INITIAL ENVIRONMENTAL EXAMINATION

ACTIVITY DATA

Activity Name: Victory Against Malnutrition Plus (ViMPlus)
Amendment (Y/N): N
Geographic Location(s) (Country/Region): Burkina Faso, Centre Nord Region
Implementation Start/End: 10/1/2018 – 9/30/2023
Solicitation/Contract/Award Number: 72-DFFP-18-CA-00008
Implementing Partner(s): ACDI/VOCA
Link of Other, Related Analyses: DCHA FFP FY18 RFA IEE; RISE II PIEE

ORGANIZATIONAL/ADMINISTRATIVE DATA

Implementing Operating Unit(s): Office of Food for Peace (FFP), Bureau for Democracy, Conflict and Humanitarian Assistance (DCHA)
Funding Operating Unit(s): Same as above
Funding Account(s): Burkina FASO-FFP Title II resources
Funding Amount: Burkina Faso-$50 million over 5 years
Amendment Funding Date: N/A
Amendment Funding Amount: N/A
Other Affected Unit(s): Africa Bureau, Regional Mission Dakar
Lead BEO Bureau: Democracy, Conflict and Humanitarian Assistance (DCHA)
Prepared by: JoEllen McGann, ACDI/VOCA
Date Prepared: 6/30/2019

ENVIRONMENTAL COMPLIANCE REVIEW DATA

Analysis Type: ☒ Initial Environmental Examination
☐ Amendment

Environmental Determination(s): ☒ Categorical Exclusion
☒ Negative Determination
☒ Positive Determination
☐ Deferral

Initial Environmental Examination Expiration Date: 9/30/2023
Additional Analyses/Reporting Required: EMMP, CSR
Climate Risks Rating for Risks Identified: Low _16_ Moderate _8_ High _5_

SUMMARY OF FINDINGS
PURPOSE AND SCOPE OF THE INITIAL ENVIRONMENTAL EXAMINATION

This is an Initial Environmental Examination (IEE) for Victory Against Malnutrition Plus (ViMPlus) operating in the Centre Nord region of Burkina Faso from October 1, 2018 to September 30, 2023. The purpose of the IEE is to establish environmental compliance procedures and templates for ViMPlus Development Food Security Activity (DFSA), funded by Food for Peace and part of the Resilience in the Sahel Enhanced II (RISE II) Initiative.

ACTIVITY SUMMARY

As specified in the ViMPlus Program Description, ViMPlus interventions will contribute to the achievement of country government resilience, economic and social development plans in Burkina Faso while serving as the foundation for USAID’s Resilience in the Sahel Enhanced II (RISE II) initiative, which aims to help “chronically vulnerable populations in Burkina Faso and Niger, supported by resilient systems, effectively manage shocks and stresses and pursue sustainable pathways out of poverty.”

The ViMPlus Activity-Level IEE falls within and integrates the IEE USAID Food for Peace (FFP) FY18 Request for Applications (RFA) and the Resilience in the Sahel Enhanced II (RISE II) Project Appraisal Document (PAD) Programmatic Initial Environmental Examination (PIEE).

ENVIRONMENTAL DETERMINATIONS

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

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

PROJECT/ACTIVITY NAME: ACDI/VOCA ViM Plus Award # 72DFFP18CA00008

Approval:  
Clyde Hicks, Food for Peace Director  
Date

Clearance:  
Agreement Officer's Representative (AOR)  
3/2/2020
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4/3/20
Date
THRESHOLD DECISION MEMO

BEO SPECIFIED CONDITIONS OF APPROVAL
[THIS SECTION IS TO BE COMPLETED BY USAID UPON APPROVAL OF THIS ACTIVITY-LEVEL IEE.]

[BEOs MAY PROVIDE SPECIFIC CONDITIONS TIED TO USAID APPROVALS. IN CASES WHERE NO ADDITIONAL CONDITIONS OF APPROVAL ARE REQUIRED, THIS SECTION RECEIVES A “N/A”. THIS APPROACH IS USED TO PROVIDE DIRECT AND SPECIFIC CONDITIONS TO THE IPS AND MAY BE PRESENTED IN THREE PARTS: 1) ISSUE; 2) DISCUSSION; 3) CONDITION.]
1.0 ACTIVITY DESCRIPTION

1.1 PURPOSE AND SCOPE OF IEE

This is an Initial Environmental Examination (IEE) for Victory Against Malnutrition Plus (ViMPlus) operating in the Centre Nord region of Burkina Faso from October 1, 2018 to September 30, 2023. The purpose of the IEE is to establish environmental compliance procedures and templates for ViMPlus Development Food Security Activity (DFSA), funded by Food for Peace and part of the Resilience in the Sahel Enhanced II (RISE II) Initiative.

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

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

The ViMPlus Activity-Level IEE falls within and integrates the IEE USAID Food for Peace (FFP) FY18 Request for Applications (RFA) and the Resilience in the Sahel Enhanced II (RISE II) Project Appraisal Document (PAD) Programmatic Initial Environmental Examination (PIEE).

1.2 ACTIVITY OVERVIEW

As specified in the ViMPlus Program Description, ViMPlus interventions will contribute to the achievement of the Government of Burkina Faso’s (GoBF) National Plan for Economic and Social Development (PNDES), as well as USAID’s FFP Strategy. ViMPlus will also serve as the foundation for USAID’s Resilience in the Sahel Enhanced II (RISE II) initiative in Burkina Faso, which aims to help “chronically vulnerable populations in Burkina Faso and Niger, supported by resilient systems, effectively manage shocks and stresses and pursue sustainable pathways out of poverty.” FFP investments will work in coordination with other investments by the U.S. Government (USG), the World Food Program (WFP), the host country governments, and other donors to collectively benefit chronically vulnerable populations in the RISE II zone.

ViMPlus will achieve the overarching goal through interventions largely aimed at the household, community and Commune levels that address five purposes as described through its theory of change:

1) Purpose 1: GOV/DRM – Enhanced Inclusive Governance of Institutions and Organizations Support Vulnerable Households in their Pathway to Food Security and Resilience
2) Purpose 2: MCHN – Health and Nutrition of Vulnerable Households, Especially PLW and Children in the First 1,000 Days, is Improved
3) Purpose 3: WASH – Improved Adoption of Household WASH Practices, Especially Reduced Open Defecation
4) Purpose 4: Diversified Livelihoods—Economic Wellbeing of Vulnerable HHs Increased and Sustained
5) Purpose 5 (Cross-cutting): Social Inclusion – Enhanced Social, Economic and Political Agency and Empowerment of Women and Male and Female Youth

1.3 ACTIVITY DESCRIPTION
FFP development food security activities in Burkina Faso and Niger 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, the FFP office supports the procurement, protection, and distribution of food commodity, including fumigation, as well as a range of program areas and elements.

INTERVENTION CATEGORY A: FORMATIVE RESEARCH
ViMPlus will carry out formative research during the Refine and Implement period, covering the following topics:

- Gender Analysis
- Nutrition-Sensitive Market Systems
- Sustainability
- WASH Market System Assessment
- Youth-Focused Needs Assessment
- Cost of the Diet Study

INTERVENTION CATEGORY B: GOVERNANCE AND DISASTER RISK MITIGATION
Intervention 1. Conseils Villageoises du Développement (CVD) Capacity Assessment and Intervention 2. Village Mapping: Working with local partners and local authorities, ViMPlus will conduct CVD capacity assessments and village mapping. These assessments will identify knowledge and capacity gaps at the CVD level, allowing ViMPlus to prioritize villages most at risk of food insecurity. Village mapping will identify HHs targeted for resource transfers and enable more efficient disaster risk management.

Intervention 3. Village Development Planning: ViMPlus will train CVDs to lead village planning, manage development initiatives and advocate for village needs at the commune and regional levels, leading to improved service delivery for HHs that will continue beyond the life of the Activity.

Intervention 4: Community Disaster Risk Management Plan: ViMPlus will facilitate a participatory Community-Managed Disaster Risk Reduction (CMDRR) process to help villages reduce their risks. CMDRR workshops will include CVDs as well as representatives of villages groups and other key stakeholders such as commune authorities and local non-governmental organizations (NGOs). These workshops ill identify risks and actionable adaptation strategies that address the needs of the most vulnerable HHs including pastoralists, where appropriate. At the end of these workshops, CVDs will have a short, prioritized list of steps and specific behaviors that they can take to increase the resilience of their communities.
Intervention 5. Develop Early Warning Systems (EWS) Sites: Access to early warning information for disasters allow villages and HHs to prepare for and respond earlier to shocks, thus reducing their impact. DRM staff and field teams will scale up the ViM EWS sites established under the regional pilot to all ViMPlus communes. ViMPlus will train community leaders to identify and measure trigger indicators and develop early-response strategies for disseminating warning information to a low-literate population. ViMPlus will help EWS site leaders to send data by SMS to the Direction Régionale de l’Agriculture et des Aménagement Hydrauliques du Centre-Nord (DRAAH), commune authorities and media outlets so that information can be shared with other villages to prepare for shocks.

Intervention 6. Resource Transfers: ViMPlus will convene coordination meetings with domestic and international safety-net providers to monitor and adapt methodologies as needs change in Centre-Nord villages. ViMPlus will identify villages and HHs that are food insecure (Stabilize phase). ViMPlus will provide food and/or cash to HHs at risk of malnutrition (Resource Manage in Management Plan), while simultaneously building up MCHN (P2) and WASH (P3) services to improve HH health. As incomes increase due to ViMPlus diversified livelihood interventions (P4), villages and HHs will begin to move from Stabilize to Adapt, no longer requiring resource transfers.

Intervention 7. Train P2, P3, and P4 Groups on HH Contingency Planning: The DRM Specialist will lead ViMPlus sector staff in developing a simple training module on HH contingency planning. Contingency plans will help vulnerable HHs to identify risks they face and viable coping mechanisms. Local partners will train all ViMPlus intervention groups and all recipients of cash transfers, to develop simple plans to improve their HH’s ability to plan for and recover from shocks. Through out layered village targeting strategy, many HHs will participate in the training more than once through different interventions.

Intervention 8. Quarterly Meeting of CVDs on Shared Resource Management: ViMPlus will prioritize natural resource areas that are at risk of degradation. In collaboration with Commune authorities, ViMPlus local partners will facilitate meetings of stakeholders around each identified natural resource. Pastoralist HHs will also be included as appropriate, as they are particularly at risk of conflict with farmers and loss of assets. The multi-village group will develop guidelines for the fair and sustainable use of the resource, to reduce conflict, align with CMDRR and Commune Development plans, and comply with GOBF policies. In Years 3 or 4, ViMPlus will support forming more permanent resource management committees around resources leveraged under Diversified Livelihoods interventions.

Intervention 9. CVD Network Meetings and Exchange Visits: Mayors, with support from ViMPlus local partners, will convene quarterly CVD Network Meetings, where all the CVDs will meet, share concerns and advocate together for important priorities with Communal and Provincial authorities, including NRM and land use issues. The CVD network will create bridging capital through improved relationships with other villages and enhance EWS through increased information sharing, and improved conflict management. ViMPlus will also facilitate exchange visits between CVDs for peer-to-peer learning and secondary adoption of good governance practices.

Intervention 10. Train Media in Management and Content Development and Intervention 11. Train CVDs and NGOs in Advocacy and Inclusion: ViMPlus will engage experienced local partners to train media outlets in advocacy, content development, SBC approaches, business planning and engaging youth and women. ViMPlus will also train media, CVDs and local authorities on Positive
Youth Development (PYD). With these new skills, media outlets will be more sustainable, more able to meet public information needs, and more able to hold local authorities accountable for service delivery.

**Intervention 12. Training on Land Laws, Gender-Based Violence (GBV) and Cooperative Laws:** ViMPlus will identify experienced local partners to deliver training to CVDs and local authorities to improve policy implementation and build social acceptance for policy. Better understanding and acceptance of laws will allow CVDs to mediate between HHs and villages, improving transparency and accountability and enabling improved service delivery. Training will include laws on cooperative management, land tenure, environmental protection, human rights, access to property and inheritance for women, GBV and conflict mediation. ViMPlus will provide copies of laws in the local language(s), as needed.

**Intervention 13. Negotiate Land Access for Women:** Under ViM, women gained access to off-season plots through irrigated perimeters. On ViMPlus, we will engage Observatoire National du Foncier (ONF) and other partners to facilitate negotiations with key actors in village land management, including CVDs, land owners, chiefs and other stakeholders. Our local partners will strengthen land management bodies by conducting training on land laws and the use of local land charters, increasing land access and food security for women.

**INTERVENTION CATEGORY C: MATERNAL AND CHILD HEALTH AND NUTRITION**

**Intervention 14. Training for Health Workers (HWs) and Community Health Workers (CHWs):** ViMPlus MCHN staff, along with MoH officials, will conduct a ToT for HWs and CHWs from all targeted villages. Training topics will address identified gaps and may include antenatal care (ANC), maternal nutrition, counseling for IYCF, growth monitoring, family planning counseling, counseling on women’s decision-making and improving adolescent health service delivery. The MCHN team will work with MoH staff during on-site supervision of HWs and CHWs to monitor improved community engagement and nutrition promotion over the life of the Activity.

**Intervention 15. Partner-defined Quality Reviews (PDQRs):** ViMPlus will scale up ViM’s successful PDQR approach in health facilities most in need of service improvements. To foster social and behavior change (SBC) through community mobilization, PDQRs will feature participatory community feedback workshops to bridge barriers between village members and HWs, improve quality of health services and promote trust and accountability. As noted in the Food and Nutrition Technical Assistance III project (FANTA) and in ViMPlus partner Tufts University’s sustainability study, continued monitoring and supervision by local authorities ensures the quality and sustainability of PDQRs. Improved communication will increase demand for health and nutrition services at the village and HH levels and will increase confidence in women and youth participants.

**Intervention 16. Institutional Support:** At the national and regional levels, ViMPlus will continue to participate in the nutrition technical working group led by the MOH to provide technical input on government strategies and activities to reduce chronic and acute malnutrition in children under 2 years of age (CU2). We will also provide support to ongoing GoBF nutrition activities, such as transportation for and supervision of Vitamin A campaigns to ensure coverage and monitoring.

**Intervention 17. Train and Support CVSNs:** CVSNs are committees of village leaders and HWs that represent the interests of their village in the promotion of positive health behaviors and prevention
of malnutrition. These committees are important advocates for community health and nutrition needs. They also bridge communications among government-run HFs and other village institutions. Under ViM, CVSNs were helpful in mobilizing villagers for meetings or health and nutrition interventions. MCHN staff will train all CHWs and CVSNs in the target area, inviting CVSNs to include PYD club representatives to improve responsiveness. This training will build the capacity of CHWs and CVSNs to appropriately support and supervise GASPAs, including strengthening referrals and linkages with HFs, and engaging husbands and mothers-in-law to support women’s health decision-making for themselves and their children. The training will help CVSNs understand their role in mobilizing village members, particularly women, to adopt positive health and nutrition behaviors, through GASPAs, CHWs and HFs, which will improve accountability for service delivery.

Intervention 18. Promote Birth Spacing and Family Planning, Especially for Youth:
According to the USAID Sahel Youth Analysis, family planning is not well understood in many Burkinabe village, despite supportive policies. ViMPlus will work with other USAID/FFP Activities, including RISE II and the anticipated Amplify Family Planning (Amplify-FP) and sexual and reproductive health (SRH) activities, to increase the use of and demand for family planning services. As RISE II addresses supply of family planning services through another Activity, ViMPlus will focus on increasing demand for these services. We will incorporate family planning knowledge and youth-friendly counseling skills into the capacity-building activities described above, including information on referrals to HFs for modern contraceptives. Our SBC strategy will include targeted messages promoting birth spacing and the benefits of family planning to women, men and youth. These messages will be delivered via an entertainment-education-style radio program, instead of didactic messaging. The program will involve a compelling narrative and community reflection on family planning behaviors.

Intervention 19. Training and Mentoring Through GASPAs:
Under ViMPlus, GASPAs are the primary MoH community platform for promoting optimal IYCF, WASH and family planning practices. We will provide support to GASPAs through CHWs, in all new targeted villages. CHWs and CVSNs will provide mentoring and supervision to GASPAs, with support from MCHN staff, and help link them to HFs through referrals and PDQRs. In addition, MCHN staff will train mother leaders – community volunteers who demonstrate positive health and nutrition behaviors (also known as positive deviants) – to facilitate GASPAs and assist with training. We will train these mother leaders to conduct nutrition screenings using mid-upper arm circumference (MUAC) and refer children to CHWs and HFs, as needed. Mother leaders will gain leadership skills and build bonding and bridging capital in the village, as they participate in Purpose 1 and 4 interventions. MCHN staff will initially oversee GASPA support and supervision and will transition responsibility entirely to the CHWs and CVSNs by the end of the Activity.

Intervention 20. Nutrition Awareness for Other ViMPlus Groups:
In addition to SBC activities developed to target mothers, ViMPlus staff involved in nutrition and livelihoods (including agricultural production) will co-develop nutrition-sensitive agriculture messages for delivery through livelihoods interventions. These messages – which we will develop with communities and will present alongside other non-communications-based activities to avoid didacticism – will highlight the effects of health and nutrition on agricultural outcomes, emphasize joint HH decision-making, women’s time burden and the importance of diet diversity, especially during the first 1,000 days. ViMPlus staff across all Purposes will conduct village meetings with village chiefs, religious leaders and other CVDs to mobilize support for optimal nutrition, WASH and family planning practices.
**Intervention 21. Health and Nutrition Training for Youth:** The ViMPlus PYD strategy will engage youth with information and interventions tailored to their needs and stage of life. ViMPlus will support the creation of PYD clubs, led by male and female village mentors, to build life skills among young people as they grow into capable resilient adults. PYD clubs will be segregated by sex and age, so discussions and trainings are appropriate and relevant. Local mentors and ViMPlus trainers will utilize Save’s Youth in Action model to build youth knowledge of adolescent nutrition, WASH, family planning, climate-related impacts, civic engagement and gender-sensitivity topics for boys and girls. The curriculum will incorporate age-appropriate information on Adolescent SRH (ASRH). PYD mentors will train health providers on ASRH service delivery for young people. Life skills built through PYD clubs will be the platform for youth economic opportunities. As youth gain confidence through the PYD clubs, they will share with other youth, creating secondary adoption of positive behaviors.

**Intervention 22. Promoting Positive Behaviors through SCB Mass Media Communications:** ViMPlus worked with USAID’s Strengthening Partnerships, Results and Innovations in Nutrition Globally (SPRING) to conduct a popular SBC campaign to support widespread adoption of health behaviors. The popular campaign used radio and video to reinforce nutrition and female empowerment messages, which were quoted during focus groups at the ViM final evaluation. ViMPlus will expand messaging to include dietary diversity, family planning, HH decision making and women’s labor burden. The ViMPlus team, with Breakthrough Action, will explore opportunities for collaboration with Population Media to develop a radio drama that targets priority behaviors, such as EBF. We will share content with media outlets and develop new content with SBC partners.

**Intervention 23. Support to Households Receiving Resource Transfers:** ViMPlus will provide food and cash transfers to HHs in Stabilize areas at risk of chronic and acute malnutrition based on criteria developed in the Refine period with USAID/FFP. Building on our experience under ViM, the ViMPlus MCHN team will communicate with these HHs to ensure they have nutrition and food preparation information to optimize use of the transfers. We will also layer interventions across Purposes so that multiple members of these HHs participate in economic opportunities to advance from Stabilize to Adapt. We will move cash transfers for Stabilize HHs, along with HH contingency planning and HH decision-making interventions.

**INTERVENTION CATEGORY D: WATER, SANITATION AND HYGIENE**

**Intervention 24. Promoting WASH Messages and Practices:** To improve HH and village WASH behaviors and reduce HH environmental contamination, ViMPlus will promote USAID’s essential WASH actions (EWAs) for nutrition as target behaviors in the WASH SBC strategy. We will identify and integrate SBC activities, including community mobilization, training, access, and communication through village promotion platforms such as GASPAs, producer organizations (POs), water user committees (WUCs), savings groups and CVDs. ViMPlus will tailor content and messages, so that they resonate with different population groups. ViMPlus will coordinate with the RISE II Health Services Delivery awardee and Breakthrough Action to ensure priority behaviors are the same across Activities.

The ViMPlus WASH Coordinators will identify important WASH training topics to be integrated into capacity building for HWs. ViMPlus staff will collaborate with the Production Specialist to integrate specific messages on best practices for animal feces management, animal management behaviors, water conservation and watershed management into training for livestock producer organizations.
To reinforce the promotion of EWAs, ViMPlus will promote positive deviants who are practicing the EWAs, including HH members, village leaders, market actors or government officials, identified during CLTS and village promotion activities. In collaboration with Breakthrough Action, we will create SBC content, such as films, radio spots or facilitated storytelling, featuring positive deviants promoting the EWAs using social, economic and emotional motivators that resonate with different population segments to promote secondary adoption. ViMPlus will employ media platforms and community mobilization to promote behavior change.

Intervention 25. Promote Community-Led Total Sanitation (CLTS): Under ViM, villages that received CLTS interventions demonstrated increased knowledge of the critical times for handwashing and the links between open defecation and diarrhea, as well as higher proportions of latrine ownership. ViMPlus will directly support the implementation of the GoBF and RISE II strategy by CLTS triggering, monitoring and certifying activities in Adapt villages. Through joint planning and site visits, ViMPlus will coordinate with other RISE II partners to ensure complementary CLTS implementation and monitoring. ViMPlus WASH staff will support the MoWS in implementing CLTS by co-facilitating triggering events and co-monitoring villages with local government counterparts. ViMPlus will train CVDs, CVSNs, traditional chiefs and religious leaders to provide ODF encouragement and enforcement to HHs within their villages.

Intervention 26. Build Capacity of Masons to Supply Quality Latrines: Under ViM, villages with trained masons had better-maintained latrines. ViMPlus will train and equip masons in target villages to ensure availability and access to durable latrine pits. Training will include optimal latrine design and placement, such as ensuring safe and convenient locations for women and girls considering menstrual hygiene needs. After the training, masons will be able to sell products that are durable, affordable, culturally appropriate and easily constructed using locally available materials. Some vulnerable HHs will receive vouchers for latrines to ensure that they can adopt this WASH best practices. We will offer masons a chance to participate in ViMPlus marketing and entrepreneurship trainings.

Intervention 27. Establish New Women- and Youth-Led Businesses to Sell WASH Products: To strengthen HH access to and use of WASH products, ViMPlus will provide new or existing entrepreneurs with business training as well as marketing and sales training and product fabrication training. Increased supply of WASH products will improve adoption of EWAs and empower women and youth.

Intervention 28. Improve Maintenance of Water Machinery: ViMPlus will link WUCs to existing GOBF’s nascent maintenance of water points. ViMPlus will coordinate interventions with l’affermage service providers in their commune. This linkage, along with training and mentoring for WUCs, will increase access to productive water for agricultural and HH use. ViMPlus will connect l’affermage service providers to WUCs in need of water maintenance and repair services in exchange for their agreement to participate as mentors for apprenticeships for youth who participate in entrepreneurship training.

Intervention 29. Construction and Rehabilitation of Multiple-Use Water Systems (MUSs): Through local contractors, ViMPlus will construct or rehabilitate water systems for the 31 most water-scarce villages. ViMPlus will conduct needs and feasibility assessments to determine priority villages, using criteria such as population size, distance (and time) to improved water source and income levels. ViMPlus will construct MUSs that can provide sustainable access to enough water for HH and
productive use. All construction and rehabilitation activities will adhere to the Activity’s Environmental Safeguards Plan, and GoBF construction and environmental policies.

These water system construction/rehabilitation interventions will increase water access for HHs and increase productive water availability for off-seasons production and pastoralism. The water systems will also contribute to ViMPlus’ objective of decreasing the time burden placed upon women and girls. Where appropriate, ViMPlus will select schools as sites for village water points and to reduce water collection burdens on children and increasing school attendance. At these locations, ViMPlus will assess the need to install appropriate sanitation facilities at village schools.

**Intervention 30. Build Sustainability of WUCs**: ViMPlus will support RISE II outcome 1.1.3 enhanced management for safe drinking water and continue successful activities conducted under ViM by establishing and training village WUCs. WUCs that were established under ViM will continue to receive monitoring visits from ViMPlus to ensure they remain functional and efficient.

ViMPlus will conduct training for new WUCs, especially those associated with an at-risk natural resource or an Irrigated Perimeter. Training sessions will focus on WUC roles: collect, enforce and manage water user fees; identify service providers for maintenance and repairs of village water infrastructure; and serve as a platform for WASH issues to be addressed, including gender equity issues.

ViMPlus will connect WUCs to the GoBF’s l’affermage public-private partnership model for preventive maintenance and repair of village water systems. WUCs that are functional and collect water user fees will serve an important role in ensuring reliable water access for HH and productive use within their villages, which will in turn lead to increased village resilience to variability and climate-related risks.

**INTERVENTION CATEGORY E: DIVERSIFIED LIVELIHOODS**

**Intervention 31. PO Capacity Building**: ViMPlus will conduct a capacity assessment of 600 POs, prioritizing those with more female and vulnerable HH membership, and closer proximity to markets and community hubs for spillover effects to neighboring villages. ViMPlus will oversee the PO capacity building program, which will strengthen the management and governance of beginning and emerging POs and cooperatives. More advanced POs will be trained in purchasing, aggregation, and marketing through ACDI/VOCA’s Sell More for More (SMFM) program, adapted under ViM. Trainings will emphasize the benefits of expanding membership to vulnerable HHs and promote gender inclusion by demonstrating how to encourage female leadership, and the benefits of women’s membership. ViMPlus will encourage spillover adoption through exchange visits, performance awards at agricultural fairs, and radio programs that showcase good PO governance and management practices. As POs mature, ViMPlus will offer incentives for them to provide services and mentoring to newer POs to stimulate cooperation and potential consolidation to cooperative unions.

**Intervention 32. Lead Farmer Extension (LFE) Model**: ViMPlus will update ViM’s Farmer Field School (FFS) training curriculum during the Refine period. FFS is a group-based field learning methodology that conveys climate smart production practices through an LFE demonstration plot or livestock herd over the course of a production cycle. ViMPlus will train 1,200 lead farmers across 600 POs in Years 2-4. The lead farmers will train all PO members. Lead farmer ToTs will cover nutrition, gender and age-inclusive sensitization and extension delivery tactics such as women and youth’s roes in production, time and location for FFP trainings, and women’s decision-making roles.
LFE training will build on investments made under ViM. Of the 1,200 lead farmers trained under ViM, more than 700 are in Communes targeted under ViMPlus. These LFEs will be more experienced, and ready to assume other roles to help their POs improve production and marketing, including facilitating access to inputs, and helping POs form Unions.

Lead farmers will receive tailored extension support and input packages to plant demonstration plots that showcase important and locally adapted stable and cash crops such as millet, sorghum and cow peas, as well as nutrient-rich crops like tomatoes, orange-flesh sweet potatoes and poultry. Training will cover recommended NRM and conservation agricultural practices. Evidence from ACDI/VOCA’s recent assessment found that labor intensive CSA practices are adopted more by wealthy farmers because they can afford the extra labor. ViMPlus will provide vouchers for mechanization or other services providers for extremely poor and vulnerable HHs.

**Intervention 33. SBC Messaging on Agricultural Practices:** ViMPlus incorporates several non-communication factors to create social and behavior change. ViMPlus will also promote behavior change communication through mass media to reinforce multi-sectoral messages and reach a large population. The ViMPlus SBC Specialist will develop communications with an emotional hook, tying production behaviors to highly valued outcomes, expanding the impact of the Activity beyond direct participants. Multisector messaging will cover nutrition, HH work sharing, women’s leadership, climate and WASH topics.

