

# INITIAL ENVIRONMENTAL EXAMINATION

## **ACTIVITY DATA**

Activity Name:	USAID Food for Peace (FFP) FY20 Request for Applications
	(RFA) for Development Food Security Activities in
Amendment (Y/N):	N N
Geographic Location(s)	Matabeleland North, Manicaland and Masvingo regions in
(Country/Region):	Zimbabwe
Implementation Start/End:	Pre-Award, To be determined upon award(s)
Solicitation/Contract/Award Number:	To be determined
Implementing Partner(s):	To be determined upon award(s)
Link to IEE:	Zimbabwe FY20 RFA IEE
Link of Other, Related Analyses:	Zimbabwe 118/119; Zimbabwe PERSUAP; Zimbabwe
	Climate Risk Profile (CRP) <sup>1</sup> in FFP Geographies
ORGANIZATIONAL/ADMINISTRATIVE DA	
Implementing Operating Unit(s): (e.g. Mission or Bureau or Office)	Office of Food for Peace (FFP), Bureau for Democracy, Conflict and Humanitarian Assistance (DCHA)
Funding Operating Unit(s): (e.g. Mission or Bureau or Office)	Same as above
Funding Account(s):	Title II Funds
Funding Amount:	Approximately \$55 million (over LOA) for activities in Manicaland and/or Masvingo and approximately \$75 million (over LOA) for activities in Matabeleland North
Other Affected Unit(s):	Africa Bureau, BFS, USAID/Zimbabwe
Lead BEO Bureau:	Democracy, Conflict and Humanitarian Assistance (DCHA)
Prepared by:	Environmental Compliance Support (ECOS) contract
Date Prepared:	November 2019
ENVIRONMENTAL COMPLIANCE REVIEW	DATA
Analysis Type:	X Initial Environmental Examination
	□ Amendment
Environmental Determination(s):	Categorical Exclusion
	□ Negative Determination
	X Positive Determination
	X Deferral
IEE Expiration Date:	2025, End of Awards
Additional Analyses/Reporting Required:	Implementing Partners to develop Supplemental IEEs
Climate Risks Rating for Risks Identified:	Low _X _ Moderate _X _ High _X _

<sup>&</sup>lt;sup>1</sup> To be posted on Climatelinks.org and on the <u>USAID Country Website</u> under Country Specific Information

# **THRESHOLD DECISION MEMO AND SUMMARY OF FINDINGS**

### PURPOSE AND SCOPE OF THE INITIAL ENVIRONMENTAL EXAMINATION

The purpose of this RFA-level Initial Environmental Examination (IEE) is to establish environmental compliance procedures and templates<sup>2</sup> for future awarded activities under the Food for Peace (FFP) <u>Fiscal Year 2020 Request for Applications (RFA)</u> for Zimbabwe Development Food Security Activities.

### ACTIVITY SUMMARY

As specified in the RFA, these activities will contribute to the achievement of resilience and economic and social development while reducing food insecurity in the target countries

### ENVIRONMENTAL DETERMINATIONS AND CLIMATE RISK RATINGS

A **Deferral** is recommended for all interventions, pursuant to 22 CFR 216.3(a)(7)(iv), that are not yet well defined in scope or technical approach.

Similarly, Climate Risk Ratings for interventions that are not yet well defined in scope or technical approach are postponed to be assessed with the Supplemental IEE.

### **BEO-SPECIFIED CONDITIONS OF APPROVAL**

<u>Condition 1:</u>	Applicant to submit Environmental Safeguards Plan.
Condition 2:	Awardee to develop Supplemental IEE for Mission and Washington clearance <sup>3</sup> .
<u>Condition 3:</u>	Implement environmental monitoring requirements. This includes development and alignment of Environmental Mitigation and Monitoring Plan (EMMP) with performance M&E systems.
<u>Condition 4:</u>	Report on USAID environmental compliance. All activities are required to submit Environmental Status Reports (ESRs <sup>4</sup> ) annually before the Pipeline Resource Estimate Proposal (PREP). Additional reporting is reflected in the Annual Results Report (ARR).
<u>Condition 5:</u>	Develop an Environmental Assessment for any actions with potential for significant impact to ecological habitats, as determined by USAID.

<sup>&</sup>lt;sup>2</sup> Word versions of the required templates can be found at a Google drive <u>here</u>.

<sup>&</sup>lt;sup>3</sup> The Supplemental IEE is subsidiary analysis to the RFA-IEE, and may also be referred to as the "Activity IEE".

<sup>&</sup>lt;sup>4</sup> The ESR is similar to the Environmental Mitigation and Monitoring Report (EMMR) used elsewhere in USAID. However, the ESR meets purposes of annual reporting and budget planning for environmental compliance.

- <u>Condition 6:</u> Plan for a Pesticide Evaluation Report and Safe Use Action Plan (PERSUAP), which includes for pesticide procurement and/or use (e.g. agriculture, livestock, public health, construction), and/or commodity fumigation mitigation requirements.
- <u>Condition 7:</u> Support the Mission in the development of any Best Practice Review (BPR) for environmental safeguarding.
- <u>Condition 8:</u> Ensure compliance with partner country environmental regulations.

#### **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.

#### USAID APPROVAL OF INITIAL ENVIRONMENTAL EXAMINATION

**ACTIVITY NAME:** USAID Food for Peace (FFP) FY20 Request for Applications Initial Environmental Examination (RFA IEE) for Development Food Security Activities in Zimbabwe

Approval: Matthew Nims, FFP Deputy Director Date cleared by email 12/18/2019 Clearance: Michael Keegan, Acting Grants and Contracts Services Team Leader, FFP Date cleared by email 12/17/2019 Clearance Blessing Mutsaka, Mission Environmental Officer (MEO) Date Erika Clesceri 01/06/2020 Clearance: Erika J. Clesceri, DCHA Climate Integration Lead (CIL) Date Erika Clesceri Concurrence: 01/06/2020 Erika J. Clesceri, DCHA Bureau Environmental Officer (BEO) Date

Bureau Tracking ID: DCHA FFP FY20 RFA IEE Zimbabwe

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# **1.0 ACTIVITY DESCRIPTION**

## **1.1 PURPOSE AND SCOPE OF 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 interventions described herein and recommend determinations and, as appropriate, conditions, for these activities. Upon approval, these determinations become affirmed, per 22 CFR 216 and BEO-specified Conditions become mandatory obligations of implementation. This RFA-level IEE (herein, "RFA IEE") also includes the RFA-level Climate Risk Management screening results in accordance with USAID policy (specifically, <u>ADS 201mal</u>).

This RFA IEE is a critical element of USAID's mandatory environmental review and compliance process meant to achieve environmentally sound activity design and implementation. This RFA IEE, cleared by FFP Washington, also establishes the requirements for post-award implementing partners (IPs) to develop their own Supplemental IEEs for Mission clearance and outlines other BEO-specified Conditions for implementation and reporting throughout the life of the awards.

## **1.2 ACTIVITY OVERVIEW**

The Office of Food for Peace (FFP), in the U.S. Agency for International Development's (USAID) Bureau for Democracy, Conflict, and Humanitarian Assistance (DCHA), is the U.S. Government leader in international food assistance. Through FFP, USAID supports multi-year development (i.e., non-emergency) food security activities to improve and sustain the food and nutrition security of vulnerable populations. Development activities are mandated in the Food for Peace Act and are aligned with the <u>FFP 2016-2025 Food Assistance and Food Security Strategy</u>. These activities work at the individual, household, and systems level to address the underlying causes of chronic and acute food insecurity and strengthen transformative opportunities. USAID also provides emergency food assistance to address needs arising from natural disasters and complex emergencies, which are often characterized by insecurity and population displacement.

Overall, the FFP Strategic Results Framework Strategic Objectives (SOs) and accompanying Intermediate Results (IRs) address key drivers of food insecurity, creating a map of the broad platform of capabilities that FFP and its partners bring to bear in supporting improved food security for vulnerable populations. Implementing partners are expected to use innovative approaches to promote environmental risk management to improve and sustain food and nutrition security of vulnerable populations, as articulated in both SO1 and SO2 of the <u>FFP 2016-2025 Food</u> <u>Assistance and Food Security Strategy</u>.

As specified in the RFA, FFP investments in the target FFP geographies<sup>5</sup> will contribute to USAID's FFP Strategy by strengthening community resilience, protecting and enhancing livelihoods, and improving food and nutritional security of vulnerable households.

<sup>&</sup>lt;sup>5</sup> Matabeleland North, Manicaland and Masvingo regions in Zimbabwe

#### **1.3 ACTIVITY DESCRIPTION**

FFP development food security activities in Zimbabwe are intended to build resilience in populations vulnerable to chronic hunger and repeated hunger crises, and to reduce their future need for ongoing or emergency food assistance. To these ends, FFP supports the procurement, protection, and distribution of food commodities, including fumigation, as well as a range of program areas and elements.

#### COMMODITY MANAGEMENT: FUMIGATION

FFP makes commodity donations to private voluntary organizations (PVOs) and international organizations (IOs), such as the UN's World Food Program (WFP). The large majority of FFP commodities are purchased from US farmers and shipped abroad from US ports; however, activities can also distribute locally, regionally, internationally procured (LRIP) food commodities as long as the use of LRIP resources clearly supports interventions that sustainably reduce vulnerability to food insecurity.

In order to prevent the spoilage and waste of food commodities procured by development food security funds, a range of protective measures are implemented in commodity storage warehouses. One common protective measure to prevent loss of commodity from insect, fungal or mammal infestations is fumigation utilizing phosphine gas and/or the application of contact pesticides to warehouse surfaces.

#### OTHER FFP PROGRAM AREAS AND ELEMENTS

The range of program areas and elements which may be supported within these development food security activities are listed below and further described in the FY20 FFP RFA.

#### **TABLE I: PROGRAM AREAS OR ELEMENTS**

#### **Commodity Fumigation**

#### **Other FFP Program Areas or Elements**

**Civil Society** 

HIV/AIDS

Maternal and child health

Family planning and reproductive health

Water supply and sanitation

Environment

Climate Change - adaptation

Climate Change - clean energy

Nutrition	
Basic education	
Social assistance	
Agriculture	
Private sector productivity	
Financial sector	
Protection, assistance and solutions	
Disaster readiness	

# **2.0 BASELINE ENVIRONMENTAL INFORMATION**

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

Implementing partners are expected to design their programs to address intervention area-specific biophysical, socioeconomic and cultural conditions, as well as the political and institutional context in which the development food security activities will operate. Applicants are expected to draw from existing USAID or other country-level environmental analyses, including USAID climate change vulnerability and adaptation analyses, (which can be found by searching for Zimbabwe in the <u>Climatelinks</u> resource library), <u>Foreign Assistance Act (FAA) 118/119 Biodiversity and Tropical Forestry Assessments</u>, and <u>Country Specific Information</u> reports.

