Manuals: List of resources for instructions and guidance for implementation of the Basel Convention and environmentally sound management of covered wastes. The following contains general references on waste management. The GH Environmental Management Portal (please request access through the COR) sections for additional guidance specific to GH activities, including:

	● *Waste Management – General Information* ● *Healthcare Waste Management* ● *Incineration*
Activity 4 - Support for use of disinfectants/germicides	
4.1 Procurement, distribution, training, and use of **germicides** on surfaces -in community setting -in private homes	See Annex ###. Per USAID 22 CFR 216.3(b), pesticides must undergo further analysis. USEPA regulates germicides applied to objects and surfaces (but it does not regulate use of germicides in medical setting. Therefore use of disinfectants for non-medical purposes requires a 22 CFR 216.3(b)(1)(i)a-l analysis be completed for the selected germicides. Local authorities, host country health ministries, and international and US authorities should be consulted for a list of effective products for the particular pathogen of concern. The following resources are available, but may be updated or changed with the evolving context: ● USEPA recommended germicides for cleaning surfaces: https://www.cdc.gov/coronavirus/2019-ncov/prepare/prevention.html
4.2 Procurement, distribution, training, and use of **ULV or fogging germicides** -in a community setting	
4.3 Procurement, distribution, training, and use of **germicides** -on surfaces in a medical facility setting	a) Conditions of good procurement and distribution as noted in Sub-activity 3.3 apply. b) For all manufactured and homemade products when selecting a disinfectant/germicide for a particular use, the user should be informed and take into consideration the human and environmental hazardous properties of the chemical and know how to use it properly. Safety Data Sheet (SDS) for all materials used and use instructions should be read and understood by all individuals, who will use the chemicals. ● In the absence of local guidance, the IP must develop SOP/EHS manuals for the use of germicides or identify applicable SOP resources for disinfection.. See Sub-activity 3.1 for expectations of SOP/EHS contents.The appropriate references should be identified at the time of the outbreak. Two possible resources are: ● Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008 Update: May 2019 ● FDA-Cleared Sterilants and High-Level Disinfectants with General Claims for Processing Reusable Medical and Dental Devices ● Where the IP is supporting use of training of germicides, the implicated staff must be provided training on appropriate use of the disinfectant/germicide, PPE use, health and environmental risks of germicidal use, and appropriate waste treatment methods. ● Appropriate PPE must be provided to trainees or staff supported by the IP for use and training.
4.4 Procurement, distribution, training, and use of **ULV or fogging germicide** - in a health facility setting	
Activity 5 – WASH (see Category #7 for construction of latrines)	
5.1 Distribute **WASH supplies**	With the distribution of WASH supplies, there must be associated training and capacity building on proper use, particularly of any disinfection materials,

to households and pre-position disinfection equipment and related items	and management of solid waste. Activities must also adhere to host country guidelines for rural sanitation and latrines constructions. See reference USAID Sector Environmental Guidelines for Water and Sanitation: https://www.usaid.gov/environmental-procedures/sectoral-environmental-social-best-practices/seg-water-supply/pdf CDC How to Protect Yourself: https://www.cdc.gov/coronavirus/2019-ncov/prepare/prevention.html
5.2 Supply drinking water via installation of **household point of use treatment systems**	**Good-practice design standards** must be implemented for new construction and rehabilitation works, generally consistent with USAID's *Sector Environmental Guidelines: Water Supply & Sanitation:* https://www.usaid.gov/environmental-procedures/sectoral-environmental-social-best-practices/seg-water-supply/pdf. Additional guidance for WASH in the context of COVID-19 is found at: WHO Water, Sanitation, Hygiene and Waste Management for COVID-19: https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19
5.3 **Technical assistance** for the design and implementation of supplemental water and sanitation facilities	Technical assistance to design water and sanitation facilities should also include provision of the following: ● Clean and disinfect water systems following construction or maintenance activities using chemical disinfectants (e.g. chlorine). ● Monitor disinfectant residual levels in water source and ensure that levels are in compliance with WHO guidelines. ● Implement a water surveillance program to monitor the quality of the water supply system throughout operation. Document water testing requirements, including responsible parties, frequency of testing, and protocols in the Water Quality Assurance Plan (WQAP). Frequency of testing may vary based on population served, reliability of the quality of the drinking-water, degree of treatment, presence of local risk factors, and local or host country requirements. ● Provide outreach, educational materials, and training to users/community on the proper use, operation, and maintenance of the water supply system to ensure the long-term sustainability of the system. Additional references are provided at: WHO Water, Sanitation, Hygiene and Waste Management for COVID-19: https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19
Activity 6 – Food Security	
6.1 Procurement and distribution of food commodities	CDC currently notest that potential for contracting COVID-19 from food is low: https://www.cdc.gov/foodsafety/newsletter/food-safety-and-