**Intervention 34. Lowland and Irrigated Perimeter Rehabilitation:** ViMPlus will assess functionality of existing sites developed under ViM to identify lessons learned and best practices in establishing these resource and management groups and will continue to support these sites as necessary to ensure they continue to Thrive. ViMPlus will expand lowland and IP areas by establishing IP committees to oversee management of sites and conducting PO trainings on water management systems. ViMPlus will build the capacity of IP committees and WUCs by conducting training on governance, financial management and improved rice and horticulture production techniques. ViMPlus will ensure women and youth’s participation and equitable allocation of irrigated plots, through mentoring of the IP management committees. Water management activities for production will also embed WASH practices and inputs.

ViMPlus will work with CVDs and POs to identify suitable locations for expansion of IP and lowland production. Sites will be selected and surveyed, including environmental and land conflict assessments, with the national and provincial water management associations to ensure compliance with national water usage regulations and USAID’s environmental regulations before opening new areas to cultivation.

**Intervention 35. Marketing Capacity Building for POs and Unions:** ViMPlus will implement ACDI/VOCA’s signature training programs: Farming as a Business (FaaB) and SMFM through local partners. FaaB covers how to analyze market information data, develop seasonal production plans and make joint, gender-equitable HH spending and resource allocation decisions. SMFM targets collective marketing strategies, using market information, negotiating contracts, building women’s membership and strengthening sales and marketing capacities. As emerging POs progress, ViMPlus will support marketing activities through SMFM. The Agricultural Marketing Specialist and local partners will facilitate regular networking and feedback sessions with POs and buyers to discuss market trends and facilitate learning and mentoring relationships with other HPPOs. ViMPlus will offer incentives (in-kind PHH or processing
equipment) to HPPOs who provide additional training and services to emerging POs, increasing secondary adoption of marketing practices and facilitating collaboration between unions and POs.

**Intervention 36. Facilitation of Improved Marketing Relationships and Information:** Market facilitation and access to market information are two strategies proven to help POs reach higher-value markets. ViMPlus will develop improved marketing information and interventions in close collaboration with RISE II partners. The ViMPlus Agricultural Marketing Specialist will oversee the strengthening of market information dissemination mechanisms through appropriate information channels, such as broadcasting government market pricing data through local radio station partners. We will also organize pre- and post-harvest agricultural and livestock fairs to increase demand for inputs and foster relationships among agricultural and livestock VC actors. ViMPlus will support local fairs through planning and cost sharing with trade associations, and public and private sector sponsors. Fairs will encourage behavior change by addressing access and mobilizing communities. They will showcase agriculture and livestock products and services and cross-sectoral messages on CMDRR, nutrition and health. As an additional behavior change activity to mobilize communities, ViMPlus will organize competitions in cooperation with local leaders to showcase exemplary PO performance in production, marketing and gender and youth inclusivity as well as to highlight top-performing microentrepreneurs.

**Intervention 37. Increased Access to PHH and Value-Added Processing:** ViMPlus will train lead farmers on proper PHH practices and will also promote PHH and value-added processing equipment through vouchers and demonstrations at agricultural events. We will also facilitate savings group investment in PHH and small-scale processing equipment. Youth and women’s groups will be eligible for small business grants to initiate value-added processing activities such as blended flour production, animal fattening, leather goods and bread production. ViMPlus will also advise and coach microentrepreneurs to source and market post-harvest and value-added processing equipment, particularly targeted at women who take on most of the PHH work.

**Intervention 38. Increased Access to Storage:** Quality storage allows POs to hold their harvest until prices increase and HHs to reduce food losses due to spoilage. POs with adequate storage facilities can access inventory credit schemes such as warrantage, where farmers use their stored commodity as collateral to receive credit. ViMPlus will oversee the rehabilitation or construction of 50 storage facilities, especially in Stabilize communes and villages where the need is greatest. HPPOs will cost-share warehouse construction through in-kind labor, local materials and purchase of small equipment. When possible, ViMPlus will leverage funding from other partners, such as REGIS-AG, or traders willing to finance storage facilities. ViMPlus will train local warehouse managers on proper storage techniques and use of equipment such as weighing scales, moisture meters, and pallets. ViMPlus will ensure access for women and other vulnerable groups through establishing PO guidelines, warehouse managers, and conducting outreach to farmer groups.

**Intervention 39. Launch Business Accelerator and Entrepreneurship Training for Agricultural and Nonfarm Businesses:** ViMPlus will launch a business accelerator program that will provide intensive business training, coaching, networking and financing support for existing and start-up microentrepreneurs. ViMPlus will support the growth of 250 agriculture and livestock and 250 nonfarm businesses within Adapt villages. Priority will be given to youth- and women-owned businesses using gender- and age-weighted criteria in its selection process. Local partner Agence Nationale de la Promotion de l’Emploi (ANPE) will provide vocational and technical training. Because women’s bridging capital is
lower, ViMPlus will arrange networking events for women entrepreneurs to connect with other women, suppliers and customer networks.

ViMPlus will deliver intensive business development and technical trainings introducing proven input, service delivery and aggregation models. Microentrepreneurs will offer products and services to include WASH, irrigation, livestock feed, mechanization, and/or animal housing. Microentrepreneurs will submit business plans for ViMPlus grant funding. Business coaches will conduct regular mentoring and networking meetings to encourage collaboration and joint problem-solving. ViMPlus will facilitate introduction of microentrepreneurs to other beneficiary groups to increase market linkages and build social capital.

**Intervention 40. Youth Entrepreneurship Program:** YECs will expand on the base of skills and capacities learned in PYD clubs to build entrepreneurship skills. The Youth Specialist will identify 125 PYD clubs interested in becoming YECs. Using quotas, at least 30 percent of YEC members will be female. ViMPlus will train YECs in entrepreneurship, work readiness, vocational skills, literacy and numeracy. ViMPlus will also facilitate technical training for members through vocational training partners such as ANPE. Training will be paired with opportunities to build social and professional capital, through networking meetings with other YECs, and opportunities for intergenerational bonding by integrating with existing POs, businesses or apprentice programs such as the GoBF’s Fonds d’Appui aux Initiatives des Jeunes (FAIJ), savings groups and other opportunities to help them build start-up funds for their business idea. ViMPlus will use radio and other communication channels to showcase successful YECs and to motivate other youth, and to reach secondary audiences.

**Intervention 41. Enhanced Use of Formal and Informal Financial Services:** ViMPlus will work with micro-finance institutions (MFIs) to develop financial products adapted to the needs of POs and entrepreneurs, such as longer-term loans aligned with operating cycles, remittance/savings-backed loans, and *warrantage* credit. ViMPlus will consider providing a guarantee fund to MFI partners to reduce the initial risk. ACDI/VOCA in partnership with RISE II partners will look for opportunities to pilot mobile money and other fintech services with partners such as ONATEL or Orange.

ViMPlus will also establish and strengthen 500 existing and new savings groups that provide important HH safety nets, investment and asset-building capital and a socially acceptable way for women and youth to save and exert control over money. The ViMPlus Financial Service Specialist will oversee partnerships with MFIs to provide start-up and management training to savings groups members and local NGOs partners. New savings groups will receive start-up kits including metal boxes and record-keeping books. ViMPlus will promote a private-service provider (PSP) model. Savings groups will also be an important conduit for SBC interventions These groups build social cohesion and mobilize communities; they also can discuss mass media interventions, such as entertainment-education cross-sectoral radio programming on nutrition, health and governance.

**Intervention 42. Facilitate Access to Vocational and Technical Skills Training:** The ViMPlus Employment Specialist will oversee the initial labor assessment to identify potential employment opportunities for young men and women and validate in-demand skills in all communes. In collaboration with ANPE in Centre-Nord, ViMPlus will launch a scholarship program for vocational training for nonfarm-based entrepreneurs and YECs for in-demand skills cited in the USAID Sahel Youth Analysis, such as artisan handicrafts, soap production, local product processing and mechanics. ViMPlus will cover the tuition costs of youth to attend one of the 147 ANPE-affiliated training centers in Centre-Nord.
Youth who complete initial life skills training and meet ANPE criteria and other high-potential entrepreneurs will be awarded scholarships for vocational training. ANPE will also coordinate apprenticeships with employers for students that complete the scholarship training. ViMPlus will also facilitate networking events between selected Technical and Vocational Education and Training (TVET) centers, private-sector companies and the GoBF’s Special Job Creation Program for Youth (PSCE/JF) to ensure TVET programs respond to needs and facilitate viable employment opportunities. Finally, ViMPlus will broadcast radio programs discussing employment opportunities and pathways, featuring successful youth employees or employers speaking about the job skills they are currently seeking.

**Intervention 43. Expand Functional Literacy and Numeracy Training:** ViM established 225 new literacy centers to serve PO members and found that improved literacy was critical to improving PO performance and boosting women’s confidence and leadership roles. The ViMPlus Employment Specialist will coordinate literacy and numeracy training through existing centers for YECs, entrepreneurs, and leaders from POs, GASPAs and savings groups. Where center do not exist, ViMPlus will identify literacy service providers to develop local sustainable literacy resources. These centers will deliver a 90-day course on functional literacy followed by two weeks on a technical theme. ViMPlus will also explore options to hire entrepreneurs who can provide childcare services to encourage women’s attendance.

**INTERVENTION CATEGORY F: SOCIAL INCLUSION**

There are no separate interventions under Purpose 5, Social Inclusion. All interventions described under previous Purposes will contribute to improved Social Inclusion as a cross-cutting result.

**Table 1: Defined Interventions**

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Intervention 21. Health and Nutrition Training for Youth
Intervention 22. Promoting Positive Behaviors through SBC Mass Media Communications
Intervention 23. Support to HHs Receiving Resource Transfers

**Intervention Category D: Water, Sanitation and Hygiene (WASH)**
Intervention 24. Promote WASH Messages and Practices
Intervention 25. Promote Community-Led Total Sanitation (CLTS)
Intervention 26. Build Capacity of Masons to Supply Quality Latrines
Intervention 27. Establish New Women- and Youth-led Businesses to Sell WASH Products
Intervention 28. Improve Maintenance of Water Machinery
Intervention 29. Construction of Multiple-use Water Systems
Intervention 30. Build Sustainability of Water User Committees (WUCs)

**Intervention Category E: Diversified Livelihoods**
Intervention 31. Producer Organization (PO) Capacity Building
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Intervention 36. Facilitation of Improved Marketing Relationships and Market Information
Intervention 37. Increased Access to Post-harvest Handling (PHH) and Value-added Processing
Intervention 38. Increased Access to Storage
Intervention 39. Launch Business Accelerator and Entrepreneurship Training for Agricultural and Nonfarm Businesses

Intervention 40. Youth Entrepreneurship Clubs (YECs)
Intervention 41. Enhanced Use of Formal and Informal Financial Services
Intervention 42. Facilitate Access to Vocational and Technical Skills Training
Intervention 43. Expand Functional Literacy and Numeracy Training

**Intervention Group F: Social Inclusion**
2.0 BASELINE ENVIRONMENTAL INFORMATION

[INSTRUCTIONS (TO BE DELETED ONCE COMPLETED): Include information pertinent to making informed environmental determinations and improving mitigation and monitoring of activities.]

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

ViMPlus has designed its program 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. We have drawn existing USAID or other country-level environmental analyses, including the 2013 West Africa Environmental Threat and Opportunity Assessment (ETOAs), Climate Change Vulnerability and Adaptation Analyses, Foreign Assistance Act (FAA) 118/119 Biodiversity and Tropical Forestry Assessments, and Country Specific Information reports.

The following sub-sections provide a brief overview of the baseline climate and environmental information for Burkina Faso.

BURKINA FASO ENVIRONMENTAL CONTEXT

According to the Climate Risks Profile for Burkina Faso, Northern Burkina Faso, the focus of USAID’s Food for Peace (FFP) in-country programming, is a semi-arid region that is chronically food insecure. In this area, poverty, limited rainfall, high evaporation rates, dependence on rain fed crops, and poor soils make people highly vulnerable to climate shocks (such as droughts, floods, heat waves and dust storms) that drive down agricultural production and increase food prices. Climate change has already impacted Burkina Faso, with increased temperature and the arid region spreading further south. Temperatures are expected to increase by an additional 1.6 - 2.8 C by 2050, there will likely be an increase in frequency and intensity of heavy rainfall, and longer dry periods. These changes will exacerbate decreased food security, impacting water resources, agriculture and livestock.

As outlined in the 118/119, priority threats to biodiversity include, 1) deforestation, 2) expansion of agriculture into native ecosystem areas, 3) intensive exploitation and use of water sources, including water pollution, 4) soil degradation and accelerated desertification, 5) unsustainable use of natural resources, 6) unsustainable grazing, 7) poaching, unsustainable hunting and fishing, 8) climate change, 9) large scale and inadequate artisanal mining, and 10) bushfires.

Moreover, Burkina Faso has a high population growth rate (3 percent per year during 2010–2015¹), pervasive poverty (43.7 percent live on less than $1.90 per day²), a highly rural population (70 percent³) and a heavy reliance on agriculture, which employs more than 80 percent⁴ of the working population and accounts for about 34 percent⁵ of GDP. These factors are driving expanded cultivation and extensive, low-input agricultural production, both of which increase pressure on natural resources essential to the country’s mostly rural population.

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Additional information on the environment and climate baseline and natural disasters facing Burkina Faso is also compiled by USAID in the October 2017 Food for Peace Food Security Desk Review for Burkina Faso and the Climate Risks in Food for Peace Geographies in Burkina Faso. All relevant threats should be considered by implementing partners in their Activity-level IEEs.

**BURKINA FASO PERSUAP AND PESTICIDES**

According to the Climate Risks Profile for Burkina Faso, chemical pesticide use is generally low in Burkina Faso, with most of the pesticides applied to cotton and other high-value crops, mainly in the south. Banned pesticides containing dieldrin, endosulfan and heptachlor and restricted pesticides containing HCH, lindane and monocrotophos; however, are available to farmers in parts of the Sahel. Pests and diseases cause significant agricultural damage every year and it is possible that farmers will respond by increasing pesticide use.

The adverse impacts of climate stress on agricultural production could also incentivize farmers to increase pesticide use. Increased frequency and intensity of heavy rainfall, meanwhile, could reduce pesticide effectiveness and increase pesticide contamination. More than 180 herbicides, insecticides and fungicides are used in the country, many of them not authorized for sale. Risk of pesticide contamination in soils and surface water and groundwater is high given weak regulations on pesticide use, lack of awareness regarding safe use (and lack of labeling about safe and effective use), and poor soils that lead to high rates of water runoff during heavy rainfall events. Pesticide contamination causes poisoning in people and can have adverse ecological impacts.

Most pesticide use is related to cotton production, with limited quantities used in subsistence farming. All of these impacts and factors should be considered in an Activity-level IEE. FFP activities in Burkina Faso should develop a tiered-off Safer Use Action Plan (SUAP) from the PERSUAP that is specific to the activity. See below on PERSUAPs for more information on pesticide use, e.g. fumigation, agriculture, livestock, and construction.

**BURKINA FASO INVASIVE SPECIES**

According to the Climate Risks Profile for Burkina Faso, invasive species are often highly adaptable and can respond positively to rising temperatures and variable climate conditions. Some initiatives have even promoted certain invasive species because of these very characteristics, to the detriment of land productivity, biodiversity and ecosystem function. Guidance from the Bureau for Democracy, Conflict, and Humanitarian Assistance (DCHA) Environmental Officer specifically prohibits USAID support for promotion of any invasive species. Many invasive plants are early-maturing and may thus capture a larger share of nutrients, water and pollinators, outcompeting crops and native species. Additionally, invasive species can often establish in degraded lands. Converting native vegetation to agricultural land disturbs the soil and disrupts plant communities, giving invasive species an opportunity to proliferate. Problematic invasive species reduce crop and livestock production, displace native biodiversity and increase production costs. Although specific information on invasive species in northern Burkina Faso is lacking, anecdotal evidence suggests that Chromolaena odorata and Eichorniae crassipes (water hyacinth) already threaten grasslands, shrub lands, savannahs, dry forests, rivers and wetlands. Some species known to be present in Burkina Faso are:
Prosopis juliflora: Perennial, deciduous, fast-growing, nitrogen-fixing and very salt- and drought-tolerant shrub or tree with deep tap roots; grows in arid and semi-arid environments, forms dense stands and outcompetes native vegetation. Has shown increased distribution under increasing temperature and long dry periods in Kenya which may present an issue in Burkina Faso.

Chromolena odorata: Perennial shrub; forms dense thickets; competes with crops and native species; presents fire risk during the dry season. Highly adaptable to variable rainfall in the range of 600–2,000 mm.

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 12-35°C, seeds can germinate in a few days or remain dormant for 15-20 years to survive variable conditions.

BURKINA FASO WATER QUALITY

The British Geological Society showed concentrations of arsenic in Burkina Faso in the Ouahiguoya area had a large range (0.5–1630 µg/L) although most analyzed samples contained less than 10 µg/L. There was a large spatial variability in arsenic concentrations, these high concentrations are derived from zones of gold mineralization in ancient volcano-sedimentary rocks. The source stated by the BGS is likely to be oxidized sulphide minerals and secondary iron oxides. Some solutions to these levels of arsenic would be to decommission problematic wells and provide alternative supplies as well as consistent and detailed testing of the water in the wells. Another study focused on the water quality in rural Burkina Faso that tested water from boreholes. It was stated that some water tested had high nitrates or sulfate concentrations over the WHO guidelines as well as microbiologically polluted. It was also mentioned that turbidity and PH can also be of concern for tested water from Burkina Faso.

Water quality assurance is essential for food security in Burkina Faso. It is important that each activity develops Water Quality Assurance Plans (WQAPs) following latest guidance put out by USAID. The importance of the WQAP is to establish a plan for water quality testing, as well as establish a plan of action if contamination is identified. Testing alone does not identify the necessary local or internationally accepted protocol for addressing sources of contamination that may be identified.

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

SUB-SAHARAN AFRICA EIA PROCEDURES

According to the Legal and Regulatory Framework Study of the World Bank, environmental impact assessment, or EIA as it is known, is a procedures 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 requirements of foreign donors, they are now mandated in twenty-two Sub-Saharan countries, as an important element of domestic environmental law, and policy. Activities for Burkina Faso and Niger are expected to understand and document their compliance with local EIA regulations in their Activity-level IEEs.

BURKINA FASO REGULATORY STRUCTURE
Burkina Faso accounts several laws, policies and strategies around the Legal Framework affecting conservation and forestry. The most relevant laws and policies are described on an IUCN report called “An IUCN situation analysis of terrestrial and freshwater fauna in West and Central Africa”. The report identifies and describes the main institutional laws, policies, and strategies regulating the country’s aim to conserve and search for sustainability. The country is also a member on several international agreements, treaties and conventions such as: Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), United Nations Framework Convention on Climate Change (UNFCCC), and United Nations Convention to Combat Desertification (UNCCD) just to name a few. More detailed information can be found in the FAA 118/119 for Burkina Faso.

Law No. 006-2013/AN (Loi n°006-2013/AN portant code de l'environnement du Burkina Faso) of 2 April 2013 provided the Environmental Code of Burkina Faso and repealed Law No. 005/97/ADP (Loi n° 005/97/ADP portant Code de l’environnement au Burkina Faso) of 30 January 1997. The new Environmental Code aims to protect people against the threats caused by the degradation of their environment and to improve living conditions. It states that promoting a healthy environment is of general interest and the responsibilities of all individuals. It further states that maintaining environmental quality and the restoration and enhancement of natural resources must be based on the principles of participation and public information, prevention, precaution, polluter pays, sustainable development, and subsidiarity. It recognizes the rights of local populations, civil society, and the private sector to participate in the management of their environment and it enshrines a right to use natural and genetic resources for local people and the sharing of benefits arising from their exploitation.

Burkina Faso’s resilience to climate change is guided by the country’s 2015 National Adaptation Plan (NAP), which aims to “(i) reduce vulnerability to the impact of climate change by developing adaptation and resilience capabilities; (ii) facilitate the integration of climate change adaptation into new or existing policies, programs or activities and in specific development planning processes and strategies in pertinent sectors and at various levels in a coherent manner.” In addition, the Second National Communication of Burkina Faso on Climate Change to the United Nations Framework Convention on Climate Change (UNFCCC) highlights climate mitigation commitments of the country and sector specific climate risks and adaptation measures.

3.0 ANALYSIS OF POTENTIAL ENVIRONMENTAL RISK

3.1 ACTIONS WITH NO EXPECTED IMPACT ON THE ENVIRONMENT

Certain actions under 216.2(c)(2) are eligible for a pre-determination categorical exclusion from further analysis within this Programmatic IEE as they do not have an effect on the natural or physical environment, or they are research actions that have a limited scope and are carefully controlled with effective monitoring. For example, actions that offer technical assistance, build capacity through training and education, offer analysis or academic studies and surveys, transfer information or data, receive a Categorical Exclusion as long as there is no resulting negative impact on the physical environment.

In summary, the following actions have low or no environmental impact. These actions also coincide with those identified for pre-determination categorical exclusions per 22 CFR 216.2(c):  

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1 Includes analysis of environmental and social
i. Education, technical assistance, or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc.);
   - Category E: Intervention 35. Marketing Capacity Building for POs and Unions
   - Category E: Intervention 43. Expand Functional Literacy and Numeracy Training
   - Category E: Intervention 41. Enhanced Use of Formal and Informal Financial Services

ii. Controlled experimentation exclusively for the purpose of research and field evaluation which are confined to small areas and carefully monitored;

iii. Analyses, studies, academic or research workshops and meetings;
   - Category A: Formative Research: All formative research proposed
   - Category B: Intervention 1: Conseils Villageoises du Développement (CVD) Capacity Assessment
   - Category B: Intervention 2: Village Mapping

iv. Projects in which USAID is a minor donor to a multi-donor project and there is no potential significant effects upon the environment of the United States, areas outside any nation’s jurisdiction or endangered or threatened species or their critical habitat;

v. Document and information transfers;
   - Category E: Intervention 33. SBC Messaging on Agricultural Practices
   - Category E: Intervention 36. Facilitation of Improved Marketing Relationships and Market Information

viii. Programs involving nutrition, health care or population and family planning services except to the extent designed to include activities directly affecting the environment (such as construction of facilities, medical or solid waste generation, water supply systems, waste water treatment, etc.)
   - Category C: Intervention 15. Partner-defined Quality Reviews (PQRs)
   - Category C: Intervention 16. Institutional Support
   - Category C: Intervention 17. Train and Support CVSNs
   - Category C: Intervention 19. Training and Mentoring through GASPPs
   - Category C: Intervention 20. Nutrition Training for Other ViMplus Groups
   - Category C: Intervention 21. Health and Nutrition Training for Youth
   - Category C: Intervention 22. Promoting Positive Behaviors through SBC Mass Media Communications
   - Category C: Intervention 23. Support to HHs Receiving Resource Transfers
   - Category D: Intervention 24. Promote WASH Messages and Practices

xiii. Matching, general support and institutional support grants provided to private voluntary organizations (PVOs) to assist in financing programs where USAID’s objective in providing such financing does not require knowledge of or control over the details of the specific activities conducted by the PVO;
xiv. Studies, projects or programs intended to develop the capability of recipient countries to engage in development planning, except to the extent designed to result in activities directly affecting the environment (such as construction of facilities, etc.); and

- Category B: Intervention 3. Village Development Planning
- Category B: Intervention 4. Community Disaster Risk Management Plan
- Category B: Intervention 5. Develop Early Warning Systems (EWS) Sites
- Category B: Intervention 7. Train P2, P3, P4 Groups on HH Contingency Planning
- Category B: Intervention 9. CVD Network Meetings and Exchange Visits
- Category B: Intervention 10. Train Media in Management and Content Development
- Category B: Intervention 11. Train CVDs and NGOs in Advocacy and Inclusion
- Category B: Intervention 12. Training on Land Laws, Gender-Based Violence (GBV), Cooperative Laws
- Category D: Intervention 25. Promote Community-Led Total Sanitation (CLTS)
- Category D: Intervention 26. Build Capacity of Masons to Supply Quality Latrines
- Category D: Intervention 28. Improve Maintenance of Water Machinery
- Category D: Intervention 30. Build Sustainability of Water User Committees (WUCs)
- Category E: Intervention 31. Producer Organization (PO) Capacity Building

xv. Activities which involve the application of design criteria or standards developed and approved by USAID

3.2 ACTIONS DESIGNED WITH SAFEGUARDS IN PLACE OR FOR THE PURPOSE OF ENVIRONMENTAL ENHANCEMENT AND MITIGATION

The following actions have no foreseeable adverse impacts as they have design features which mitigate their impact upon implementation. These actions may also serve as the mitigation measures for other actions.

**Category B: Intervention 8. Quarterly Meeting of CVDs on Shared Resource Management:**
Shared or common resource management committees are intended to reduce conflict, assure access to the natural resource, while still conserving the economic productivity of that resource. The principle risk is that these committees sometimes fail to understand or enforce principles of sustainable use, or do not address the adverse social impacts on communities that can result when resources are better managed.

**Category C: Intervention 14. Training for Health Workers (HWS) and Community Health Workers (CHWs):**
Training for health workers may generate medical waste (vials, syringes, etc.) that would need to be properly disposed to avoid negative environmental impact.

**Category C: Intervention 18. Promote Birth Spacing and Family Planning, Especially for Youth:**
Awareness messages should take into account the management of waste from products used for birth spacing. If not, the waste generated may have negative impacts on the environment.

**Category D: Intervention 26. Build Capacity of Masons to Supply Quality Latrines:**
Training for masons in the safe placement, appropriate design and efficient construction of quality latrines is intended to improve hygiene and sanitation practices and reduce the potential for environmental and water contamination cause by open defecation. Increasing the availability, quality and access to latrine
construction services may increase demand for construction, which if not done following safe placement and efficient construction principles may have an adverse impact on the environment. Latrine placement and construction should also consider the specific needs of women and girls to encourage use.

**Category D: Intervention 27. Establish New Women- and Youth-led Businesses to Sell WASH Products:** The goal of establishing new businesses to sell WASH products is to increase income-generating activities for women and youth, while improving access to WASH products at the community level to encourage ESA practices. Increased ESA practice at the community level will in turn contribute to improved hygiene and sanitation. Some WASH products to be promoted under this activity, such as soap-making, may have a potential impact on the environment due to harsh chemicals and use of wood/charcoal for production. All potential businesses supported under this activity should be vetted for potential negative environmental impact to be mitigated before implementation.

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### 3.3. ACTIONS WITH DIRECT IMPACTS ON THE ENVIRONMENT

**Category B: Intervention 6. Resource Transfers:** Resource transfers planned under ViMPlus include vouchers for food or non-food items (including agricultural inputs and animals), cash, and potentially local and regionally procured (LRP) food. Resource transfers can have a negative social impact, including increasing potential for conflict, as well as safety and security considerations for recipients.

In order to prevent the spoilage and wasting of food commodity procured by development food security activities, 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.

As mentioned in the Fumigation PEA, 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.
- The quality of the food commodity may be compromised due to phosphine fumigation.
- Beneficiary populations may be at risk from inhalation, preparation, and ingestion of fumigated commodities.
- Fumigation residuals could affect water quality, soil, and non-target organisms.
- Poor practices in transport, storage, 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 USAID Special Topic Presentation on Pesticides). 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, 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.

Distribution of agricultural inputs and animals may have a negative impact on the environment if the quality of the inputs and/or health of animals is not verified.