The following sub-sections provide a brief overview of the baseline climate and environmental information for Zimbabwe, pertinent to the sub-national areas in the FFP geographies. These FFP target areas include Matabeleland North, Masvingo, and Manicaland. It is crucial to understand the baseline situation (the existing environmental situation or condition in the absence of USAID activities) in order to understand and measure the impacts, or change from the baseline, caused by an activity in these regions.

- <u>Climate Risks</u>
- <u>Key Ecological Habitats & Species</u>
- <u>PERSUAP and Pesticides</u>
- Invasive Species
- Water Resources
- Other Key Stakeholders

#### **CLIMATE RISKS**

Zimbabwe's climate is largely subtropical and semi-arid with three seasons: a hot and rainy "summer" season from November to March. a drv and cool season from April to July, and a hot, dry season from August to mid-November. During the time period from 1901-2016, the mean monthly precipitation of the country varies from 0 mm to 160 mm, which resulted in an annual average rainfall of roughly 670 mm. However, average annual rainfall varies regionally, decreasing from north to south and east to west. The mean monthly temperature of the country ranges between 15°C and 25°C during the period of 1901 - 2016<sup>6</sup>. Matabeleland North is one of the warmest regions in Zimbabwe with an average daily high temperature of 31°C. Manicaland is one of the coldest regions in Zimbabwe with an average daily high temperature of only 25°C. Temperatures in Masvingo reach an average daily high temperature of 29°C<sup>7</sup>. In the summer months, the temperature can rise to over 40°C in the north and southeastern lowland areas<sup>8</sup>. However, in the next 30 years, temperatures across the country are projected to rise by 1.2-2.2°C and rainfall is predicted to decline by approximately 6% in 50 years9.



Figure 1. Map of FFP Geographies\* and Protected Areas in Zimbabwe; Sources: Political boundaries: Diva-Gis (https://www.diva-gis.org/datadown). Protected areas: Protected Planet (www.protectedplanet.net)

\*Specific Orientation within FFP Geographies to be determined

The climate risks to Zimbabwe include both sudden onset climate shocks and gradual climate stressors. The gradual climate stressors impacting Zimbabwe are rising average temperatures and changes in rainfall patterns, which are predicted to worsen over the next few decades. Sudden-onset climate shocks, such as drought, dry spells and riverine flooding, will directly affect the FFP provinces Matabeleland North, Manicaland, and Masvingo<sup>10</sup>. Drought refers to limited precipitation resulting in minimal plant growth and parched soil. Dry spell more explicitly refers to at least 10

<sup>&</sup>lt;sup>6</sup> World Bank<u>, *Climate Change Knowledge Portal Zimbabwe: Climate Dat</u>a, 2019.</u>* 

<sup>&</sup>lt;sup>7</sup> Worddata.info, <u>Worlddata.info, Climate for Zimbabwe</u>

<sup>&</sup>lt;sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> Climate Risks in Food For Peace Geographies: Zimbabwe

<sup>&</sup>lt;sup>10</sup> Chagutah, Tigere, <u>Climate Change Vulnerability and Adaptation Preparedness in Southern Africa: Zimbabwe Country</u> <u>Report</u>, 2010.

consecutive days of dry weather after the onset of the rainy season, impacting the traditionally fertile planting season. El Niño Southern Oscillation, or ENSO, has had a direct impact on the recent droughts and climatic fluctuations in the past few years in Zimbabwe<sup>11</sup>. In 2015, the effects of ENSO combined with drought and minimal precipitation killed over 23,000 livestock, leaving 2.8 million people across the country food insecure<sup>12</sup>. However, the impacts of this extreme weather event were felt most dramatically by the food insecure provinces, Masvingo, Manicaland, and Matabeleland North.

In early March 2019, Cyclone Idai, wiped out the crops and homes of people living in Zimbabwe's provinces Masvingo and Manicaland. The storm killed over 185 people and left 270,000 people in crisis in these regions<sup>13</sup>. The cyclone destroyed swaths of cornfields across these already food insecure districts<sup>14</sup>. While drought currently presents a threatening reality for Zimbabwe, climate models project that the country will become hotter and drier over the next century, increasing the intensity and frequency of droughts and dry spells. Drought and climate stress on Manicaland, Masvingo and Matabeleland North exacerbates the government's inability to respond to disasters.

These climate predictions outline a grim future particularly for the Zimbabwean agricultural economy. Climate hazards, such as increased drought and shorter rainy seasons, threaten to impact crop production, erode soil, damage crops, and lead to malnutrition<sup>15</sup>. Some farmers in Zimbabwe have begun to shift away from maize, exchanging the traditional crop for less water-demanding and more drought-resistant crops, such as sorghum and millet<sup>16</sup>. However, this transition has been marred by poor crop management, declining soil fertility, high production costs and limited access to high-quality sorghum and millet seeds. As the climate in Zimbabwe continues to change, agriculture, the main source of income for nearly 90% of Zimbabwean households, is becoming a less viable livelihood option.

<u>USAID's Climate Risks in Food for Peace Geographies - Zimbabwe (2019)</u> indicates that there are key threats to food security as a result of the changing climate. The projected decline in average rainfall will have a significant and detrimental impact on the main sources of income and food for many in Zimbabwe. The likelihood of increased drought and dry spell is predicted to also threaten livestock, increasing the incidence of disease and invasive species. Though maize continues to dominate the national diet, accounting for 80-90% of the domestic crop production and half of Zimbabwe's total agricultural land, the crop is intolerant to higher temperatures and drought. Maize is also particularly susceptible to invasive species, such as the fall armyworm, whose destruction wiped out entire farms in the province, Masvingo<sup>17</sup>. While the fall armyworm had a national impact, the severity was exacerbated by the extended drought, particularly in Masvingo and areas within Matabeleland North. The current agrarian system's reliance on and people's preference for maize and inability to diversify their crops is a key challenge to food security across Zimbabwe.

 $<sup>^{11}</sup>$  Not currently available: Climate Risks in Food For Peace Geographies: Zimbabwe

<sup>&</sup>lt;sup>12</sup> World Bank, <u>Climate Change Knowledge Portal Zimbabwe: Vulnerability</u>, 2019.

<sup>&</sup>lt;sup>13</sup> Marima, Tendai. "Cyclone Idai Destroys Zimbabwe Farms, Deepening Food Crisis." (News | Al Jazeera, Al Jazeera,), 29 Mar. 2019.

<sup>&</sup>lt;sup>14</sup> Ibid.

 $<sup>^{15}</sup>$  Climate Risks in Food For Peace Geographies: Zimbabwe

<sup>&</sup>lt;sup>16</sup> USAID <u>Zimbabwe Biodiversity and Tropical Forest Assessment (118/119)</u>, 2012.

<sup>&</sup>lt;sup>17</sup> Famine Early Warning Systems Network (FEWS NET), *Zimbabwe Food Security Brief*, 2014.

Gradual climate stressors such as declining crop production, rising temperatures, and drought have begun to increase competition for water between geographical regions in Zimbabwe<sup>18</sup>. The increasing scarcity of this critical resource has increased migration both out of stressed districts and out of Zimbabwe. In the next decade, there is likely to be an upsurge in cross-border migration with many in key FFP provinces and districts displaced because of climatic events or lack of accessible resources. Many in Manicaland are out-migrating toward Mozambique while those in Matabeleland North and South provinces are moving south toward South Africa and Botswana<sup>19</sup>. The Masvingo province has had the most out-migration of any Zimbabwean province, with roughly a fifth to a quarter (-19%) of people born into the province outflowing elsewhere<sup>20</sup>.

Additional information on Zimbabwe's climate baseline and the projected impacts of climate change on food security can be found in the USAID Climate Risks in Food for Peace Geographies-Zimbabwe, which will be uploaded on the <u>USAID Country Website</u> under Country Specific Information. All relevant threats should be considered by implementing partners in their Supplemental IEEs.

### **KEY ECOLOGICAL HABITATS & SPECIES**

FFP districts, Manicaland, Masvingo and Matabeleland North, are home to diverse ecological habitats. See Map 1, which shows the districts where FFP activities will be implemented, and their proximity to protected areas.

Ecosystem services provide vital benefits to communities, such as water provisioning, carbon sequestration, and flood prevention. Healthy and well-managed ecosystems play an important role in enhancing the resilience of communities to shocks. According to the <u>Journey to Self-Reliance, FY</u> <u>2019 Country Roadmap for Zimbabwe</u>, Zimbabwe received an exceedingly high score of 0.95 out of 1 for Biodiversity and Habitat Protection. This metric is drawn from the Yale University/Columbia University Center for International Earth Science Information Network (CIESIN) <u>Environmental Performance Index (EPI)</u> a tool for evaluating a country's performance in habitat conservation and species protection. The score indicates the degree to which a country's laws, policies, actions, and informal governance mechanisms - such as cultures and norms - support progress towards self-reliance.

Zimbabwe's protected areas network is made up of valuable ecosystems, including wetlands, national parks, wildlife estates and forests rich in species diversity, which cover 27.21% of the country's land mass. Of the 106,837 km of protected areas in Zimbabwe, a large portion of the protected area is in Matabeleland North and Masvingo. Zimbabwe is home to approximately 672 bird species, 196 mammals, 213 species of reptiles and amphibians, and 132 different species of fish. The high levels of biodiversity in Zimbabwe are a result of the five diverse ecoregions that are home to endemic flora and fauna. These five ecoregions include the Eastern Highlands, the Central region, the Save-Limpopo, and the Zambezi and Kalahari regions. The Eastern Highland zone comprises of a combination of montane shrub and grassland while the other four ecoregions are comprised of a combination of tropical savannas or shrublands.

Zimbabwe's ecosystems provide key services to the local livelihoods and the national economy. In Masvingo, a study found that goods and services provided by ecosystems contribute to over two-

<sup>&</sup>lt;sup>18</sup> Konrad Adenauer stiftung <u>Climate Change in Zimbabwe</u>, 2015.

