# SUPPLEMENTAL INITIAL ENVIRONMENTAL EXAMINATION

**PROJECT/ACTIVITY DATA**

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| **Project/Activity Name:** | COVID-19 Response |
| **Geographic Location(s)** (Country/Region)**:** | Kenya, Africa |
| **Implementation Start/End Date** (FY or M/D/Y)**:** | FY 2020 |
| **If Amended, specify New End Date:** | |
| **Solicitation/Contract/Award Number(s):** | Multiple |
| **Implementing Partner(s):** | Multiple |
| **Bureau Tracking ID:** | |
| **Tracking ID of related Programmatic IEE:** | AFR COVID-19 PIEE<br>https://ecd.usaid.gov/document.php?doc_id=52754 |
| **Tracking ID of Other, Related Analyses:** | |

**ORGANIZATIONAL/ADMINISTRATIVE DATA**

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|---|---|
| **Implementing Operating Unit(s):**<br>(e.g. Mission or Bureau or Office) | USAID Kenya and East Africa |
| **Other Affected Operating Unit(s):** | |
| **Lead BEO Bureau:** | AFRICA Bureau |
| **Funding Account(s)** (if available)**:** | Multiple |
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| **If Amended, specify funding amount:** | N/A |
| **If Amended, specify new funding total:** | N/A |
| **Prepared by:** | Wilkister Magangi |
| **Date Prepared:** | May 5, 2020 |

**ENVIRONMENTAL COMPLIANCE REVIEW DATA**

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|---|---|---|
| **Analysis Type:** | **X** ☐Environmental Examination | ☐Deferral |
| **Environmental Determination(s):** | ☐Categorical Exclusion(s)<br>**X** Negative with Conditions<br>☐Positive<br>☐Deferred (per 22 CFR 216.3(a)(7)(iv) | |
| **IEE Expiration Date** (if applicable)**:** | 2025 | |
| **Additional Analyses/Reporting Required:** | **X** ☐EMMP/EMMR | |
| **Climate Risks Identified (#):** | Low ____ Moderate __2#___ High ___#___ | |
| **Climate Risks Addressed (#):** | Low ____ Moderate __2#___ High __#___ | |

# USAID APPROVAL OF SUPPLEMENTAL INITIAL ENVIRONMENTAL EXAMINATION

**OPERATING UNIT:** USAID Kenya and East Africa

**Bureau Tracking ID:** _____

**Approval:** _____ 15 June 20
Mark Meassick, KEA Mission Director — Date

Clearance: Warren Harrity Digitally signed by Warren Harrity Date: 2020.05.19 15:28:07 +03'00' — 05/19/2020
Warren Harrity, Supervisory Program Officer — Date

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Wilkister Magangi, Mission Environmental Officer — Date

Clearance: David Kinyua Digitally signed by David Kinyua Date: 2020.05.12 14:10:00 +03'00' — 05/12/2020
David Kinyua, East Africa Regional Environmental Advisor — Date

Clearance: Cleared by email — 05/20/2020
Donald Keene, Regional Legal Officer — Date

**Concurrence:** _____ 12/08/2020
Brian Hirsch, Africa Bureau Environmental Officer [*required*] — Date

**DISTRIBUTION:**

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# SUPPLEMENTAL INITIAL ENVIRONMENTAL EXAMINATION

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# 1.0 PROJECT/ACTIVITY DESCRIPTION

## 1.1 PURPOSE OF THE SIEE

This Supplemental Initial Environmental Evaluation (SIEE) 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 USAID Kenya and East Africa initiates new interventions in response to the COVID-19 pandemic. It is the intent that this SIEE will:

1. explore the potential environmental impacts, recommend appropriate threshold decisions, and establish responsive mitigation measures for new awards being issued expressly for COVID-19 response actions; and
2. avoid the need to amend existing IEEs/RCEs for ongoing mechanisms at the Mission-level to which COVID-19 response interventions are being added.

This SIEE is a critical element of USAID's mandatory environmental review and compliance process meant to achieve environmentally sound design and implementation. 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 provides guidance for completing the Climate Risk Management (CRM) process in accordance with USAID policy (specifically, ADS 201mal).

This SIEE 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.

## 1.2 PROJECT/ACTIVITY OVERVIEW

This SIEE 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:

1. Communications, outreach, analysis, planning, and other actions that typically have no impact on the environment.
2. Laboratory or research strengthening (e.g., vaccine research, equipment purchases, operation of laboratories, procurement and supply management, waste management)
3. 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);
4. Support for use of disinfectants/germicides;
5. WASH (e.g. provision of soap and hygiene kits to households);

6. Food security (e.g. food distribution);
7. Small-scale construction and rehabilitation (e.g., installation of mobile units, latrine construction, temporary hospital/health post construction);

**Will this activity/intervention involve construction[1] as defined by ADS 201 and 303? Yes X No ☐**

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| 1) Construction of a field hospital equipped with approximately 100 beds and BIPAP oxygenation machines and laboratory services (while tents may be utilized for the field hospital, there is a high probability of using existing facilities)<br><br>2) Installation of backup energy generation facilities<br><br>3) Connecting to existing utilities (water, electricity)<br><br>4) Construction of latrines |

[1] **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.