**Category D: Intervention 29. Construction of Multiple-use Water Systems:** ViMPlus intends to rehabilitate or construct WASH-related infrastructure including latrines, boreholes, tippy-taps, and water distribution systems that may be used for HH, production and livestock needs. Multi-use water system construction/rehabilitation interventions will increase water access for HHs and increase productive water availability for off-seasons production and pastoralism. The water systems will also contribute to ViMPlus’ objective of decreasing the time burden placed upon women and girls. Where appropriate, ViMPlus will select schools as sites for village water points and to reduce water collection burdens on children and increasing school attendance. At these locations, ViMPlus will assess the need to install appropriate sanitation facilities at village schools. Potential risks include:
Construction and operation of latrines (including innovative latrine technologies) and hand washing stations have the potential to cause the following adverse impacts:

**Contamination and odors.** Contaminate shallow groundwater and wells, and when not well maintained or of an open-pit design, can be the source of multiplication of flies, mosquitoes, spread of diseases, and foul odors. Improperly used, designed, or drained latrines or ponding of water from hand washing stations can also contaminate surface water through runoff.

**Disease transmission.** Poorly designed sanitation facilities can lead to insect- and water-borne diseases as well as other water-related diseases. There are two groups of insects to consider: 1) *Calex* mosquitoes, which do not transmit malaria but can transmit filariasis, breed extensively in septic tanks and flooded latrines; and 2) Flies and cockroaches often thrive on excreta and have been implicated in some transmission of fecal-oral disease. Mosquitoes, flies, and cockroaches all constitute a great nuisance, and poor urban households have consistently been shown to spend substantial amounts of household incomes on using control coils and nets. Additionally, poorly designed or operating facilities can transmit disease due to fecal contamination of water supplies such as diarrheal disease, cholera, dysentery, typhoid, and giardia, among others.

**Material sourcing and construction.** Construction with burnt brick poses particular concerns as it relates to deforestation. Construction might also utilize timber or stones and sand from local streams which can cause erosion, deforestation, and sedimentation of streams. Generally, latrine construction has impacts similar to those discussed for small-scale construction in Section 3.4.7.

**Wells, boreholes, and water supply systems.** Construction and operation of wells, boreholes and small water systems can cause the following adverse impacts:

**Groundwater depletion.** Deplete groundwater when abstraction exceeds replenishment of groundwater resource. This can lead to conflict amongst users over water quantity or access to water. Drawdown is also a concern if other boreholes are located nearby, thereby reducing water access at adjacent locations.

**Disease transmission.** Create stagnant (standing) water near the water supply point and creation of diseases vectors breeding sites (mosquitoes, risks of contamination of fetched water, foot infection of water point users, seepage in and contamination of the wells, etc.). Multiple use sites may pass zoonotic diseases to humans. Providing water that does not meet water quality standards can contribute to disease in both humans and animals.

**Contamination.** Create human health risks from provision of biologically or chemically contaminated water. Even if water is not contaminated initially, it can become so through flooding, failure to exclude livestock from the water point, use of contaminated containers to draw water from hand-dug wells, and other factors.

**Material sourcing and construction.** Even small-scale uses of burnt brick for water supply (e.g. well enclosures, water towers, etc.) can locally contribute to deforestation.

**Distribution Infrastructure – Towers, Tanks, Solar Panels, Piped Systems and Communal Taps.** Construction/Installation of small-scale renewable energy sources/infrastructure systems are intended to result in far fewer adverse impacts than the traditional technologies (e.g. diesel generator sets) for which they serve as an alternative. They can make possible economic activity, communications and the other beneficial services that would otherwise be unavailable in remote/off-grid areas.
However, each water infrastructure or technology does have a set of potential adverse impacts that require management, but they are generally related to general construction risks. One exception is that communal or piped systems, if constructed with lead pipes or inappropriate soldering, or have ineffective water treatment for bacteria, can lead to contamination of large numbers of residents. Water testing is therefore critical.

**Water Purification and Treatment.** Point of use water treatment presents strong benefits if required dosage levels and procedures are followed. Health risks related to excessive dosing of water are minimal; the risk is rather of under-treatment and re-contamination that renders the point of use treatment ineffective. Further, appropriate dilution/dosage is the major focus of the intervention.

**Irrigation Systems.** Several factors will affect environmental and social impacts of irrigation including irrigated area, topography, shape of field, location, climate, irrigation method, water quality, crops irrigated, type of soil, availability and the source of water, alternative water sources, and competing uses.

**Livestock Watering Points and Irrigation Supply Ponds.** Livestock access to watercourses. Livestock that have free access to watercourses may impact both the water quality and the land bordering the watercourse (the riparian area). Impacts can include: direct deposit of urine and manure into the water; deposit of manure onto low land that is seasonally flooded or where it can be washed into a watercourse; spawning bed trampling; streambank trampling and siltation of the water; and removal of riparian vegetation. Livestock impacts are usually related to the duration and timing of use, the livestock density, and the nature of the watercourse.

**Water reservoirs.** Reservoirs are often used for multiple purposes including to supply irrigation water during dry seasons, provide power, and prevent flooding. In the Sahel, mixed use systems where household water is reused or captured for livestock purposes or irrigation is also common. Like other water diversions, reservoirs and their associated dams worsen low-flow states and add to the potential adverse impacts of reduced flooding. Creation of new reservoirs, although anticipated to be small in this case, may deprive villages of farmlands or forests. Shallow reservoirs can become clogged with weeds, impeding water flow and preventing livestock from reaching drinking water. Reservoirs may also be breeding grounds for vectors carrying diseases like malaria, schistosomiasis (bilharzia) and river blindness.

Loading water bodies with nutrients encourages algal blooms, which deplete life-giving dissolved oxygen and harm aquatic life and fisheries. These conditions are most severe in shallow and slow-moving water bodies, such as reservoirs and low-flow-regime rivers. Reservoirs may also become anaerobic (i.e., lacking oxygen) near the bottom due to decaying organic matter. When organic matter decomposes under these anaerobic conditions, the process yields hydrogen sulfide, methane and ammonia, all of which are poisonous to humans and aquatic organisms.

Reservoirs and irrigation canals can also be used for aquaculture and as bird habitats. Aquaculture in canals can help to control weeds while providing a source of protein and income. Bird sanctuaries and wildlife parks can be established around reservoirs to protect wildlife and stabilize shorelines against overuse and erosion.

**Category E: Intervention 31. Producer Organization (PO) Capacity Building** Activities that include identifying producer groups and proving these groups with management and organizational training, providing leadership training to women organizations, and conducting sensitizing training for women participation will not have direct impact on the environment. Activities that include
agricultural training of partners will have both indirect and direct impact on the environment. ViMPlus intends to focus on promoting good agricultural practices that are climate-smart and proven to improve production in the ZOI (i.e., zai, demi-lune, etc.). However, practices promoted through ViMPlus may have a negative impact on the environment if not properly implemented, as described below:

**Climate-Smart Water Use and Soil Conservation Fertility Management:** Largely, climate smart practices are complementary to environmental safeguards and may serve as mitigation measures for environmental impacts. However, climate smart is not always environmentally sound, and the practices must be considered separately. While increased fertilizer application may make crops more resilient to water stress because they are healthier, over-application of fertilizer or fertilizer application may still result in adverse impacts. Additionally, reliance on groundwater for irrigation may be considered a means for adapting to climate threats; however, necessary analysis for environmental sustainability and impact must still be included to evaluate potential for draw down of the aquifer as well as potential conflict associated with groundwater access points, and salinization of irrigated soils.

**Seed and planting materials.** Growers often use or purchase poor quality seed and planting materials from uncertified sources. Using low quality seed and planting materials can have a negative effect on crop yield and waste agricultural inputs. Seedborne fungal pathogens can cause detrimental diseases of crops.

**Fertilizer.** Fertilizer impacts vary depending on the type and application of the fertilizers. Some fertilizers have dual action as pesticides. Impacts may include:

- **Surface water and groundwater contamination.** Over-application can lead to runoff into surface waters or leaching into groundwater particularly in sandy soils. Even small amounts of over-application of phosphorous can lead to harmful algal blooms in waterways which reduce oxygen and kill instream fauna.

- **Human health hazards.** Touching some fertilizers with bare hands may cause skin irritation and ingesting it may be poisonous. Inappropriately stored fertilizer is a health hazard. Phosphorous fertilizers also commonly contain cadmium which is toxic to humans. Children exposed to contaminated water may develop blue-baby syndrome or methemoglobinemia.

- **Crop damage.** Application at inappropriate times is not only wasteful but can damage crops. Fertilizer burn is defined as leaf scorch resulting from over-fertilization, usually referring to excess nitrogen salts.

- **Greenhouse gas emissions.** Fertilizer mismanagement can also contribute to greenhouse gas emissions as soil microbes in areas of application produce nitrous oxide. Manure used as fertilizer also releases gases continuously into the climate; however, in under fertilized areas, fertilizer may contribute little to emissions.

- **Acidification.** Nitrogen fertilizers can also contribute to soil acidification. Acid soils have lower availability of trace elements and can affect the development of nitrogen fixing legumes.

**Pesticides.** Use of pesticides can result in serious health implications to human health and contamination of the environment. There is now overwhelming evidence that pesticides pose a potential risk to humans and other life forms and unwanted side effects to the environment. Pesticide poisoning can cause deaths and chronic diseases. Pesticides can pollute the tissues of virtually every plant and animal life form on the earth and every natural resource including the air, water, soil and sediment in rivers. The high-risk groups exposed to pesticides include agricultural farm workers, but pesticides also affect
agricultural food consumers and the public that is exposed to pesticides in the environment, for example, through inadequate notification of pesticide application.

Seed diversification, multiplication, and quality assurance. Seed diversification and quality assurance involve technical assistance and capacity building to improve the seed certification and multiplication system to make it of higher quality and more consistent. The activity is expected to have a positive impact on the environment in that it will increase productivity on agricultural lands potentially resulting in less need to clear land for production if done in combination with comprehensive land use management. The activity also may reduce the number of non-target seeds or off-specification seeds in seed lots, and therefore, reduce the amount of non-native or exotic seeds sown onto fields.

Actions addressing seed multiplication are directed toward quality control and not multiplication itself. Commercial seed multiplication involves the operation of seed farms, often irrigated, and almost always involving use of fertilizers and pesticides (agro-chemicals). Seeds are typically pesticide-treated. The use of agro-chemicals, particularly in the context of irrigation (fields used for seed replication are often irrigated), presents a set of concerns outlined for general agricultural actions.

Nursery operations typically entail the use of pesticides, fertilizers and irrigation. The scale is smaller than the acreage involved in field crops or agroforestry schemes themselves, but the use of inputs may be concentrated, presenting a set of concerns outlined in general agricultural impacts.

Livestock production. When improperly managed, livestock production may cause significant economic, social and environmental damage. Increasing livestock production has the potential to increase environmental harm. Livestock actions, in general, can be associated with the following environment impacts:

Land degradation. Adverse impacts of livestock are associated with overgrazing and use of marginal lands, soil erosion and compaction, land degradation and diversification, loss of natural habitats and resulting losses of biodiversity.

Loss of biodiversity. Breed has a strong influence on disease susceptibility and therefore on disease management. Systematic livestock production may result in loss of genetic diversity in livestock species and subsequent susceptibility to disease outbreaks. An uncontrolled introduction of new breeds (live animals or through artificial insemination) could also cause a gradual disappearance of local pure breeds if the crossing is not well controlled.

Water pollution. Contamination may occur if nutrients from manure enter the water table because they are either improperly used or disposed of. Water pollution can also be associated with improper processing and disposal of dead animals that release nutrients into the ground water as they decompose. Animal manures transported from fields, pens or feedlots into water bodies through rainfall, runoff or irrigation can pollute local drinking water sources and spread human and animal diseases.

Air pollution. Livestock production can increase greenhouse gas emissions from enteric fermentation, from livestock manure and burning of animal carcasses.

Social impacts. When policies do not consistently address the land tenure issue for farmers and pastoralists, livestock keepers may potentially increase animal stock beyond land carrying capacity, thus contributing to enhanced competition for resources, and eventually, to conflicts that can become violent.
Animal transmitted diseases. A zoonotic disease is an infectious disease that is transmitted between species from animals to humans (or from humans to animals). Animal transmitted diseases such as Brucellosis, Giardiasis and Ringworm (Dermatophytosis) that are transmitted from animals to people are widespread in Africa. Animal mobility through transhumance could also be a factor in the spread of disease if the animals are not vaccinated.

Spread of invasive species. Many herbaceous species spread easily through animal hair. Thus, the movement of animals through transhumance could also be a factor in the spread of these invasive species.

Fodder and Feed Production. Intensification of livestock production can promote a system of monocropping for feed production. Impacts associated with fodder production are similar to those described in the Section 3.4.9 on production of agricultural crops including impacts associated with unsustainable intensification of agricultural production, land clearing and degradation, land erosion, siltation of water bodies and environmental pollution associated with use of agricultural chemicals.

Category E: Intervention 32. Lead Farmer Extension Model: Extension services are critical information resources for farmers and agents and are extremely influential in teaching techniques and influencing local farmers. Extension services can be diverse in nature including production in traditional agriculture, soil and water conservation measures, livestock and animal husbandry, and aquaculture. Extension programs that apply a “package” of new approaches and technologies over large, diverse areas result in sub-optimal or even incorrect techniques for parts of the range of conditions. While extension services provide information, their instruction has direct impact on the physical practices farmers utilize. The agents likely do not have direct control on what the farmers do with their knowledge, but the extension services can promote environmentally sound and climate resilient interventions. Maladaptive or inappropriate farming techniques, promoted by extensions, can have an environmental impact that is broad from over application of fertilizer, soils loss, water contamination and drawdown of aquifers. These impacts would be like those for general agriculture.

Certain controlled pilot studies may have very limited environmental impact due to the controlled scale and monitoring of the activity, and only those with controlled parameters and monitored regularly are excluded from further analysis. However, actions which serve as demonstration sites or pilots with the intent to disseminate practices can have a much broader reaching, cumulative impact. If the pilot’s impact is not carefully identified and measures taken to transfer the skills to mitigate impact in translation projects, there can be far reaching and multiplicative environmental damage.

Inappropriate siting of pilot studies or demonstration projects can lead to significant adverse impacts. For example, if sited in protected areas, substantially intact forests, or other valuable ecosystems, the land clearance itself can have significant adverse impacts. Siting too close to streams or water bodies increases substantially the risk of contaminating surface water resources with agrochemicals. While unlikely to be significant at small scale, these impacts scale as the physical size of these facilities increase.

Overall, the set of crops and practices to be promoted through demonstration and pilot are specifically intended to be more productive and profitable in the near term, and more sustainable than the typical, current practices they seek to replace or augment. That said, these actions can have impacts addressed in sections above.
Veterinary services and vaccination campaigns: Livestock operations typically involve (1) periodic use of drugs and injectable pharmaceuticals and vaccines resulting in generation of hazardous medical waste; and (2) topical use of pesticides to control pests.

The impact of veterinary chemicals and associated waste on the environment will depend on many factors such as their properties and conditions under which they were administered and disposed of or otherwise released into the environment. Veterinary waste may lead to contamination of air, water, and soil which may affect all forms of life including human life. Once released the impact of veterinary chemicals will depend on amount, soil type, climate, ecotoxicity, and other factors. Pharmaceuticals and pesticides used for treatment of livestock have the potential to contaminate soils, ground and surface water, sediment and adversely affect all live organisms including people. Contact with waste that is contaminated with a zoonotic disease is classified as biohazardous. Improper use of veterinary products could also create resistance to certain pathogenic microorganisms in animals. If product remanence times are not respected, residues of veterinary drugs in animal products (meat, milk) could also be harmful to consumers. Sharp veterinary waste poses risk of injury and infection. Sharps are devices with acute rigid corners, edges, or protuberances capable of cutting or piercing. Sharps waste includes but is not limited to hypodermic needles and blades. Broken glass items are considered sharps waste when they are contaminated with biohazardous waste.

Category E: Intervention 34. Lowlands and IP Rehabilitation: Irrigation Systems. Several factors will affect environmental and social impacts of irrigation including irrigated area, topography, shape of field, location, climate, irrigation method, water quality, crops irrigated, type of soil, availability and the source of water, alternative water sources, and competing uses.

Development/rehabilitation and operation of irrigation schemes. An array of adverse environmental impacts may be associated with newly irrigated areas and modifications to existing irrigation projects. They generally include the following:

Construction. Construction of intake/diversion/impoundment structures presents high risks of damaging stream/river banks and introducing heavy sediment loads and potentially fuel, oil and other contaminants to downstream waters during the active construction period.

Soil salinity. Intensified agricultural production on irrigated lands can reduce soil fertility over time by making it saltier (saline). A high level of salt in the soil limits the types of crops that can be grown, reduces crop germination and yields, and may make soils more difficult to work.

Waterlogging. Excessive irrigation on poorly drained soils will create waterlogging. This occurs (as is common for salinization) in poorly drained soils where water cannot penetrate deeply. For example, there may be an impermeable clay layer below the soil. It also occurs on areas that are poorly drained topographically. What happens is that the irrigation water (and/or seepage from canals) eventually raises the water table in the ground. The groundwater table rises and causes a reduction of oxygen available to plant root systems. It also results in increased salinity as it brings the dissolved salts and minerals of the soil to the surface.

Hydrology. Diverting water for irrigation affects watersheds by altering rivers' flow regimes (patterns of flow volume) and affecting the depth of the water table, including low flow regimes, flood regimes, water table levels and dams.
Erosion and sedimentation. Because irrigated land is already wet, it may be less able to absorb rainfall. Runoff from irrigated croplands during a storm can thus be heavier than runoff from unirrigated areas, carrying sediment and any farm chemicals into water bodies.

Destruction of the soil structure. Possible structural collapse during irrigation of soils with low structural stability. Soil structure can be dramatically and rapidly degraded by irrigation. Soil strength decreases rapidly with increasing water content so that wet soil is generally more vulnerable to structural damage from mechanical stresses or disturbance.

Human health. On one hand, irrigated agriculture can improve human health through greater food security, better nutrition, improved local infrastructure and higher incomes that allow access to medicines and health services. On the other hand, irrigation also supports many waterborne diseases in both humans and animals, including malaria, schistosomiasis, dengue, bancroftian and lymphatic filariasis, river blindness, roundworm, tapeworm, guinea worm, yellow fever, sleeping sickness, cholera, typhoid, hepatitis and leishmaniasis.

Water quality. As mentioned earlier, irrigation can affect downstream water quality by reducing the amount of water available to dilute contaminants and by potentially increasing agrochemical pollution.

Impacts on ecosystems. Diverting water for irrigation leaves less for downstream ecosystems, including wetlands, mangroves, and coastal estuaries. Discharge water from irrigated fields may contain more salt, less dissolved oxygen, more pollutants, and a heavier silt load than the incoming flow.

Socioeconomic impacts. Although irrigation is usually introduced to improve economic conditions and support development, it may wreak social and economic havoc. New irrigation schemes can disrupt communal land-use rights and highlight discontinuities between traditional and legal land rights. Individual water rights may need to be negotiated, particularly for small plots. As land becomes more productive it may be taken away from women by men for their own use, exacerbating gender inequalities.

Cumulative and area wide impacts. Before creating a new irrigation project, it is crucial to consider the cumulative impacts of other water needs in the watershed.

Category E: Intervention 37. Increased Access to Post-harvest Handling (PHH) and Value-added Processing: Agribusiness enterprises, particularly agricultural processing, can be the source of significant adverse environmental impacts. Assistance that increases the scale or number of such enterprises in the absence of such practices will tend to result in increase these adverse impacts. Various food processing, handling, storing and packaging operations create wastes of different quality and quantity, which, if not treated, could lead to increasing disposal problems and severe pollution problems. Additionally, if not recovered by appropriate technologies for upgrading, bioconversion and reutilization, food processing wastes can represent a loss of valuable biomass and nutrients.

Solid waste production. Processing will likely result in the generation of organic wastes and potentially inorganic wastes. Properly processed, solid wastes can be converted into organic fertilizers. Hulls from shelling or off-casts from milling are solid wastes that must be handled appropriately. Spoiled products may need to be disposed and could be hazardous for human or animal consumption (e.g., aflatoxin contamination).

Generation of liquid waste. Liquid wastes from food washing and processing contain significant quantities of organic and inorganic matter. These wastes, if improperly disposed, can generate standing water that will become a breeding ground for disease vectors and can create pockets of pollution when reaching groundwater and surface water. The impact on the water will depend on wastewater characteristics.
Generally, water pollution can result in changes in pH and temperature, increased nitrogen and phosphorus load that leads to eutrophication and more long-term problems because of organic compounds and heavy metals that are discharged.

*Energy consumption.* Processing, storage and transportation of agricultural produce requires energy and all energy consumption has impact on the environment. Equipment such as pumps that are of poor quality have lower energy efficiency. Certain power sources, such as diesel generators, generate greenhouse gases and local air and noise pollution.

*Pesticide use for protection of stored commodities, fumigation of commodities.* Use of pesticides can result in serious health implications to humans and contamination of the environment. Structural use of pesticides can pose significant risk to applicators and bystanders if not done properly and escaped fumigants can cause illness and death of workers and the public.

*Workers’ health and safety.* Farmworkers and post-harvest food processors are exposed to numerous safety, health, environmental, biological, and respiratory hazards. These include heat exposure, falls, musculoskeletal injuries, hazardous equipment and machinery, unsanitary conditions, pesticides, and many others.

**Category E: Intervention 38. Increased Access to Storage:** Construction itself has a well-known set of potential adverse impacts, which spans across nearly all types of construction, rehabilitation, and upgrading (e.g., housing structures, warehouses, health clinics, market infrastructure, agricultural markets, etc.). They include the following:

*Disturbance to existing landscape/habitat.* Construction typically necessitates clearing, grading, trenching and other actions that can result in near-complete disturbance to the pre-existing landscape/habitat within the plot or right-of-way. If the plot or right-of-way contains or is adjacent to a permanent or seasonal stream/water body, grading and leveling can disrupt local drainage.

*Sedimentation/fouling of surface waters.* Runoff from cleared ground or materials stockpiles during construction can result in sedimentation/fouling of surface waters, particularly if the site is near a stream or water body.

*Standing water.* Construction may result in standing water on-site, which readily becomes breeding habitat for mosquitoes and other disease vectors.

*Occupational and community health and safety hazards.* The construction process and construction sites present hazards: fall and crush injuries, hazards from hand or power tools and equipment used in construction, and exposure to hazardous substances.

*Increased demand for water and production of sewage, manure, and waste waters.* Community structures where people, livestock, or agricultural products are gathered are likely to locally increase the demand for water and sanitation facilities. For example, on market day, the need for toilets, fresh water, and areas to pen animals increase. Likewise, the amount of manure and sewage will increase on those days, and without adequate systems, groundwater

**Note:** In the absence of complicating factors; USAID AFR Bureau has concluded that very small-scale general construction involving a total "disturbed area" of less than 1000m² is of its nature very unlikely to create significant adverse impacts. In general, the potential impacts of facilities construction and operation somewhat larger than 1000m² are controllable with basic good design and operating practices. However, the precise nature of the potential impacts—and the appropriate design and operating practices to mitigate them—are highly dependent both on location and the specific characteristics of the infrastructure. This requires a site-specific, design-specific assessment of potential adverse impacts and the efficacy of available mitigation measures.
and surface water can be contaminated, dust can be significant, and health hazards from zoonotic and diarrheal disease can increase.

*Increased air and noise pollution* can result during construction or rehabilitation from the actions of construction equipment and workers.

**Adverse impacts of materials sourcing.** Construction requires a set of materials often procured locally: timber, fill, sand and gravel, bricks. Unmanaged extraction of these materials can have adverse effects on the environment. For example, stream bed mining of sand or gravel can increase sedimentation and disturb sensitive ecosystems; or purchase of timber from unmanaged or illegal concessions helps drive deforestation.

**Use, storage and disposal of toxic materials.** Numerous toxic chemicals play a significant role in construction industry. These may vary depending on the type of construction. Termiticides and preservatives are used to treat wood. They can extend the life of wood and reduce waste of forest resources, but if improperly used may leach into nearby soils or water and touching treated wood may leave residues on exposed skin.

**Use of burnt bricks.** Burnt (fired) bricks are a major cause of deforestation in Africa. The demand for burnt bricks in the construction industry has stimulated a huge demand for hardwood for burning the bricks. This demand is most severe in peri-urban areas.

**Pesticide use for protection of stored commodities, fumigation of commodities.** As stated above, use of pesticides can result in serious health implications to humans and contamination of the environment. Structural use of pesticides can pose significant risk to applicators and bystanders if not done properly and escaped fumigants can cause illness and death of workers and the public.

**Intervention 39. Launch Business Accelerator and Entrepreneurship Training for Agricultural and Nonfarm Businesses:** Entrepreneurship, business management and coaching training will have no impact on the environment. Some businesses may include those in value added processing of agricultural commodities, livestock, or non-farm businesses that include potential for environmental impact (soap-making, tannery, mechanic, etc.). These potential impacts include: production of solid or liquid waste, air pollution, increased water use, increased energy use and worker/community health and safety hazards (exposure to chemicals, machinery, etc.).

**Category E: Intervention 40. Youth Entrepreneurship Clubs (YECs):** There is the potential that some of the livelihood activities influence the socioeconomic dynamics, natural resource management, and the environment, leading to increased land degradation, intensification of agriculture, low agricultural productivity, water pollution, food insecurity, and poverty. To ensure environmental and livelihood sustainability, there is need to balance the need for alternative livelihoods and economic diversification and environmental objectives while contributing to sustainable poverty alleviation. This requires supporting a shared responsibility for sustainable resource and environmental management among various stakeholders. Environmental screening of activities is to be undertaken through the grants per the conditions noted in Section 5.

**Category E: Intervention 42. Facilitate Access to Vocational and Technical Skills Training:** Training in vocational and technical skills may include both topics that have no impact on the environment (life skills, secretarial work, etc.), and those that may have an impact on the environment (soap-making, mechanic, tannery, etc.). Those vocations or technical skills that do have a negative impact on the environment may lead to soil and water pollution due to liquid and solid waste.
<table>
<thead>
<tr>
<th>Intervention Title</th>
<th>Potential environmental and social impacts</th>
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| Intervention 6. Resource Transfers | Resource transfers can contribute to conflict  
Safety and security of recipients of resource transfers can be impacted by the process  
Fumigation of stored food commodities can have a negative impact on the environment |
| Intervention 29. Construction of Multiple-use Water Systems | MUSs and latrine design should incorporate needs of women and youth to ensure appropriate access  
Construction of MUS and latrines may contribute to ground water depletion, disease transmission, contamination and odors, and materials used in construction may have a negative impact on the environment  
Livestock waterpoints may contribute to water and soil contamination and disease transmission |
| Intervention 31. Producer Organization (PO) Capacity Building | Women, youth and poor HHs may not be members of POs, due to poor land access, and therefore miss opportunities to participate in activities.  
Training for POs that focus on agriculture and livestock rearing may have a negative impact on the environment if best practices are not respected. This may lead to: water pollution, human and animal health hazards, greenhouse gas emissions, acidification, land degradation, loss of biodiversity, air pollution and spread of invasive species. |
| Intervention 32. Lead Farmer Extension Model | Women, youth, pastoralists and poor HHs may not have easy access to extension and veterinary services, or services are not designed to meet their specific needs, which may create conflict.  
Farmer and veterinary extension workers, if not properly trained, may not properly transmit best practices to farmers. This may lead to the spread of poor practices that can contribute to: water pollution, human and animal health hazards, greenhouse gas emissions, acidification, land degradation, loss of biodiversity, air pollution and spread of invasive species.  
Veterinary waste, pesticides and vaccinations, if improperly disposed of, may lead to air, soil and water pollution, as well as a threat to human health. Improper application of vaccinations may also lead to resistance of certain pathogens. |
| Intervention 34. Lowlands and IP Rehabilitation | Lowlands and IP rehabilitation may lead to conflict if communal land use rights are not negotiated up front, particularly for women, youth and other vulnerable groups. |
The rehabilitation of lowlands and IPs may negatively impact the environment, specifically contributing to: construction impact on environment, soil salinity, water logging, hydrology, erosion and sedimentation, destruction of soil structure, human health risks, water quality and impact on ecosystems.