<sup>&</sup>lt;sup>19</sup> <u>Transnationalism and Undocumented Migration Between Rural Zimbabwe and South Africa</u>, 2010.

<sup>&</sup>lt;sup>20</sup> Ibid.

thirds of the average family income<sup>21</sup>. In agrarian zones, the Zimbabwean national forests house watersheds that serve farmers' irrigation practices. In addition to agricultural practices, many rural citizens rely on the natural environment for water, firewood and foraged food. One of the key ecosystems services in Zimbabwe is the capacity to regulate soil health, water quality and fluvial flooding control. The predicted reduction of soil fertility in conjunction with decreased annual precipitation places key ecosystems services in Zimbabwe at risk.

### WETLANDS

Following the ratification of the Ramsar Convention, Zimbabwe has seven sites classified as Ramsar protected wetlands, two of which are located in the FFP zone of influence; Victoria Falls National Park is located in the Matabeleland North Province and the Driefontein Grasslands in the Masvingo Province. Wetlands are crucial to the country's people as well as its wildlife. In addition to providing water resources and livelihoods, Ramsar Wetlands also include important destinations for tourism and recreation<sup>22</sup>.

Dominated by a unique vegetation of mopane forest and miombo woodlands, and characterized by basaltic gorges shaped by the Zambezi River, the Victoria Falls National Park is a natural wonder and a biodiversity hotspot. Also designated as a World Heritage site for its exceptional geological features and natural beauty, the Park is known for the Mosi-oa-Tunya ("The smoke that thunders") or Victoria Falls. Victoria Falls National Park is a combined mopane forest and miombo woodlands, located along the Zambezi River in the Matabeleland North province. This Ramsar site is a biodiversity hotspot, home to a wide variety of species, including a large number of elephants, buffalo, lions, leopards and black rhinoceros<sup>23</sup>. An estimated 10% of the global population of the critically endangered black rhinoceros live and are protected in the park. While Victoria Falls National Park is a Wetland of International Importance, the management plan is not being implemented and it does not have a reported IUCN category<sup>24</sup>.

### **PROTECTED AREAS**

The Driefontein Grasslands in the Masvingo region. Dominated by a unique habitat of swamps, lakes, miombo woodlands and Kalahari desert sands, Driefontein Grasslands is home to about 85% of the total national population of the globally vulnerable wattled crane and the endangered grey crowned crane. It provides an ideal breeding and feeding ground for the secretary bird, saddle-billed stork, African marsh harrier, and the duck species found in the Site. Other noteworthy species that depend on the Site include the black-bellied bustard and the kori bustard, the black-breasted snake eagle, and the African fish eagle. Farmers use the wetlands for maize growing, small-scale farming, fishing, and cattle rearing. In 2010 the Conservation Action Plan for Wattled Crane and Grey Crowned Crane in Zimbabwe, which focused on Driefontein Grasslands, was developed to ensure the protection of the species against vlei fires and habitat loss.

There are numerous additional protected areas and conservation corridors that overlap with the FFP zones of influence, such as the Hwange National Park and the Matetsi Safari Area in Matabeleland North; the Chipinge Safari Area and Nyanga National Park in Manicaland; as well as

<sup>&</sup>lt;sup>21</sup> USAID, <u>Zimbabwe Biodiversity and Tropical Forest Assessment (118/119)</u>, 2012.

<sup>&</sup>lt;sup>22</sup> Ramsar, "Zimbabwe," 2019, <u>https://www.ramsar.org/wetland/zimbabwe</u>.

<sup>&</sup>lt;sup>23</sup> Ramsar, "Zimbabwe," 2019, <u>https://www.ramsar.org/wetland/zimbabwe</u>.

<sup>&</sup>lt;sup>24</sup> Protected Planet, "Zimbabwe, Africa," 2019, <u>https://www.protectedplanet.net/country/ZW</u>.

the North- and South Gonarezhou National Parks, Savé Valley Conservancy and Mutirikwi National Park in Masvingo (see Map 1).

#### **OVERVIEW OF THREATS**

Zimbabwe's high rating in Biodiversity and Habitat Protection does not reflect the decline of stable animal populations in the FFP regions. While there are a variety of threatened birds and mammal species, these regions provide habitat to the Critically Endangered White-backed Vulture, Hooded Vulture, White-headed Vulture, and the Black Rhinoceros<sup>25</sup>. Manicaland is home to a fifth IUCN Critically Endangered species, the amphibian, the "Cave Squeaker," as well as a variety of other endangered frogs and birds<sup>26</sup>. In Matabeleland North, poaching in marked wildlife protected areas has resulted in a steep drop in elephant populations, particularly in this region. Manicaland has also been subject to increased changes in land usage that have decreased the level of biodiversity in the region. In the past 18 years, Manicaland has seen a 23% decrease in tree cover<sup>27</sup>.

USAID's <u>Zimbabwe Biodiversity and Tropical Forest Assessment (118/119</u>) states that the country - as a whole - is facing significant environmental challenges that are accelerating the depletion of natural resources and threatening biodiversity. Primary threats to biodiversity include: 1) population growth, 2) land reform and land tenure, 3) poverty and food insecurity, 4) government capacity, and 5) climate change and severe weather. In addition to the primary threats, the direct threats to Zimbabwe's biodiversity also includes deforestation, poaching, invasive plant and animal species, water stress, fire, and wildlife management. These environmental threats are compounded by the country's overall lack of capacity to manage environmental resources and enforce environmental regulations, particularly at the local level.

More information on the status of biodiversity in Zimbabwe can be found in the 118/119 Assessment on Biodiversity or in Zimbabwe's <u>Fifth National Report to the Convention for</u> <u>Biodiversity</u>.

### PERSUAP AND PESTICIDES

Zimbabwe's unpredictable rainfall patterns, warmer temperatures, and increased frequency of drought and dry spells will likely result in an increased incidence and range of pests. The country primarily employs large-scale applications of insecticides to mitigate hazards both to both public health and the agricultural industry.

Increased pesticide usage over the past few decades in Zimbabwe has corresponded with an increase in the long-term population growth of pests. In Zimbabwe, cotton is the most pesticideintensive crop and second most important cash crop after maize. Cotton is grown in FFP provinces, Manicaland, Masvingo, and Matabeleland North. These provinces have been impacted by the aphid population explosion, upping the amount of pesticides used to control them<sup>28</sup>. Aphids are one of the most persistent pests, whose populations boom in periods of dry spell post-rainy season. Cotton farmers in these districts have begun to use insecticide to ward off the aphids and then fertilizer to strengthen the plants damaged by the pests. Increasingly, the amount of pesticide usage in

<sup>&</sup>lt;sup>25</sup> iNaturalist, "Masvingo, ZW," 2019, <u>https://www.inaturalist.org/places/12580#threatened=1</u>.

<sup>&</sup>lt;sup>26</sup> Ibid.

<sup>&</sup>lt;sup>27</sup> World Resources Institute, *Global Forest Watch*, 2018.

<sup>&</sup>lt;sup>28</sup> Not currently available: Climate Risks in Food For Peace Geographies: Zimbabwe

Zimbabwe is growing, creating concern surrounding the health impacts of these pesticides and the potential for more pests in the future.

While cotton is the second largest cash crop, small scale farmers in these food insecure districts are looking to plant fruits and vegetables in order to feed their communities. Many farmers are using pesticides to maximize yields as the demand increases. However, pesticides in Masvingo and Manicaland are being distributed without the proper safety equipment for implementation and with little regard for the potential impacts of their actions<sup>29</sup>.

Efforts by USAID to provide better storage facilities for crops have been relatively well-received. USAID Zimbabwe is particularly concerned with the capacity to better preserve sorghum and groundnuts in Matabeleland North and South, Manicaland, and Masvingo. In 2017, USAID funded two separate programs, focused on better harvest management practices, that would reduce the need for pesticides<sup>30</sup>. In FFP area Matabeleland North, USAID has directed the *Amalina Program* to provide access to hermetic grain bags and improved granaries for the 55+ percent of farmers that did not use improved storage for grain nuts and sorghum. The ENSURE program introduced the same practices to FFP areas in Masvingo and Manicaland, respectively<sup>31</sup>. By improving the quality of the storage facilities, farmers can preserve their crops for longer, protect them from destruction by pests, use less insecticide, and alleviate food insecurity associated with lost crops. In addition to hermetic storage, improved granaries, and warehousing, USAID is also encouraging the use of traps and grain bags treated with pesticide. However, existing sources of aid and small-scale agricultural support needs to be made more accessible to farmers.

Zimbabwe's existing PERSUAP took effect in 2016 and expires in November 2020. This PERSUAP outlines the best ways to use pesticides in order to increase agricultural yields, while protecting those using the pesticides and consuming the crops. FFP provinces must abide by these chemical regulations, as well as spraying techniques. For many of the FFP projects, fumigation of distributed foods is encouraged or required<sup>32</sup>.

In addition to the country specific PERSUAP, the Fall Armyworm Management PERSUAP includes the impact of the pest on Zimbabwean farmers<sup>33</sup>. This pest has done widespread damage to maize production across the country. The Fall Armyworm's wide range of host plants make it difficult to control, particularly in times of drought. The FAW also carries different pesticide resistant genes, making it very difficult to exterminate properly. USAID promotes a variety of tactics to mitigate the impacts of the armyworm, including targeted insecticide use, biological control, as well as education and training surrounding the best times to plant the crops<sup>34</sup>.

### **INVASIVE SPECIES**

Invasive species in Zimbabwe are often highly adaptable and can respond positively to rising temperatures and variable climate conditions. Some humanitarian assistance initiatives to support agriculture have inadvertently promoted certain invasive species expansion to the detriment of land productivity, biodiversity and ecosystem function. The potential impacts of invasive species in

<sup>&</sup>lt;sup>29</sup> USAID, <u>PERSUAP Zimbabwe</u>, 2016.

<sup>&</sup>lt;sup>30</sup> USAID, <u>Baseline Study of the Title II Development Food Assistance Programs in Zimbabwe</u>, 2015.

<sup>&</sup>lt;sup>31</sup> Ibid.

<sup>&</sup>lt;sup>32</sup> USAID, <u>PERSUAP Zimbabwe</u>, 2016.