6.2 Safe handling of food commodities	Coronavirus.html FDA regularly updates food safety issues with COVID-19, but currently are not issuing new guidance for those handling food who are not ill. Find current updates at: https://www.fda.gov/food/food-safety-during-emergencies/food-safety-and-coronavirus-disease-2019-covid-19 However, during the distribution of food aid, groups may congregate. Procurement and food distributions and handling must be appropriate to the situation and must consider social distancing and safe practices to prevent the spread of disease. See CDCs Disease Prevention Site: https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fprepare%2Fprevention.html
6.3 Fumigation of food commodities	Fumigation is subject to the Fumigation PEA. https://www.usaid.gov/documents/1860/pea-t-3-template-fumigation-management-plan As such, the Fumigation PEA requires the IP to develop and implement a Fumigation Management Plan (FMP) that describes the steps that will be taken before, during, and after the fumigation process to ensure that fumigants are applied safely and effectively. The FMP documents pertinent information such as: responsible parties (e.g., storage facility manager, fumigators); emergency contact information; personal protective equipment and staffing notification and emergency response plans; commodities being fumigated, dosage and downtime calculations; gas concentration monitoring logs; and any accidents or exceptions to the procedures. If using a fumigation contractor (third party), the contractor is responsible for storing fumigants according to label directions, host country requirements, and international best practices. Refer to the following documents for guidance when developing an FMP: ● USAID. Phosphine Fumigation Management Plan (FMP) (Sheeted Stacks Only) (August 2014 ● USAID. Phosphine Fumigation of Stored Agricultural Commodity: Programmatic Environmental Assessment (November 2013) ● USAID. Phosphine Fumigation of Stored Agricultural Commodity: Programmatic Environmental Assessment Tool Annex (November 2013) Ensure that fumigation is performed by trained and licensed applicators and that they have the ability to comply with the FMP. Contractual language with the service provider will include requirements to comply with host country laws governing pesticide use and with the FMP.
Activity 7 - Small Scale Construction and Rehabilitation To qualify as a small-scale activity, the construction/rehabilitation must meet ALL the following criteria, which would be considered complicating factors:	