## 1.3 PROJECT/ACTIVITY DESCRIPTION

| A. ACTIVITY NAME | B. CURRENT IEE (ECD LINK PREFERRED) | C. COVID-19-SPECIFIC ACTIONS | D. ACTIVITY TYPE(S) [From section1.2] | E. ENVIRONMENTAL IMPACTS [From Annex 2 Of Covid-19 PIEE] | F. MITIGATION MEASURES [From Annex 3 Of Covid-19 PIEE] |
|---|---|---|---|---|---|
| **COMMUNICATIONS, OUTREACH, ANALYSIS, PLANNING** | | | | | |
| MSI<br>MSP Mission Support Program<br>Tusome<br>KYES | Kenya_DO2 IEE Time Extension<br>Kenya_DO3_EG_IEE<br>Kenya_DO1_GJD | Develop and print RC materials for COVID-19.<br>Support coordination, strategy development for risk and recovery communications as well as for publicity of activities, especially for secondary, non-health impacts. | 1 | See illustrative environmental impacts for Activity 1 in Annex 2 of the AFR COVID-19 PIEE | See illustrative mitigation measures in for Activity 1 in Annex 3 of the AFR COVID-19 PIEE |
| NAWIRI | Ongoing | Procure and distribute 4,000 copies of IEC materials to the health facilities and for CHVs to use for health education. | | | |
| **SUPPORT TO FORMAL AND INFORMAL/TEMPORARY HEALTHCARE FACILITIES AND SYSTEMS** | | | | | |
| Kenya Medical Supplies Agency KEMSA | Kenya_DO2 IEE Time Extension | Procurement of selected IPC supplies, diagnostic kits, lab supplies and equipment for case management to expand capacity at 3 isolation units in high risk counties prioritizing centers in Nairobi, Mombasa and Nakuru. | 2, 3 | See illustrative environmental impacts for Activities 2 and 3 in Annex 2 of the AFR COVID-19 PIEE | See illustrative mitigation measures for Activities 2 and 3 in Annex 3 of the AFR COVID-19 PIEE |
| Afya Ugavi | | Support to KEMSA and national resource mobilization committee particularly on commodity supply chain management. | | | |
| AMPATHPlus | | Case management interventions in Uasin Gishu County to establish and equip the COVID-19 response command | 1, 3, 4 | See illustrative environmental impacts | See illustrative mitigation measures for Activities 1, |

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| | | center and support its operations, SOP's in isolation center and IPC training. There will be no construction involved since AMPATHPlus shall use existing centers. The cost to be incurred will include operationalizing the use of select existing buildings as command centers e.g reorganization of rooms, facilitation of meetings, purchase of bundles for meetings with the counties, capacity building of HCWs involved by training then in IPC etc. We do not expect any construction or renovation.<br>Procurement of PPEs required to protect the staff working at the isolation centers will also be done. | | for Activities 1, 3, and 4 in Annex 2 of the AFR COVID-19 PIEE | 3, and 4 in Annex 3 of the AFR COVID-19 PIEE |
| AFYA Halisi | Kenya_DO2 IEE Time Extension | Training, technical assistance, and capacity building of health care workers, waste workers, staff, community health care workers, and volunteers in areas of PPE use, waste management, procurement, storage, and disposal of commodities, and disinfection. | 1,3,4 | | |
| | | Case management interventions to support and equip the COVID-19 response command center and support its operations by provision of training on Infection Prevention and Control as well as how to address the stigma for infected community members. | | | |
| Human Resources for Health (HRH) | Kenya_DO2 IEE Time Extension | Strengthen health care workers training and management systems in the country. | 1 | | |
| | | Adapt training platforms and curriculum and transform into e-learning format tools required to train 1,000 county health care workers and Ministry of Health to support the COVID-19 response. | | | |