<sup>&</sup>lt;sup>33</sup> USAID, *Fall Armyworm PERSUAP*, 2017.

<sup>&</sup>lt;sup>34</sup> Ibid.

regions whrere FFP is active need to be addressed with priority in order to avoid economic damage and costly pest removal efforts.

FFP projects are specifically prohibited from using USAID support for promotion of any invasive species. The 20+ non-native species that have been introduced to Zimbabwe have rapidly expanded their range, resulting in both negative and positive effects on ecosystems and native biodiversity. Of particular concern is the impact of certain invasives on the declining maize production, a trend that impacts the agrarian economies in FFP districts directly. In 2016, the invasive armyworm (*Spodoptera frugiperda*) caused \$83 million in extensive damage to the annual maize yield in Zimbabwe. The regions that were hit hardest by this invasive pest were districts in FFP provinces, Manicaland and Masvingo, most notably Chimanimani<sup>3536</sup>. In addition to the armyworm, some of the most prevalent invasive species impacting farmers in FFP districts are:

- *Opuntia* (prickly pear): Species of cacti ranging from small, low-growing shrubs to specimens of 16 feet or more; used by farmers to create natural borders and enclosures. However, also encroaches on agricultural land and pastures, hindering productivity.
- *Lantana camara:* Flowering plant that thrives when invading moist areas, as well as pastures, fields and forests. Its small seeds make it easily dispersed by wind or bird excrement. The plant is highly toxic to fish and livestock.
- *Eichorniae crassipes:* (water hyacinth) Aquatic species of a few centimeters to over a meter in height; forms dense floating mats that impede water flow and create mosquito breeding areas. Adapted to temperature range of 12-35C, seeds can germinate in a few days or remain dormant for 15-20 years to survive variable conditions.
- *Tuta absoluta* (tomato leafminer): Flourishes in relatively warm and short rainy season. Feeds primarily on tomato plants, tobacco and cassava and can lead to significant yield losses if uncontrolled.
- *Phenacoccus solenopsis* (cotton mealybug): A sap-sucking insect that feeds on more than 200 plants but causes economic damage mainly to cotton and vegetable crops. Feeds mainly on leaves and branches that join stems.
- *Prostephanus trancatus* (grain borer): First detected in Zimbabwe in the 1980s, this fastmultiplying insect feeds internally on maize grains, sorghum and dried cassava, with most damage occurring in storage<sup>37</sup>.

All six of these invasive species have been disruptive to the small-scale farmers in FFP target provinces of Manicaland, Matabeleland North, and Masvingo

## WATER RESOURCES

The Zimbabwe <u>Water, Sanitation and Hygiene (WASH) 2018 Budget Brief</u> outlined the fragility of the water and sanitation situation, as both coverage and access remains limited and unevenly distributed. For example, the Multiple Indicator Cluster Survey shows that only 29.7% of households in Zimbabwe have access to improved water sources and sanitation, and in FFP program area, Matabeleland North, that number drops to 17.5%. Sphere Standards observe that the maximum distance that a household should have to travel to safely access a clean water source is 500m. Across Zimbabwe, more than 54% of citizens have to travel further than this threshold and

<sup>&</sup>lt;sup>35</sup> Farmer's Weekly, "Outbreak of Fall Armyworm Threatens Zimbabwean Maize Harvest," 2017.

<sup>&</sup>lt;sup>36</sup> United Nations, *Flash Appeal: Zimbabwe*, 2019.

<sup>&</sup>lt;sup>37</sup> USAID, Climate Risks in Food For Peace Zimbabwe (Procurement Sensitive), 2019.

25% travel more than 1km. Much of the time, the women in the household fetch the water, making them more susceptible to health risks associated with walking long distances in extreme heat.

Water quality and safety in FFP regions is also of imminent concern. In recent quality assurance testing of deepwater wells, all 44 water points sampled for Arsenic came back with negative results. In addition to chemicals testing, bacteriological tests were conducted routinely every six months in accordance with the Government of Zimbabwe regulations<sup>38</sup>. Only 8% of all water samples had coliform levels deemed 'acceptable' for drinking. The absence of clean water and safe sanitation facilities has led to frequent outbreaks of cholera, typhoid, and other water-born diseases. Children are the most susceptible to disease, particularly in FFP provinces.

UNICEF analyzed the WASH indicators across Zimbabwe, ranking the provinces from best to worst. FFP targeted province, Masvingo, had the least improved sources of drinking water, with only 64.3% having access<sup>39</sup>. Of the other three indicators, "improved drinking water and sanitation," "open defecation," and "percent of children whose stools were disposed of safely," Matabeleland North had the worst rates in the country<sup>40</sup>. In Matabeleland North, 80.2% and in Masvingo 65.3% of children's feces are not disposed of safely<sup>41</sup>. While these two FFP districts have been acknowledged to have the worst rates of sanitation and access to clean water, there is no institution in Zimbabwe managing WASH policies and regulations. Infrastructure and coverage across the country remain weak.

Climate change has also impacted the availability of clean water. The agricultural sector in Zimbabwe uses 80% of the total available water supply. However, with higher rates of evaporation and less precipitation, the coupled threat to water supply and agriculture are cause for concern in considering the future of water quality and access. The national per capita water availability is likely to decrease by 38% by 2050 due to climate change and projected population growth<sup>42</sup>.

Zimbabwe has few groundwater resources, relying primarily on surface water and water catchments for provision. The Kalahari Sands teak forest in southwestern Zimbabwe is near Matabeleland North. However, the groundwater potential throughout Matabeleland North is still relatively low<sup>43</sup>. Despite surface water accounting for nearly 90% of the total available water in Zimbabwe, groundwater remains the main source of drinking water for many living in rural regions, including FFP provinces. There have been few recent concerted efforts to improve the groundwater access, leaving the current system outdated and defunct. The projected decline in precipitation and the ensuing reduction in groundwater recharge could have dramatic impacts on the rural community's access to drinking water. The Southern Africa Development Community (SADC) found that the population at risk from groundwater drought could rise from 32% to 86% by 2100 with the progression of the climate crisis<sup>44</sup>. In the FFP program areas of Masvingo and

<sup>&</sup>lt;sup>38</sup> USAID, Food for Peace Environmental Status Report, 2018.

<sup>&</sup>lt;sup>39</sup> UNICEF, "Water, Sanitation and Hygiene (WASH) 2018 Budget Brief," 2018. <u>https://www.unicef.org/esaro/UNICEF-Zimbabwe-2018-WASH-Budget-Brief.pdf</u>

<sup>&</sup>lt;sup>40</sup> Ibid.

<sup>&</sup>lt;sup>41</sup> Ibid.

<sup>&</sup>lt;sup>42</sup> USAID, Climate Risks in Food For Peace Zimbabwe (Procurement Sensitive), 2019.

<sup>&</sup>lt;sup>43</sup> USAID, Climate Risks in Food For Peace Zimbabwe (Procurement Sensitive), 2019.

<sup>&</sup>lt;sup>44</sup> Ibid.

Matabeleland North, groundwater extraction potential is already low, given their location within Zimbabwe's semi-arid agroecological natural zones.

The projected reduction in rainfall will reduce crop yield, increase food insecurity, and threaten electricity production. Hydropower in Zimbabwe accounts for 51.4% of the total energy production, a statistic that will decline as the water levels drop. The predictions assert that by 2080, Zimbabwe could fall into the United Nations "absolute water scarcity" category if medium or high population growth projections occur.

### OTHER KEY STAKEHOLDERS

Global Environment Facility (GEF) Agencies working in Zimbabwe include The World Bank, United Nations Development Programme (UNDP), and United Nations Environment Programme (UNEP). The GEF currently has 42 ongoing projects in Zimbabwe totaling 148.9 million in Grant funding and an additional 1,278.4 million in co-financing<sup>45</sup>.

Project	Budget	Dates	FFP Region	Objective
Zimbabwe National Water Project	\$ 20 million	2016 - active	Matabeleland North, Masvingo, and Manicaland all receive funding from this national program	The development objective of the National Water Project for Zimbabwe is to improve access and efficiency in water services in selected growth centers and to strengthen planning and regulation capacity for the water and sanitation sector. The project comprises three components. First, growth center water and sanitation improvements will finance investments in water supply and sanitation (WSS) rehabilitation and upgrading in seven growth centers.
Zimbabwe Idai Recovery Project	\$72 million	2019 - 2023	Manicaland	This was an emergency response project aiding in recovery for the regions and sectors impacted by Cyclone Idai.
Zimbabwe Health Sector Support Project	10.2 million	2019 – active	Matabeleland North	The objective is to improve the health and access to health services in various regions of Zimbabwe.

Key institutions include AUSAID, GIZ, EU, FAO, World Bank, and UNDP.

Key Zimbabwean Government Agencies include the Ministry of Agriculture and Rural Development, Climate Change Management Department, Ministry of Lands and Rural Resettlement, Zimbabwe National Water Authority, Environmental Management Authority, Department of Research and

<sup>&</sup>lt;sup>45</sup> GEF, "Zimbabwe," <u>https://www.thegef.org/country/zimbabwe</u>.

Specialist Services- Agronomy Research Institute, National Parks and Wildlife Management Authority, National Herbarium and Botanic Garden, and the Forestry Commission.

Key environmental and conservation NGOs in Zimbabwe include the World Wildlife Fund, Conservation International, US FWS, Environment Africa, Biotechnology Trust of Zimbabwe, Wildlife and Environment Zimbabwe, Communal Area Management Programme for Indigenous Resources, Environment Development Activities Zimbabwe, African Wildlife Foundation, and Wildlife Conservation Society<sup>46</sup>.

#### 2.2 APPLICABLE AND APPROPRIATE PARTNER COUNTRY AND OTHER INTERNATIONAL STANDARDS, ENVIRONMENTAL AND SOCIAL LAWS, POLICIES, AND REGULATIONS

### SUB-SAHARAN AFRICA EIA PROCEDURES

According to the <u>Legal and Regulatory Framework Study of the World Bank</u>, environmental impact assessment, or EIA as it is known, is a procedure for evaluating the impact proposed activities may have on the environment. In recent years, significant strides have been made to build a legal foundation for EIAs in Sub-Saharan Africa. Whereas EIAs typically used to be carried out only to meet the requirements of foreign donors, they are now mandated in twenty-two Sub-Saharan countries as an important element of domestic environmental law and policy. IPs for Zimbabwe are expected to understand and document their compliance with local EIA regulations in their Supplemental IEEs<sup>47</sup>.