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<th>Intervention 37. Increased Access to Post-harvest Handling (PHH) and Value-added Processing</th>
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<td>Construction of storage facilities to be used and/or owned by POs may lead to conflict generating from land tenure and common ownership questions.</td>
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<td>Construction of storage facilities could lead to the following environmental impacts: disturbance to existing landscape/habitat; sedimentation/fouling of surface waters; increased standing water; occupational and community health and safety hazards; increased demand for water; increased production of sewage and waste water; increase air and noise pollution; adverse impacts of materials sourcing; use, storage and disposal of toxic materials; and use of burnt bricks.</td>
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<tr>
<td>Pesticide use and fumigation for the protection of stored commodities may have an impact on soil, water and human health.</td>
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<td>Some businesses established through YECs could contribute to soil and water pollution, as well as human safety and health concerns</td>
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**4.0 ENVIRONMENTAL DETERMINATIONS**

**4.1 RECOMMENDED ENVIRONMENTAL DETERMINATIONS**

In alignment with 22 CFR 216.2 (c)(2) ViMPlus recommends a **Categorical Exclusion** for the following interventions with no expected impact on the environment:

(i) Education, technical assistance or training programs except to the extent such programs include activities directly affecting the environment (such as construction of facilities, etc.):

- Category E: Intervention 35. Marketing Capacity Building for POs and Unions
- Category E: Intervention 41. Enhanced Use of Formal and Informal Financial Services
- Category E: Intervention 43. Expand Functional Literacy and Numeracy Training
(iii) Analyses, studies, academic or research workshops and meetings;
   • Category A: Formative Research: All formative research proposed
   • Category B: Intervention 1: Conseils Villageoises du Développement (CVD) Capacity Assessment
   • Category B: Intervention 2: Village Mapping

(v) Document and information transfers;
   • Category E: Intervention 33. SBC Messaging on Agricultural Practices
   • Category E: Intervention 36. Facilitation of Improved Marketing Relationships and Market Information

(viii) Programs involving nutrition, health care or population and family planning services except to the extent designed to include activities directly affecting the environment (such as construction of facilities, medical or solid waste generation, water supply systems, waste water treatment, etc.)
   • Category C: Intervention 15. Partner-defined Quality Reviews (PQRs)
   • Category C: Intervention 16. Institutional Support
   • Category C: Intervention 17. Train and Support CVSNs
   • Category C: Intervention 19. Training and Mentoring through GASPAs
   • Category C: Intervention 20. Nutrition Training for Other ViMPlus Groups
   • Category C: Intervention 21. Health and Nutrition Training for Youth
   • Category C: Intervention 22. Promoting Positive Behaviors through SBC Mass Media Communications
   • Category C: Intervention 23. Support to HHs Receiving Resource Transfers
   • Category D: Intervention 24. Promote WASH Messages and Practices

xiv. Studies, projects or programs intended to develop the capability of recipient countries to engage in development planning, except to the extent designed to result in activities directly affecting the environment (such as construction of facilities, etc.); and
   • Category B: Intervention 3. Village Development Planning
   • Category B: Intervention 4. Community Disaster Risk Management Plan
   • Category B: Intervention 5. Develop Early Warning Systems (EWS) Sites
   • Category B: Intervention 7. Train P2, P3, P4 Groups on HH Contingency Planning
   • Category B: Intervention 9. CVD Network Meetings and Exchange Visits
   • Category B: Intervention 10. Train Media in Management and Content Development
   • Category B: Intervention 11. Train CVDs and NGOs in Advocacy and Inclusion
   • Category B: Intervention 12. Training on Land Laws, Gender-Based Violence (GBV), Cooperative Laws
   • Category B: Intervention 13. Negotiate Land Access for Women
   • Category D: Intervention 25. Promote Community-Led Total Sanitation (CLTS)
   • Category D: Intervention 28. Improve Maintenance of Water Machinery
   • Category D: Intervention 30. Build Sustainability of Water User Committees (WUCs)
   • Category E: Intervention 31. Producer Organization (PO) Capacity Building - Governance

In addition, ViMPlus requests exemption in accordance with 22 CFR 216.2(b)(1) for any activities deemed part of an international disaster assistance or other emergency circumstances to serve populations in need.
Per ADS 204.3.10, these interventions may be exempt if they meet all four of the following criteria:

1. The activity is being implemented in response to a disaster (including but not limited to political-, economic-, or conflict-related disasters as well as natural disasters) that is the subject of (a) an official U.S. disaster declaration cable or equivalent communication, (b) an equivalent emergency declaration by a recipient country or the Secretary General of the United Nations, or (c) an emergency appeal from a country, United Nations Agency, the International Committee of the Red Cross or the International Federation of Red Cross and Red Crescent Societies, a relevant regional or international intergovernmental agency, or non-governmental humanitarian organization of recognized standing traditionally working in conjunction with the former bodies.

2. The activity must begin urgently in order to avert an immediate threat to lives or public health and safety, or to avert imminent significant damage to property or livelihoods. This does not include situations in which the need for the activity was foreseeable and has become urgent merely as a result of the Agency’s lack of advance planning. The activity cannot be an extension or continuation of a prior activity, unless the need for the extension or continuation resulted from significant changes in the disaster situation that arose within the last three months of the original activity.

3. The activity timeframe is either (a) no longer than 12 months, whether under one or more awards, or (b) up to 18 months due to an extension of a shorter activity, if the extension is approved by the Director of the Office of Foreign Disaster Assistance or Food For Peace (or duly delegated deputy or division director) under special circumstances deemed unavoidable to address urgent relief needs.

4. The activity does not involve “assistance for the procurement or use of pesticides,” unless otherwise authorized in accordance with applicable USAID procedures. (See ADS 312 and 22 C.F.R. 216.2(e)).

Due to the growing insecurity in ViMPlus’ zone of intervention, ViMPlus may be called upon to contribute to emergency response including, but not limited to the following interventions:

- Intervention 6. Resource Transfers (Emergency)
- Intervention 29. Construction of Multiple-use Water Systems (Emergency)

**Negative Determinations** are recommended for actions that meet BOTH the following: The actions are NOT within the classes of actions eligible for categorical exclusion; AND one of the following applies:

a. they have no direct foreseeable adverse impacts;

b. they are mitigation measures for other actions;

c. they have foreseeable adverse impacts, but these are not significant and appropriate mitigations are already built into their design or specification; or

d. they have foreseeable adverse impacts, but these are not significant and are also indirect, with mitigation beyond the control of USAID.

For such actions (and as detailed in the general conditions), the action must be implemented as designed (i.e. inclusive of any mitigation measures included in the design), and that if unexpected impacts are observed during action implementation, appropriate corrective action will be taken and the Agreement/Contracting Officers Representative (A/COR) and MEO notified.
ViMPlus recommends a **Negative Determination** for the following interventions:

- Intervention 6. Resource Transfers (Cash and Non-Food Items Excluding Ag. Inputs and Animals)
- Intervention 8. Quarterly Meeting of CVDs on Shared Resource Management:
- Intervention 26. Build Capacity of Masons to Supply Quality Latrines
- Intervention 27. Establish New Women- and Youth-led Businesses to Sell WASH Products

**Negative Determinations with Conditions** are recommended for actions which, based on the impacts analysis, are highly unlikely to result in significant adverse impacts. This includes instances in which the impacts of the unmitigated action could be significant, but technically straightforward, easily monitorable, and mitigation as specified by the condition(s) will reliably prevent impacts from becoming significant. Conditions are those requirements or specific mitigation measures applicable to the project planning, implementation, and operation. Conditions are detailed for these actions in Section 5.

As a condition, some actions may require subsidiary review in the form of an Environmental Review Form (ERF) and associated Environmental Review Report (ERR) (http://www.usaidgems.org/subsidiary.htm) due to sub-grants or sub-awards being used. IPs or their sub-grantees, must complete and submit the ERF/ERR to the A/COR for each subject action, prior to implementation of the action. The ERF/ERR will be approved by the A/COR and the MEO. Actions subject to this form of subsidiary review are those which:

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

b. these actions 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 actions/components are to be added to existing projects, programs or sector portfolios.

c. 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.

d. of their general nature, the actions are NOT large-scale.

- Intervention 6. Resource Transfers (Agricultural Inputs + Animals)
- Intervention 6. Resource Transfers (Commodity Fumigation)
- Intervention 14. Training for Health Workers (HWs) and Community Health Workers (CHWs)
- Intervention 18. Promote Birth Spacing and Family Planning, Especially for Youth
- Intervention 29. Construction of Multiple-use Water Systems
- Intervention 31. Producer Organization (PO) Capacity Building – Production
- Intervention 32. Lead Farmer Extension Model
- Intervention 34. Lowlands and IP Rehabilitation
- Intervention 37. Increased Access to Post-harvest Handling (PHH) and Value-added Processing
- Intervention 38. Increased Access to Storage Agricultural and Nonfarm Businesses
- Intervention 39. Launch Business Accelerator and Entrepreneurship Training for Agricultural and Nonfarm Businesses
- Intervention 40. Youth Entrepreneurship Clubs (YECs)
- Intervention 42. Facilitate Access to Vocational and Technical Skills Training

**Positive Determinations.** A positive determination is associated with actions that have a significant impact on the environment, or those actions which by regulation per 216.2(d), generally have a significant impact on the environment.

- No interventions have been identified as positive determination at this time.

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

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Categorical Exclusion Citation (if applicable)</th>
<th>Negative Determination</th>
<th>Positive Determination</th>
<th>Deferral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formative Research</td>
<td>22 CFR 216.2(c)(2)(iii)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Intervention 1: Conseils Villageoises du Développement (CVD)</td>
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<tr>
<td>Capacity Assessment</td>
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<td>Intervention 2: Village Mapping</td>
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<tr>
<td>Intervention 3. Village Development Planning</td>
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<tr>
<td>Intervention 4: Community Disaster Risk Management Plan</td>
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<tr>
<td>Intervention 5. Develop Early Warning Systems (EWS) Sites</td>
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<tr>
<td>Intervention 6. Resource Transfers (Cash and Non-food items exl. Inputs and Animals)</td>
<td></td>
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<td>X</td>
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<tr>
<td>Intervention 6, Resource Transfers (Agricultural Inputs + Animals)</td>
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<td>X WC</td>
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<tr>
<td>Intervention 6. Resource Transfers (Commodity Fumigation)</td>
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<td>X WC</td>
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<tr>
<td>Intervention 7. Train P2, P3, P4 Groups on HH Contingency Planning</td>
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</tbody>
</table>

TABLE 3: ENVIRONMENTAL DETERMINATIONS

VIMPLUS IEE JULY 2019 40
<table>
<thead>
<tr>
<th>Intervention</th>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Quarterly Meeting of CVDs on Shared Resource Management</td>
<td></td>
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<tr>
<td>9</td>
<td>CVD Network Meetings and Exchange Visits</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Train Media in Management and Content Development</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Train CVDs and NGOs in Advocacy and Inclusion</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Training on Land Laws, Gender-Based Violence (GBV), Cooperative Laws</td>
<td></td>
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<tr>
<td>13</td>
<td>Negotiate Land Access for Women</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Training for Health Workers (HWs) and Community Health Workers (CHWs)</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Partner-defined Quality Reviews (PQRs)</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Institutional Support</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Train and Support CVSNs</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Promote Birth Spacing and Family Planning, Especially for Youth</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Training and Mentoring through GASPAs</td>
<td></td>
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<tr>
<td>20</td>
<td>Nutrition Training for Other ViMPlus Groups</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Health and Nutrition Training for Youth</td>
<td></td>
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<tr>
<td>22</td>
<td>Promoting Positive Behaviors through SBC Mass Media Communications</td>
<td></td>
</tr>
<tr>
<td>Intervention</td>
<td>Description</td>
<td>Code</td>
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<tr>
<td>--------------</td>
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</tr>
<tr>
<td>23</td>
<td>Support to HHs Receiving Resource Transfers</td>
<td>22 CFR 216.2(c)(2)(viii)</td>
</tr>
<tr>
<td>24</td>
<td>Promote WASH Messages and Practices</td>
<td>22 CFR 216.2(c)(2)(viii)</td>
</tr>
<tr>
<td>25</td>
<td>Promote Community-Led Total Sanitation (CLTS)</td>
<td>22 CFR 216.2(c)(2)(xiv)</td>
</tr>
<tr>
<td>26</td>
<td>Build Capacity of Masons to Supply Quality Latrines</td>
<td>X</td>
</tr>
<tr>
<td>27</td>
<td>Establish New Women- and Youth-led Businesses to Sell WASH Products</td>
<td>X</td>
</tr>
<tr>
<td>28</td>
<td>Improve Maintenance of Water Machinery</td>
<td>22 CFR 216.2(c)(2)(xiv)</td>
</tr>
<tr>
<td>29</td>
<td>Construction of Multiple-use Water Systems</td>
<td>X WC</td>
</tr>
<tr>
<td>30</td>
<td>Build Sustainability of Water User Committees (WUCs)</td>
<td>22 CFR 216.2(c)(2)(xiv)</td>
</tr>
<tr>
<td>31</td>
<td>Producer Organization (PO) Capacity Building - Governance</td>
<td>22 CFR 216.2(c)(2)(xiv)</td>
</tr>
<tr>
<td>31</td>
<td>Producer Organization (PO) Capacity Building - Production</td>
<td>X WC</td>
</tr>
<tr>
<td>32</td>
<td>Lead Farmer Extension Model</td>
<td>X WC</td>
</tr>
<tr>
<td>33</td>
<td>SBC Messaging on Agricultural Practices</td>
<td>22 CFR 216.2(c)(2)(v)</td>
</tr>
<tr>
<td>34</td>
<td>Lowlands and IP Rehabilitation</td>
<td>X WC</td>
</tr>
<tr>
<td>35</td>
<td>Marketing Capacity Building for POs and Unions</td>
<td>22 CFR 216.2(c)(2)(i)</td>
</tr>
<tr>
<td>36</td>
<td>Facilitation of Improved Marketing</td>
<td>22 CFR 216.2(c)(2)(v)</td>
</tr>
</tbody>
</table>
### Relationships and Market Information

| Intervention 37. Increased Access to Post-harvest Handling (PHH) and Value-added Processing |  
| --- | --- |
| Intervention 38. Increased Access to Storage | X WC |
| Intervention 39. Launch Business Accelerator and Entrepreneurship Training for Agricultural and Nonfarm Businesses | X WC |
| Intervention 40. Youth Entrepreneurship Clubs (YECs) | X WC |
| Intervention 41. Enhanced Use of Formal and Informal Financial Services |  
| 22 CFR 216.2(c)(2)(i) |
| Intervention 42. Facilitate Access to Vocational and Technical Skills Training | X WC |
| Intervention 43. Expand Functional Literacy and Numeracy Training |  
| 22 CFR 216.2(c)(2)(i) |

### 4.2 CLIMATE RISK MANAGEMENT

Burkina Faso is highly vulnerable to climate change.¹ The nation, where the vast majority of the population is dependent on rainfed agriculture, is currently experiencing rising temperatures and changes in precipitation amount and frequency—trends that are only expected to worsen over time.² Even if rainfall amounts remain steady, higher temperatures will lead to increased soil evaporation and lower crop yields, prompting vulnerable populations to adopt coping strategies that prioritize short-term benefits and compound long-term negative effects on the environment. These effects increase the vulnerability of households and communities in Centre-Nord, leaving them trapped in a cycle of poverty and risk.³ As part of RISE II, ViMPlus has adopted the following climate risks identified in the RISE II CRM:

- **Variability and unpredictability of rainfall.**
- **Flooding.**
- **Increasing temperatures.**
- **Drought.**

In addition to the above, the RISE II CRM notes that climate also acts as an underlying driver of upstream risks to others. “While climate acts as a direct threat to many RISE II interventions, it also acts as an underlying driver of upstream risks to others. For example, when agriculture and pastoralism become less productive, people are more likely to migrate, making it more difficult for them to access...
health services or for governance structures to operate effectively. Similarly, if climate negatively affects livelihoods, reducing income, people may become less willing or able to pay for health services or engage productively in local governance. Furthermore, when livelihood opportunities and income decrease, the ability of local governments to raise revenue will also decrease. At the same time, the need and demand for health services and local government support are likely to increase during climate stresses. As the local capacity to manage significant shocks in the target zones is limited, outside support is often required. However, such support, if poorly implemented, can undermine local governance structures and/or decrease the incentives for local government to be transparent and accountable. While still highly uncertain, changes in the climate regime is likely to produce winners and losers, which may lead to a break down in local cooperation, particularly between farmers and pastoralists.

In order to determine climate risk and management strategies for ViMPlus interventions, the team reviewed interventions using USAID’s Climate Risk Screening and Management Tools to inform this process. Sector-specific annexes were also referenced to identify sector-specific risk factors for all interventions screened per ADS Guidance. Potential impacts for each intervention were considered, based on ViMPlus’ working knowledge of the Centre Nord region, but also referring to the USAID ClimateLinks website and the World Bank Climate Change Knowledge Portal. Climate risk ratings were assigned to each intervention (or grouping of interventions) based on the potential severity and probability of negative impact on the intervention. Finally, the team reviewed mitigating actions that were either already integrated into the design of the intervention or identified areas where additional mitigation steps are recommended.

ViMPlus was designed to build community and HH capacity to respond to shocks and stresses. All interventions were designed to address the underlying shocks and stresses that pull HH and communities off a pathway out of poverty. Disaster Risk Mitigation and Governance outcomes allows villages and HHs to strengthen their resilience to climate-related shocks and break the negative feedback loop wherein these shocks lead to resource degradation, thereby lead to worse climate impact. ViMPlus interventions, including CMDRR planning, village development planning, the building of CVD networks and the strengthening of EWS will improve climate risk response while increasing adaptation planning and action. Village development plans increase social accountability, engaging villages to take part in planning and local government decision-making, including acknowledging current risk exposure.

Social protection measures and expansion of safety nets will assist in lowering risks of adopting climate smart practices. ViMPlus resource transfers will be targeted to address the needs of those most vulnerable, by providing appropriate resources that best meet those specific needs. By improving access to land for vulnerable HHs, ViMPlus will help the extreme poor to improve food production and diversified livelihoods and improve protection of common resources.

Climate risks have the potential to impact ViMPlus MCHN goals, with extreme weather events causing disruption of training events, healthcare services and staff transport to facilities. Changes in temperature and precipitation have the potential to alter disease patterns, increase diarrheal illnesses, decrease nutrient availability and increase aflatoxin prevalence. Yield decreases from temperature and rainfall shifts also endanger food availability.

To address these risks, ViMPlus will develop targeted messaging that will incorporate information about effects of climate variability on nutrition and health, along with adaptation strategies, including the promotion of nutrient-rich commodities. ViMPlus interventions will build social and institutional capacity.
to adapt to climate variability, including responding to gradual and rapid onset climate variances that affect health services and needs. Development of MCHN training materials, messages, and logistical planning of training events will include information on potential impacts from extreme weather events.

Climate risks may impact ViMPlus WASH goals with extreme weather events causing supply issues, undue stress to supply and sanitation infrastructure, altering waterborne and vector disease patterns decreasing water availability and increasing time burden, especially for women and girls. We have integrated climate risk management options into the interventions under WASH using local available resources, promotion of improved climate appropriate practices, and ties to improved water governance that improve infrastructure resilience and reduce collection times.

Climate impacts (rising temperatures, increased rainfall variability and frequency of extreme events) could affect ViMPlus interventions, increasing pressure on already strained natural resources. ViMPlus will promote the following climate risk management interventions: agricultural training to emphasize local conditions and focus on soil fertility improvements and conservation drawing on proven techniques like planting pits, FMNR and IPM; IP and lowland production will address increasing water stress by improving off-season access to productive plots; PHH, storage and value-added processing interventions will introduce appropriate technologies that reduce climate risks brought by increased heat and moisture stress, or interrupted transport of perishables; and promotion of POs and savings groups to build the adaptive capacity of farmers in the face of climate risks and enable investment in improved practices and technology.
### TABLE 4: CLIMATE RISK MANAGEMENT SUMMARY TABLE

<table>
<thead>
<tr>
<th>Defined or Anticipated Program Interventions</th>
<th>Timeframe</th>
<th>Geography</th>
<th>Climate Risks</th>
<th>Risk Rating</th>
<th>Climate Risk Management Options</th>
<th>How are risks addressed</th>
<th>Opportunities to Strengthen Climate Resilience</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1 Enhanced Inclusive Governance of Institutions and Organizations Support Vulnerable HHs in their Pathway to Food Security and Resilience</td>
<td>Life of Award</td>
<td>Areas where governance interventions take place</td>
<td>Increased climate variability strains natural resource supply and creates more demand for improved governance of natural resources</td>
<td>Moderate</td>
<td>Build the capacity of CVDs to plan and manage local initiatives and advocate for village needs at the commune and regional levels.</td>
<td>Capacity assessment for CVDs</td>
<td>ViMPlus has included interventions to build the capacity of CVDs to better plan and manage urgent village development needs, including those related to climate and natural resource risk.</td>
</tr>
<tr>
<td>1.1 Improved and Equitable Service Delivery at the Commune and Village Level</td>
<td>Intervention 1: Conseils Villageoises du Développement (CVD) Capacity Assessment</td>
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<td></td>
<td>Intervention 2: Village Mapping</td>
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<td></td>
<td>Intervention 3. Village Development Planning</td>
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<tr>
<td>Intervention</td>
<td>Life of Award</td>
<td>Areas where governance interventions take place</td>
<td>Extreme weather events such as floods could completely destabilize households (loss of assets) and push them to move.</td>
<td>Moderate</td>
<td>Community Disaster Risk Management Plans will be developed to anticipate and mitigate climate risks and shocks on households.</td>
<td>Community Managed Disaster Risk Reduction</td>
<td>Village Early Warning Systems</td>
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<tr>
<td>4. Community Disaster Risk Management Plan</td>
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<td>5. Develop Early Warning Systems (EWS) Sites</td>
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<td>7. Train P2, P3, P4 Groups on HH Contingency Planning</td>
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<tr>
<td>6. Resource Transfers (Ag Inputs and Animals)</td>
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</table>

VIMPlus has integrated several interventions under this sub-purpose to address climate-related risks at both the HH and Community level, including: CMDRR, EWS, access to safety nets, HH contingency planning, and improved social cohesion.

Use of resource transfers to restore agricultural and livestock assets should be timed to maximize benefit and include climate-appropriate inputs and species.
<table>
<thead>
<tr>
<th>Intervention 6. Resource Transfers (Commodity Fumigation)</th>
<th>Life of award</th>
<th>Areas where commodity fumigation will occur.</th>
<th>Increased temperatures reducing effectiveness of fumigation</th>
<th>Low</th>
<th>N/A</th>
<th>N/A</th>
<th>Educate local communities, including farmers and agribusiness about potential changes in pest and pathogen distribution due to climate change and provide techniques to limit the impact of these changes throughout the agricultural value chain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Changes in humidity reducing fumigation effectiveness</td>
<td>Low</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Climate change, such as increased temperatures and changes in rainfall patterns, resulting in changes in occurrence of pests and pathogens and therefore fumigation requirements</td>
<td>High</td>
<td>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.</td>
<td>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.</td>
<td>Ask local community members about observed changes in pathogen and pests over recent years and use fumigation that is relevant for the current situation. Ask local community members about observed changes in pathogen and pests over recent years and use fumigation that is relevant for the current situation.</td>
</tr>
<tr>
<td>1.3 Improved and equitable Management of Natural and</td>
<td>Life of Activity</td>
<td>Areas where Governance Interventio</td>
<td>Increased climate extremes create pressure on available and accessible natural</td>
<td>Moderate</td>
<td>Facilitated meetings bringing resource stakeholders together to develop guidelines for fair and</td>
<td>Facilitated meetings bringing resource stakeholders together to develop guidelines for fair and</td>
<td>VIMPlus has planned interventions to address management and use of common natural resources by creating a network of CVDs</td>
</tr>
<tr>
<td>Intervention</td>
<td>Life of Activity</td>
<td>Areas where Governance Interventions take place</td>
<td>Increased climate extremes require new means for managing access to common natural resources and potential for conflict</td>
<td>Low</td>
<td>N/A</td>
<td>N/A</td>
<td>Training of media and civil society offers an opportunity to educate population about climate and resource-related topics.</td>
</tr>
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</tr>
<tr>
<td>1.4 Greater Transparency and Accountability</td>
<td>Life of Activity</td>
<td>Areas where Governance Interventions take place</td>
<td>Increased climate extremes require new means for managing access to common natural resources and potential for conflict</td>
<td>Low</td>
<td>N/A</td>
<td>N/A</td>
<td>Training of media and civil society offers an opportunity to educate population about climate and resource-related topics.</td>
</tr>
<tr>
<td>1.5 Improved Conflict Management</td>
<td>Life of Activity</td>
<td>Areas where governance</td>
<td>Climate extremes create conflict over</td>
<td>Moderate</td>
<td>Improve understanding by and enforcement of laws</td>
<td>Improve understanding by and enforcement of laws</td>
<td>ViMPlus has planned interventions to work with local and regional authorities to...</td>
</tr>
<tr>
<td>Interventions</td>
<td>Life of Activity</td>
<td>Areas where MCHN interventions take place</td>
<td>Changes in temperature and precipitation have the potential to alter disease patterns, increase diarrheal illnesses, decrease nutrient availability and increase aflatoxin prevalence.</td>
<td>Low</td>
<td>N/A</td>
<td>N/A</td>
<td>Help ensure understanding and enforcement of land tenure and resource use laws</td>
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</tbody>
</table>

**P2 Health and Nutrition of Vulnerable Households, Especially PLW and Children in the First 1000 Days, Is Improved**

<table>
<thead>
<tr>
<th>2.1 Improved Quality of Healthcare Services</th>
<th></th>
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<tbody>
<tr>
<td>Intervention 14. Training for Health Workers (HWs) and Community Health Workers (CHWs)</td>
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<tr>
<td>Intervention 15. Partner-defined Quality Reviews (PQRs)</td>
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</table>

VIMPlus interventions will build social and institutional capacity to adapt to climate variability, including responding to gradual and rapid onset climate variances that affect health services and needs.