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| Afya Uzazi | Kenya_DO2 IEE Time Extension | Strengthening of specific County Health Systems' functions and high impact family planning and reproductive, maternal, newborn, child, and adolescent health (FP/RMNCAH).<br><br>Training on Infection Prevention and Control. | 1,3,4 | | |
| Afya Pwani | Kenya_DO2 IEE Time Extension | Establish and equip the Mombasa County COVID-19 response command center and support its operations by provision of communication equipment for rapid response teams and linking up of patients to service providers.<br><br>To improve access to and quality of health services in Nairobi City County by strengthening county-level institutional capacity to manage these health services, including HIV/AIDS. | 1,3 | See illustrative environmental impacts for Activities 1 and 3 in Annex 2 of the AFR COVID-19 PIEE | See illustrative mitigation measures for Activities 1 and 3 in Annex 3 of the AFR COVID-19 PIEE |
| Afya Jijini | Kenya_DO2 IEE Time Extension | Support activities to slow the spread and ensure that the public health system in Nairobi County is supported to respond to the pandemic such as contact tracing, psychosocial support, and risk communication.<br><br>Establish and equip the Nairobi County COVID-19 response command center and support its operations including repairs renovations and painting of the centers.<br><br>Supports the Ministry of Health (MOH) Information systems strengthening both at National and County level. | 1,3, 4, 5 | See illustrative environmental impacts for Activities 1, 3, 4 and 5 in Annex 2 of the AFR COVID-19 PIEE | See illustrative mitigation measures for Activities 1, 3, 4 and 5 in Annex 3 of the AFR COVID-19 PIEE |

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| Health IT | Kenya DO2 IEE Time Extension | Tailor MOH systems to collect and report COVID-19 related data.<br><br>Support inter-operability efforts ensuring that the systems used for case management, contact tracing sample processing exchange data seamlessly.<br><br>To build individual and institutional capacity and systems to regularly collect, analyze, and use high-quality data in program management, monitoring, and adaptation.<br><br>Build the capacity of and mentor county health management teams (CHMTs) to utilize data for decision making and support data-informed planning. | 1 | See illustrative environmental impacts for Activity 1 in Annex 2 of the AFR COVID-19 PIEE | See illustrative mitigation measures for Activity 1 in Annex 3 of the AFR COVID-19 PIEE |
| CMLAP | Kenya DO2 IEE Time Extension | 1) Assist counties track disease progression, map contacts and identify priority areas for investing the limited resources available efficiently while ensuring high quality of care for the identified cases.<br>2) Strengthen the COVID-19 related management and coordination of county surveillance and rapid response. | 1,3 | See illustrative environmental impacts for Activities 1 and 3 in Annex 2 of the AFR COVID-19 PIEE | See illustrative mitigation measures for Activities 1 and 3 in Annex 3 of the AFR COVID-19 PIEE |
| NAWIRI | Ongoing | Training of 300 clinical personnel from 128 health facilities across the nine sub-counties, 120 public health officers and sub county health management teams, 3400 CHVs and CHAs from 170 community units on early detection and reporting of infectious diseases. The training will take place mainly through radio spots and road shows. | 1,3 | | |

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| **WASH Ensuring Access to Water During the COVID 19 Crisis** | | | | | |
| KIWASH<br><br>WASHFIN | Kenya_DO3_EG_IEE | Ensuring consistent access to clean water to fight the spread of the virus by bolstering the financial solvency, safety, and operational efficiency of the water utilities through:<br>(1) Treatment of drinking water at points of distribution (e.g. bulk chlorination) and ensuring water safely stored at home in cleaned containers.<br>(2) Preparation and delivery simple training programs designed for frontline utility staff to maintain best hygiene practices both at home and at workplace.<br>(3) Orienting known digital solutions to support call centers and remote customer service operations in utilities to ensure social distancing measures, while maintaining adequate communication and information flow between customers and service providers.<br>(4) Coordination with local partners to identify hospitals and health centers with water supply problems and provide solutions. | 1,5 | See illustrative environmental impacts for Activities 1 and 5 in Annex 2 of the AFR COVID-19 PIEE | See illustrative mitigation measures for Activities 1 and 5 in Annex 3 of the AFR COVID-19 PIEE |
| **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** | | | | | |
| New activity | N/A | 1) Construction of a field hospital equipped with approximately 100 beds and BIPAP oxygenation machines and laboratory services (while tents may be utilized for the field hospital, there is a high probability of using existing facilities)<br>2) Installation of backup energy generation facilities<br>3) Connecting to existing utilities (water, electricity)<br>4) Construction of latrines | 2, 3, 4, 5, 7 | See illustrative environmental impacts for Activities 2, 3, 4, 5 and 7 in Annex 2 of the AFR COVID-19 PIEE | See illustrative mitigation measures for Activities 2, 3, 4, 5 and 7 in Annex 3 of the AFR COVID-19 PIEE |