### **REGULATORY STRUCTURE**

The overarching goal of sustainable development underlies Zimbabwe's environmental policy and legal documents, including the country's constitution. The 2013 Constitution outlines that "Every person has the right to an environment that is not harmful to their health or well-being; and to have the environment protected for the benefit of present and future generations, through reasonable legislative and other measures that prevent pollution and ecological degradation; and promote conservation; and secure ecologically sustainable development and use of natural resources while promoting economic and social development." The legislature that was adopted in response to this mandate was the Environmental Management Act of 2002.

The Environmental Management Act of 2002 makes provision for regulations to promote the sustainable use of the environment through environmental impact assessments, environmental audits, and penalties for those who pollute the environment along with the National Water Act. This law provides the institutional and legal foundation for sustainable management of Zimbabwe's natural resources. This act spurred into development the Environmental Management Agency and Environment Fund. At the sub-national level, this act empowers officials to make local by-laws and regulate. Unfortunately, however, these local institutions lack the power to effectively regulate, and

<sup>&</sup>lt;sup>46</sup> USAID, Zimbabwe Biodiversity and Tropical Forests Assessment (118-119), 2012.

<sup>&</sup>lt;sup>47</sup> Bekhechi, Mohamed Abdelwahab, and Jean-Roger Mercier. *The Legal and Regulatory Framework for Environmental Impact Assessments : A Study of Selected Countries in Sub-Saharan Africa*. Law, Justice, and Development. Washington, D.C.: World Bank, 2002

the Environmental Management Act does have loopholes that officials will skirt to avoid doing an EIA.

In addition to domestic environmental policy, Zimbabwe has also either ratified or is a party to the following international conventions and agreements: Cartagena Protocol on Biosafety, Convention Concerning the Protection of the World Cultural and Natural Heritage, Convention on International Trade in Endangered Species (CITES), United Nations Convention on the Law of the Sea (UNCLOS), Vienna Convention for the Protection of Ozone Layer, Montreal Protocol on Substances that Deplete the Ozone Layer, United Nations Framework Convention on Climate Change (UNFCCC), Kyoto Protocol, UN Convention on Biodiversity (CBD), United Nations Convention to Combat Drought and Desertification (UNCCD), and the Ramsar Convention on Wetlands of International Importance. More detailed information can be found in the <u>FAA 118/119 for Zimbabwe</u>.

# **3.0 ANALYSIS OF POTENTIAL ENVIRONMENTAL IMPACTS AND CLIMATE RISK**

This section provides an analysis of the environmental risk of commodity fumigation in FFP activities, (given that most FFP activities will use commodity fumigation to prevent the loss of food commodities), as well as the anticipated climate risks associated with fumigation activities. While the impacts of commodity fumigation are well-understood across the FFP landscape, the environmental impacts and climate risks of other FFP activities will depend on the specific context in which activities are implemented. Further, FFP activities are typically undefined at the RFA level, which makes the evaluation of potential environmental impacts and climate risks difficult. Therefore, analyses of the environmental impacts and climate risks of non-fumigation activities need to be undertaken in the Supplemental IEE.

### **3.1 ENVIRONMENTAL IMPACTS OF COMMODITY FUMIGATION**

Most FFP activities will carry out the storage and protection of commodities, either as US in-kind food assistance or as locally-procured food commodity. To prevent the loss of food commodity from pest infestations during storage, it is common practice to perform periodic fumigation of warehouses and/or the application of contact pesticides to warehouse surfaces.

As mentioned in the <u>Fumigation PEA</u>, impacts of commodity fumigation must be considered, including:

- Use of the fumigant aluminum phosphide, and to a lesser extent magnesium phosphide, can potentially affect the health of applicators and other on-site workers and visitors.
- Use of the fumigant phosphine gas can affect the health of residents near warehouses being fumigated.
- Fumigation residuals could affect water quality, soil, and non-target organisms.
- Poor practices in transport, storage, application, and disposal of fumigants are a concern for human health.
- Improper disposal practices of rodents and birds killed by phosphine gas could affect human health.
- Phosphine may not completely control fungal contamination.

In addition, it is a USAID agency commitment that activities consider the procurement or promotion of pesticides as a last resort within an Integrated Pest Management (IPM) framework (see <u>USAID</u> <u>Special Topic Presentation on Pesticides</u>). Whichever their intended use may be, pesticides are potent killing agents and their use poses intrinsic dangers to applicators, households, communities and the environment. These risks include, but are not limited to:

- Use of chemical, non-organic compound-based, and biological or botanical-based pesticides can potentially affect the health of applicators, on-site workers and visitors.
- Poor practices in the transport, storage, application, and disposal of pesticides and pesticide containers are a concern for human and environmental health.
- Pesticides can negatively affect and/or eliminate non-target organisms in the environment, (i.e. predatory insects and pollinators, microorganisms beneficial to soil health, aquatic organisms, etc.) thereby altering ecological food webs and potentially causing detriment to agricultural production systems.
- Chemical pesticides can contaminate surface and groundwater water, soils, and can bioaccumulate in surrounding ecosystems and organisms, posing a concern for health.
- Misuse or overuse of pesticides can result in pesticide-resistance.

# TABLE 2: POTENTIAL ENVIRONMENTAL IMPACTS, AND CLIMATE RISKS, OF COMMODITY FUMIGATION

Commodity Fumigation	Potential environmental and social impacts	Potential climate risks
Warehouse treatment of bagged and bulk commodity	<ul> <li>Negative health impacts to applicators and on-site workers and visitors (including transporters)</li> <li>Negative health impacts of residents near fumigation sites</li> <li>Negative impacts to water quality, soil and non-target organisms if fumigant disperses from the site</li> <li>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</li> <li>Need for ancillary treatment of fungal diseases as Phosphine may not be effective in control of fungal contamination</li> </ul>	<ul> <li>Certified applicators unwilling to use personal protective equipment due to increased temperatures.</li> <li>Increased temperatures and changes in rainfall patterns, changes occurence of pests and pathogens and therefore fumigation requirements.</li> <li>Warehouses where commodities are stored are in locations threatened by extreme weather, or in flood zones.</li> </ul>

## **3.2 CLIMATE RISKS TO COMMODITY FUMIGATION**

As noted in Section 2, Zimbabwe will experience increasing temperatures. Droughts have become more frequent, especially in the northern areas. Due to model uncertainties, it is not possible to get a clear picture for precipitation change for Zimbabwe under a future climate. However, it is clear that the future will increase climate variability and extreme events. The climate changes expected in Zimbabwe could impact fumigation by changing herbivore and pathogen range and occurrence,

which should also be considered during fumigation, and threatening the effectiveness of fumigation storage effectiveness.

## **3.3 OTHER FFP PROGRAM AREAS AND ELEMENTS**

This RFA IEE cannot determine the reasonably foreseeable potential environmental impacts and climate risks of interventions within the FFP Program Areas and Elements described in Section 1.3, as the scope and technical approach of these interventions have not yet been defined. These interventions will be refined and analyzed in Supplemental IEEs.

# 4.0 ENVIRONMENTAL DETERMINATIONS AND CLIMATE RISK RATINGS

### 4.1 RECOMMENDED ENVIRONMENTAL DETERMINATIONS

A **Positive Determination**, pursuant to 22 CFR 216.3(b)(l)(ii), is recommended for all commodity fumigation activities that use a restricted use pesticide, as registered by the USEPA. Please see additional information in Section 5 under Condition 6b.

A **Deferral** is recommended for all other activity interventions that are not yet well defined in scope or technical approach pursuant to 22 CFR 216.3(a)(7)(iv). The **Deferral** for these interventions, or FFP program elements, must be resolved in the post-award Supplemental IEE, in which each intervention will be assigned a threshold determination: **Categorical Exclusion**, **Negative Determination with Conditions** or **Positive Determination**.

## 4.2 CLIMATE RISK MANAGEMENT

The recommended climate risk rating for commodity fumigation is based on the anticipated likelihood and severity of climate risk, per 201mal. Low, moderate and high risk ratings were identified based on likely climate risks to commodity fumigation.

The following table summarizes the recommended determinations and climate risk ratings based on the environmental analysis conducted. Upon approval, these determinations become affirmed, per 22 CFR 216.

### 4.3 ENVIRONMENTAL THRESHOLD DETERMINATIONS AND CLIMATE RISK RATINGS

#### **TABLE 3: ENVIRONMENTAL DETERMINATIONS AND CLIMATE RISK RATINGS**

Illustrative Interventions	22 CFR 216 Environmental Determination	Climate Risk Rating	
Commodity Fumigation	Positive Determination	Low, moderate, and high (see Annex 6)	
Other FFP Program Areas and Elements	Deferral	Postponed Assessment, Rating to be assessed along with Supplemental IEE analysis	

### 4.4 CLIMATE RISK MANAGEMENT SUMMARY NARRATIVE

This climate risk management screening is conducted at the global level for FFP as part of the preaward CRM process. The intention is to capture the climate risks that could affect activities anticipated under FFP awards. Given that the specific geographies (e.g., country, region, and coastal proximity), climate conditions, adaptive capacity, and other key characteristics that can shape risk are not yet defined at this level of analysis, the screening focuses on risks that can be broadly applied for a specific type of activity -- in this case, fumigation. Post-award, the partner will complete full screening once activity and geography details are defined. CRM must be provided for all activities, regardless of activity type. A critical resource used in identifying and assessing the climate risks was <u>USAID's Climate Risk Screening and Management Tool for Strategy Design +</u> <u>Annexes</u>.