(a) disturbs an area less 1000 m^2; (b) has a total cost less than $200,000; (c) will not involve resettlement; AND (d) is not in or adjacent to an undisturbed local ecosystem.	
7.1 Refurbishment/rehabilitation	Conduct a site survey to adequately evaluate site conditions based on the size and complexity of the construction activity. The IP must develop a design plan that includes the use of appropriate building materials and complies with international best management practices and host country laws and regulations. The IP will develop a waste management plan that includes procedures for properly disposing of nonhazardous and hazardous materials and recover reusable materials to reduce the disposal of construction debris by recycling. USAID developed a set of resources that analyze potential environmental impacts associated with activities common to USAID, including indirect impacts from technical assistance. For additional analyses of environmental impacts in construction, healthcare facilities, healthcare waste, solid waste management, and housing, among others, refer to *USAID Sectoral Environmental Guidelines and Resources* (https://www.usaid.gov/environmental-procedures/sectoral-environmental-social-best-practices/seg-construction/pdf)
7.2 Construction of latrines 7.3 Construction of boreholes or water systems	**Good-practice design standards** must be implemented for new construction and rehabilitation works, generally consistent with USAID's *Sector Environmental Guidelines: Water Supply & Sanitation:* https://www.usaid.gov/environmental-procedures/sectoral-environmental-social-best-practices/seg-water-supply/pdf. The COVID-19 virus has not been detected in drinking-water supplies or via sewerage systems with or without wastewater treatment. Based on current evidence, the risk to water supplies and sanitation systems is low. is low; however, additional references are provided by WHO that should be considered for WASH activities. See WHO Water, Sanitation, Hygiene and Waste Management for COVID-19: https://www.who.int/publications-detail/water-sanitation-hygiene-and-waste-management-for-covid-19 These standards must be specified in the EMMP. ● For **water supply,** these activities must include siting of new wells away from groundwater contamination sources (e.g. latrines, cesspits, dumps) (generally at least 15-30m), exclusion of livestock from water points, and prevention of standing water at water supply points. ● For **latrines**, they must include provisions to prevent contamination of water supplies, appropriate choice of latrine type given local

	environmental conditions (e.g. pit latrines are rarely suitable in locations where the water table is high), provision of hand wash stations, and development and implementation of a system for ongoing latrine cleaning and maintenance ● **Capacity-building** in equipment/system maintenance must be co-programmed with construction/installation of small-scale water supply and sanitation infrastructure. **Water quality assurance plan.** More specifically, the Mission shall ensure that the IP develops and implements a Water Quality Assurance Plan that addresses how the partner will ensure the provision of safe drinking water to communities served under the subject activity. This Plan should be approved by the MEO and should assure that drinking water sources meet local and WHO water quality standards.
7.4 Connecting to existing utilities (water, electricity) 7.5 Backup energy generation	Utility connections that are the responsibility of the IP will receive the approval of the local authorities. IPs will verify that the connection does not burden the community with reduction in services (e.g., aquifer drawdown is not expected). An IP that is providing backup energy generation will consider green energy provision as an option for generation if the situation allows (e.g., solar may make sense to install on an existing facility used for an outbreak but may not be reasonable for temporary shelters).
7.6 Installation of temporary units (quarantine units, staging areas, offices, mobile supply warehouses, screening facilities)	Conduct a site survey to adequately evaluate site conditions based on the size and complexity of the activity. The IP will verify that the site selected for the installation is not considered sensitive habitat. The IP must develop a design plan that includes the use of appropriate building materials and complies with international best management practices and host country laws and regulations. The IP will develop a waste management plan that includes procedures for properly disposing of nonhazardous and hazardous materials and recover reusable materials to reduce the disposal of construction debris by recycling. USAID developed a set of resources that analyze potential environmental impacts associated with activities common to USAID, including indirect impacts from technical assistance. For additional analyses of environmental impacts in construction, healthcare facilities, healthcare waste, solid waste management, and housing, among others, refer to USAID Sectoral Environmental Guidelines and Resources (https://www.usaid.gov/environmental-procedures/sectoral-environmental-social-best-practices/seg-construction/pdf).
Activity 8 Small and medium enterprises (SMEs) in support of COVID-19 response	
8.1 Training, capacity building, small grants, technical assistance, purchase of	a) Activities shall be conducted following principles of USAID small scale guidelines chapters: https://www.usaid.gov/environmental-