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| **Use of disinfectants/germicides** | | | | | |
| NAWIRI | Ongoing | 1) Provide 450 hand-washing booths handwashing with antiseptic soap to the health facilities and bus stops in the high-risk sub-counties (urban centers along the Isiolo Moyale highway).<br><br>2) At health facilities introduce and train facility staff on mixing 0.05% bleach solution for handwashing and disinfection. | 3, 4, 5 | See illustrative environmental impacts for Activities 3, 4 and 5 in Annex 2 of the AFR COVID-19 PIEE | See illustrative mitigation measures for Activities 3, 4 and 5 in Annex 3 of the AFR COVID-19 PIEE |
| **Food Security** | | | | | |
| Kenya Crops and Dairy Market Systems KCDMS<br><br>Kenya Livestock Market Systems KLMS<br><br>Trade mark East Africa | Kenya_DO3_EG_IEE | To ensure that food market systems are resilient and can withstand the COVID-19-related shocks by strengthening food security and nutrition by;<br><br>1) Maintaining local production of vegetables and animals sourced foods by improving access to agricultural inputs such as seeds and fertilizers to allow food production of staple foods in the ongoing growing season.<br><br>2) Ensuring food security through adequate and timely access to key food staples and critically required medicines by making the ports, borders and critical supply chains open and safe for trade.<br><br>3) Reaching rural and urban population through cash transfers to secure food availability. | 1,6 | See illustrative environmental impacts for Activities 1 and 6 in Annex 2 of the AFR COVID-19 PIEE Cash Transfers have the potential for social impacts, which may include the upstream and downstream IPs work related risks, and also risks to recipient's cash handling at some point.<br><br>May pose COVID exposure risks both at the IP's level and messaging for the recipient. | See illustrative mitigation measures for Activities 1 and 6 in Annex 3 of the AFR COVID-19 PIEE |

## 2.0 BASELINE ENVIRONMENTAL INFORMATION

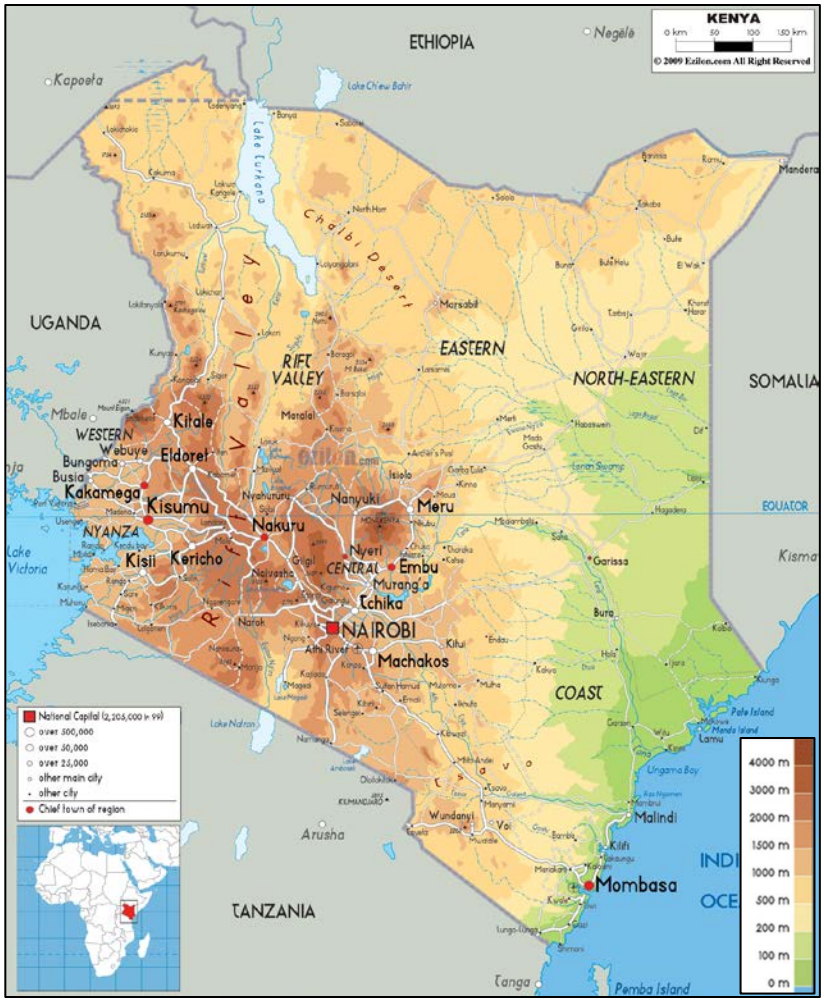
**Geography.**

Kenya is located in East Africa with 536 km of coastline along the Indian Ocean. It shares borders with Ethiopia and Somalia to the north and northeast, South Sudan and Uganda to the west, and Tanzania to the south. The total area of the country is around 580,000 $km^2$. Mount Kenya, located in the Kenyan Highlands, is the highest point in the country, and the second highest point in Africa at 5,199 m. Mount Kenya National Park is also listed as a UNESCO World Heritage Site. Kenya is home to low plains in the East along the Indian Ocean, rising to highlands in the center of the country which are divided by the Great Rift Valley, a 6,000 km trench running from northern Syria to central Mozambique. A fertile plateau lies to the west of the country. Kenya has a population of almost 45 million people, 3.4 million of which live in the capital city of Nairobi, located in the central highlands. Mombasa, located on the southeastern coast of Kenya, is the second largest city by population, at almost 1 million.