#### TABLE 1. CLIMATE RISK MANAGEMENT SUMMARY TABLE

DEFINED OR ANTICIPATED PROGRAM INTERVENTION	TIMEFRAME	GEOGRAPHY	CLIMATE RISKS	RISK RATING	CLIMATE RISK MANAGEMENT OPTIONS	HOW ARE RISKS ADDRESSED	OPPORTUNITIES TO STRENGTHEN CLIMATE RESILIENCE
			Certified applicators unwilling to use personal protective equipment due to increased temperatures.	Low	Educate applicators on importance of wearing protective equipment	Educate applicators on importance of wearing protective equipment	Ensure that applicant training includes information on climate risks and emphasizes the importance of protective equipment
Commodity Fumigation	Life of the award, until 2023.	Areas where commodity fumigation will occur. Likely country-wide.	Increased temperatures and changes in rainfall patterns, changes occurrence of pests and pathogens and therefore fumigation requirements.	Medium	Conduct review of relevant literature on how pests and pathogens will change in the area due to climate change and evaluate how that might impact commodity storage and fumigation. Ask local community members about observed changes in pathogen and pests over recent years, and use fumigation that is	Conduct review of relevant literature on how pests and pathogens will change in the area due to climate change and evaluate how that might impact commodity storage and fumigation. Ask local community members about observed changes in pathogen and pests over recent years and use	Consult relevant literature and local communities frequently throughout the life of project to understand how pests and pathogens could change due to climate change impacts and how that might impact commodity storage and fumigation. Consider climate change impacts when planning inspection times to ensure that any new pest species or increasing occurrences of pest infestations are identified as early as possible.

DEFINED OR ANTICIPATED PROGRAM INTERVENTION	TIMEFRAME	GEOGRAPHY	CLIMATE RISKS	RISK RATING	CLIMATE RISK MANAGEMENT OPTIONS	HOW ARE RISKS ADDRESSED	OPPORTUNITIES TO STRENGTHEN CLIMATE RESILIENCE
					relevant for the current situation.	fumigation that is relevant for the current situation.	
			Warehouses where commodities are stored are in locations threatened by extreme weather, or in flood zones.	High	During site selection evaluate if storage facilities are in areas that are exposed to extreme weather or regular flooding. Ensure that all pesticides stored in warehouses (as non-fumigants may also be stored in warehouses) are in locations safe from the impacts of extreme weather events (i.e., on raised platforms in the case of flood risk).	During site selection evaluate if storage facilities are in areas that are exposed to extreme weather or regular flooding. Ensure that all pesticides stored in warehouses (as non-fumigants may also be stored in warehouses) are in locations safe from the impacts of extreme weather events (i.e., on raised platforms in the case of flood risk).	During site selection evaluate if storage facilities are in areas that are exposed to extreme weather or regular flooding. Improve early warning of climate and weather events, such as rainfall or flood, to improve preventative protection of commodities and stored pesticides

# **5.0 MITIGATION MEASURES**

## **5.1 CONDITIONS**

For applicants, USAID FFP environmental compliance at the time of activity design will be met through adherence to both 1) this RFA IEE and 2) completion of a stand-alone, Supplemental IEE, only upon USAID's indication of an intent to award. Once the Supplemental IEE, including the Environmental Mitigation and Monitoring Plan (EMMP), CRM screening, and IAP (including attendant budget), is finalized and approved by the DCHA BEO, the IEE is to be used to guide activity implementation. All mitigation measures contained in the Supplemental IEE must be implemented and monitored for effectiveness in reducing potential environmental impacts resulting from interventions.

The following 8 conditions describe awardees' environmental compliance, mitigation, monitoring and evaluation responsibilities throughout the life of award (LOA). Figure 1 below provides a visual schematic of the requirements over LOA.

The environmental determinations in this IEE are contingent upon these general implementation and monitoring requirements, as well as <u>ADS 204</u> and other relevant requirements.



Figure 1. Overarching Environmental Compliance Flowchart for FFP Activities

## **5.1.1 PRE-AWARD STAGE**

### CONDITION 1: APPLICANT TO SUBMIT ENVIRONMENTAL SAFEGUARDS PLAN

USAID requires analyses which consider environmental risks across the Agency, using a set of defined procedures to meet USAID environmental requirements. Applicants are expected to design innovative approaches to promote environmental and climate risk management to improve and sustain food and nutrition security of vulnerable populations, as articulated in both SO1 and SO2 of the <u>FFP 2016-2025 Food Assistance and Food Security Strategy</u>. Applicants must summarize these environmental approaches into a four-page Environmental Safeguards Plan.

This plan must summarize:

- 1. How strategies to reduce both environmental impacts of the activity and climate risks to the activity have been integrated into activity design;
- 2. How funds for environmental and climate risk management have been allocated in the detailed/comprehensive budgets and described in the budget narrative;
- 3. How staffing for oversight of environmental compliance requirements will be carried out over the life of the activity; and
- 4. How outcomes of the EMMP will inform performance as monitored through the Logical Framework and Indicator Performance Tracking Tables (IPTT) in M&E systems.

### 5.1.2 POST-AWARD STAGE

# CONDITION 2: AWARDEE TO DEVELOP SUPPLEMENTAL IEE FOR MISSION AND WASHINGTON CLEARANCE

#### IEE

Upon receipt of the FFP award, implementing partners will be required to develop a Supplemental IEE<sup>48</sup>, specific to the award. The Supplemental IEE will describe the environmental impact analysis for all interventions in the project's zone of influence, within the FFP geographies described in the RFA. In short, the Supplemental IEE must 1) summarize the technical design, 2) describe baseline environmental conditions in the FFP zones of influence 3) identify all reasonably foreseeable environmental impacts of interventions, and 4) recommend sound mitigation measures to prevent, reduce or compensate for negative environmental impacts.

There are important resources that partners can consult when developing Supplemental IEEs:

- For a general introduction on how to develop an IEE, consult the <u>USAID IEE Assistant</u><sup>49</sup>.
- Partners are advised to consult previous Supplemental IEEs to research common environmental concerns and solutions among FFP activities globally. Partners can utilize the <u>USAID Environmental Compliance Database</u> to search for USAID-approved IEEs.
- For technical guidance on environmentally sound design and management for USAID development activities, consult the <u>USAID Sector Environmental Guidelines</u>.

*Timing:* The timing of IEE submission will be determined by the BEO in coordination with the Agreement Officer's Representative (AOR) and Activity Manager post-award. *Please refer to Appendix III of the RFA for a schedule of Key Collaboration Events during the pre-award co-creation and Refine and Implement period.* 

*Sharing Documentation.* Partners are encouraged to share with the BEO any documents developed during the pre-award and Refine & Implement (R&I) period that could support the BEO's

<sup>&</sup>lt;sup>48</sup> A word version of the Supplemental IEE template can be found at a Google drive here:

https://drive.google.com/drive/u/1/folders/1CwBSuh0RG54Ehe94KbpdeciIw052zGS8

<sup>&</sup>lt;sup>49</sup> Provides useful overall process information, but templates are out of date and should not be used.

review and understanding of the environmental and climate risks associated with anticipated project activities (i.e., gender analyses, feasibility studies, etc.). Documentation sharing will help avoid undue burden and duplication of information by partners throughout the environmental compliance documentation review and clearance process.

#### **IEE AMENDMENTS**

In the event that any new proposed interventions differ substantially from the type and/or agroecological zone of interventions described in the Supplemental IEE, an IEE Amendment (IEE-A) will be developed, including a revised EMMP (and potentially revised IAP and CRM screening, as needed). Amendments must be sent to FFP and reviewed for approval by the DCHA/BEO prior to implementation.

Some of the possible triggers for an IEE-A include, but are not limited to: modified or new interventions, new geographic zone, cost extension, and/or significant time extension, such as an additional year. Pursuant to 22 CFR 216.2(b), activities involving international disaster assistance or other emergency circumstances may be Exempt from these procedures. Emergency activities with Agreement Officer (AO) approval may be Exempt from environmental review, such as the transfer of food commodities pursuant to 22 CFR 211.

#### EMMP

As a component of the Supplemental IEE, FFP applicants must complete an EMMP which serves as the implementation and monitoring plan for all required 22 CFR 216 compliance actions to be taken by a given activity. This RFA IEE provides a template for the EMMP in the annexes. Detailed guidance and best-practice considerations for the development of the EMMP are available on the <u>USAID Environmental Procedures Website</u>. The effectiveness of the individual compliance mitigation measures to prevent or reduce environmental impacts must be monitored periodically throughout the life of the activity. The results of this monitoring should be described in the annual ESR. See information below.

EMMP revisions during the course of implementation, such as fine tuning mitigation measures or including additional analysis for unexpected impacts, are encouraged as part of any activity's sound adaptive environmental management. It is important to note, such EMMP modifications do not require an IEE amendment or USAID approval. However, all EMMP changes and their rationale, should be reported in subsequent ESRs.

### **CRM Screening**

As a component of the Supplemental IEE, upon receipt of the award, the partners will develop a Climate Risk Management (CRM) screening for all activities. CRM is the process of assessing, addressing, and adaptively managing climate risks that may impact the ability of USAID programs to achieve their objectives. It is recommended that CRM screening begin with the Supplemental IEEs under this RFA, with the exception of fumigation activities (See Annexes 5 & 6 for more details). Currently, the activity interventions for this RFA are not well defined in scope or technical approach, and therefore it is appropriate to begin CRM screening when they are better defined, at the Supplemental IEE stage, pursuant to <u>Climate Risk Management for Projects and Activities. A</u> <u>Mandatory Reference for ADS 201</u>. It is likely that many of these interventions will have **high and moderate climate risks** during implementation. When high and moderate climate risks are identified, CRM screening for these activities must be resolved in the post-award Supplemental IEE,

in which climate risks, and opportunities to integrate climate into programming, will be identified and addressed as outlined by <u>USAID policy</u> and FFP CRM guidance (found in Annex 5 and also on the <u>Climatelinks Climate Risk Management website</u>). Furthermore, a Climate Risk Profile<sup>50</sup> to identify Climate Risks in Food for Peace Geographies for Zimbabwe has been developed to assist with CRM screening under this RFA-IEE.

#### Institutional Arrangement Plan

As a component of the Supplemental IEE, the Institutional Arrangement Plan (IAP) describes the budget and staffing needs for IEE implementation. The IAP describes the implementing partner capacity for fulfilling the implementation conditions required by the Supplemental IEE, EMMP and CRM screening. The IAP is submitted with the Supplemental IEE, and is later updated with the annual ESR<sup>51</sup>. A budget for the implementation of the IEE (which is attached to the IAP) must be transparently demonstrated in the Detailed and Comprehensive Budget and Budget Narrative for the award. The budget includes provisions for:

- internal staffing
- technical support
- training
- monitoring/reporting
- pesticide expertise
- environmental assessments, as needed

An IAP template can be found in Annex 3 and at the following Google Drive: <u>https://drive.google.com/drive/u/1/folders/1CwBSuhORG54Ehe94KbpdeciIwO52zGS8</u>

**Budget Guidance.** The budget for environmental compliance must not increase the Total Estimated Cost (TEC) of the multi-year activity. Rather this compliance budget must be allocated from within the award TEC. Failure to do so in a transparent manner will result in delays. The budget for environmental compliance for the Apparently Successful Applicant will be reviewed before the beginning of the activity with the cost application review, and annually with the Pipeline and Resource Estimate Proposals (PREPs<sup>52</sup>). Refer to the <u>USAID Environmental Budgeting Toolkit</u> for step-by-step guidance for both budget developers and USAID budget reviewers. While the BEO can provide guidance on budgeting for environmental compliance, only the AO can authorize budget commitments.