equipment or supplies, or financing for small and medium scale enterprises (SMEs). Illustrative new SMEs responding to COVID-19 may include but not limited to: -PPE production -Sanitizer production -Delivery services -Technology development -Use of UAVs to deliver samples/products	procedures/sectoral-environmental-social-best-practices/sector-environmental-guidelines-resources#ms b) For support to banks, financial institutions, or small grants, activities will be screened to categorize the SME's work to the types and significance of environmental impacts they generate. c) Assistance for SME must comply with local, national, USAID, or its own organizational environmental policies. Yet, it is unreasonable to expect for IPs to conduct a detailed assessment of the impacts of every SME they work with. The goal of the screening phase is to determine quickly and easily assess if an assistance request from an SME (for a loan, business planning, accounting training, etc.) will need environmental review before it can be approved. d) With activities involving hazardous materials, the IP must work with the business to develop a written plan to ensure appropriate procurement, storage, management and/or disposal of these materials.

ANNEX 4. APPROVED DISINFECTANTS AND 22 CFR 216.3(B)(1)A-L ANALYSIS

For the purpose of this document, uses of disinfectants (germicides) are divided into non-medical and medical uses. Some non-medical-use germicides utilized for cleaning inanimate objects and surfaces (environmental surfaces) are classified by the US Environmental Protection Agency (USEPA) as pesticides. This definitional distinction does not suggest that non-medical disinfectants are more toxic than medical use disinfectants. For purposes of USAID environmental review, however, this USEPA definition triggers the Pesticide Procedures analysis found at 22 CFR 216.3(B)(1)A-L.

Categorizations of Disinfectants/Germicides

USAID programs seeking to provide guidance to businesses, institutions and individuals in the procurement and use of disinfectants and sterilants on environmental surfaces (i.e., are not providing guidance on their use for medical purposes) should comply with conditions for non-medical Use of Disinfectants (see Part 1) and seek guidance primarily from local authorities. USAID programs seeking to provide guidance for use of pesticides to medical facilities should comply with conditions for Medical Use of Disinfectants (see Part b).

a) **Conditions for Non-Medical Use of Disinfectants/Germicides**

For activities described below, use of disinfectants/germicides constitutes use of pesticides:

- Procurement and distribution of disinfectant/germicides by IPs to all facilities, community health workers, businesses, public institutions, and households for cleaning and disinfection.
- ULV fogging and community-wide surface cleaning in non-medical facilities.
- Training and demonstration of disinfectant/germicide preparation and use as well as solid and liquid waste management.

This is because disinfectant/germicide use on non-medical surfaces is considered use of a pesticide and regulated by USEPA and therefore under 22 CFR 216.3(b)(1)(i) requires USAID Pesticide Procedures' "12-factor analysis."

As such, for these activities the following SIEE conditions will apply:

- Use only the following AIs as a sole ingredient and/or in combination of ingredients, that are registered and approved by USEPA and per the COVID-19 PIEE for use of cleaning and disinfecting surfaces:
    - **Alcohols:** Ethanol, Isopropanol, Triethylene Glycol

- **Salts**: Ammonium Carbonate, Ammonium Bicarbonate, Sodium Carbonate, Sodium Chlorite, Sodium Dichloro-S-Triazinetrione, Sodium Dischloroisocyanurate Dihydrate, Sodium Hypochlorite
- **Acids:** Citric, Hypochlorous, Glycolic, L-Lactic, Octanoic, Peracetic, Peroxyacetic, Peroxyoctanoic, Phenolics
- **Peroxides:** Hydrogen Peroxide, Peroxyhydrate
- **Quaternary Ammonium** compounds

- **Other ingredients:** Silver ions, botanical oil thymol

● Select products that contain active ingredients or mixture of active ingredients that are approved by this COVID-19 PIEE listed below. For selecting which concentrations are effective, it is best to consult the USEPA-approved list of products and identify same or similar products.
● The IP must complete the disinfectant checklist for their planned interventions using disinfectants and retain the document with their EMMP.
● The A/COR and MEO must review and clear on the disinfectant checklist.
● Consult local authorities and follow host country established channels of communication when providing recommendations for use of disinfectants/germicides.