**Climate.** Due to its location along the Rift Valley and various other landforms, Kenya's variable climate brings frequent droughts and floods and uneven rainfall. The climate in Kenya ranges from tropical along the coast, to dry in the interior. Average annual rainfall is about 630 mm, ranging from less than 200 mm in northern Kenya, to 1800 mm on Mt. Kenya. Long rains occur from March to June and short rains from October to November.

**Soils.** Soil type in Kenya varies greatly due to topography and variable rainfall. Soils in Western Kenya are mainly acrisols, cambisols, and their mixtures, and are leached with iron and aluminum oxides. Young nitosol and andosol soils of volcanic origin are in the central highlands while coastal soils are generally coarse and low in organic matter and include arenosols, luvisols, and acrisols. Soils in arid and semi-arid areas include vertisols, gleysols, and phaeozems, and contain pockets of sodicity and salinity. Soils in these areas are characterized by low fertility and vulnerability to erosion. Soil salinity is widespread along the Lake Baringo basin in the Rift Valley and in the Tavetta division in the coastal provinces.

**Ecological zones.** Kenya has diverse ecological zones and habitats, including lowlands and mountain forests, wooded and open grasslands, semi-arid scrubland, dry woodlands, inland aquatic, and coastal and marine ecosystems. Wetlands are an important factor in Kenya's economy, affecting agriculture, livestock production, hydroelectric power, fisheries and tourism. The marine waters and mangrove areas along the coast are rich in biodiversity and provide locals the opportunity to fish, although Lake Victoria produces 90% of Kenya's total catch. Forests are even more significant, supporting not only agriculture and tourism, but also watershed functions.  Kenyan forests are also home to some of the highest levels of biodiversity in the country.




**Water resources and irrigation.** Kenya is characterized as a water scarce country, where demand exceeds renewable freshwater sources. Total renewable water resources totaled 30.7 billion $m^3$/year in 2008. Of this total, 30.2 billion $m^3$/year is surface water, and 3.5 billion $m^3$/year is groundwater (most of this is overlap with surface water). Kenya has 9 lakes; most are saline besides Victoria, Naivasha, and Baringo. Additionally, Lakes Nakuru and Naivasha are designated as Ramsar sites as wetlands of international importance for the conservation of biodiversity. Kenya has 5 main drainage areas: Lake Victoria, the Rift Valley and inland lakes, Athi River and coast, Tana River, and Ewaso Ng'iro River, which is the largest, covering 36.3% of the country. Hydroelectric power meets approximately 61% of Kenya's electricity demand at 677.3 MW, whereas hydroelectric potential totals 6,000 MW. The largest hydroelectric power station is Gitaru, at 225 MW.

Agriculture is the largest source of water withdrawal, at 79.2%. Irrigation potential in Kenya is estimated at 353,060 ha, with over 50% from the Nile basin (Lake Victoria). While 16% of the land has medium to high potential for irrigation, less than 10% is used, totaling only 2% of total arable land. Smallholder and commercial/private schemes dominate irrigation development; seventy-five percent of Kenya's agricultural output is produced by small-scale farms. A major obstacle to the expansion of irrigation is the rising cost of modern irrigation projects. Due to a lack of investment, the amount of irrigated land in Kenya has not changed for 30 years.

Consequently, Kenyans depend heavily on rainfed agriculture, which contributes to 80% of the nation's employment. The main irrigated crops are rice, maize, sugarcane, vegetables, bananas, citrus, coffee, tea, cotton and flowers.

**Biodiversity.** Kenya's vast biodiversity is due to its long evolutionary history, variable climate, and habitat and ecosystem diversity. The Kenya Wildlife Service (KWS) manages the protected areas in Kenya which are home to major biodiversity sites, but 70% of Kenya's biodiversity falls outside these areas. Kenya hosts five globally important hot spots of biodiversity and 61 important bird areas. There are 7000 plants, 25,000 invertebrates, 1,133 birds, 315 mammals, 191 reptiles, 180 freshwater fish, 692 marine and brackish fish, 88 amphibians and 2,000 species of fungi and bacteria in Kenya. Fourteen of Kenya's mammalian species are endemic to the country, which is famous for its large mammals like the African elephant, black rhino, leopard, buffalo and African lion. According to the International Union for Conservation of Nature (IUCN) report, endangered and threatened species in Kenya include 103 species of bird, 51 mammals, eight amphibians and reptiles and 26 fish.