<sup>&</sup>lt;sup>50</sup> To be posted on Climatelinks.org and on the <u>USAID Country Website</u> under Country Specific Information

<sup>&</sup>lt;sup>51</sup> \*The ESR is similar to the Environmental Mitigation and Monitoring Report (EMMR) used elsewhere in USAID. However, the ESR meets both purposes of reporting and budget planning for environmental compliance.

<sup>&</sup>lt;sup>52</sup> The PREP describes an awardee's resource needs and interventions for a specific upcoming period of time agreed to by the partner and the Agreement Officer's Representative.



Figure 4 Developing Activity Budgets for Environmental Compliance Requirements.

Source: Adapted from Environmental Compliance Budgeting Toolkit, P.5.

\*Note: It may be possible to combine Steps 3 and 4 into a single step, depending on the particular budgeting process. It is shown here as two separate steps for greatest clarity.

#### **The BEO Issues Letter**

After reviewing IP inputs, both post-award and throughout the project life-cycle (IEEs, ESRs, PERSUAPs, EAs, etc.), the BEO will prepare an "Issues Letter" highlighting questions, concerns, or changes that should be made to the document before it can receive final BEO clearance. The BEO will solicit MEO input on the Issues Letter for a field perspective [and Regional Environmental Adviser (REA) input, as relevant], as well as FFP technical team input (gender, WASH, engineering, etc.) as appropriate. In accordance with AOR advisement, IPs will need to respond to the Issues Letter and revise their documentation accordingly before re-submitting for BEO clearance. Upon final BEO and CIL approval, all environmental compliance documentation is subsequently shared with the implementing partner and uploaded to the publicly accessible Environmental Compliance Database. Supplemental IEEs must be approved by the USAID DCHA Bureau Environmental Officer (BEO) and Climate Integration Lead (CIL) prior to the implementation of medium-risk interventions (i.e., classified as a Negative Determination with Conditions as per 22 CFR 216).

#### Drinking Water Quality-- Requirements and Additional Guidance

Per USAID regulations, implementing partners are required to monitor drinking water for arsenic and fecal coliform levels in the case of new construction or rehabilitation of drinking water infrastructure (Guidance Cable State 98 108651). USAID has developed a guidance tool for water quality, termed the Water Quality Assurance Plan (WQAP). This plan provides a template for partners to articulate a clear path for water quality assurance, as well as establish a corrective plan of action if contamination or exceedances are identified. Additional support for improved water supply systems can be found in the USAID <u>Visual Field Guide</u> which includes simple photorich monitoring tools in English and French. Water quality and quantity assurance is important for food security in Zimbabwe. If DFSA applicants intend to directly or indirectly support the provision of potable water, partners should submit a plan for water quality assurance either through the WQAP or by incorporating the needed information in the EMMP. These WQAPs will also be shared with FFP WASH staff in Washington and/or the field.

Given the significant resource and capacity constraints within many FFP host countries, partners using the WQAP are strongly encouraged to tailor or modify this guidance to fit the context and to reflect a realistic plan for ensuring water quality. For example, if host government water quality labs are unavailable, partners could provide a plan for field monitoring of water quality that strives to engage and build capacity of local officials or private operators.

#### **CONDITION 3: IMPLEMENT ENVIRONMENTAL MONITORING REQUIREMENTS**

Environmental monitoring is crucial to ensuring that environmental compliance and climate risk management requirements are being successfully implemented. Partners can use environmental monitoring systems and site visits (described below) to implement monitoring requirements. These methods should be incorporated into the project's wider M&E systems.

#### **3A. DEVELOP ENVIRONMENTAL MONITORING SYSTEMS**

**EMMP Tools for Field Monitoring:** Implementing Partners can develop EMMP tools (such as checklists) to assist in the integration of environmental management in the planning, design, implementation and monitoring phases. EMMP tools can be designed for rapid environmental diagnostic exercises, which aim to identify site-specific environmental conditions that may lead to the generation of localized impacts. This analysis can be used to determine the most appropriate environmental management strategies on a site-specific basis. For monitoring purposes, tools can also be designed to facilitate the data collection and monitoring of EMMP indicators. The environmental monitoring system that the partners use or develop should be described in the IAP, mentioned above under Condition 2.

One such example of site field monitoring tools is the <u>Visual Field Guides</u>, which are intended to support field environmental monitoring of select interventions by development professionals, including those who are not environmental specialists. They are photo-based, simple, yes-no checklists that identify the most typical, significant environmental design and management considerations by development sector.

Another example of an environmental monitoring checklist system is the Go Green Strategy (GGS). This scorecard system provides environmental management information in a simple Yes/No checklist, which can be used as a monthly monitoring tool by field agents. USAID conducted a more detailed assessment of the GGS through a field assessment, as described in the "Examination of Environmental Foundations for Program Design Environmental Compliance Review and Go Green Strategy Snapshot".

A new tool for use on phones, tablets and browsers is the <u>Nexxus Environmental Assessment Tool</u> <u>(NEAT+)</u>. NEAT+ is based in <u>Kobo Toolbox</u>, open-source software for project-level assessment of the current sensitivity of the local environment, highlighting any underlying vulnerabilities. NEAT+ is hosted on <u>EHAConnect</u>, which is a portal to help environmental actors engage in the disaster space and humanitarians develop more resilient emergency management systems. The NEAT was developed with a broad range of humanitarian and environmental stakeholders as part of the <u>Joint Initiative</u> for the Coordination of Assessments for Environment in Humanitarian Action.

**USAID Environmental Compliance Site Visits:** As required by ADS 204.5.4, the AOR, in consultation with FFP Managers, Mission Environmental Officers (MEO) and/or the DCHA/BEO will actively monitor and evaluate whether environmental consequences unforeseen under interventions covered by the current RFA IEE, and the Supplemental IEEs, arise during implementation and modify or end interventions as appropriate.

# 3B. INTEGRATE ENVIRONMENTAL MONITORING, INCLUDING CLIMATE RISKS, INTO M&E SYSTEMS

A key component of environmental safeguards for USAID activities is to ensure the inclusion of climate risk and environmental considerations into activity performance monitoring systems. For FFP, to promote ongoing safeguards for environmental goods and services while supporting food security, applicants will need to integrate environmental considerations into the overall activity M&E systems.

The M&E workshops, held at the start-up of new FFP development food security activities, are designed to convey M&E requirements and to strengthen awardees' Logical Frameworks and Indicator Performance Tracking Tables (IPTTs). During these workshops, awardees have an opportunity to learn about <u>environmental considerations</u> with M&E experts to coordinate the IPTT with the EMMP.

Implementing Partners can also visit the <u>Food and Nutrition Technical Assistance (FANTA) III</u> website for additional tools that can assist with environmental monitoring, such as indicator guides. For more than 15 years, the FANTA project provided support to USAID in the development of methods and best practice guidance to support rigorous M&E systems.

As described in the <u>Policy and Guidance for Monitoring. Evaluation, and Reporting of Development</u> <u>Food Security Activities</u>, awardees may make other additions to the Performance Indicator Reference Sheet (PIRS) to clarify the use of a FFP or Mission indicator in the activity's M&E Plan. For example, text may be added to the Rationale section to identify the indicator as part of the activity's EMMP and explain how the indicator is environmentally sensitive to the activity context (please see the <u>Recommended Performance Indicator Reference Sheet</u>). Clarifications inserted into the PIRSs, like those described above, do not 'change' the FFP or Mission indicator; they simply add more information about how the indicator will be collected and which activities beneficiaries or outputs will be considered.

#### **CONDITION 4: REPORT ON USAID ENVIRONMENTAL COMPLIANCE**

Reporting on environmental compliance throughout the programming lifecycle assists FFP in understanding whether the DFSA is making adequate progress toward achieving results from the prescribed environmental safeguards and compliance with USAID regulations. Implementing partners report on USAID environmental compliance by developing Environmental Status Reports (ESRs) and integrating environmental and climate reporting into Annual Results Reports (ARRs).

#### **Environmental Status Report (ESR)**

ESRs<sup>53</sup> must be completed by all FFP awardees on an annual basis to report on progress toward achieving environmental compliance. ESRs must be submitted along with the M&E plans in January, or at least three 1-3 months before the anticipated PREP submission by the partners. The ESR is designed to:

- 1. Document environmental safeguard staffing and budget for the upcoming implementation year, matching the budget narrative for the award; and
- 2. Identify progress towards achieving environmental compliance and reducing climate risks, including a report out on EMMP monitoring.

The ESR template<sup>54</sup> provides instruction to awardees on what information must be included in the ESR.

 <sup>&</sup>lt;sup>53</sup> Also known as Environmental Mitigation and Monitoring Reports (EMMRs) elsewhere in USAID.
 <sup>54</sup> A Word version of the ESR template can also be found at the following Google Site: and at the following Google Drive: <u>https://drive.google.com/drive/u/1/folders/1CwBSuhORG54Ehe94KbpdeciIwO52zGS8</u>

#### **Mission Requirements for Sub-project Review**

The <u>Environmental Review Form (ERF) and Environmental Review Report (ERR)\*</u> were developed by the USAID Africa Bureau to enhance environmental management and oversight of USAID programming for sub-projects that may not be well-defined at the IEE stage.

As noted in the ERF/ERR Form and Instructions, the BEO will not clear an IEE or EA that authorizes use of the ERF unless ALL of the following are true:

1. the general nature or potential scope of the activities for which the ERF will be used are known at the time the IEE is written (e.g. small infrastructure rehabilitation, training and outreach for a specified purpose, etc.).

2. these activities will be executed under a grant or subproject component of a parent project/program. The ERF cannot be used in lieu of a request for categorical exclusion, IEE or IEE amendment when new activities/components are to be added to existing projects, programs or sector portfolios.