b) **Conditions for Medical Use of Disinfectants/Germicides**

For activities described below, use of disinfectants/germicides constitutes use of pesticides:

● Use of antiseptics/disinfectants/sterilant germicides **on human body and medical devices and in medical facilities on medical equipment.**

Use of germicides that are antiseptics applied to living tissue and disinfectants applied to medical equipment is not regulated by USEPA and therefore Pesticides Procedures 22 CFR 216.3(b)(1) do not apply to these activities. Best Management Practices, Health and Safety and Environmental Mitigation Measures specified by lead health organizations, such as CDC, should be applied to these uses and detailed in the EMMP. Recently developed references for COVID-19 in healthcare settings can be found at:

- CDC's Information for HealthCare Professionals
- CDC's Information for Laboratories

Mandatory 22 CFR 216.3(b)(1) - 12-Factor Analysis for Pesticides

The following 12-factor analysis mandated by 22 CFR 216.3(b)(1) is intended to assist and serve as a basis for SIEE development for IPs engaged in activities requiring use of germicides that fall under definition of pesticides as described above. Modifications and additions of relevant information can be made as appropriate.

A. U.S. Environmental Protection Agency (US USEPA) registration status of the proposed pesticides

Active ingredients (AIs) and combinations of AIs listed above are registered by USEPA.

B. Basis for selection of pesticides

These pesticides were recommended by USEPA as effective for treatment of environmental surfaces and are based on full product list provided by USEPA at:

https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2

C. Extent to which the proposed pesticide use is part of an IPM program

These AIs are recommended in combination with handwashing measures and recommendations to avoid touching face, eyes and mouth with unwashed hands. The following site provides links to both CDC recommended hand cleaning procedures: https://www.cdc.gov/coronavirus/2019-ncov/prepare/prevention.html

D. Proposed method or methods of application, including the availability of application and safety equipment

Methods of application of products are in accordance with the label and manufacturer instructions. For home made products follow strictly dosage instructions provided by relevant authorities.

E. Any acute and long-term toxicological issues with the proposed use, and measures available to minimize such hazards

All chemical disinfectants are, by their very nature, potentially harmful or toxic to living organisms. Like other toxic substances, the chemical disinfectants can enter the body through several routes, including absorption through skin or mucous membrane, inhalation and ingestion. Sometimes a chemical substance can enter through more than one of the routes. However, chemical disinfectants would be effective and safe tools when handled properly with the safety measures in place. If misused, they can be hazardous and harmful to people and the environment.[1]

Accidental exposure in high doses may result in acute toxic reaction such as skin irritation, dizziness or nausea, or they may be permanent: blindness, scars from acid burns, mental impairment and other adverse health effects. Acute toxicity is often seen within minutes or hours after a sudden, high exposure to a chemical. However, there are a few instances where a one-time high-level exposure causes delayed effects. Symptoms of exposures may not appear for several days.

As a general rule, chronic toxicity appears many years after exposure first began. The health effects may occur where exposure has taken place repeatedly over many years. For this activity, repeated exposure over the long term is not anticipated.

Disinfectants can pose physical/chemical risks and can be flammable or explosive. Products must be stored at temperatures designated by their labels/Safety Data Sheets.

All AIs and products should be accompanied by the label and, where available, a Safety Data Sheet. First aid instructions must be available to users and health workers.

All disinfecting products/AIs and their containers must be properly triple rinsed away from all water sources, punctured and properly recycled or disposed of, never reused.

F. Effectiveness of the requested pesticide for the proposed use

The AI approved by this IEE are contained in USEPA approved/recommended products for disinfection of environmental surfaces against COVID-19.

G. Compatibility of the proposed pesticide use with target and non-target ecosystems

Disinfectants contribute to air and water pollution during their manufacture and use. Cleaning, sanitizing and disinfecting products can increase indoor air pollution. However, AIs identified by USEPA as effective against COVID-19 are recommended by this IEE.