Development of MCHN training materials, messages and logistical planning of training events will include information on the potential impacts from extreme weather events.
<table>
<thead>
<tr>
<th>Interventions</th>
<th>Life of Activity</th>
<th>Areas where MCHN interventions take place</th>
<th>Changes in temperature and precipitation have the potential to alter disease patterns, increase diarrheal illnesses, decrease nutrient availability and increase aflatoxin prevalence.</th>
<th>Low</th>
<th>N/A</th>
<th>N/A</th>
<th>Development of MCHN training materials for CVSNs will include information on the potential impacts on health of extreme weather.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention 16. Institutional Support</td>
<td></td>
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</tr>
<tr>
<td>Interventions 2.2 Increased Use of Health and Nutrition Services by Women and Children</td>
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<td></td>
</tr>
<tr>
<td>2.3 Increased Use of Family Planning Services, especially among Married Adolescent Girls and their Partner, Including Polygamous Households</td>
<td></td>
<td></td>
<td>Increased climate extremes may render difficult travel to health clinics to receive services.</td>
<td></td>
<td></td>
<td></td>
<td>VIMPlus will provide messaging and information through multiple channels, to allow beneficiaries to access information before going to health clinic.</td>
</tr>
<tr>
<td>Intervention 17. Train and Support CVSNs</td>
<td></td>
<td></td>
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<td></td>
<td>VIMPlus will link to AMPLIFY-FP, a RISE II activity to identify ways to improve access to FP services.</td>
</tr>
<tr>
<td>Intervention 18. Promote Birth Spacing and Family Planning, Especially for Youth</td>
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<tr>
<td>Life of Activity</td>
<td>Areas where MCHN interventions take place</td>
<td>Increased climate variability may increase post-harvest food loss and effect nutrient value of food</td>
<td>Low</td>
<td>N/A</td>
<td>N/A</td>
<td>Sharing information with GASPAs on improved post-harvest food storage to reduce food loss can increase food availability in the HH. Promotion of WASH messaging and improving access to water will help reduce diarrheal disease.</td>
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<td></td>
</tr>
<tr>
<td>Intervention 19. Training and Mentoring through GASPAs</td>
<td></td>
<td>Changes in temperature and precipitation have the potential to alter disease patterns, increase diarrheal illnesses, decrease nutrient availability and increase aflatoxin prevalence.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Intervention 20. Nutrition Training for Other VIMPlus Groups</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Intervention 21. Health and Nutrition Training for Youth</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Intervention 22. Promoting Positive Behaviors through SBC Mass Media Communications</td>
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<td></td>
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<tr>
<td>Intervention 23. Support to HHs</td>
<td></td>
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</tr>
<tr>
<td>Receiving Resource Transfers</td>
<td></td>
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</tr>
</tbody>
</table>

### P3 Improved Adoption of Household WASH Practices, Especially Reduced Open Defecation

#### 3.1 Improved Knowledge on and Motivation to Adopt Recommended WASH-Related Health Topics and Behaviors

<table>
<thead>
<tr>
<th>Intervention 24. Promote WASH Messages and Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life of Activity</td>
</tr>
<tr>
<td>Areas where WASH interventions take place</td>
</tr>
<tr>
<td>Extreme climate events (flooding, drought, and high temperatures) may alter waterborne and vector disease patterns.</td>
</tr>
<tr>
<td>Low</td>
</tr>
<tr>
<td>N/A</td>
</tr>
<tr>
<td>N/A</td>
</tr>
<tr>
<td>ViMPlus will promote Essential WASH Actions that help mitigate risks of water-borne diseases.</td>
</tr>
</tbody>
</table>

#### 3.2 Increased HH and Schools Access to Basic Sanitation Facilities and Handwashing Stations with Soap and Water

<table>
<thead>
<tr>
<th>Intervention 25. Promote Community-Led Total Sanitation (CLTS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life of Activity</td>
</tr>
<tr>
<td>Areas where WASH interventions take place</td>
</tr>
<tr>
<td>Construction of latrines and hand washing stations must consider climate-related risks such as high heat, flooding and drought to avoid contamination risks.</td>
</tr>
<tr>
<td>High</td>
</tr>
<tr>
<td>Ensure masons properly trained on placement and design of latrines</td>
</tr>
<tr>
<td>Train masons in proper design and placement of latrines</td>
</tr>
<tr>
<td>Ensure WUC and local technical oversight of latrine construction to control quality</td>
</tr>
<tr>
<td>Ensure quality control oversight of construction at local, regional and project level</td>
</tr>
</tbody>
</table>

<p>| Extreme climate events (flooding, drought, and high           |
| Low                                                           |
| N/A                                                           |
| N/A                                                           |
| ViMPlus will address open defecation, and best sanitation and hygiene practices in villages |</p>
<table>
<thead>
<tr>
<th>Intervention 26. Build Capacity of Masons to Supply Quality Latrines</th>
<th>Life of Activity</th>
<th>Disruption to supply chains for construction and maintenance of water and sanitation infrastructure due to flooding and/or severe events.</th>
<th>Low</th>
<th>N/A</th>
<th>N/A</th>
<th>as the underlying cause of water-borne disease in the ZOI through CLTS interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3 Improved access to WASH markets and businesses</td>
<td>Areas where WASH interventions take place</td>
<td>Disruption to supply chains for construction and maintenance of water and sanitation infrastructure due to flooding and/or severe events.</td>
<td>Low</td>
<td>N/A</td>
<td>N/A</td>
<td>ViMPlus will develop local supply channels for WASH-related products and services to ensure availability and access.</td>
</tr>
<tr>
<td>Intervention 27. Establish New Women- and Youth-led Businesses to Sell WASH Products</td>
<td>Life of Activity</td>
<td>Areas where WASH interventions take place</td>
<td>Disruption to supply chains for construction and maintenance of water and sanitation infrastructure due to flooding and/or severe events.</td>
<td>Low</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3.4 Increased Access to Water for Household Use, Including Potable Water</td>
<td>Life of Activity</td>
<td>Areas where WASH interventions take place</td>
<td>Increased damage to water supply and sanitation systems, including collection, treatment, and distribution systems, due to increased intensity of precipitation.</td>
<td>High</td>
<td>Develop design for multi-use water systems that is resilient to climate risks.</td>
<td>Multi-use water systems will be constructed in identified villages. Water systems response and protection integrated into CMDRR plans.</td>
</tr>
<tr>
<td>Intervention 28. Improve Maintenance of Water Machinery</td>
<td>Life of Activity</td>
<td>Areas where WASH interventions take place</td>
<td>Disruption to supply chains for construction and maintenance of water and sanitation infrastructure due to flooding and/or severe events.</td>
<td>Low</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>3.5 Increased Access to Safe Sanitation Facilities</td>
<td>Life of Activity</td>
<td>Areas where WASH interventions take place</td>
<td>Disruption to supply chains for construction and maintenance of water and sanitation infrastructure due to flooding and/or severe events.</td>
<td>Low</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
### 3.5 Improved Village Water Governance for Sustainable Water

**Intervention 30. Build Sustainability of Water User Committees (WUCs) Management**

| Life of Activity | Areas Where WASH Interventions take place | Extreme climate events (flooding, drought and high temperatures) may place pressure on water resources | Moderate | Build the capacity of local Water User Committees to manage water infrastructure, and ensuring accessibility to local service providers/technical specialists to maintain and advise on sustainable use principles | Build capacity of local WUCs | Build capacity of local service providers | Link WUCs to service providers and technical specialists | ViMPlus has developed interventions that build the capacity of local WUCs and local service providers to manage and maintain water distribution systems that will be supported by ViMPlus. WUCs will also be linked to commune-level technical authorities to provide input and guidance on sustainable use principles for water infrastructure. |

---

### P4 Economic Wellbeing of Vulnerable HHs Increased and Sustained

**Intervention 31. Producer Organization (PO) Capacity Building – Governance**

<p>| Life of Activity | Areas where livelihood Interventions take place | Climate variability (rising temperature, increased rainfall variability and frequency of extreme events) may impact outcomes for HH agriculture and livestock income-generating activities. | Moderate | Ag and Livestock interventions should emphasize local conditions and focus on soil fertility improvements and conservation drawing on proven techniques like planting pits (zai) FMNR and IPM | Capacity building for POs in CSA and adapted animal husbandry practices | Lead Farmer Extension agents trained in recommended NRM and conservation agricultural practices | SBC messaging to promote recommended NRM | ViMPlus will integrate climate smart agriculture and livestock practices into training for POs and extension agents, including those practices linked to soil fertility improvements and conservation. Improving access to labor and climate-adapted inputs using vouchers will help encourage farmers to invest in these practices. |</p>
<table>
<thead>
<tr>
<th>Intervention 32.</th>
<th>Intervention 33.</th>
<th>Intervention 34.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lead Farmer Extension Model</strong></td>
<td><strong>SBC Messaging on Agricultural Practices</strong></td>
<td><strong>Lowlands and IP Rehabilitation</strong></td>
</tr>
</tbody>
</table>

- **Increased prevalence of parasites and diseases that affect livestock due to changing climate conditions.**
- **Nutrient rich varieties and conservation agricultural practices.**
- **Promote use of drought tolerant seeds and production of nutrient rich varieties.**
- **Moderate**
- **Expand availability and quality of veterinary services and products.**
- **Promote development of voluntary village veterinarian (VVV) network and link with veterinary product suppliers.**
- **Train VVVs on impact of climate variability on animal health.**
- **Increased water availability for crops and livestock due to increased evaporative demand from higher temperatures.**
- **High**
- **Rehabilitation of lowland production sites and irrigated perimeters around existing water resources.**
- **Establish and train IP and WUCs to oversee sustainable use of water resources.**
- **ViMPlus will promote development of VVV network linked to veterinary product suppliers to ensure improved quality and access to veterinary services and products. VVVs will be trained on the impact of climate variability on animal health.**
- **ViMPlus will complete extensive studies and surveys in conjunction with regional authorities to ensure sites selected for development comply with GoBF water usage regulations as well as USAID.**
<p>| 4.2 Increased Business Capacity for Entrepreneurs Especially for Women and Youth | Life of Activity | Areas where livelihood interventions take place | Climate variability (rising temperature, increased rainfall variability and frequency of extreme events) may impact outcomes for HH agriculture and livestock income-generating activities. | Low | N/A | N/A | VIMPlus will work with POs to increase their capacity in production planning, analyzing market information data, collective marketing strategies, strengthening sales and marketing capacities. VIMPlus will then POs to market information channels and buyers of commodities for higher-return opportunities. |</p>
<table>
<thead>
<tr>
<th>Intervention</th>
<th>Description</th>
<th>Level</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>37.</td>
<td>Increased Access to Post-harvest Handling (PHH) and Value-added Processing</td>
<td>Moderate</td>
<td>Climate variability, including increased heat and moisture stress can increase food loss and reduce nutritive value of food. Improved storage, PHH, and processing techniques can reduce food loss and increase HH incomes, while preserving nutrition. Training in improved storage, PHH and processing for POs. Linkage to suppliers of improved storage, PHH and processing technologies. PHH and value-added processing improve access to higher-value market opportunities that reward improved quality and reduce climate risks that increase spoilage. ViMPlus will train lead farmers on proper PHH practices and link farmers to suppliers of PHH equipment and technologies.</td>
</tr>
<tr>
<td>38.</td>
<td>Increased Access to Storage</td>
<td>High</td>
<td>Climate variability, including increased heat and moisture stress can increase food loss and reduce nutritive value of food. Construction of 1000m² storage facilities for POs can help smooth market supply during lean seasons, decrease food loss and provide access to finance for POs to invest in climate-adapted production practices and technologies. Construction of 1000m² storage facilities for POs can help smooth market supply during lean seasons, decrease food loss and provide access to finance for POs to invest in climate-adapted production practices and technologies. ViMPlus will oversee the construction of 50 storage facilities for high performing POs, and train local warehouse managers on improved storage techniques, equipment use, and environmental and safety precautions linked to fumigation, where needed.</td>
</tr>
<tr>
<td>39.</td>
<td>Launch Business Accelerator and Entrepreneurship</td>
<td>Low</td>
<td>Workforce required to learn new</td>
</tr>
<tr>
<td>Intervention 40. Youth Entrepreneurship Clubs (YECs)</td>
<td>Training for Agricultural and Nonfarm Businesses</td>
<td>Workforce required to learn new skills and technologies to achieve employment in other sectors due to reduced productivity of sectors such as agriculture caused by climate stressors.</td>
<td>Low</td>
</tr>
<tr>
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</tr>
<tr>
<td>Intervention 41. Enhanced Use of Formal and Informal Financial Services</td>
<td>Extreme climate events, such as drought, flooding or extreme temperatures will require HH assets</td>
<td>VIMPlus intends to establish and strengthen 500 existing and new savings groups to encourage HH to build their asset base as part of their contingency planning.</td>
<td>Low</td>
</tr>
</tbody>
</table>

ViMPlus will train YECs in entrepreneurship, work readiness, vocational skills, literacy and numeracy. Members will be paired with opportunities to build social and professional capital and launch their businesses or career. Themes linked to climate impact and risk can be integrated into the curriculum to assist members in their understanding of potential future risks.

ViMPlus will train microentrepreneurs. Themes linked to climate impact and risk to business can be integrated into the curriculum to assist entrepreneurs in their planning exercises.
### 4.3 Increased quality, gender equitable and higher return formal and informal employment (especially during the lean season)

<table>
<thead>
<tr>
<th>Life of Activity</th>
<th>Areas where livelihood Interventions take place</th>
<th>Workforce required to learn new skills and technologies to access higher-value opportunities in agriculture, or achieve employment in other sectors due to reduced productivity of sectors such as agriculture caused by climate stressors.</th>
<th>Low</th>
<th>N/A</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention 42. Facilitate Access to Vocational and Technical Skills Training</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Intervention 43. Expand Functional Literacy and Numeracy Training</td>
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</tbody>
</table>

ViMPlus will support vocational and technical skills training for YEC members and functional literacy and numeracy training for PO groups. Trained PO and YEC members will learn skills that will help them access higher return opportunities further up the value chain, or access employment opportunities in sectors outside of agriculture.
5.0 MITIGATION MEASURES

The mitigation measures presented in this section constitute the minimum required based on available information at the time of this IEE and the environmental analysis in Section 4.

INTERVENTION 6. RESOURCE TRANSFERS

ViMPlus is in the process of determining the appropriate resource transfer mechanism for the current context in Centre-Nord. Currently, the team is considering three different options (or a mix of all three) for potential distribution. These are: 1) Cash; 2) Non-Food Items (excluding agricultural inputs and animals); 3) Agricultural Inputs and Animals; and 4) Food. Transfers of cash and non-food items (excluding agricultural inputs and animals) have been recommended for Negative Determination, as transfers do not have immediate negative impact on the environment, and any foreseeable negative impact can be mitigated in the design. Transfers of cash and non-food items may create conflict or security risk to beneficiaries (especially for women and youth) if beneficiary selection is not transparent, and if beneficiary security is not considered during the design of the distribution process.

Transfers of agricultural inputs and animals to recipients may have a negative impact on the environment if the quality of inputs is poor, the inputs or animals are inappropriate for the agro-ecological climate, and if animals are unhealthy. As a result, we have recommended this intervention be considered as Negative Determination with conditions. Transfers of agricultural inputs should be subject to quality control test, such as germination rates and random sample verification. The provision/distribution, promotion of, and training in use of fertilizers must conform to best practices outlined in the Africa Bureau Fertilizer Fact Sheet. Support for seed and seedlings procurement/distribution will follow the following mitigation measures: 1) all seed and seedlings introduction should conform to sanitary and phytosanitary standards of the country and be considered for their applicability to local conditions; and 2) only seeds appropriate to the agro-climatic zones will be promoted, however climate change will be considered as well as the selection of appropriate seeds based on the agro-climatic zone. Animals for distribution should be tested and certified by representatives from the Ministry of Livestock to ensure they are in good health.

If ViMPlus determines it will distribute food commodities in such a way that it requires longer-term storage and fumigation, ViMPlus will be required to ensure official certification of service provider to perform commodity fumigation, and that fumigants are applied according to the directions on the product label, and follow all listed directions, precautions, and restrictions.

USAID has developed an assessment of environmental and health risks in the fumigation of food assistance commodity entitled USAID Programmatic Environmental Assessment (PEA) for Phosphine Fumigation of Stored Agricultural Commodity. The PEA includes a Pesticide Evaluation Report and Safer Use Action Plan (PERSUAP) template, and a Fumigation Management Plan (FMP) template. These tools are intended to assist in compliance with the Fumigation PEA’s requirement for completion of an activity-specific PERSUAP and FMP reporting. The Fumigation PERSUAP will be developed as soon as the warehouse and fumigation service providers are identified, and in advance of the need for fumigation. Specific mitigation requirements for the fumigant phosphine are provided in the Fumigation PEA.
The TOPS Warehouse Staff Safety Guide (November, 2014) will be used to design of education campaigns for warehouse commodity storage for staff. The Warehouse Safety Guide posters, which highlight best fumigation practices, follow the findings of the Fumigation PEA, and compliments the PEA with practical guidance, information, recommendations and tools to promote warehouse staff safety and prevent injury and illness.

### TABLE 5A: SUMMARY OF MITIGATION MEASURES FOR INTERVENTION 6. RESOURCE TRANSFERS

<table>
<thead>
<tr>
<th>Intervention 6. Resource Transfers</th>
<th>Mitigation Measures</th>
</tr>
</thead>
</table>
| Resource transfers: cash and non-food items (Excluding Ag Inputs and Animals) | • Transparent and participatory beneficiary identification and selection process  
• Security of beneficiaries considered during design of distribution process |
| Resource transfers: Agricultural Inputs and Animals | • Verification of appropriateness of inputs to be distributed for agro-ecological zone  
• Quality control of inputs should be completed to ensure sanitary and phytosanitary standards are met  
• Fertilizer distribution must conform to best practices outlined in the Africa Bureau Fertilizer Fact Sheet  
• Animals for distribution certified by veterinarian and authorities from the Ministry of Livestock |
| Resource transfers: Food (Commodity fumigation) | • PERSUAP and Fumigation Management Plan will be developed before fumigation is undertaken by ViMPlus  
• Fumigation will only be completed by certified fumigators, and fumigants should be applied according to the directions on the product label, following all directions, precautions, and restrictions  
• Warehouse staff will be trained using TOPS Warehouse Staff Safety Guide. |

### INTERVENTION 8. QUARTERLY MEETING OF CVDS ON SHARED RESOURCE MANAGEMENT

Building the capacity of CVDs to manage shared natural resources has been determined as Negative Determination with No Conditions as this action supports mitigation measures for indirect impacts of other actions (i.e., better natural resource management through inclusive stakeholder engagement and capacity building). However, due to potential social impacts, ViMPlus will implement, monitor and report on social mitigation measures to reduce risk of conflict.

### TABLE 5B: SUMMARY OF MITIGATION MEASURES FOR INTERVENTION 8. QUARTERLY MEETING OF CVDS ON SHARED RESOURCE MANAGEMENT

<table>
<thead>
<tr>
<th>Intervention 8. Quarterly Meeting of CVDs on Shared Resource Management</th>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVDs and stakeholder groups trained in conflict management and mitigation skills as part of the capacity building work</td>
<td></td>
</tr>
</tbody>
</table>
**INTERVENTION 14. TRAINING FOR HEALTH WORKERS (HWS) AND COMMUNITY HEALTH WORKERS (CHWS)**

Training for health workers and community health workers has been determined as Negative Determination with Conditions has been recommended. In order to mitigate the potential negative environmental impact, ViMPlus will incorporate best medical waste disposal practices as part of the training, as per the [USAID Sectoral Guidelines for Healthcare Waste](#).

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention 14. Training for Health Workers and Community Health Workers</td>
</tr>
<tr>
<td>Health workers will be trained on best practices for medical waste disposal per the USAID Sectoral Guidelines for Healthcare Waste.</td>
</tr>
</tbody>
</table>

**INTERVENTION 18. PROMOTE BIRTH SPACING AND FAMILY PLANNING, ESPECIALLY FOR YOUTH**

Promoting birth spacing and family planning, especially for youth has been determined as Negative Determination with Conditions. In order to mitigate the potential negative environmental impact of increased medical waste as a result of this intervention, ViMPlus will incorporate best medical waste disposal practices as part of the messaging, as per the [USAID Sectoral Guidelines for Healthcare Waste](#).

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention 18. Promote Birth Spacing and Family Planning, Especially for Youth</td>
</tr>
<tr>
<td>Messaging on birth spacing and family planning will incorporate best practices for medical waste disposal per the USAID Sectoral Guidelines for Healthcare Waste</td>
</tr>
</tbody>
</table>

**INTERVENTION 26. BUILD CAPACITY OF MASONS TO SUPPLY QUALITY LATRINES**

Building the capacity of masons to supply quality latrines has been determined as Negative Determination with No Conditions as this action supports mitigation measures for indirect impacts of other actions (i.e., reduction of open defecation). However, due to potential social and health impacts, ViMPlus will implement, monitor and report on social mitigation measures to ensure masons build the capacity to construct latrines following [USAID Sectoral Guidelines for Water Supply and Sanitation](#).

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention 26. Build Capacity of Masons to Supply Quality Latrines</td>
</tr>
<tr>
<td>• Masons will be trained on best practices in the USAID Sectoral Guidelines for Water Supply and Sanitation</td>
</tr>
<tr>
<td>• Training will promote the following: 1) appropriate siting of pit latrines, drainage or spillage from latrine should flow away from surface water sources, avoiding flooded or high-water table environments, sourcing</td>
</tr>
</tbody>
</table>
INTERVENTION 27. ESTABLISH NEW WOMEN- AND YOUTH-LED BUSINESSES TO SELL WASH PRODUCTS

Facilitating the establishment of new women- and youth-led enterprises to sell WASH products is recommended as Negative Determination with No Conditions as this action supports mitigation measures for indirect impacts of other actions (i.e., reduction of open defecation). However, due to potential social and health impacts, ViMPlus will implement, monitor and report on social mitigation measures to ensure entrepreneurs engaging in WASH product production follow safety precautions if handling chemicals, responsible materials sourcing and safe disposal of liquid and solid waste.

TABLE 5F: SUMMARY OF MITIGATION MEASURES FOR INTERVENTION 27. ESTABLISH NEW WOMEN- AND YOUTH-LED BUSINESSES TO SELL WASH PRODUCTS

<table>
<thead>
<tr>
<th>Intervention 27. Establish New Women- and Youth-led Businesses to Sell WASH Products</th>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Training for WASH-product businesses shall include modules on worker safety, responsible materials sourcing and safe disposal of liquid and solid waste.</td>
</tr>
</tbody>
</table>

INTERVENTION 29. CONSTRUCTION OF MULTIPLE-USE WATER SYSTEMS

ViMPlus intends to construct multiple-use water systems that contain several components, including: boreholes, latrines, hand washing stations, sources of drinking water, small scale irrigation and livestock watering points. Negative Determination with Conditions has been recommended for these components of the intervention, and the following mitigation measures are proposed:

**Boreholes:** ViMPlus will ensure environmentally sound design by skilled professionals and actionable mitigation at every phase of the construction as provided in [USAID’s Sectoral Guideline for Water Supply and Sanitation](http://www.who.int/water_sanitation_health/publications/wash_standards_school.pdf). Prior to borehole drilling and water extraction, ViMPlus will obtain all required applicable authorizations, licenses and permits from the local authorities. Prior to construction, groundwater capacity and discharge rates must be measured to ensure sustainability as well as limit drawdown on nearby wells. The quantities of water supplied by waterpoint to expected beneficiaries must be minimally consistent with standards set by World Health Organization to ensure water is always available for personal hygiene, food preparation, cleaning, and laundry. Boreholes must be properly sited and located away (up slope and at least 50m) from sources of contamination, such as latrines or poorly drained areas which receive contaminated run-off and away from other sources of abstraction. Prior to opening of the borehole, ViMPlus will test water in accordance with local standards.

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standards, but at a minimum, tests water quality for fecal coliform and arsenic. In addition, ViMPlus will consult with stakeholders and community authorities to determine issues of access and natural resource governance around boreholes.

**Latrines:** ViMPlus will follow best practices and assure implementation of any environmental mitigation and monitoring conditions specified in [USAID’s Sectoral Guideline for Water Supply and Sanitation](#). At a minimum, latrine construction and rehabilitation will:

- Ensure that the environment is free from contamination with human waste by properly siting, designing and constructing latrines to avoid discharge of chemical and microbial contaminants into the ground and surface waters.
- Locate pit latrines at least 30 meters away from any water sources and the bottom of any latrine must be at least 1.5 meters above the water table. Drainage or spillage from the latrine must not run towards any surface water source or shallow groundwater source. The distances may be increased for fissured rocks and limestone but are sufficient in fine soils.
- Build elevated toilets or septic tanks, where necessary in flooded or high-water table environments, to prevent overflowing and contamination of the environment.
- Ensure that latrines are properly equipped, emptied and maintained.
- Ensure that users have the means to wash their hands after latrine use with soap or an alternative (such as ash). There should be a constant source of water near the latrine for this purpose.
- Ensure that latrines are properly decommissioned, and do not leave pits open.

Prior to latrine construction, adequate attention must be paid to identifying and addressing social barriers to using latrine, for example, selecting the location. Key hygiene behaviors and factors such as cultural perceptions, distance to the latrine, safety to users and community participation in cleaning and maintenance of the latrine should be addressed. Where the population has not traditionally used toilets, it may be necessary to conduct a concerted education/promotion campaign to encourage their use and to create a demand for more toilets to be constructed.

**Hand Washing Stations:** ViMPlus will follow best practices and assure implementation of any environmental mitigation and monitoring conditions specified in [USAID’s Sectoral Guideline for Water Supply and Sanitation](#). Technologies and locations of handwashing stations will be appropriate for the local context including availability of materials, water and soap. The design and use of hand washing station must ensure that no stagnant water pools are generated to become a disease vector breeding ground. Handwashing stations must be located very close to latrine facilities (within 1.5m of the latrine exit) to avoid the possibility of fecal-oral contamination and designed for effective use. Where stagnant water is generated, treatment appropriate to climate and type of soil will be selected. Standing waste water generated due to poor drainage from hand-washing may need to be addressed by building a soak pit to facilitate percolation of water into the ground. In hot and dry season evaporation or use of wastewater for irrigation should be considered.

Prior to construction of handwashing station, adequate attention must be paid to identifying and addressing key hygiene behaviors. Where the population does not have proper hygiene habits, it may be necessary to conduct a concerted education/promotion campaign to create awareness about health benefits of handwashing particularly after use or maintenance of a latrine. Communities must be
informed, and children must receive warning where water provided for hand-washing is generally not fit for human consumption.

**Irrigation Systems with Cultivable Command Area < 200 ha:** Construction or rehabilitation of irrigation systems aiming to enhance agricultural productivity using improved water storage, conveyance, lifting and application technologies related to surface, ground and rain water management. ViMPlus will follow best practices and assure implementation of environmental mitigation and monitoring conditions specified in *USAID’s Sectoral Guideline for Water Supply and Sanitation*.

Irrigation projects will be planned and managed with community participation in the context of the overall regional development plans, including both the upland catchment areas and the catchment areas downstream and will consider the roll of the community in construction and management of the system and mechanisms for potential conflicts resolution. The planning process will also consider the capacity of land and water resources and their seasonal water variability to support irrigation for the number of users, optimum scale of the scheme, and potential impacts on the soils.

The following considerations will be integrated as appropriate in developing irrigation projects:

- Locating the irrigation project on the site where negative impacts are minimized;
- Improving the efficiency of existing projects and restoring degraded croplands to use rather than establishing a new irrigation project;
- Developing small-scale, individually-owned irrigation systems as an alternative to large-scale, publicly-owned and managed schemes;
- Using micro-irrigation systems to decrease the risk of waterlogging, erosion and inefficient water use;
- Using treated wastewater, where appropriate, to make more water available to other users; and
- Training farmers in water management.

Water quality will be tested on the annual basis, however in locations where water quality tends to be low, more frequent testing should be conducted. The parameters of importance for irrigation water testing include: salinity, infiltration, specific ion toxicity, and other parameters depending on the scale and type of irrigation system.

In addition to these general conditions, specific conditions will be established based on screening of actions implemented under this category using an Environmental Irrigation Checklist to be developed by ViMPlus.

**Livestock Watering Points:** ViMPlus will ensure environmentally sound design by skilled professionals and actionable mitigation at every phase of construction and operation, as provided in *USAID’s Sectoral Guideline for Water Supply and Sanitation* and *USAID Sectoral Guidelines for Construction*. Prior to the creation of the supply pond or watering point, ViMPlus must obtain all required applicable authorizations, licenses and permits from local authorities.

Pond siting and watering point assessments must address: 1) site selection and design measures to prevent contamination of groundwaters from seepage; 2) minimizing dust, erosion and sedimentation; 3) damage to sensitive wetland ecosystems; and 4) mitigation measure to prevent runoff into ponds. Where ViMPlus has interventions related to livestock production and rangeland management, where
there is direct access of livestock to watercourses, will address preserving the integrity of watercourses, streambanks and riparian areas through environmentally responsible livestock management.