**Climate change.** Kenya's 2010 National Climate Change Response Strategy (NCCRS) concluded that "evidence of climate change in Kenya is unmistakable." Notable changes include erratic rainfall, extreme weather events, drought during the rainy season, and extreme flooding. Climactic trends reported by the NCCRS include general warming of land locations (besides the coastal zone) and less cold extreme temperatures in the arid and semi-arid lands. Climate change is already responsible for the melting of 11 Mt. Kenya glaciers, and resulting decline in water levels in the Athi and Tana Rivers. Kenya's major forests are also at risk, as their distribution is determined by rainfall. Climactic conditions also influence forest fires, which recently damaged the Mount Kenya Forest in early 2012. Local environmental degradation also exacerbates climate change issues. Deforestation, pollution, overgrazing and habitat loss are major challenges in Kenya; forest cover has decreased from 12% in the 1960's to just 6% in 2013.

Climate change in Kenya has also had socio-economic impacts. Prolonged droughts, receding lake levels, and frost in productive agricultural areas, among other impacts, have forced communities to migrate to other areas, leading to conflicts over natural resources. In addition, Kenya's economy relies heavily on climate-sensitive sectors such as agriculture, tourism and energy. Kenya depends on rain-fed agriculture for food, meaning pastoral and marginal agricultural areas are especially vulnerable to drought. The tourism industry is based on wildlife populations that are greatly affected by climate change, while the hydropower sector (contributing to 50% of Kenya's energy production) is likewise impacted by droughts and erratic rainfall. In general, extreme climactic events could end up costing Kenya's economy US$500 million/year from factors such as loss of crops and livestock, forest fires, fisheries damage and reduced hydropower potential.

Kenya's National Climate Change Action Plan 2013-2017 (NCCAP) was developed to implement the NCCRS and help Kenya reach its long-term development goals, including a secure environment. The "low carbon climate resilient development pathway" outlined in the

NCCAP describes strategies Kenya can use to contribute to efforts to reduce greenhouse gas emissions.

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

Kenya being a Sub-Saharan African country may present complicating factors for response to the COVID-19 pandemic, including an overwhelmed and already burdened and weak health system, inefficient health commodities supply system for essential commodities such as Personal Protective Equipment, laboratory commodities for diagnosis, pharmaceuticals and medical equipment. This is further complicated by inadequate infrastructure to enable quick response (and where available may currently be flooded), limited capacity to enforce measures to reduce infections (e.g., stay-at-home or quarantine orders).

Kenya is a water scarce country with inadequate water and sanitation utilities that with this pandemic may strain available supplies to combat the spread through hand washing facilities and supply of clean treated to major hospitals. Additionally, Kenya has large at-risk populations (e.g., immunocompromised individuals and areas where malnutrition is an issue), overcrowding and poverty in informal settlements with limited clean water supplies potentially exacerbating the spread of COVID-19. Rural urban migration is common in much of Kenya and poses the risk of infecting communities far from disease centers (and accompanying healthcare facilities) increases the risk of reinfection of communities that are recovering from COVID-19 outbreaks. Dependence on informal economies makes social distancing of self-quarantine extremely difficult for the population. Physical distancing measures that are intended to protect Kenyans from the pandemic and could trigger citizen resistance and civil unrest.

The scale of the outbreak, the populations affected, local conditions, capacity for response, and infrastructure will strongly dictate the types of actions necessary and the scale of proposed interventions. It is likely that interventions will take place in healthcare facilities, private homes, schools, and other public and private buildings.

With the recent devolution of health services, Counties have inadequate capacity for disaster response with limited bed capacity and essential commodities should the number of infections increase. COVID-19 preparedness at county level being low may exacerbate response and will require seamless engagement with the national government to manage.

As COVID-19 outbreaks progress, communities where USAID commonly operates may face additional challenges. For example, mandated business closures may result in loss of household income, increased poverty, and food insecurity and civil unrest. In the longer term, as farming and business slow due to the virus, agricultural productivity may also significantly decrease, with food insecurity following. 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

The Environmental Management and Coordination Act (EMCA), established in 1999, provides the legal and institutional framework for environmental management, as well as provisions for environmental protection and conservation. The Environmental Impact Assessment regulations require that all projects likely to have a negative environmental impact, or those for which an EIA is required by the EMCA, produce an EIA which must be approved before implementation. Similarly, financial institutions cannot finance projects, and neither can licensing authorities issue trading, commercial or development permits or licenses for any projects with likely negative impacts or EMCA EIA requirements that do not have an approved EIA. The EIA regulations list projects that must produce an EIA (along with those that are generally likely to have negative environmental impacts), including procurement and supply chain strengthening, community mobilization, and education/outreach; and small-scale water supply and sanitation.

National Environmental Management Authority (NEMA) has also developed regulations for the sustainable management of medical waste. The Environmental Management and Coordination (Waste Management) Regulations of 2006, has clear provisions on the management of Biomedical waste. The provisions relate to segregation of biomedical waste, securing, packaging, storage and disposal of all generated medical waste within the country, to ensure a clean and healthy environment for all.