H. Conditions under which the pesticide is to be used, including climate, geography, hydrology, and soils

AIs in products recommended will be used mostly indoors and surfaces around structures. These AIs/products should be used away from ambient environmental water sources.

I. Availability of other pesticides or non-chemical control methods

Only AIs/Products registered by USEPA are recommended. Other AIs, such as aldehydes that are approved by EU for disinfection, are not covered by this IEE.

J. Host country's ability to regulate or control the distribution, storage, use, and disposal of the requested pesticide

Most host countries in Africa have limited frameworks for regulation of pesticides and most do not regulate disinfectants for use on environmental surfaces. Regulation of disinfectants is more likely to be under the auspices of Ministries of Health (MoH). Most

countries in Africa have a network of health clinics that can be instrumental for Training of Trainers (TOT) and promulgation of guidelines for use of disinfectants.

K. Provision for training of users and applicator

Guidelines, training materials and awareness built through Social Behavior Change Communication (SBCC) messaging should be developed for each country, translated to local languages, and distributed through MoH networks. These should also include a list of AIs, labels, SDSs, and instructions for first aid and environmental controls.

L. Provision made for monitoring the use and effectiveness of each pesticide

Use and effectiveness will be tracked through regular reporting by the IPs supporting the actions involving germicides. Overall, monitoring effectiveness in limiting spread of COVID-19 will depend on numerous factors that are likely to be monitored as part of disease surveillance by host countries' Ministries of Health and their international donors.

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[1] https://www.labour.gov.hk/eng/public/os/C/Disinfectants.pdf

ANNEX 5 PRACTICAL GUIDANCE FOR USE OF DISINFECTANTS

This annex provides resources for the safe use of disinfectants, including specific practices related to COVID-19. Since information and best practices are still evolving, users should frequently visit websites for updates and maintain contact with their local health authorities.

Disinfection Procedures

Disinfection at a household with a suspect or confirmed case of COVID-19:

A complete guide to disinfecting households with suspected or confirmed COVID-19 cases is available at: https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/cleaning-disinfection.html

When using manufactured product for disinfection of inanimate objects:

a) Select products that contain active ingredients or mixture of active ingredients that are approved by this IEE. For selecting which concentrations are effective, it is best to consult the USEPA-approved list of products and identify the same or similar products. A full list of products approved is available at: https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2

b) Always ensure that the product has a proper label. Labels of disinfectants should include the following information:

- Product name
- Company name and address
- Net contents
- Manufacturing/host country registration detail
- Active ingredients statement
- Child hazard warning
- Hazard signal word
- First aid instructions
- Precautionary statements and requirements for use of PPE
- Environmental hazards statements
- Physical/chemical hazards statements
- Directions for use and misuse statement
- Storage and disposal instructions

c) Always use products in accordance with the label. Strict attention must be given to the proper use of a product with regard to its application, effectiveness, and associated hazards (human, animal, and environment). Where possible, obtain the Safety Data Sheet that provides more extensive product detail.

Directions for use must specify:

- The surfaces, objects or inanimate environments intended for treatment (floors, walls, bathroom surfaces, etc.)
- The major areas in which the product is intended for use (hospitals, restaurants, homes, schools).
- The level of activity (e.g., Sanitizer, Disinfectant, Sporicide)
- Pathogens against which product is effective
- How the product must be applied
- Pre--cleaning steps
- Recommended use dilution and provide instructions for preparing it including the units of measure (ounces, quarts).
- Method of application
- Contact time
- How to remove the product from the surface after the recommended exposure time[1]

When using homemade products for disinfection of inanimate objects:

Natural household disinfectants may be less effective than commercial household disinfectants. It is important to be informed on hazards of AI(s) used for homemade product preparations. Where possible, SDS sheets should be obtained for AI(s) used in preparing homemade products. The SDS information and risk assessment will help determine, the PPE requirements, describe health hazards of unprotected exposure to people and animals, describe physical hazards such as flammability and explosion, and environmental hazards such as toxicity to aquatic organisms, provide hazard statements and first aid instructions and instructions for use, storage and disposal of chemical used in making of a disinfectant.