**Point of Use Water Purification**: Water quality testing must be used to verify that the point of use treatment (e.g. Aquatab and sand-filter treatment) is enough to ensure the safety of drinking water. Any USAID-supported activity engaged in the provision of potable water must adhere to Guidance Cable State 98 108651, which requires arsenic testing. That 1998 cable also anticipates “practical guidelines on sampling and testing for arsenic” that were then under development. Refer to the USAID, “Guidelines for Determining the Arsenic Content of Ground Water in USAID-Sponsored Well Programs in Sub-Saharan Africa.” USAID requires, at minimum, testing of groundwater for arsenic and fecal coliform, at all water point construction or rehabilitation actions prior to opening of the water source to public consumption.

**TABLE 5G: SUMMARY OF MITIGATION MEASURES FOR INTERVENTION 29. CONSTRUCTION OF MULTIPLE WATER-USE SYSTEMS**

<table>
<thead>
<tr>
<th>Intervention 29. Construction of Multiple-Use Water Systems</th>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of Boreholes for Mixed-Use</td>
<td>• Ensure environmentally sound design by skilled professionals.</td>
</tr>
<tr>
<td></td>
<td>• Follow best practices from USAID’s Sectoral Guideline for Water Supply and Sanitation.</td>
</tr>
<tr>
<td></td>
<td>• Obtain all required applicable authorizations, licenses and permits from the local authorities.</td>
</tr>
<tr>
<td></td>
<td>• Measure groundwater capacity and discharge rates.</td>
</tr>
<tr>
<td></td>
<td>• Properly site and locate boreholes away (up slope and at least 50m) from sources of contamination.</td>
</tr>
<tr>
<td></td>
<td>• Test water in accordance with local standards, but at a minimum, tests water quality for fecal coliform and arsenic.</td>
</tr>
<tr>
<td></td>
<td>• Consult with stakeholders and community authorities before construction about governance and access.</td>
</tr>
</tbody>
</table>

| Construction of Latrines                                  | • Follow best practices specified in USAID’s Sectoral Guideline for Water Supply and Sanitation. |
|                                                            | • Properly site, design and construct latrines to avoid discharge of chemical and microbial contaminants. |
|                                                            | • Locate pit latrines at least 30 meters away from any water sources and at least 1.5 meters above the water table. |
|                                                            | • Build elevated toilets or septic tanks, where necessary. |
|                                                            | • Ensure that latrines are properly equipped, emptied and maintained. |
|                                                            | • Ensure that users have the means to wash their hands after latrine use. |
|                                                            | • Ensure that latrines are properly decommissioned. |
|                                                            | • Address social barriers to using latrines. |

| Construction of Hand Washing Stations                     | • Follow best practices specified in USAID’s Sectoral Guideline for Water Supply and Sanitation. |
|                                                            | • Ensure handwashing stations are appropriate for the local context. |
|                                                            | • Ensure no stagnant water pools are generated. |
### Construction of Irrigation Systems for <200 ha
- Location should be very close to latrine facilities.
- In hot and dry season evaporation or use of wastewater for irrigation should be considered.
- Key hygiene behaviors should be addressed.
- Follow best practices specified in [USAID’s Sectoral Guideline for Water Supply and Sanitation](https://www.usaid.gov/).
- Ensure community participation in planning and management of irrigation project.
- Ensure adequate capacity of land and water resources and potential impacts on soils.
- Locate the irrigation project to minimize negative impacts;
- Improve the efficiency of existing projects rather than establishing a new irrigation project;
- Develop small-scale, individually-owned irrigation systems;
- Use micro-irrigation systems reduce risk;
- Use treated wastewater, where appropriate.
- Train farmers in water management.
- Test water quality annually and more frequently where quality is low.
- Establish Environmental Irrigation Checklist.

### Livestock Watering Points
- Ensure environmentally sound design by skilled professionals.
- Obtain all required applicable authorizations, licenses and permits from local authorities prior to construction.
- Pond siting and watering point assessments must address: 1) site selection and design to prevent groundwater contamination; 2) minimizing dust, erosion and sedimentation; 3) damage to sensitive wetland ecosystems; and 4) mitigation measure to prevent runoff.
- Promote environmentally responsible livestock management.

### Point of Use Water Purification
- Water quality testing to verify the safety of drinking water.
- Adhere to Guidance Cable State 98 10865, covering arsenic testing.
- Adhere to USAID minimum testing of groundwater for arsenic and fecal coliform, at all water point construction or rehabilitation actions prior to opening of the water source to public consumption.

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### INTERVENTION 31. PRODUCER ORGANIZATION (PO) CAPACITY BUILDING
ViMPlus will build the capacity of producer organizations (both livestock and agriculture) in improved management and governance (Categorical Exclusion) and in improved production and PHH practices (Negative Determination with Conditions). Production (agriculture and livestock) and PHH training ay be introduced using a variety of techniques, including field and classroom demonstrations, extension services, agricultural research, strengthening use of techniques and improved technologies, and field crops and fodder production. The following mitigation measures are recommended:
Agricultural production and related actions: All agricultural actions must incorporate and promote sound environmental management practices in general conformity with USAID’s Sectoral Guidelines. Selection and demonstration of crops for cultivation should reflect environmental conditions, with an emphasis on the local terrain, biodiversity, future climate predictions and quality and quantity of water and soil resources. All agricultural actions will include sensitization of partners, stakeholders and beneficiaries to climate risks of agriculture and required environmental safeguards. Where appropriate, ViMPlus will promote environmental safeguards and climate adaptation for agricultural actions, including: avoid land clearance and removal of vegetation, with a preference for utilizing already cleared plots; where plots must be cleared, it will be done in an environmentally sustainable manner conserving vegetation and replanting trees; discourage agricultural actions within 30 meters of water bodies; plot siting will take into consideration local and cultural constructs and norms; and the use of chemical inputs should be promoted in conjunction with a pesticide safer use capacity building strategy supported by a package of marketing, quality improvement and value addition actions that can support the increased expense of input requirements.

Farmer-managed natural regeneration (FMNR), soil and water conservation measures, and plantings and land reclamation actions: These actions include tree/bush grass planting (both native and non-native), compost, zai pits and demi-lunes (larger pits), fencing, erosion control, infiltration rock walls, vegetative buffers, cover plantings, nurseries and wind blocks. Development of these interventions must address issues of sustainable use of natural resources and implementation of appropriate techniques and best practices in accordance with USAID’s Sectoral Guidelines for CBNRM, Sectoral Guidelines for Forestry, and Sectoral Guidelines for Dryland Agriculture. While ViMPlus largely intends to support training only in these techniques, large demonstration plots or grants to communities to implement these techniques on common land larger than 4 ha will require an ERF/ERR process. The ERF/ERR process must be reviewed and approved by the AOR, MEO and REO prior to implementation. ViMPlus will assure implementation of any environmental mitigation and monitoring conditions specified by the approved ERF/ERR.

For actions on communal lands, local authorities (including traditional authorities) will be involved, to ensure local authorization and agreement with the action. For actions disseminated to farmers with minimal direct oversight, a well-developed manual for implementation and maintenance, planned and overseen by a forester or agronomist, will be developed. The capacity of CVDs and communities to implement NRM practices will be strengthened by training the committee in governance and maintenance. Species selection for these interventions will include consultation with a qualified forester, agronomist or biologist to avoid invasive species and will be made with consideration of the local community’s interests.

Provision, distribution, promotion of, and training in use of fertilizers must conform to best practices outlined in the Africa Bureau Fertilizer Fact Sheet. In addition, the procurement or promotion of, or training in the use of pesticides, including herbicides, insecticides, acaricides and fungicides is disallowed until such time that a Pesticide Evaluation Report Safer Use Action Plan is completed pursuant to 22 CFR Regulation 216.3 (b) – USAID pesticide procedures – and duly approved. Actions involving pesticide safer use training, IPM measures and extension outreach, but not procurement or use of pesticides, may proceed with an approved EMMP in place.

Support for seed and seedlings and the introduction of improved crop varieties: No introduction of non-native species should take place where it is likely to cause economic harm, environmental harm or harm to human health. Invasive species will not be introduced. All seed and
seedling introduction should conform to local sanitary and phytosanitary standards and be considered for their applicability to local conditions. Only seeds appropriate to the agro-climatic zones will be promoted. However, climate change will be considered as well in the selection of appropriate seeds based on the agro-climatic zone.

**Pesticide use and procurement** (including herbicides, insecticides, acaricides and fungicides) is disallowed until such time that a PERSUAP is completed pursuant to 22 CFR Regulation 216.3 (b) – USAID pesticide procedures – and duly approved. Actions involving pesticide safer use training, IPM measures and extension outreach, but not procurement or use of pesticides, may proceed with an approved EMMP in place.

**Fertilizer procurement or use**: Support for fertilizer procurement or use that includes training, demonstrations, supply, and other support including provision of fertilizers organic and inorganic, green manure, and other soil amendments for integrated soil management including provision of vouchers, facilitation of access to inputs or work with input suppliers and other actions that provide direct and indirect support related to fertilizer use and procurement. Emphasize and fully integrate information on the environmental risks associated with fertilizer use and best management practices to mitigate these risks. This information should at a minimum be consistent with the risks and best practices outlined in **USAID’s Africa Bureau Fertilizer Factsheet**. Develop and implement appropriate safeguards to protect human health and the local ecosystems based on toxicological and environmental data for the proposed fertilizers or soil inoculums. Such safeguards will address product storage, handling and application, including the use of PPE, clean-up and disposal.

**Agricultural tools and machinery**: All introductions of new technologies and machinery must be screened for environmental and social impacts over the lifetime use of equipment assessing its potential impacts on air, water, and soil pollution, labor safety and sustainability.

**Protection of crops, seeds and post-harvest and food aid commodities protection** that require support of pesticides (including promotion, provision of vouchers, improved access to agrodealers and support provided to agrodealers, integrated pest management [IPM] training, provision of PPE, pesticide treatment, or use of pesticide treated seed): The procurement or use of pesticides, including herbicides, insecticides, acaricides, and fungicides, is disallowed until such time that a PERSUAP is completed pursuant to 22CFR Regulation 216.3 (b)—USAID pesticide procedures— and duly approved. Actions involving pesticide safer use training, IPM measures, and extension outreach, but not procurement or use of pesticides, may proceed with an approved EMMP in place (see Section 6 for special limitations). Fumigation of aid commodities will be guided by the USAID **Programmatic Environmental Assessment (PEA) for Phosphine Fumigation of Stored Agricultural Commodity**.

**Livestock Production**: ViMPlus will follow best practices and assure implementation of environmental mitigation and monitoring conditions specified in USAID’s **Sectoral Guidelines for Livestock**, **Sectoral Guidelines for Agriculture**, and **Sectoral Guidelines for Dryland Agriculture**. Livestock production and increased diversity of livestock holdings must be informed by assessments of carrying capacity, GHG considerations and social impacts, including potential conflicts over access to private or communal natural resources. The assessment results will provide input for the planning of interventions. Interventions that intensify livestock production or lead to the intensification of livestock production will integrate actions aimed at improved rangeland management, feed management, and water resources.
management. ViMPlus will implement water access management options for protection of drinking water sources and riparian protection (e.g. use of alternative water sources, herding, manure disposal and fencing). ViMPlus will introduce practices aimed at minimizing GHG emissions (e.g. improved animal nutrition, manure management, pasture management). No new breeds will be introduced without careful review and coordination by a trained specialist and in consultation with relevant Government ministries and institutions as required by host country regulations. Finally, ViMPlus will conduct a consultation with stakeholders prior to initiative of livestock intensification or fodder production involving shared community resources.

Livestock/poultry feed management, promotion and introduction of improved feed, and introduction of new fodder species: ViMPlus will follow best practices and assure implementation of environmental mitigation and monitoring conditions specified in USAID Sectoral Guidelines for Agriculture, USAID Sectoral Guidelines for Dryland Agriculture, and USAID Sectoral Guidelines for Livestock. New fodder crops and species introduced which comply with conditions provided in Intervention Category I on agriculture and crop production. New land will not be cleared for fodder production, but degraded land may be restored for fodder production. Introduction of new feed to animals will seek to formulate rations that improve production levels, while simultaneously minimizing environmental impacts associated with excreta. Support for fodder production will include training on environmentally sound practices including use of inputs, IPM, and mitigating impacts on local biodiversity. Finally, procurement or use of pesticides, including herbicides, insecticides, acaricides, and fungicides, is disallowed until a PERSUAP is completed pursuant to 22CFR Regulation 216.3 (b)—USAID pesticide procedures—and duly approved. Actions involving pesticide safer use training, IPM measures, and extension outreach, but not procurement or use of pesticides, may proceed with an approved EMMP in place.

**TABLE 5H: SUMMARY OF MITIGATION MEASURES FOR INTERVENTION 31. PRODUCER ORGANIZATION CAPACITY BUILDING**

<table>
<thead>
<tr>
<th>Intervention 31. Producer Organization Capacity Building</th>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural production</td>
<td>• Incorporate and promote sound environmental management practices in general conformity USAID’s Sectoral Guidelines.</td>
</tr>
<tr>
<td></td>
<td>• Selection and demonstration of crops for cultivation should reflect environmental conditions.</td>
</tr>
<tr>
<td></td>
<td>• Include sensitization of partners, stakeholders and beneficiaries to climate risks of agriculture and required environmental safeguards.</td>
</tr>
<tr>
<td></td>
<td>• Promote environmental safeguards and climate adaptation for agricultural actions,</td>
</tr>
<tr>
<td></td>
<td>• Plot siting will take into consideration local and cultural constructs and norms;</td>
</tr>
<tr>
<td></td>
<td>• Promote pesticide safer use capacity building strategy.</td>
</tr>
</tbody>
</table>
• ERR/ERR process for large demonstration plots or grants to communities to implement these techniques on common land larger than 4 ha.  
• Assure implementation of any environmental mitigation and monitoring conditions specified by the approved ERF/ERR.  
• Involve local authorities to ensure local authorization and agreement with the action on common land.  
• Develop training manual for implementation and maintenance, planned and overseen by a forester or agronomist  
• Build capacity of CVDs and communities to implement NRM practices.  
• Consult qualified forester, agronomist or biologist for species selection. |
• Complete and obtain approval of a Pesticide Evaluation Report Safer Use Action Plan  
• Integrate actions involving pesticide safer use training, IPM measures and extension outreach, into the EMMP. |
| Seed, seedlings and improved crop varieties | • Non-native species should take place where it is likely to cause economic harm, environmental harm or harm to human health. Invasive species will not be introduced.  
• All seed and seedling introduction should conform to local sanitary and phytosanitary standards and be considered for their applicability to local conditions.  
• Only seeds appropriate to the agro-climatic zones will be promoted.  
• Impact of climate change will be considered in seed selection. |
| Pesticide use and procurement | • A PERSUAP is must be competed and duly approved prior to start of interventions.  
• Safer use training, IPM measures and extension outreach may proceed with an approved EMMP. |
| Fertilizer procurement or use | • Integrate information on the environmental risks associated with fertilizer use and best management practices to mitigate these risks, per the [USAID’s Africa Bureau Fertilizer Factsheet](https://www.usaid.gov/sustainable-development/around-world/sectoral-guidelines/dryland-agriculture).  
• Develop and implement appropriate safeguards (for product storage, handling and application) to protect human health and the local ecosystems. |
| Agricultural tools and machinery | • Screen new technologies and machinery for environmental and social impacts. |
| Protection of crops, seeds and post-harvest | • A PERSUAP must be developed and approved prior to interventions involving pesticides.  
• EMMP must be developed and approved prior to interventions on pesticide safer use training, IPM measures, and extension outreach |
Livestock Production

- Follow best practices specified in USAID’s [Sectoral Guidelines for Livestock](#), [Sectoral Guidelines for Agriculture](#), and [Sectoral Guidelines for Dryland Agriculture](#).
- Assess carrying capacity, GHG considerations and social impact of livestock interventions.
- Integrate improved management for rangeland, feed and water resources into livestock intensification interventions.
- Implement water access management protection of drinking water sources and riparian.
- Introduce practices that minimize GHG emissions.
- Follow host government regulations prior to introduction of new breeds.
- Complete stakeholder consultation prior to livestock intensification or fodder production involving shared community resources.

Livestock/poultry feed management, promotion and introduction of improved feed, and introduction of new fodder species:

- Follow best practices specified in [USAID Sectoral Guidelines for Agriculture](#), [USAID Sectoral Guidelines for Dryland Agriculture](#), and [USAID Sectoral Guidelines for Livestock](#).
- Introduce new fodder crops and species that comply with conditions provided in Intervention Category I on agriculture and crop production.
- New land will not be cleared for fodder production, but degraded land may be restored for fodder production.
- Formulate new feed rations to production levels and minimize environmental impacts of excreta.
- Train on environmentally sound practices including use of inputs, IPM, and mitigating impacts.
- A PERSUAP must be developed and approved prior to interventions involving pesticides.
- EMMP must be developed and approved prior to interventions on pesticide safer use training, IPM measures, and extension outreach.

### INTERVENTION 32. LEAD FARMER EXTENSION MODEL

ViMPlus will build the capacity agricultural extension system in Centre Nord. Extensionists (Lead Farmers) will provide training and advice to farmers in rural areas and will cover the range of topics listed in the above intervention (31. Producer Organization Capacity Building). Themes covering improved management and governance are considered Categorical Exclusion and themes covering improved production and PHH practices are considered Negative Determination with Conditions. In addition, Volunteer Village Veterinarians (VVVs) will provide livestock production and veterinary services for farmers and these services are also considered Negative Determination with Conditions. Production (agriculture and livestock) and PHH training, and veterinary services may be introduced using a variety of techniques, including field and classroom demonstrations, extension services, agricultural research, strengthening use of techniques and improved technologies, and field crops and fodder production. The following mitigation measures are recommended:

**Agricultural production and related actions:** All agricultural actions must incorporate and promote sound environmental management practices in general conformity [USAID’s Sectoral Guidelines](#). Selection and demonstration of crops for cultivation should reflect environmental conditions, with an emphasis on the local terrain, biodiversity, future climate predictions and quality and
quantity of water and soil resources. All agricultural actions will include sensitization of partners, stakeholders and beneficiaries to climate risks of agriculture and required environmental safeguards. Where appropriate, ViMPlus will promote environmental safeguards and climate adaptation for agricultural actions, including: avoid land clearance and removal of vegetation, with a preference for utilizing already cleared plots; where plots must be cleared, it will be done in an environmentally sustainable manner conserving vegetation and replanting trees; discourage agricultural actions within 30 meters of water bodies; plot siting will take into consideration local and cultural constructs and norms; and the use of chemical inputs should be promoted in conjunction with a pesticide safer use capacity building strategy supported by a package of marketing, quality improvement and value addition actions that can support the increased expense of input requirements.

Farmer-managed natural regeneration (FMNR), soil and water conservation measures, and plantings and land reclamation actions: These actions include tree/bush grass planting (both native and non-native), compost, zai pits and demi-lunes (larger pits), fencing, erosion control, infiltration rock walls, vegetative buffers, cover plantings, nurseries and wind blocks. Development of these interventions must address issues of sustainable use of natural resources and implementation of appropriate techniques and best practices in accordance with USAID’s Sectoral Guidelines for CBNRM, Sectoral Guidelines for Forestry, and Sectoral Guidelines for Dryland Agriculture. While ViMPlus largely intends to support training only in these techniques, large demonstration plots or grants to communities to implement these techniques on common land larger than 4 ha will require an ERF/ERR process. The ERF/ERR process must be reviewed and approved by the AOR, MEO and REO prior to implementation. ViMPlus will assure implementation of any environmental mitigation and monitoring conditions specified by the approved ERF/ERR.

For actions on communal lands, local authorities (including traditional authorities) will be involved, to ensure local authorization and agreement with the action. For actions disseminated to farmers with minimal direct oversight, a well-developed manual for implementation and maintenance, planned and overseen by a forester or agronomist, will be developed. The capacity of CVDs and communities to implement NRM practices will be strengthened by training the committee in governance and maintenance. Species selection for these interventions will include consultation with a qualified forester, agronomist or biologist to avoid invasive species and will be made with consideration of the local community’s interests.

Provision, distribution, promotion of, and training in use of fertilizers must conform to best practices outlined in the Africa Bureau Fertilizer Fact Sheet. In addition, the procurement or promotion of, or training in the use of pesticides, including herbicides, insecticides, acaricides and fungicides is disallowed until such time that a Pesticide Evaluation Report Safer Use Action Plan is completed pursuant to 22 CFR Regulation 216.3 (b) – USAID pesticide procedures – and duly approved. Actions involving pesticide safer use training, IPM measures and extension outreach, but not procurement or use of pesticides, may proceed with an approved EMMP in place.

Support for seed and seedlings and the introduction of improved crop varieties: No introduction of non-native species should take place where it is likely to cause economic harm, environmental harm or harm to human health. Invasive species will not be introduced. All seed and seedling introduction should conform to local sanitary and phytosanitary standards and be considered for their applicability to local conditions. Only seeds appropriate to the agro-climatic zones will be promoted. However, climate change will be considered as well in the selection of appropriate seeds based on the agro-climatic zone.
Pesticide use and procurement (including herbicides, insecticides, acaricides and fungicides) is disallowed until such time that a PERSUAP is completed pursuant to 22 CFR Regulation 216.3 (b) – USAID pesticide procedures – and duly approved. Actions involving pesticide safer use training, IPM measures and extension outreach, but not procurement or use of pesticides, may proceed with an approved EMMP in place.

Fertilizer procurement or use: Support for fertilizer procurement or use that includes training, demonstrations, supply, and other support including provision of fertilizers organic and inorganic, green manure, and other soil amendments for integrated soil management including provision of vouchers, facilitation of access to inputs or work with input suppliers and other actions that provide direct and indirect support related to fertilizer use and procurement. Emphasize and fully integrate information on the environmental risks associated with fertilizer use and best management practices to mitigate these risks. This information should at a minimum be consistent with the risks and best practices outlined in USAID’s Africa Bureau Fertilizer Factsheet. Develop and implement appropriate safeguards to protect human health and the local ecosystems based on toxicological and environmental data for the proposed fertilizers or soil inoculums. Such safeguards will address product storage, handling and application, including the use of PPE, clean-up and disposal.

Agricultural tools and machinery: All introductions of new technologies and machinery must be screened for environmental and social impacts over the lifetime use of equipment assessing its potential impacts on air, water, and soil pollution, labor safety and sustainability.

Protection of crops, seeds and post-harvest and food aid commodities protection that require support of pesticides (including promotion, provision of vouchers, improved access to agrodealers and support provided to agrodealers, integrated pest management [IPM] training, provision of PPE, pesticide treatment, or use of pesticide treated seed): The procurement or use of pesticides, including herbicides, insecticides, acaricides, and fungicides, is disallowed until such time that a PERSUAP is completed pursuant to 22 CFR Regulation 216.3 (b)—USAID pesticide procedures— and duly approved. Actions involving pesticide safer use training, IPM measures, and extension outreach, but not procurement or use of pesticides, may proceed with an approved EMMP in place (see Section 6 for special limitations). Fumigation of aid commodities will be guided by the USAID Programmatic Environmental Assessment (PEA) for Phosphine Fumigation of Stored Agricultural Commodity.

Livestock Production: ViMPlus will follow best practices and assure implementation of environmental mitigation and monitoring conditions specified in USAID’s Sectoral Guidelines for Livestock, Sectoral Guidelines for Agriculture, and Sectoral Guidelines for Dryland Agriculture. Livestock production and increased diversity of livestock holdings must be informed by assessments of carrying capacity, GHG considerations and social impacts, including potential conflicts over access to private or communal natural resources. The assessment results will provide input for the planning of interventions. Interventions that intensify livestock production or lead to the intensification of livestock production will integrate actions aimed at improved rangeland management, feed management, and water resources management. ViMPlus will implement water access management options for protection of drinking water sources and riparian protection (e.g. use of alternative water sources, herding, manure disposal and fencing). ViMPlus will introduce practices aimed at minimizing GHG emissions (e.g. improved animal
nutrition, manure management, pasture management). No new breeds will be introduced without careful review and coordination by a trained specialist and in consultation with relevant Government ministries and institutions as required by host country regulations. Finally, ViMPlus will conduct a consultation with stakeholders prior to initiative of livestock intensification or fodder production involving shared community resources.

**Promotion of veterinary and animal health services** (including training in veterinary services, vaccination campaigns, use of veterinary products): ViMPlus will follow best practices and assure implementation of environmental mitigation and monitoring conditions specified in USAID’s Sectoral Guidelines for Livestock. All interventions supporting veterinary actions, including engagement in vaccination campaigns must address the impacts of generation and management of veterinary waste including sharps. Training of VVs must address occupational health and safety risks in animal veterinary practice, including the transmission of zoonotic disease. Sharps, hazardous and biohazardous waste and veterinary pharmaceutical waste will be disposed of in accordance with local regulations and guidelines. Individuals who are involved in the collection and removal of veterinary waste must be properly trained and use appropriate personal protective equipment (PPE). ViMPlus will promote community awareness of zoonotic disease. All actions associated with the use of veterinary drugs must address generation of residues in animal derived products and food safety. Where veterinary drugs are addressed, promoted and introduced, actions must assess risks and develop measures to prevent contamination of soil, and bodies of water caused by veterinary medicinal products used in livestock farming. ViMPlus will promote and use non-chemical methods for control of livestock pests where practical.

Finally, the procurement or use of pesticides, including herbicides, insecticides, acaricides, and fungicides, is disallowed until such time that a PERSUAP is completed pursuant to 22CFR Regulation 216.3 (b)—USAID pesticide procedures—and duly approved. Actions involving pesticide safer use training, IPM measures, and extension outreach, but not procurement or use of pesticides, may proceed with an approved EMMP in place.

**Livestock/poultry feed management, promotion and introduction of improved feed, and introduction of new fodder species:** ViMPlus will follow best practices and assure implementation of environmental mitigation and monitoring conditions specified in USAID Sectoral Guidelines for Agriculture, USAID Sectoral Guidelines for Dryland Agriculture, and USAID Sectoral Guidelines for Livestock. New fodder crops and species introduced which comply with conditions provided in Intervention Category I on agriculture and crop production. New land will not be cleared for fodder production, but degraded land may be restored for fodder production. Introduction of new feed to animals will seek to formulate rations that improve production levels, while simultaneously minimizing environmental impacts associated with excreta. Support for fodder production will include training on environmentally sound practices including use of inputs, IPM, and mitigating impacts on local biodiversity. Finally, procurement or use of pesticides, including herbicides, insecticides, acaricides, and fungicides, is disallowed until a PERSUAP is completed pursuant to 22CFR Regulation 216.3 (b)—USAID pesticide procedures—and duly approved. Actions involving pesticide safer use training, IPM measures, and extension outreach, but not procurement or use of pesticides, may proceed with an approved EMMP in place.