3. of their general nature, foreseeable adverse environmental impacts are small or easily controllable with basic mitigation techniques that can be successfully implemented by field staff.

4. of their general nature, the activities are NOT large-scale\*\*.

While many missions in Africa have been using the ERF/ERR for years, the application of ERF/ERRs to DCHA Bureau programs is new. As such, all ERF/ERRs for FFP programs must also be submitted to the BEO, for information purposes only. The BEO will not be providing formal clearance at this time. However, if any significant issues are identified during BEO review, a resolution will be chosen through AOR and MEO engagement.

\* Note that the Environmental Screening Form (ESF) is an older process that has been updated and replaced by ERF/ERRs. The BEO is working with MEOs and FFP projects in the region to ensure that the most recent templates are being used. \*\*Refer to the ERF Instructions for definition of scale

#### Annual Results Reports (ARRs)

Awardees are required to submit an ARR for each FY during which interventions were implemented, regardless of when funding or food assistance commodities were provided. An ARR describes the performance results of interventions implemented during the reporting FY. The ARR should include the results of IPTT environmental and climate change indicators, environmental monitoring reports, assessments, action plans, and/or case studies related to the integration of environmental safeguards and climate change considerations. Please see the <u>FFP ARR Guidance</u> for more information.

CONDITION 5: DEVELOP AN ENVIRONMENTAL ASSESSMENT FOR ANY ACTIONS WITH POTENTIAL FOR SIGNIFICANT IMPACT TO ECOLOGICAL HABITATS, AS DETERMINED BY USAID. Increasingly, FFP partners have been responding to the need to develop more significant physical infrastructure to meet food security demands. For activities with potential for significant environmental effect, USAID may require partners to complete a full environmental impact assessment.

A Positive Determination, pursuant to <u>22 CFR 216</u>.3(a)(2)(iii) or 22 CFR 216.5, may arise if an intervention determined as a Deferral by this RFA IEE is later identified as having the potential to cause significant environmental effect. Interventions that receive a Positive Determination will require further analysis, such as a <u>Scoping Statement</u> and <u>Environmental Assessment</u>. The following classes of actions have been determined generally to have a significant effect:

- Programs of river basin development;
- Irrigation or water management projects, including dams and impoundments;
- Agricultural land leveling;
- Drainage projects;
- Large-scale agricultural mechanization;
- New lands development;
- Resettlement projects;
- Penetration road building or road improvement projects;
- Powerplants;
- Industrial plants;
- Potable water and sewerage projects other than those that are small-scale.

Additionally, if the proposed activity will have the effect of jeopardizing an endangered or threatened species or of adversely modifying its critical habitat, the Threshold Decision is a Positive Determination.

# CONDITION 6: PLAN FOR A PESTICIDE EVALUATION REPORT AND SAFE USE ACTION PLAN (PERSUAP)

# 6A. PERSUAPS FOR PESTICIDE USE (E.G. AGRICULTURE, LIVESTOCK, PUBLIC HEALTH, CONSTRUCTION)

FFP partners must take note that pursuant to <u>22 CFR 216.3(b)</u>, in the event that any interventions include the promotion, procurement, transport, storage or disposal of pesticides for agricultural or livestock interventions, vector control interventions, or construction material treatment, a PERSUAP for proposed pesticides must be approved by the DCHA/BEO prior to the commencement of these interventions. PERSUAPs should be submitted with Supplemental IEEs (or as amendments to Supplemental IEEs). For more information on USAID environmental compliance policy requirements related to pesticides and PERSUAPs, see this <u>Special Topic Presentation</u>.

**Tiering off of Existing Mission PERSUAPs.** FFP encourages its awardees to tier off existing USAID analyses when possible, thereby reducing the need to carry out new and potentially redundant analyses, yet allowing for the appropriate consideration of the specific needs and context of each development food security activity. In this case, the FFP activity will need to develop a Safe Use Action Plan (SUAP). The SUAP provides a succinct, definitive stand-alone statement of compliance requirements, synthesized from the 12-factor analysis. It also assigns responsibilities and timelines for implementation of these requirements.

USAID/Zimbabwe has a <u>Mission-Wide Agriculture-sector PERSUAP</u> that expires in November 2020, but is anticipated to be updated before June 2020. Partners can tier-off from this PERSUAP as well as the most up-to-date information available on the authorization status of pesticides.

# 6B. COMMODITY FUMIGATION MITIGATION REQUIREMENTS, PER THE USAID PEA FOR PHOSPHINE FUMIGATION OF STORED AGRICULTURAL COMMODITY

USAID requires that the person/people carrying out commodity fumigation operations hold official certification to perform the fumigation, use fumigants according to the directions on the product label, and follow all listed directions, precautions, and restrictions. Fumigants will be used only for commodities and at sites specified by the product label.

USAID has developed an assessment of environmental and health risks in the fumigation of food assistance commodity entitled <u>USAID Programmatic Environmental Assessment (PEA) for</u> <u>Phosphine Fumigation of Stored Agricultural Commodity</u>. The PEA includes a <u>Pesticide Evaluation</u> <u>Report and Safer Use Action Plan (PERSUAP) template</u>, and a <u>Fumigation Management Plan (FMP)</u> <u>template</u>. These tools are intended to assist in complying with the Fumigation PEA's requirement for completion of an activity-specific PERSUAP and FMP reporting. The Fumigation PERSUAP should be developed as soon as the warehouse and fumigation service providers are identified, and in advance of the need for fumigation. It is preferred that this PERSUAP be submitted with the Supplemental IEE, if possible. Specific mitigation requirements for the fumigant phosphine are provided in the Fumigation PEA.

Please note that the Technical and Operational Performance Support (TOPS) Program has released their <u>Warehouse Staff Safety Guide</u> (November, 2014) which is an excellent resource to assist awardees in the design of education campaigns for warehouse commodity storage. The Warehouse Safety Guide posters, which highlight best fumigation practices, are in compliance with the findings of the Fumigation PEA, and complement the PEA with practical guidance, information, recommendations and tools to promote warehouse staff safety and prevent injury and illness. The materials include an 80-page manual, 7 Warehouse Staff Safety Posters, a 2-day Facilitator's Training Tool, and various other tools and checklists to help organizations adhere to minimum safety standards in the warehouse. The Guide was funded by USAID through a TOPS Program Micro-grant and developed by Project Concern International (PCI) and the TOPS Commodity Management Task Force. TOPs has also developed a Facilitator's Guide to Integrated Pest Management and Fumigation Safety. This includes modules on pesticide compliance, integrated pest management, and phosphine fumigation.

# CONDITION 7: SUPPORT THE MISSION IN THE DEVELOPMENT OF ANY BPR FOR ENVIRONMENTAL SAFEGUARDING

The Environmental Compliance Best Practice Review (BPR) was developed under the USAID Africa Bureau to enhance environmental management and oversight on USAID programming. Since 2008, over 20 BPRs have been conducted, principally in USAID's Africa and Asia regions. In 2015, USAID/AFR updated its BPR standard to account for updates to USAID Automated Directives System sections 201 and 204. Building from this updated USAID/AFR BPR standard, there has been a movement by other pillar and regional bureaus to undertake similar reviews, including in DCHA. The purpose of the BPR is to improve the effectiveness of Mission and Bureau compliance with USAID's environmental and CRM procedures and to better integrate compliance into Mission and Bureau operations. Examples of previous BPRs are available upon request.

**Process**: DCHA BPR reviews are conducted via a mix of desk review, interviews, and field visits, and result in an action plan to correct gaps and weaknesses in environmental compliance and CRM processes during project design and implementation. BPR reviews are not audits, but voluntary gap analyses. IPs should coordinate with the BPR facilitators to determine the extent to which adequate environmental compliance and CRM procedures are integrated into all processes at the program and activity levels, as well as to identify any areas for improvement.

# CONDITION 8: ENSURE COMPLIANCE WITH PARTNER COUNTRY ENVIRONMENTAL REGULATIONS

Implementation will in all cases adhere to applicable partner country environmental laws. The Supplemental IEE supports and strengthens the rule of law for systems of environmental governance in partner countries. In order to ensure environmental compliance, the status and applicability of the partner country's policies, programs, and procedures in addressing natural resources, environment, food security, and other related issues must be incorporated into each activity. This may include incorporating the national policies pertaining to environmental assessment or other policies related to the sector. Implementing partners must be aware of and ensure compliance with the country's regulations where their activity is located.

Approved IEEs from the same geographic areas may provide valuable guidance and be a beneficial resource for cross-checking information and developing a deeper knowledge of country-specific regulations and policies. These IEEs are available on the Agency's Environmental Compliance Database.

# **6.0 LIMITATIONS OF THIS INITIAL ENVIRONMENTAL EXAMINATION**

The determinations recommended in this document apply only to interventions described herein. Other activities that may arise must be documented in either a separate IEE, if the activities are within the same activity an IEE amendment or other type of appropriate environmental compliance document and shall be subject to an environmental review.

Other than activities determined to have a Positive Threshold Decision, it is confirmed that the activities described herein do not involve actions normally having a significant effect on the environment, including those described in 22CFR216.2(d).

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

- 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;
- Lead to new construction, reconstruction, rehabilitation, or renovation work per §216.2(b)(1);
- Support agro-processing or industrial enterprises per §216.1(b)(4);
- 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);
- Procure or use genetically engineered organisms per §216.1(b)(1); and/or
- 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 AOR and awardees 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:**

The Annexes of this FFP RFA IEE provide templates and guidance for various components of the environmental review that are helpful for implementing partners (IPs) to develop project-specific environmental and climate risk management documentation. These annexes are available on USAID's FFP Google Drive:

https://drive.google.com/drive/u/0/folders/1CwBSuhORG54Ehe94KbpdeciIwO52zGS8

ANNEX 1: TEMPLATE FOR SUPPLEMENTAL INITIAL ENVIRONMENTAL EXAMINATIONS

ANNEX 2: TEMPLATE FOR ENVIRONMENTAL MITIGATION AND MONITORING PLANS

**ANNEX 3: TEMPLATE FOR INSTITUTIONAL ARRANGEMENT PLAN** 

ANNEX 4: TEMPLATE FOR ENVIRONMENTAL STATUS REPORTS

**ANNEX 5: GUIDANCE FOR CLIMATE RISK MANAGEMENT SCREENING**