COVID-19 Categories of Disinfectants – Considerations for Safe Use

Bleach

Homemade disinfectants are most commonly made from household bleach.

Household bleach is usually a mixture of chemicals, its main active ingredient is a solution of ~3-6% sodium hypochlorite (NaOCl), which is mixed with small amounts of sodium hydroxide, hydrogen peroxide, and calcium hypochlorite. Unexpired household bleach will be effective against coronaviruses when properly diluted.

*Bleach solution preparation recommended by CDC**[1]***:

Diluted household bleach solutions can be used if appropriate for the surface.

- Prepare a bleach solution by mixing:
  - 5 tablespoons (1/3rd cup) bleach per gallon of water or

    - 4 teaspoons bleach per quart of water
- Follow manufacturer's instructions for application and proper ventilation.
- Check to ensure the product is not past its expiration date.
- Never mix household bleach with ammonia or any other cleanser.

Chlorine compounds found in bleach are unstable and react with a variety of chemicals and water when it is released into the environment. Because chlorine is so reactive, it is not normally detected in the environment except for very low levels. Bleach spilled into surface water may adversely affect aquatic organisms. Inhaling bleach fumes may cause eye, nose, throat irritation depending on dosage. The effects will depend also on exposure duration. In general, people who suffer from respiratory conditions such as allergies or hay fever, or who are heavy smokers, tend to experience more severe effects than healthy subjects or nonsmokers. Spilling hypochlorite solution on the skin can produce irritation. The severity of the effects depends on the concentration of sodium hypochlorite in the bleach. Drinking small amounts of hypochlorite solution (less than a cup) can produce irritation of the esophagus. Drinking concentrated hypochlorite solution can produce severe damage to the upper digestive tract and even death. These effects are most likely caused by the caustic nature of the hypochlorite solution and not from exposure to molecular chlorine. Long-term exposure to small amounts of sodium hypochlorite has not shown to have significant impacts on human health.[2]

Alcohols

Alcohols that are components of drinking beverages and rubbing alcohols are recommended for sanitizing, not for drinking. Alcohol products must be at least 70%. Most drinking beverages are below 48% alcohol and not appropriate for sanitizing.

Rubbing alcohol products that are at least 70 percent alcohol reportedly will kill viruses. When using rubbing alcohol, do not dilute it below 70%. Alcohol higher than 70% is not always better, and 70% alcohol is better than 91% because water plays a key role in protein denaturation. Consumer Reports says rubbing alcohol is safe for all surfaces but can discolor some plastics.

Although it has the word alcohol in its name, rubbing alcohol is completely different from the ethyl alcohol found in alcoholic beverages. Isopropyl alcohol, also referred to as isopropanol and IPA, is twice as toxic as ethanol. Swallowing just 8 ounces, or 240 milliliters, of rubbing alcohol can be fatal — but as little as 20 milliliters mixed with water can make a person sick.

Inhaling rubbing alcohol can also cause serious side effects, including headache, nausea, vomiting and irritation of the nasal passages and lungs. Inhaling isopropanol fumes can cause a loss of consciousness.[4]

Hydrogen Peroxide

Hydrogen peroxide is typically sold in concentrations of about 3%. Hydrogen peroxide at this concentration should be able to neutralize the coronavirus. It is recommended to be left on surfaces for at least 1 minute. Hydrogen peroxide is not corrosive and can be used on metal

surfaces. Similar to bleach, it can discolor fabrics. Hydrogen peroxide had minimal impact on the environment as it decomposes into oxygen and water.