**TABLE 5I: SUMMARY OF MITIGATION MEASURES FOR INTERVENTION 32 LEAD FARMER EXTENSION MODEL**
<table>
<thead>
<tr>
<th>Intervention 31. Producer Organization Capacity Building</th>
<th>Mitigation Measures</th>
</tr>
</thead>
</table>
| **Agricultural production** | • Incorporate and promote sound environmental management practices in general conformity [USAID’s Sectoral Guidelines](https://www.usaid.gov).  
• Selection and demonstration of crops for cultivation should reflect environmental conditions.  
• Include sensitization of partners, stakeholders and beneficiaries to climate risks of agriculture and required environmental safeguards.  
• Promote environmental safeguards and climate adaptation for agricultural actions,  
• Plot siting will take into consideration local and cultural constructs and norms;  
• Promote pesticide safer use capacity building strategy. |
| **FMNR, soil and water conservation measures, and plantings and land reclamation actions** | • Integrate best practices in accordance with [USAID’s Sectoral Guidelines for CBNRM](https://www.usaid.gov), [Sectoral Guidelines for Forestry](https://www.usaid.gov), and [Sectoral Guidelines for Dryland Agriculture](https://www.usaid.gov).  
• ERR/ERR process for large demonstration plots or grants to communities to implement these techniques on common land larger than 4 ha  
• Assure implementation of any environmental mitigation and monitoring conditions specified by the approved ERF/ERR.  
• Involve local authorities to ensure local authorization and agreement with the action on common land.  
• Develop training manual for implementation and maintenance, planned and overseen by a forester or agronomist  
• Build capacity of CVDs and communities to implement NRM practices.  
• Consult qualified forester, agronomist or biologist for species selection. |
| **Provision, distribution, promotion of, and training in use of fertilizers** | • Conform to best practices outlined in the [Africa Bureau Fertilizer Fact Sheet](https://www.usaid.gov).  
• Complete and obtain approval of a Pesticide Evaluation Report Safer Use Action Plan  
• Integrate actions involving pesticide safer use training, IPM measures and extension outreach, into the EMMP. |
| **Seed, seedlings and improved crop varieties** | • Non-native species should take place where it is likely to cause economic harm, environmental harm or harm to human health. Invasive species will not be introduced.  
• All seed and seedling introduction should conform to local sanitary and phytosanitary standards and be considered for their applicability to local conditions.  
• Only seeds appropriate to the agro-climatic zones will be promoted.  
• Impact of climate change will be considered in seed selection. |
| **Pesticide use and procurement** | • A PERSUAP is must be competed and duly approved prior to start of interventions. |
| **Fertilizer procurement or use** | • Safer use training, IPM measures and extension outreach may proceed with an approved EMMP.  
• Integrate information on the environmental risks associated with fertilizer use and best management practices to mitigate these risks, per the USAID’s Africa Bureau Fertilizer Factsheet.  
• Develop and implement appropriate safeguards (for product storage, handling and application) to protect human health and the local ecosystems. |
| **Agricultural tools and machinery** | • Screen new technologies and machinery for environmental and social impacts.  
| **Protection of crops, seeds and post-harvest** | • A PERSUAP must be developed and approved prior to interventions involving pesticides.  
• EMMP must be developed and approved prior to interventions on pesticide safer use training, IPM measures, and extension outreach.  
| **Livestock Production** | • Follow best practices specified in USAID’s Sectoral Guidelines for Livestock, Sectoral Guidelines for Agriculture, and Sectoral Guidelines for Dryland Agriculture.  
• Assess carrying capacity, GHG considerations and social impact of livestock interventions.  
• Integrate improved management for rangeland, feed and water resources into livestock intensification interventions.  
• Implement water access management protection of drinking water sources and riparian.  
• Introduce practices that minimize GHG emissions.  
• Follow host government regulations prior to introduction of new breeds.  
• Complete stakeholder consultation prior to livestock intensification or fodder production involving shared community resources. |
| **Promotion of veterinary and animal health services** | • Follow best practices and assure implementation of environmental mitigation and monitoring conditions specified in USAID’s Sectoral Guidelines for Livestock.  
• Address impacts of generation and management of veterinary waste.  
• Train VVVs on occupational health and safety risks in animal veterinary practice.  
• Ensure disposal of veterinary pharmaceutical waste in accordance with local regulations and guidelines.  
• Promote community awareness of zoonotic disease.  
• Address drug residues in animal derived products and food safety.  
• Assess risks and develop preventative measures against environmental contamination caused by veterinary medicinal products.  
• Promote and use non-chemical methods for control of livestock pests where practical.  
• A PERSUAP must be developed and approved prior to interventions involving pesticides.  
• EMMP must be developed and approved prior to interventions on pesticide safer use training, IPM measures, and extension outreach. |
Livestock/poultry feed management, promotion and introduction of improved feed, and introduction of new fodder species

- Introduce new fodder crops and species that comply with conditions provided in Intervention Category I on agriculture and crop production.
- New land will not be cleared for fodder production, but degraded land may be restored for fodder production.
- Formulate new feed rations to production levels and minimize environmental impacts of excreta.
- Train on environmentally sound practices including use of inputs, IPM, and mitigating impacts.
- A PERSUAP must be developed and approved prior to interventions involving pesticides.
- EMMP must be developed and approved prior to interventions on pesticide safer use training, IPM measures, and extension outreach.

INTERVENTION 34. LOWLANDS AND IP REHABILITATION

ViMPlus intends to rehabilitate lowland and irrigated perimeters (IP) to extend production opportunities to women and youth, particularly for highly nutritious off-season production of vegetables. Rehabilitation of irrigation systems (including irrigated perimeters) or lowland areas under 200 hectares in Cultivable Command Area (CCA) are recommended as Negative Determination with Conditions. Proposed mitigation measures for this intervention includes: ViMPlus will follow best practices and assure implementation of environmental mitigation and monitoring conditions specified in USAID Sectoral Guidelines for Agriculture. Irrigation projects will be planned and managed with community participation in the context of overall regional development plans, including both the upland catchment areas and the catchment areas downstream and will consider the role of the community in construction and management of the system and mechanisms for potential conflicts resolution. The planning process will consider the capacity of land and water resources and their seasonal water variability to support irrigation for the number of users, optimum scale of the scheme, and potential impacts on the soils. The following considerations will be integrated as appropriate in developing irrigation projects: 1) locating the irrigation project on the site where negative impacts are minimized; 2) improving the efficiency of existing projects and restoring degraded croplands to use rather than establishing a new irrigation project; 3) developing small-scale, individually-owned irrigation systems as an alternative to large-scale, publicly-owned and managed schemes; 4) using micro-irrigation systems to decrease the risk of waterlogging, erosion and inefficient water use; 5) using treated wastewater, where appropriate, to make more water available to other users; training farmers in water management. Water quality will be tested on the annual basis, however in locations where water quality tends to be low, more frequent testing should be conducted. The parameters of importance for irrigation water testing include: salinity, infiltration, specific ion toxicity, and other parameters depending on the scale and type of irrigation system. In addition to these general conditions, specific conditions will be established based on screening of actions implemented under this category using an Environmental Irrigation Checklist to be developed by ViMPlus.
TABLE 5J: SUMMARY OF MITIGATION MEASURES FOR INTERVENTION 34. LOWLANDS AND IP REHABILITATION

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowlands and IP Rehabilitation</td>
</tr>
<tr>
<td>• Follow best practices in USAID Sectoral Guidelines for Agriculture.</td>
</tr>
<tr>
<td>• Plan and manage irrigation with community participation.</td>
</tr>
<tr>
<td>• Consider capacity of land and water resources to support irrigation for the number of users and potential impacts on the soils.</td>
</tr>
<tr>
<td>• Locate on the site where negative impacts are minimized</td>
</tr>
<tr>
<td>• Improve the efficiency of existing projects and restoring degraded croplands rather than a new irrigation project;</td>
</tr>
<tr>
<td>• Develop small-scale, individually-owned irrigation systems;</td>
</tr>
<tr>
<td>• Use micro-irrigation systems;</td>
</tr>
<tr>
<td>• Use treated wastewater, where appropriate,</td>
</tr>
<tr>
<td>• Train farmers in water management.</td>
</tr>
<tr>
<td>• Test water quality annually, or more frequently where water quality tends to be low.</td>
</tr>
<tr>
<td>• Develop and use Environmental Irrigation Checklist</td>
</tr>
</tbody>
</table>

INTERVENTION 37. INCREASED ACCESS TO POST-HARVEST HANDLING (PHH) AND VALUE-ADDED PROCESSING

ViMPlus intends to train POs in improved PHH and value-added processing as opportunities to increase revenue and food security through decreased PH losses and improved income. Interventions in PHH and processing have been identified as Negative Determination with Conditions.

**Agricultural harvest and post-harvest actions that include:** 1) training, capacity building and technical assistance (both field and classroom), introductions and demonstrations of harvest and post-harvest techniques and technologies; 2) research of harvest and post-harvest technologies; 3) providing or organizing collection points or intermediary collection centers for produce; and 4) packaging and transportation of commodities, including seed bags or PICS. The following mitigation measures are recommended for this intervention. All introductions of post-harvest technologies and use of machinery must be screened for environmental and social impacts over the lifetime use of equipment assessing its potential impacts on air, water, and soil pollution, labor safety and sustainability. Development and support of value chains based on forest products will incorporate cleaner production and waste energy and water minimization best practices. All post-harvest actions where waste is generated will have a waste management plan. Support for micro and small-scale processing enterprises will follow guidelines outlined by USAID’s Food Processing Sector Guidelines.

TABLE 5K: SUMMARY OF MITIGATION MEASURES FOR INTERVENTION 37 INCREASED ACCESS TO PHH AND VALUE-ADDED PROCESSING

<table>
<thead>
<tr>
<th>Intervention 37. Increased PHH and Value-Added Processing</th>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Agricultural harvest and post-harvest actions

- Screen all post-harvest technologies and machinery must be screened for environmental and social impacts.
- Incorporate cleaner production for forest products value chains.
- Develop waste management plans for all post-harvest actions.
- Support for micro and small-scale processing enterprises will follow guidelines outlined by USAID’s Food Processing Sector Guidelines.

INTERVENTION 38. INCREASED ACCESS TO STORAGE

ViMPlus will oversee the rehabilitation or construction of 50 storage facilities, especially in Stabilize communes and villages where the need is greatest.

Construction, rehabilitation or upgrading of infrastructure and building structures <1,000 m² (including but not limited to produce collection and marketing structures, transport hubs, post-harvest storage, animal housing structures, and other small structures, warehouses, health facilities and clinics, cooperative storage or processing facilities): Sites with no complicating factors, meet the following criteria: 1) Not within 30m of a permanent or seasonal stream or water body; 2) Does not involve displacement of existing settlement/inhabitants; 3) Has an average slope of less than 5 percent; 4) Not heavily forested, in an otherwise undisturbed local ecosystem, or in a protected area; 5) Disturbed area of more than 1,000 sq. meters or 10 km (for rural feeder roads) and 6) Less than $250,000 total cost.

For sites with no complicating factors, a Negative Determination with Conditions has been recommended and all construction / rehabilitation actions shall be conducted following the principles as provided in the USAID Sectoral Guidelines for Small Scale Construction, including:

- No construction should be undertaken without the relevant permits and licenses. Where construction is being undertaken on communal land, community engagement in planning and decision making needs to be considered.
- Construction actions will introduce required measures to minimize solid waste pollution, water pollution and polluted water runoff, soil pollution and noise and air pollution in a manner generally consistent with the Best Practices in Construction, including the development of construction management plans, promotion of resource efficiency, and environmentally friendly procurement of materials.
- Construction will be properly sited in accordance with water and groundwater resources.
- Occupational safety and health of employees will be ensured through development of site health and safety plans which adhere to best safety practices and availability of PPE.
- No lead paint or asbestos will be used in construction.
- The procurement or use of pesticides, including herbicides, insecticides, acaricides, and fungicides, is disallowed until such time that a PERSUAP is completed pursuant to 22CFR Regulation 216.3 (b)—USAID pesticide procedures—and duly approved. Actions involving pesticide safer use training, IPM measures, and extension outreach, but not procurement or use of pesticides, may proceed with an approved EMMP in place.

For multiple sites of 1,000m² or for construction of structures above 1,000m² but less than
10,000m², the above conditions apply, in addition:

1. An engineer will plan and supervise all construction designs and actions.
2. Construction management plans and pre-construction site surveys will include specific mitigation measures and capture baseline data for the site. Surveys and management plans should address:
   - Water hydrology and water resources adequacy, availability, and location
   - Soil type and slope of the site
   - Vegetation removal and replanting requirements
   - Land uses by the local community and access rights

*Protection of crops, seeds and post-harvest and food commodities protection* that require support of *pesticides* (including promotion, provision of vouchers, improved access to agrodealers and support provided to agrodealers, integrated pest management [IPM] training, provision of PPE, pesticide treatment, or use of pesticide treated seed): The procurement or use of pesticides, including herbicides, insecticides, acaricides, and fungicides, is disallowed until such time that a PERSUAP is completed pursuant to 22CFR Regulation 216.3 (b)—USAID pesticide procedures— and duly approved. Actions involving pesticide safer use training, IPM measures, and extension outreach, but not procurement or use of pesticides, may proceed with an approved EMMP in place (see Section 6 for special limitations).

### TABLE 5L: SUMMARY OF MITIGATION MEASURES FOR INTERVENTION 38 INCREASED ACCESS TO STORAGE

<table>
<thead>
<tr>
<th>Intervention 38. Increased Access to Storage</th>
<th>Mitigation Measures</th>
</tr>
</thead>
</table>
| Construction, rehabilitation or upgrading of infrastructure and building structures <1,000 m² Sites with no complicating factors | - All construction shall be conducted following the [USAID Sectoral Guidelines for Small Scale Construction](#)
- Relevant permits and licenses required.
- Minimize waste, air, water, soil and noise pollution consistent with best practices.
- Construction will be sited in accordance with water and groundwater resources.
- Occupational safety and health of employees will be ensured through development of site health and safety plans.
- No lead paint or asbestos will be used in construction.
- A PERSUAP must be developed and approved prior to interventions involving pesticides.
- EMMP must be developed and approved prior to interventions on pesticide safer use training, IPM measures, and extension outreach. |

For multiple sites of 1,000m² or for construction of structures above 1,000m² but less than 10,000m², the above conditions apply, in addition:

- An engineer will plan and supervise all construction designs and actions.
- Construction management plans and pre-construction site surveys will include specific mitigation measures and capture baseline data for the site. Surveys and management plans should address: Water hydrology and water resources adequacy, availability, and location Soil type and slope of the site.
Protection of crops, seeds and post-harvest and food commodities protection

- A PERSUAP must be developed and approved prior to interventions involving pesticides.
- EMMP must be developed and approved prior to interventions on pesticide safer use training, IPM measures, and extension outreach.

**INTERVENTION 39. LAUNCH BUSINESS ACCELERATOR AND ENTREPRENEURSHIP TRAINING FOR AGRICULTURAL AND NONFARM BUSINESSES**

In order to encourage diversification of livelihoods and develop employment opportunities, ViMPlus will launch a business accelerator program that will provide intensive business training, coaching, networking and financing support for existing and start-up microentrepreneurs. ViMPlus will support the growth of 250 agriculture and livestock and 250 nonfarm businesses in Centre Nord.

Support to agricultural and non-farm business enterprises through the accelerator will cover both off-farm and non-farm businesses, and some may be categorized as Negative Determination, while others will be categorized as Negative Determination with Conditions.

Based on this, ViMPlus recommends a site-specific subsidiary environmental review for the implementation of this intervention, using the AFR ERF/ERR process. The ERF/ERR must be reviewed and approved by the A/COR, MEO, and REO prior to implementation of the action. The awardee/IP must assure implementation of any environmental mitigation and monitoring conditions specified by the approved ERF/ERR.

All direct and grants livelihood diversification activities must have environmental mitigation and monitoring measures generally consistent with applicable good-practice guidance in USAID’s Sector Environmental Guidelines.

**TABLE 5M: SUMMARY OF MITIGATION MEASURES FOR INTERVENTION 39 LAUNCH BUSINESS ACCELERATOR AND ENTREPRENEURSHIP TRAINING FOR AGRICULTURAL AND NONFARM BUSINESSES**

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention 39. Launch Business Accelerator and Entrepreneurship Training for Agricultural and Non-Farm Businesses</td>
</tr>
<tr>
<td>- Complete site-specific subsidiary environmental review for the implementation of this intervention, using the AFR ERF/ERR process.</td>
</tr>
<tr>
<td>- The ERF/ERR must be reviewed and approved by the A/COR, MEO, and REO prior to implementation of the action.</td>
</tr>
<tr>
<td>- Assure implementation of any environmental mitigation and monitoring conditions specified by the approved ERF/ERR.</td>
</tr>
<tr>
<td>- Integrate environmental mitigation and monitoring measures generally consistent with applicable good-practice guidance in USAID’s Sector Environmental Guidelines.</td>
</tr>
</tbody>
</table>

**INTERVENTION 40. YOUTH ENTREPRENEURSHIP CLUBS (YECS)**
ViMPlus will train YECs in entrepreneurship, work readiness, vocational skills, literacy and numeracy. ViMPlus will also facilitate technical training for members through vocational training partners such as ANPE. Entrepreneurship, work readiness, literacy and numeracy training are recommended as Categorical Exclusion, as there is no anticipated negative impact on the environment as a result of these trainings. However, some vocational training may include technical areas such as mechanics or agriculture, which are recommended as Negative Determination with Conditions.

ViMPlus recommends a site-specific subsidiary environmental review for the implementation of this intervention, using the AFR ERF/ERR process. The ERF/ERR must be reviewed and approved by the A/COR, MEO, and REO prior to implementation of the action. The awardee/IP must assure implementation of any environmental mitigation and monitoring conditions specified by the approved ERF/ERR.

All direct and grants livelihood diversification activities must have environmental mitigation and monitoring measures generally consistent with applicable good-practice guidance in USAID’s Sector Environmental Guidelines.

**TABLE 5N: SUMMARY OF MITIGATION MEASURES FOR INTERVENTION 40 YOUTH ENTREPRENEURSHIP CLUBS**

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention 40. Youth Entrepreneurship Clubs</td>
</tr>
<tr>
<td>• Complete site-specific subsidiary environmental review for the implementation of this intervention, using the AFR ERF/ERR process.</td>
</tr>
<tr>
<td>• The ERF/ERR must be reviewed and approved by the A/COR, MEO, and REO prior to implementation of the action.</td>
</tr>
<tr>
<td>• Assure implementation of any environmental mitigation and monitoring conditions specified by the approved ERF/ERR.</td>
</tr>
<tr>
<td>• Integrate environmental mitigation and monitoring measures generally consistent with applicable good-practice guidance in USAID’s Sector Environmental Guidelines.</td>
</tr>
</tbody>
</table>

**INTERVENTION 42. FACILITATE ACCESS TO VOCATIONAL AND TECHNICAL SKILLS TRAINING**

ViMPlus will cover the tuition costs of youth to attend one of the 147 ANPE-affiliated training centers in Centre-Nord for vocational training, and work with ANPE to coordinate apprenticeships with employers for students that complete the scholarship training. ViMPlus will also facilitate networking events between selected Technical and Vocational Education and Training (TVET) centers, private-sector companies and the GoBF’s Special Job Creation Program for Youth (PSCE/JF) to ensure TVET programs respond to needs and facilitate viable employment opportunities. Some vocations studied, and apprenticeships provided will include areas with some risk for environmental and social impact, if no mitigation measures are undertaken. Therefore, a Negative Determination with Conditions is recommended for this intervention.
ViMPlus recommends a site-specific subsidiary environmental review for the implementation of this intervention, using the AFR **ERF/ERR process**. The ERF/ERR must be reviewed and approved by the A/COR, MEO, and REO prior to implementation of the action. The awardee/IP must assure implementation of any environmental mitigation and monitoring conditions specified by the approved ERF/ERR.

All direct and grants livelihood diversification activities must have environmental mitigation and monitoring measures generally consistent with applicable good-practice guidance in **USAID’s Sector Environmental Guidelines**.

**TABLE 50: SUMMARY OF MITIGATION MEASURES FOR INTERVENTION 42. FACILITATE ACCESS TO VOCATIONAL AND TECHNICAL SKILLS TRAINING**

<table>
<thead>
<tr>
<th>Mitigation Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention 42. Facilitate Access to Vocational and Technical Skills Training</td>
</tr>
<tr>
<td>• Complete site-specific subsidiary environmental review for the implementation of</td>
</tr>
<tr>
<td>this intervention, using the AFR <strong>ERF/ERR process</strong>.</td>
</tr>
<tr>
<td>• The ERF/ERR must be reviewed and approved by the A/COR, MEO, and REO prior to</td>
</tr>
<tr>
<td>implementation of the action.</td>
</tr>
<tr>
<td>• Assure implementation of any environmental mitigation and monitoring conditions</td>
</tr>
<tr>
<td>specified by the approved ERF/ERR.</td>
</tr>
<tr>
<td>• Integrate environmental mitigation and monitoring measures generally consistent</td>
</tr>
<tr>
<td>with applicable good-practice guidance in <strong>USAID’s Sector Environmental Guidelines</strong>.</td>
</tr>
</tbody>
</table>

**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, an IEE amendment if the activities are within the same activity, or other type of 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).

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 and environmental determinations:

- Support project preparation, project feasibility studies, or engineering design for activities listed in §216.2(d)(1);
- Affect endangered and threatened species or their critical habitats per §216.5, FAA 118, FAA 119;
- Provide support to extractive industries (e.g. mining and quarrying) per FAA 117;
Promote timber harvesting per FAA 117 and 118;
Lead to new construction, reconstruction, rehabilitation, or renovation work per §216.2(b)(1);
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.

ANNEXES:

1. ENVIRONMENTAL MITIGATION AND MONITORING PLAN

2. TEMPLATE FOR ENVIRONMENTAL STATUS REPORTS

3. GUIDANCE FOR RISK MANAGEMENT SCREENING
### ANNEX 1: ENVIRONMENTAL MITIGATION AND MONITORING PLANS

<table>
<thead>
<tr>
<th>Interventions</th>
<th>Identified Environmental Aspects or Impacts</th>
<th>Mitigation Measure(s)</th>
<th>Monitoring Indicator(s)</th>
<th>Monitoring and Reporting Frequency/Methods</th>
<th>Responsible Parties</th>
</tr>
</thead>
</table>
| **Intervention 6. Resource Transfers** | Resource transfers can contribute to conflict  
Safety and security of recipients of resource transfers can be impacted by the process | Transparent and participatory beneficiary identification and selection process  
Security of beneficiaries considered during design of distribution process | Census and HEA process report  
# of people benefitting from USG-supported social assistance programming | Y1, updated as required  
Quarterly, through distribution activities | M&E/DCOP  
Technical/DCOP  
Operations/COP |
| **Cash and non-food items (Excluding Ag Inputs and Animals)** | Fumigation of stored food commodities can have a negative impact on the environment | Verification of appropriateness of inputs to be distributed for agro-ecological zone  
Ensure quality control of inputs should be completed to ensure sanitary and phytosanitary standards are met  
Fertilizer distribution must conform to best practices outlined in the Africa Bureau Fertilizer Fact Sheet. Animals for distribution certified by veterinarian and authorities from the Ministry of Livestock | Input and animal selection documentation  
Quality control testing reports, certification of inputs (seeds)  
Fertilizer distribution will be accompanied by training in best use practices and monitoring of use.  
Certification reports from veterinarian | Pre-planning documentation, as required  
Pre-distribution controls, as required  
Pre-distribution training, monitoring use during planting season | DCOP  
Technical/DCOP  
Operations/COP |
| **Agricultural Inputs and Animals** | | | | | |

**Annex 1 Note:** Interventions are identified to assess impacts and provide mitigation and monitoring measures. Monitoring and reporting frequency methods are determined by the responsible parties, ensuring compliance and effective implementation.
<table>
<thead>
<tr>
<th>Food (Commodity fumigation)</th>
<th>PERSUAP and Fumigation Management Plan will be developed before fumigation is undertaken by ViMPlus. Fumigation will only be completed by certified fumigators, and fumigants should be applied according to the directions on the product label, following all directions, precautions, and restrictions. Warehouse staff will be trained using TOPS Warehouse Staff Safety Guide.</th>
<th>PERSUAP and Fumigation Management Plan are available. List of certified fumigators available. Contracts with certified fumigators with specifications available. Warehouse staff receive certificate of completion for Safety training. Regular spot checks at warehouse to ensure proper safety measures followed.</th>
<th>Y1, reviewed annually. As needed. As needed. As needed. At least monthly.</th>
<th>DCOP Operations/Program Manager/COP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention 8. Quarterly Meeting of CVDs on Shared Resources</td>
<td>Failure to understand or enforce sustainable use of common resources. Failure to successfully mitigate conflict over common resources. CVDs and stakeholder groups trained in conflict management and mitigation skills as part of the capacity building work.</td>
<td># of conflicts successfully managed by local authorities and communities. Regular monitoring of CVD capacity to manage and mitigate conflict during site visits.</td>
<td>Quarterly. Routine Monitoring (RM). Quarterly, RM.</td>
<td>M&amp;E/DCOP Technical/COP. Field agents/ M&amp;E/ DCOP Technical/COP</td>
</tr>
<tr>
<td>Intervention</td>
<td>Description</td>
<td>Methods</td>
<td>Monitoring</td>
<td>Malpractice Monitoring</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>---------</td>
<td>------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>18. Promote Birth Spacing and Family Planning, Especially for Youth</td>
<td>Increased use of birth spacing and family planning methods increases medical waste.</td>
<td>Messaging includes information on best practices for medical waste disposal.</td>
<td># of beneficiaries reached with messaging</td>
<td>Regular monitoring of disposal of medical waste during site visits,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26. Build Capacity of Masons to Supply Quality Latrines</td>
<td>Trained masons fail to comply with safe placement and construction guidance, potentially leading to water and soil contamination.</td>
<td>Ensuring appropriate placement and design to respond to needs of women and youth.</td>
<td># Masons trained in best practices</td>
<td>Monitor latrine construction by trained masons</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27. Establishment of New Women and Youth-Led Businesses to Sell WASH Products</td>
<td>Potential soil and water pollution risk from production of some WASH products (soap-making, etc.)</td>
<td>Training for WASH-product businesses shall include modules on worker safety, responsible materials sourcing</td>
<td>Training modules exist</td>
<td>Monitoring reports exist</td>
</tr>
</tbody>
</table>
Intervention 29. Construction of Multiple-Use Water Systems

| Construction of Boreholes for Mixed-Use | MUSs and latrine design should incorporate needs of women and youth to ensure appropriate access. Construction of MUS and latrines may contribute to ground water depletion, disease transmission, contamination and odors, and materials used in construction may have a negative impact on the environment. Livestock waterpoints may contribute to water and soil contamination and disease transmission. | Ensure environmentally sound design by skilled professionals. Follow best practices from [USAID’s Sectoral Guideline for Water Supply and Sanitation](https://www.usaid.gov). Obtain all required applicable authorizations, licenses and permits from the local authorities. Measure groundwater capacity and discharge rates. Properly site and locate boreholes away (up slope and at least 50m) from sources of contamination. Test water in accordance with local standards, but at a minimum, tests water quality for fecal coliform and arsenic. Consult with stakeholders and community authorities before construction about governance and access. | Environmentally sound design exists # boreholes constructed using best practices Authorizations, licenses and permits from authorities exist Monitoring reports for water quality exist. | Y2, updated as needed Quarterly, RM Y2-5, updated as needed Annually | DCOP Technical/WASH Lead |

<p>| Construction of Latrines | Follow best practices specified in USAID’s Sectoral Guideline for Water Supply and Sanitation. Properly site, design and construct latrines to avoid discharge of chemical and microbial contaminants. | # of latrines constructed following best practices Monitoring reports for latrine maintenance and use exist. | Quarterly, RM | Quarterly, RM | DCOP Technical/WASH Lead |</p>
<table>
<thead>
<tr>
<th>Construction of Handwashing Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locate pit latrines at least 30 meters away from any water sources and at least 1.5 meters above the water table.</td>
</tr>
<tr>
<td>Build elevated toilets or septic tanks, where necessary.</td>
</tr>
<tr>
<td>Ensure that latrines are properly equipped, emptied and maintained.</td>
</tr>
<tr>
<td>Ensure that users have the means to wash their hands after latrine use.</td>
</tr>
<tr>
<td>Ensure that latrines are properly decommissioned.</td>
</tr>
<tr>
<td>Address social barriers to using latrines.</td>
</tr>
<tr>
<td>Follow best practices specified in <a href="#">USAID’s Sectoral Guideline for Water Supply and Sanitation</a>.</td>
</tr>
<tr>
<td>Ensure handwashing stations are appropriate for the local context.</td>
</tr>
<tr>
<td>Ensure no stagnant water pools are generated.</td>
</tr>
<tr>
<td>Location should be very close to latrine facilities.</td>
</tr>
<tr>
<td>In hot and dry season evaporation or use of wastewater for irrigation should be considered.</td>
</tr>
<tr>
<td>Key hygiene behaviors should be addressed.</td>
</tr>
<tr>
<td># handwashing stations built following best practices</td>
</tr>
<tr>
<td>Monitor use and maintenance of handwashing stations</td>
</tr>
<tr>
<td>Average number of critical moments for handwashing with soap that households can recall</td>
</tr>
<tr>
<td>Quarterly, RM</td>
</tr>
<tr>
<td>Quarterly, RM</td>
</tr>
<tr>
<td>Annual Survey</td>
</tr>
<tr>
<td>DCOP Technical/WASH Lead</td>
</tr>
</tbody>
</table>
### Construction of Irrigation Systems for <200 ha

- Follow best practices specified in [USAID's Sectoral Guideline for Water Supply and Sanitation](#).
- Ensure community participation in planning and management of irrigation project.
- Ensure adequate capacity of land and water resources and potential impacts on soils.
- Locate the irrigation project to minimize negative impacts. Improve the efficiency of existing projects rather than establishing a new irrigation project;
- Develop small-scale, individually-owned irrigation systems;
- Use micro-irrigation systems reduce risk;
- Use treated wastewater, where appropriate.
- Train farmers in water management
- Test water quality annually and more frequently where quality is low
- Establish Environmental Irrigation Checklist

<table>
<thead>
<tr>
<th>Metric</th>
<th>Frequency</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td># ha under improved irrigation</td>
<td>Quarterly, RM</td>
<td></td>
</tr>
<tr>
<td># farmers trained in improved water management</td>
<td>Quarterly, RM</td>
<td></td>
</tr>
<tr>
<td>Environmental Irrigation Checklist exists</td>
<td>Y1</td>
<td></td>
</tr>
<tr>
<td>Water quality test results available</td>
<td>Annually</td>
<td></td>
</tr>
</tbody>
</table>

### Livestock Watering Points

- Ensure environmentally sound design by skilled professionals.