The Government of Kenya through the Ministry of Health has developed interim guidelines on infection prevention and control and case management in Kenya. These guidelines combine both preventive and clinical management of the disease in Kenyan context. The protocol borrows various international recommendations including the World Health Organization, from experience of other countries such as China that has struggled with the outbreak for a longer time and from principles of virology and infectious disease management.

The increased use of the safety materials against COVID-19 has led to massive generation of waste that can be considered infectious waste. These protective and safety materials are being used across the country in hospitals, shopping places, offices, and homes. Most of these items are single use resulting in increased waste generation which if not well addressed could pose both cross infections and environmental risk.

The health-care activities dealing with COVID-19 will protect and restore health and save lives however, the amount of waste and by-products being generated will cause adverse environmental impacts. In general, of the total amount of waste generated by health-care activities, about 85% is, non-infectious waste. The remaining 15% is considered infectious material that may be, toxic or radioactive.
Below are the links to some of the COVID-19 specific guidelines used in Kenya.

1. Ministry of Health Interim Guidelines on Management of COVID-19 In Kenya
2. Ministry of Health Guidelines on the Management of Pediatric Patients during COVID-19 Pandemic
3. Interim Infection Prevention and Control Recommendations for Coronavirus Disease 2019 (COVID-19) in Health Care Settings
4. NEMA COVID-19 Waste Management guidelines

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

2.3 Environmental Regulations Relevant to Proposed Activities in Kenya

2.3.1 Subsidiary Legislation under the Environmental Management and Coordination Act of 1999. The Environmental Management and Coordination Act (EMCA) of 1999 is an Act of Parliament to provide for the establishment of an appropriate legal and institutional framework for the management of the environment. EMCA outlines the rights and responsibilities of all Kenyan citizens in the protection and assurance of a clean and healthy environment. EMCA provides guidance on resources monitoring, access rights, reporting requirements, and mitigation, compensation, and restoration activities as well as the regulatory and management structures responsible safeguarding Kenya's natural resources. This act created the National Environmental Management Authority (NEMA) as the administrative body tasked with implementing the EMCA 1999. Specific regulations outlined by EMCA of importance to this sub-award include:

• Environmental Management and Co-ordination (Water Quality) Regulations, 2006

• Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations, 2006

• Environmental Management and Co-ordination (Waste Management Regulations), 2006

• Environmental Management and Co-ordination (Wetlands, Riverbanks, Lake Shores and Sea Shore Management) Regulation, 2009

• Environmental (Impact Assessment and Audit) Regulations, 2003

*Healthcare Waste*

Kenya has a National Health Care Waste Management Plan (2008-2012), and the EMCA has provisions to regulate effluent and hazardous waste. These regulations require that any owner or operator of a trade or industry that discharges effluents, waste, or other pollutants into the environment apply for an effluent discharge and waste disposal license from NEMA. NEMA considers the effects of these pollutants on the quality of water courses and local water requirements before approving licenses. In an additional effort to manage the potential risk from HCW, Kenya has made progress with the completion of a short-term National Health Care Waste Management Plan 2008-2012 (Kenya Ministry of Health, undated), long-term National Health Care Waste Management Plan 2006-2015 (World Bank, 2007), National Guidelines on Medical Waste Management, Injection Safety and Medical Waste Management Policy, the formalization of a National Steering Committee and Working Group on Health Care Waste (HCW) Management, approval of the Environmental Sanitation and Hygiene Policy, and formation of an Inter-Sectoral Working Group on health care waste management.

*Air Quality*

EMCA outlines a process for which air quality standards should be developed. The Standards and Enforcement Review Committee is responsible for advising NEMA on how to establish criteria and procedures for measuring air quality, which are currently in draft form. This includes ambient, occupational, and emission standards for various sources, as well as criteria for reducing existing sources of air pollution and greenhouse gases. Owners of operators of trades

that emit substances likely to cause air pollution are required to apply for a license from NEMA, who will consider the effect of emission on air quality and require the applicant to submit an EIA, as necessary.

*Water Management*

Kenya's Environmental Management and Coordination, (Water Quality) Regulations were finalized in 2006. These regulations are to ensure that all-natural water sources are protected. They apply to drinking water, and to water used for industrial, agricultural, recreational and other purposes (http://www.elaw.org/assets/pdf/ke.WaterQualityReg.pdf). This regulation has set standards for the quality of wastewater discharged into the environment, providing for the parameters to be regulated in each sector. In accordance with EMCA, the Minister for Environment and Natural Resources created water quality regulations that define water quality standards for domestic, industrial, agricultural, and recreational use. To protect sources of drinking water, the regulations set forth measures to prevent water pollution, and include standards for the maximum allowable levels of substances in the water. The regulations require NEMA to maintain water quality monitoring records for domestic water sources twice a year. For industrial water use and discharge, standards are defined for maximum allowable limits of substances in effluent to be discharged into the environment.
http://www.nema.go.ke/images/documents/water_quality_regulations.pdf

# 3.0 ANALYSIS OF POTENTIAL ENVIRONMENTAL RISK

Activities covered by this SIEE fall under the activity types 1-8 covered explicitly in the AFR COVID-19 PIEE.