Acids

Commercial products effective against Covid-19 often contain acids. Acids range from weak to very strong. Weak acids such as household vinegar are not likely to be effective against coronavirus. Concentrated industrial strength acids are not recommended as they can be extremely corrosive and can cause dangerous burns when not handled properly. Only acids approved by this IEE can be used in preparation of homemade products.[5]

Quaternary ammonium compounds

The quaternary ammonium compounds (QAC) are widely used as surface disinfectants and are an active ingredient in household cleaning products. Health hazards of QACs include contact dermatitis, triggering of asthma symptoms in people who already have asthma or new onset of asthma in people with no prior asthma, eye and mucous membrane injuries from splashes or contact with mists, and oral and gastrointestinal injuries from swallowing solutions containing QACs. [6] Some household products can be diluted with water but the correct dosage effective against Covid-19 must be established. [7]

Oils

Botanical oil thymol in an ingredient in some USEPA approved products effective against Covid-19. There is no evidence that other oils such as tea tree oil are effective.

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[1] https://www.niehs.nih.gov/news/events/pastmtg/hazmat/assets/2007/wtp_2007aic_kempter_disinfectants_508.pdf
[2] https://emergency.cdc.gov/agent/chlorine/basics/facts.asp
[3] https://www.lenntech.com/periodic/elements/cl.htm#ixzz6IPDRT1xR
[4] https://www.drugrehab.com/addiction/alcohol/drinking-rubbing-alcohol/
[5] https://aces.nmsu.edu/pubs/_g/G304/welcome.html
[6] https://med.nyu.edu/pophealth/sites/default/files/pophealth/QACs%20Info%20for%20Physicians_18.pdf
[7] https://www.thejakartapost.com/life/2020/03/24/want-to-disinfect-your-home-lipi-recommends-cleaning-products-as-alternative-disinfectants.html

ANNEX 6 CLIMATE RISK MANAGEMENT

The purpose of Climate Risk Management (CRM, https://www.usaid.gov/sites/default/files/documents/1868/201mal_042817.pdf) screening at USAID is to assess, address, and adaptively manage, “climate risks that may impact the ability of USAID programs to achieve objectives.”

In the spirit of CRM and good development practices, COVID-19 PIEE-related funding should balance the direct response to this crisis, while also building longer term climate resilience, when possible.

While CRM screening is required for all strategies, projects, and activities, there are some exceptions. CRM) is not completed in this COVID-19 PIEE, and is exempt, since this is a “tailored process(es) for screening contingency programming,” as outlined in ADS Reference 201mal. While the COVID-19 is not an OTI or DCHA-specific program, this is funding for a response to an urgent crisis. In addition, many of the funds related to the COVID-19 PIEE will be obligated to already existing projects and activities that have undergone CRM screening. CRM screening for current projects continues to apply for all projects and activities that have undergone a CRM. New CRM screening is not required for MTFs where CRM has already been completed.

Missions are encouraged to consider climate risks during implementation of projects and activities, and may complete CRM screening to help consider these risks during the development of MTFs, as determined by the Mission.

If new programs are designed using COVID-19 PIEE related funds, and those programs are expected to continue beyond the immediate response to COVID-19, CRM screening should be conducted. Specifically, and unless otherwise directed, after 1 year, Asia and OAPA OUs should evaluate their COVID-19 response actions covered by their COVID-19 IEEs and conduct CRM screening for those: 1) NOT already screened, and 2) expected to continue for another year or more.

Climate and COVID-19

Climate and weather shocks and stressors can cause direct and indirect negative impacts to human health, such as heat waves leading to increased heat related illness, or changing temperatures and rainfall patterns changing the distribution of infectious diseases. These impacts may magnify the severity of COVID-19. Furthermore, climate and weather shocks and stressors may also weaken health systems, and these systems' ability to respond to COVID-19. The most vulnerable populations are usually the most impacted by climate and weather shocks and stressors, potentially putting more people at risk of serious illness due to COVID-19.

As part of any COVID-19 response involving establishment of temporary facilities, siting of such facilities will be considered to avoid areas prone to flooding, landslides, etc.