# 4.0 ENVIRONMENTAL DETERMINATIONS

## 4.1 RECOMMENDED ENVIRONMENTAL DETERMINATIONS

A **Negative Determination with Conditions** is recommended for all activity types implemented in response to COVID-19. No categorical exclusions are applicable to this activity because the implementation of all activities, including those that would typically qualify for a Categorical Exclusion, may present the risk of COVID-19 transmission. The implementation of all activities may result in workplace exposure and transmission if precautions are not taken.

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 clearance and Council on Environmental Quality consultation.

## 4.2 CLIMATE RISK MANAGEMENT

All ongoing mechanisms that will support COVID-19 activities have undergone CRM screening and approved by the Africa Bureau CIL except for the new activity, construction of a temporary

hospital/ quarantine facility A summary of climate risks for the new COVID-19 response activity is provided in Table 2.

# 5.0 MITIGATION MEASURES AND CONDITIONS

## 5.1 MITIGATION MEASURES

Mitigation measures in Annex 3 of the AFR COVID-19 PIEE shall apply. Relevant mitigation measures for each activity are hereby referenced from the COVID – 19 PIEE.
The Implementing Partners shall refer to this when developing their respective Environmental Monitoring and Mitigation Plans

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 and Annex 3 from the COVID-19 PIEE. 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 SIEEs. This COVID-19 PIEE provides example mitigation measures in Annex 3 for COVID-19 response actions.

## 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 SIEE prepared by USAID KEA 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 IEE.

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 IEE. Activities outside of the scope of the IEE cannot be implemented until the IEE is amended.

5.2.2.8 IEE Amendment: If new activities are introduced or other changes to the scope of this IEE occur, an 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; 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.

5.2.2.12 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 Programmatic IEEs (PIEE): PIEEs stipulate requirements for additional environmental examination of new or country specific projects/activities. The A/COR of any project/activity being implemented under a PIEE will ensure appropriate reviews are conducted, typically through a Supplemental IEE, and approved by the cognizant BEO.

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

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

5.3.5 Resolution of Deferrals: If a deferral of the environmental threshold determination was issued, the A/COR will ensure that the appropriate 22CFR216 environmental analysis and documentation is completed and approved by the BEO before the subject activities are implemented.

5.3.6 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 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.

## 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 SIEE, or an 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 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 SIEE 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.

| CRM Table for COVID-19 SIEE | | | | | |
|---|---|---|---|---|---|
| **Intervention Type** | **Climate Risks** | **Risk Rating** | **How Risks are Addressed in Strategy or by Programs** | **Next Steps** | **Accepted Risks and Opportunities** |
| **Small scale construction of a temporary hospital** | Increased intensity, duration and/or frequency of extreme climate-related events such as storms, floods, wildfires, and high winds and/or landslides may damage or impede access routes for locations. | **Moderate** | If construction is included that requires a design team or engineer, then construction activities should consider climate risks during the design phase and be approved by relevant design engineers or firms. | To address potential climate change threats during the planning process, consider having discussions early on with key stakeholders about climate vulnerability and preparedness.<br><br>Involve an engineer in design and consider site. | The engineer of record responsible for design will conduct a climate risk screening during the design process and identify steps to manage the climate risks.<br>Where appropriate, include specific language on climate risk screening and management in Scopes of Work, Requests for Applications, and Requests for Interest (4) Include climate risk management measures in the Activity EMMP.<br><br>An **accepted risk** is that infrastructure may be damaged by extreme weather events. |
| **Use of disinfectant s/germicides** | Both long term climate change and climate shocks lead to direct or indirect impacts that increase populations vulnerability. For example, heat waves may decrease the immune systems in some locations and populations. Or, rainfall patterns and increased temperatures could increase occurrence of other, non-COVID diseases. | **Moderate** | Not known. | Conduct climate risk management for new projects and activities that have moderate or high risks, and risks that are not accepted.<br><br>Decisions should focus on targeting the most vulnerable populations first and consider where distribution of materials will have the most impact.<br><br>Logistic and supply chain delivery plans and teams | While potentially likely in some areas, supply chain disruption, and supply demand increase, due to extreme climate and weather events may be an **accepted risk in some instances**. Delivery and logistic teams should consider climate and weather as best as possible as highlighted in previous columns. |

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|---|---|---|---|---|---|
| | Supply chain distribution interrupted due to extreme climate or weather events.<br><br>Extreme climate and weather events leading to more demand for services. | | | should consider alternative routes, be adaptive, and both plan ahead and be prepared for extreme climate and weather events both increasing demand, and interrupting supply chain delivery. | |