<table>
<thead>
<tr>
<th>Metric</th>
<th>Frequency</th>
<th>Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td># watering points constructed following best practices</td>
<td>Quarterly, RM</td>
<td></td>
</tr>
</tbody>
</table>

DCOP Technical/WASH Lead
<table>
<thead>
<tr>
<th>Point of Use Water Purification</th>
<th>Follow best practices specified in USAID’s Sectoral Guidelines for Water Supply and Sanitation and USAID Sectoral Guidelines for Construction. Obtain all required applicable authorizations, licenses and permits from local authorities prior to construction. Pond siting and watering point assessments must address: 1) site selection and design to prevent groundwater contamination; 2) minimizing dust, erosion and sedimentation; 3) damage to sensitive wetland ecosystems; and 4) mitigation measure to prevent runoff. Promote environmentally responsible livestock management.</th>
<th>Authorizations, licenses and permits exist. Regular monitoring to verify use and maintenance. # trained in environmentally responsible livestock management.</th>
<th>As needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water quality testing to verify the safety of drinking water. Adhere to Guidance Cable State 98 10865, covering arsenic testing. Adhere to USAID minimum testing of groundwater for arsenic and fecal coliform, at all water point construction or rehabilitation actions prior to opening of the water source to public consumption.</td>
<td>Water quality tests exist. Monitor use and maintenance of water points.</td>
<td>At least annually. Quarterly, RM.</td>
<td>DCOP Technical/WASH Lead</td>
</tr>
<tr>
<td>Intervention 31. Producer Organization Capacity Building &amp; Intervention 32. Lead Farmer Extension Model</td>
<td><strong>Agricultural Production</strong></td>
<td><strong>Incorporate and promote sound environmental</strong></td>
<td><strong># of individuals who have applied</strong></td>
</tr>
</tbody>
</table>
Women, youth and poor HHs may not be members of POs, due to poor land access, and therefore miss opportunities to participate in activities.

Training for POs that focus on agriculture and livestock rearing may have a negative impact on the environment if best practices are not respected. This may lead to: water pollution, human and animal health hazards, greenhouse gas emissions, acidification, land degradation, loss of biodiversity, air pollution and spread of invasive species.

<table>
<thead>
<tr>
<th>FMNR, soil and water conservation measures, and plantings and land reclamation actions</th>
<th>integrated best practices in accordance with USAID’s Sectoral Guidelines for Forestry, and Sectoral Guidelines for Dryland Agriculture. ERF/ERR process for large demonstration plots or grants to communities to implement these techniques on common land larger than 4 ha. Assure implementation of any environmental mitigation and monitoring conditions</th>
<th># of hectares under improved management practices or technologies that promote improved climate risk reduction and/or natural resources management with USG assistance Training modules on implementation and maintenance exist ERF/ERR exists for common land larger than 4 ha</th>
<th>Quarterly, RM</th>
<th>DCOP Technical/Livelihoods Lead/Agricultural Production Lead</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved management practices in general conformity USAID’s Sectoral Guidelines.</td>
<td>Selection and demonstration of crops for cultivation should reflect environmental conditions. Include sensitization of partners, stakeholders and beneficiaries to climate risks of agriculture and required environmental safeguards. Promote environmental safeguards and climate adaptation for agricultural actions,</td>
<td>Improved management practices or technologies with USG assistance Training modules and guidance include Pesticide Safer Use Practices</td>
<td>Y1</td>
<td>Lead/Agricultural Production Lead</td>
</tr>
<tr>
<td>Provision, distribution, promotion of, and training in use of fertilizers</td>
<td>Specified by the approved ERF/ERR. Involve local authorities to ensure local authorization and agreement with the action on common land. Develop training manual for implementation and maintenance, planned and overseen by a forester or agronomist. Build capacity of CVDs and communities to implement NRM practices. Consult qualified forester, agronomist or biologist for species selection.</td>
<td>Conform to best practices outlined in the Africa Bureau Fertilizer Fact Sheet. Complete and obtain approval of a Pesticide Evaluation Report Safer Use Action Plan Integrate actions involving pesticide safer use training, IPM measures and extension outreach, into the EMMP.</td>
<td>Training modules including best practices, safer use training and IPM measures exist PERSUAP approved # of individuals who have applied improved management practices or technologies with USG assistance</td>
<td>Y2 Y1 Annual Survey</td>
</tr>
<tr>
<td>Seed, seedlings and improved crop varieties</td>
<td>Non-native species should take place where it is likely to cause economic harm, environmental harm or harm to human health. Invasive species will not be introduced. All seed and seedling introduction should conform to local sanitary and</td>
<td>Pre-implementation evaluation report exists to determine potential risk, conformity with local phytosanitary standards and appropriateness to agro-climatic zones</td>
<td>As needed</td>
<td>DCOP Technical/Livelihoods Lead/Agricultural Production Lead</td>
</tr>
</tbody>
</table>
| **Pesticide use and procurement** | phytosanitary standards and be considered for their applicability to local conditions.  
Only seeds appropriate to the agro-climatic zones will be promoted.  
Impact of climate change will be considered in seed selection. | Approved PERSUAP exists  
Training modules include safer use training and IPM measures exist | Y1  
Y2 | **DCOP**  
Technical/Livelihoods Lead/Agricultural Production Lead |
|---|---|---|---|---|
| **Fertilizer procurement or use** | Integrate information on the environmental risks associated with fertilizer use and best management practices to mitigate these risks, per the [USAID’s Africa Bureau Fertilizer Factsheet](#).  
Develop and implement appropriate safeguards (for product storage, handling and application) to protect human health and the local ecosystems. | Training modules including best practices, safer use training and IPM measures exist  
Safeguards for product storage, handling and application exist  
Monitor implementation of best practices and appropriate safeguards | Y2  
Y2  
Quarterly, RM | **DCOP**  
Technical/Livelihoods Lead/Agricultural Production Lead |
| **Agricultural tools and machinery** | Screen new technologies and machinery for environmental and social impacts.  
Monitor use of screening tool and identified mitigation actions | Screening tool exists | Y2  
As needed | **DCOP**  
Technical/Livelihoods Lead/Agricultural Production Lead |
| Protection of crops, seeds and post-harvest | A PERSUAP must be developed and approved prior to interventions involving pesticides. EMMMP must be developed and approved prior to interventions on pesticide safer use training, IPM measures, and extension outreach | Approved PERSUAP exists | Y1 | DCOP Technical/Livelihoods Lead/Agricultural Production Lead | # of individuals who have applied improved management practices or technologies with USG assistance | Annual Survey | Y2 | Quarterly, RM |
| Livestock Production | Follow best practices specified in USAID’s Sectoral Guidelines for Livestock, Sectoral Guidelines for Agriculture, and Sectoral Guidelines for Dryland Agriculture. Assess carrying capacity, GHG considerations and social impact of livestock interventions. Integrate improved management for rangeland, feed and water resources into livestock intensification interventions. Implement water access management protection of drinking water sources and riparian. | Training modules including best practices for livestock production exist Monitor implementation of best practices for livestock production # of individuals who have applied improved management practices or technologies with USG assistance | Y2 | DCOP Technical/Livelihoods Lead/Agricultural Production Lead | Training modules including safer use training and IPM measures exist Monitoring of appropriate safer use and IPM practices | Quarterly, RM | Annual Survey |
| Promotion of veterinary and animal health services | Introduce practices that minimize GHG emissions.  
Follow host government regulations prior to introduction of new breeds.  
Complete stakeholder consultation prior to livestock intensification or fodder production involving shared community resources. | Approved PERSUAP exists  
Training modules for VVVs include best practices, occupational health and safety, disposal of pharmaceutical waste  
Monitor implementation of best practices by VVVs | Y1  
Y2  
Quarterly, RM | DCOP Technical/Livelihoods Lead/Livestock Production Lead |
Livestock/poultry feed management, promotion and introduction of improved feed, and introduction of new fodder species:

- Introduce new fodder crops and species that comply with conditions provided in Intervention Category I on agriculture and crop production.
- New land will not be cleared for fodder production, but degraded land may be restored for fodder production.
- Formulate new feed rations to production levels and minimize environmental impacts of excreta.

Approved PERSUAP exists
- Training modules for livestock, poultry and feed production incorporating best practices specified in USAID’s Sectoral Guidelines exist.
- Monitoring of implementation of livestock, poultry and feed production interventions to ensure best practices are followed.
- # of individuals who have applied improved management practices or technologies with USG assistance.

Y1
- Y2

Quarterly, RM
- Annual Survey

DCOP
- Technical/Livelihoods Lead/Livestock Production Lead
Train on environmentally sound practices including use of inputs, IPM, and mitigating impacts.

A PERSUAP must be developed and approved prior to interventions involving pesticides.

EMMP must be developed and approved prior to interventions on pesticide safer use training, IPM measures, and extension outreach.

### Intervention 34. Lowlands and IP Rehabilitation

- Lowlands and IP rehabilitation may lead to conflict if communal land use rights are not negotiated up front, particularly for women, youth and other vulnerable groups.

  - The rehabilitation of lowlands and IPs may negatively impact the environment, specifically contributing to: construction impact on environment, soil salinity, water logging, hydrology, erosion and sedimentation, destruction of soil structure, human health risks, water quality and impact on ecosystems.

- Follow best practices in USAID Sectoral Guidelines for Agriculture.

- Plan and manage irrigation with community participation.

- Consider capacity of land and water resources to support irrigation for the number of users and potential impacts on the soils.

- Locate on the site where negative impacts are minimized.

- Improve the efficiency of existing projects and restoring degraded croplands rather than a new irrigation project.

- Train farmers in water management.

- Environmental Irrigation Checklist Developed

- Pre-rehabilitation assessment completed, and local authorization obtained.

- Training modules in best water management practices exist.

- Monitoring sites to ensure best water management practices implemented.

- Water quality tested

- # of ha under improved management practices

| Y1 | As needed |
| Y2 | Quarterly, RM |
| Annually | Annual Survey |

DCOP Technical/Livelihoods Lead/COP
### Intervention 37. Increased Access to Post-Harvest Handling

<table>
<thead>
<tr>
<th>Description</th>
<th>Action Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test water quality annually, or more frequently where water quality tends to be low.</td>
<td>or technologies with USG assistance</td>
</tr>
<tr>
<td>Develop and use Environmental Irrigation Checklist</td>
<td></td>
</tr>
</tbody>
</table>

### Intervention 38. Increased Access to Storage

<table>
<thead>
<tr>
<th>Description</th>
<th>Action Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of storage facilities to be used and/or owned by POs may lead to conflict generating from land tenure and common ownership questions.</td>
<td>All construction shall be conducted following the USAID Sectoral Guidelines for Small Scale Construction</td>
</tr>
<tr>
<td>Construction of storage facilities could lead to the following environmental impacts: disturbance to existing landscape/habitat; sedimentation/fouling of surface waters; increased standing water; occupational and</td>
<td>Approved PERSUAP exists</td>
</tr>
<tr>
<td></td>
<td>Relevant permits and licenses obtained</td>
</tr>
<tr>
<td></td>
<td>Pre-construction site surveys developed to mitigated environmental risk</td>
</tr>
<tr>
<td></td>
<td>Construction/ rehabilitation planning design by local engineer</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y1</td>
<td>As needed</td>
</tr>
<tr>
<td>Y2</td>
<td>As needed</td>
</tr>
</tbody>
</table>

### DCOP Technical/Livelihoods Lead/COP

- Annual survey
- Quarterly, RM
| Community health and safety hazards; increased demand for water; increased production of sewage and waste water; increase air and noise pollution; adverse impacts of materials sourcing; use, storage and disposal of toxic materials; and use of burnt bricks. | Occupational safety and health of employees will be ensured through development of site health and safety plans. No lead paint or asbestos will be used in construction. A PERSUAP must be developed and approved prior to interventions involving pesticides. EMMMP must be developed and approved prior to interventions on pesticide safer use training, IPM measures, and extension outreach. | Monitoring of site to ensure practices to minimize risk to environment and human health have been taken # of improved warehouses built or rehabilitated | Quarterly, RM

| For multiple sites of 1,000m² or for construction of structures above 1,000m² but less than 10,000m² | In addition to the above, an engineer will plan and supervise all construction designs and actions. Construction management plans and pre-construction site surveys will include specific mitigation measures and capture baseline data for the site. Surveys and management plans should address: Water hydrology and water resources adequacy, availability, and location Soil type and slope of the site. |  |  |

| Protection of crops, seeds and post-harvest commodities protection | Pesticide use and fumigation for the protection of stored commodities may have an impact on soil, water and human health. A PERSUAP must be developed and approved prior to interventions involving pesticides. EMMMP must be developed and approved prior to interventions on pesticide safer use training, IPM. | Approved PERSUAP exists Training modules on pesticide safer use, IPM available Monitor implementation of PH | Y1 Y2 Quarterly, RM |

<p>| | | | |
|  |  |  |  |</p>
<table>
<thead>
<tr>
<th>Intervention 39. Launch Business Accelerator and Entrepreneurship Training for Agricultural and Non-Farm Businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expansion of agribusinesses in PHH and value-added processing, and some non-farm businesses may contribute to increased solid and liquid waste production, increased energy consumption, risks from chemical use and machinery.</td>
</tr>
<tr>
<td>Complete site-specific subsidiary environmental review for the implementation of this intervention, using the AFR <a href="#">ERF/ERR process</a>.</td>
</tr>
<tr>
<td>Assure implementation of any environmental mitigation and monitoring conditions specified by the approved ERF/ERR.</td>
</tr>
<tr>
<td>Integrate environmental mitigation and monitoring measures generally consistent with applicable good-practice guidance in <a href="#">USAID’s Sector Environmental Guidelines</a>.</td>
</tr>
<tr>
<td>Screening tools (ERF) approved</td>
</tr>
<tr>
<td>Complete screening for proposed enterprises</td>
</tr>
<tr>
<td>Monitor implementation of environmental mitigation measures</td>
</tr>
<tr>
<td>Y2</td>
</tr>
<tr>
<td>As needed</td>
</tr>
<tr>
<td>Quarterly, RM</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Intervention 40. Youth Entrepreneurship Clubs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some businesses established through YECs could contribute to soil and water pollution, as well as human safety and health concerns</td>
</tr>
<tr>
<td>Complete site-specific subsidiary environmental review for the implementation of this intervention, using the AFR <a href="#">ERF/ERR process</a>.</td>
</tr>
<tr>
<td>Assure implementation of any environmental mitigation and monitoring conditions specified by the approved ERF/ERR.</td>
</tr>
<tr>
<td>Integrate environmental mitigation and monitoring measures generally consistent with applicable good-practice guidance in <a href="#">USAID’s Sector Environmental Guidelines</a>.</td>
</tr>
<tr>
<td>Screening tools (ERF) approved</td>
</tr>
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</tr>
<tr>
<td>Monitor implementation of environmental mitigation measures</td>
</tr>
<tr>
<td>Y2</td>
</tr>
<tr>
<td>As needed</td>
</tr>
<tr>
<td>Quarterly, RM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intervention 42. Facilitate Access to Vocational Technical Skills Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some vocational training may include activities that could contribute to soil and water pollution, as well as human safety and health concerns</td>
</tr>
</tbody>
</table>
## ENVIRONMENTAL STATUS REPORT (ESR)

### ACTIVITY DATA

<table>
<thead>
<tr>
<th>Activity Name:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographic Location(s) (Country/Region):</td>
<td></td>
</tr>
<tr>
<td>Implementation Start/End Date:</td>
<td></td>
</tr>
<tr>
<td>Award Number:</td>
<td></td>
</tr>
<tr>
<td>Implementing Partner(s):</td>
<td></td>
</tr>
<tr>
<td>Link of Related IEE:</td>
<td></td>
</tr>
<tr>
<td>Life of Award (LOA) $:</td>
<td></td>
</tr>
</tbody>
</table>

### ORGANIZATIONAL/ADMINISTRATIVE DATA

| DCHA Office: |  |
| Lead BEO Bureau: |  |
| Prepared by: |  |
| Date Prepared: |  |

### ENVIRONMENTAL COMPLIANCE REVIEW DATA

| PREP Year: |  |
| Environmental Action Recommended: |  |
| Categorical Exclusion: |  |
| Positive Determination: |  |
| Negative Determination: |  |
| Deferral: |  |
PURPOSE AND SCOPE
Environmental Status Reports (ESRs) are required for USAID-funded activities when the 22 CFR 216 documentation governing the activity imposes conditions on at least one of the activity’s interventions. ESRs ensure that the ADS 204 requirements for reporting on environmental compliance are met.

The ESR meets both purposes of reporting and budget planning. ESRs report on status of mitigation and monitoring efforts in accordance with IEE requirements over the preceding activity implementation year. The ESR also describes environmental compliance resource needs over the course of the upcoming year (e.g., staffing, assessments, training, etc.).

The ESR is submitted by the Implementing Partner at least three (3) months prior to the annual Pipeline and Resource Estimate Proposal (PREP). The PREP describes an awardee's food security resource needs and activities over the course of the upcoming year.

USAID APPROVAL OF ENVIRONMENTAL STATUS REPORT

ACTIVITY NAME:

Clearance: Mission Environmental Officer (MEO) Date

Clearance: Food for Peace Officer (FFPO) Date

Clearance: Regional Environmental Officer (REO) Date

Clearance: Agreement Officer’s Representative (AOR) Date

Concurrence: Erika J. Clesceri, DCHA Bureau Environmental Officer (BEO) Date

1 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.
DISTRIBUTION: DCHA Climate Integration Lead (CIL); Regional Bureau Environmental Officer (BEO)

*Clearance recommended, but optional.
1.0 INTRODUCTION TO THE ENVIRONMENTAL STATUS REPORT

[INSTRUCTIONS (TO BE DELETED ONCE COMPLETED): Provide a brief synopsis of progress towards achieving environmental compliance and climate risk management objectives as detailed in the RFA IEE, Activity-level IEE and EMMP.

Awardees whose programs are making only limited progress towards achieving environmental compliance and climate risk management objectives should provide an explanation. Describe the extenuating circumstances outside of the control of the award that are impeding progress, and top-line approaches to address these obstacles in the upcoming years.]

2.0 STAFFING AND BUDGET FOR UPCOMING IMPLEMENTATION YEAR

[INSTRUCTIONS (TO BE DELETED ONCE COMPLETED): This section must include responses to Topics 1-4.]

A. STAFFING AND EXPERTISE:

[Topic 1: Describe staffing plan for environmental safeguards for the next year. Include responsibilities, level of effort, and authority of staff. A full-time staff with relevant expertise is required for monitoring and reporting on USAID environmental compliance in a timely and professional manner. For guidance, refer to the USAID toolkit describing methods for budgeting.]

[Topic 2: Please describe any environmental assessments (e.g., roads, irrigation), trainings or workshops that will be carried out in the upcoming implementation year (e.g. EA, PERSUAP, FMP, climate risk or vulnerability assessments, community resource mapping exercise, staff training on EMMP monitoring.).]

B. RESOURCES NEEDS FOR ENVIRONMENTAL COMPLIANCE:

[Topic 3: Provide a description of the upcoming year’s resource needs for the materials and services for environmental requirements. Illustrative needs are described in Box 2 “Common Materials and Services Needed for Environmental Requirements in FFP Projects” on Page 13 of the USAID toolkit on how to develop and review an environmental compliance budget.]

[Topic 4: Demonstrate that the activity’s budget for environmental compliance is described in the PREP budget and narrative. Where individual budget line items for environmental compliance actions do not exist, then these actions must be described in the budget narrative. This budget indicating resources needs may be reviewed as part of the ESR clearance, and lack of clarity here will cause delays in approval.]
3.0 PROGRESS TOWARDS ENVIRONMENTAL COMPLIANCE

[INSTRUCTIONS (TO BE DELETED ONCE COMPLETED): This section must include responses for Topics 5-11.]

A. PREVIOUS BEO CONDITIONS:

[Topic 5: Describe compliance with USAID BEO Conditions from any and all BEO Decision Memos. A specific discussion must be included for each Condition. Discuss challenges or opportunities identified]

B. EMMP REPORTING:

[Topic 6: Provide a brief narrative on progress implementing the EMMP. Include description of the EMMP environmental monitoring systems. Include staff or beneficiary trainings conducted, photos of mitigation measures and activities, etc.]

C. INTEGRATION INTO PERFORMANCE M&E SYSTEMS:

[Topic 7: Indicate how the awardee has ensured sufficient inclusion of environmental aspects (as in the EMMP) into the M&E Plan, as described in FFP’s Policy and Guidance for Monitoring, Evaluation, and Reporting for Development Food Security Activities (Section 2.4 on EMMP, p. 36).]

[Topic 8: Briefly describe any USAID climate risk indicator or other environmental performance indicator. Full details of the results of the indicators are primarily discussed in the Annual Results Reports (ARRs), and need not be described fully.]

D. CLIMATE RISKS AND OTHER ENVIRONMENTAL LIMITING FACTORS:

[Topic 9: Provide a description of how the awardee has integrated climate risks and geohazards into activity design and implementation. If applicable, awardees must specifically discuss how Climate Risk Management Screening was completed for all activity elements, per the Climate Risk Management for USAID Projects and Activities A Mandatory Reference for ADS Chapter 201 and guidance found in the RFA IEE. In the description include how findings from Climate Risk Management Screening, particularly all risks classified as ‘moderate’ and ‘high,’ have and will be integrated into activity implementation. Also include a discussion of plans to reduce risk from other environmental limiting factors, such as geohazards, as in 22 CFR 216.1(b)(4).]

E. FUMIGATION PEA:

[Topic 10: Provide a description of how awardee is meeting the USAID Programmatic Environmental Assessment (PEA) for Phosphine Fumigation of Stored Agricultural Commodity, by attaching the most recent Fumigation Management Plan (FMP). If no FMP has been completed, provide justification. For activities that are not managing Title II or locally-procured commodity, then disregard.]

F. LESSONS LEARNED AND INNOVATION:

[Topic 11: Discuss any other lessons learned and/or innovation regarding the implementation of systems for climate and environmental resilience and compliance. The awardee is asked to share with USAID any examples to institutionalize environmental safeguards as a cross cutting theme into the awardee’s monitoring systems (e.g.
field-based environmental monitoring systems, community-level social and behavioral change tools/strategies, community incentive awards, etc.).]

### 4.0 EMMP REPORTING TABLE

[INSTRUCTIONS (TO BE DELETED ONCE COMPLETED): This table should align with the most recent version of the activity’s Logical Framework. Please indicate where changes have been made. Any substantial changes to interventions will require an IEE and EMMP Amendment and USAID’s approval. ]

<table>
<thead>
<tr>
<th>Interventions</th>
<th>EMMP Mitigation Measures (Indicate any additions or deletions)</th>
<th>EMMP Indicators (Indicate any additions or deletions)</th>
<th>Results</th>
<th>Remarks and Description of Necessary Corrective Actions</th>
</tr>
</thead>
<tbody>
<tr>
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<td>[Add rows as needed]</td>
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</tbody>
</table>
5.0 ATTACHMENTS

[INSTRUCTIONS (TO BE DELETED ONCE COMPLETED): Include relevant attachments, such as water quality test results, Fumigation Management Plans (FMPs), etc.]
ANNEX 3: GUIDANCE FOR CLIMATE RISK MANAGEMENT SCREENING

Integrating climate risks into project and activity planning helps limit the impacts of climate on implementation. USAID conducts Climate Risks Management (CRM) screening to assess and address climate risks and opportunities in strategies, projects, and activities. This screening is included in the initial environmental examination (IEE), and it will be included in the DCHA Bureau Environmental Officer (BEO) technical review of the IEE. Below is a set of guidance notes and resources to complete the CRM screening.

Requirements: The requirements and basic guidance for completing the climate risk management (CRM) screening at the project and activity level is available in Mandatory Reference for ADS Chapter 201: CRM for USAID Projects and Activities (ADS Guidance). The guidance specific to Activity-Level screening should be followed. This includes development of an Activity-Level Climate Risk Management Summary Table (CRM Table). The table structure showing all columns we require can be seen in Table 1 below.

TABLE 1. CLIMATE RISK MANAGEMENT SUMMARY TABLE

<table>
<thead>
<tr>
<th>Defined or Anticipated Activity Interventions</th>
<th>Timeframe</th>
<th>Geography</th>
<th>Climate Risks</th>
<th>Risk Rating</th>
<th>Climate Risk Management Options</th>
<th>How are risks addressed</th>
<th>Opportunities to Strengthen Climate Resilience</th>
</tr>
</thead>
</table>

Table + Narrative: In addition to the CRM Table, the ADS Guidance requires a “summary of the approach to activity-level CRM and major results”. This should briefly clarify how risks were identified and assessed, and also include critical resources referenced. If there are opportunities to reduce greenhouse gas (GHG) emissions associated with implementing the activity, describe them in the narrative.

CRM Table References: USAID has developed Climate Risk Screening and Management Tools to support this process and provide step-by-step guidance on completing the CRM Table. In particular, please use the Climate Risk Screening and Management Tool for Activity Design (CRM Tool) and the accompanying Matrix Template. While Table 1 (above) shows all columns we require, you may also choose to complete and submit additional columns found in the Matrix Template.
Within the CRM Tool, use the sector-specific annexes, which begin on page 14. In particular, see annexes on “Education, Social Services, and Marginalized Populations”, “Agriculture”, and “Infrastructure, Construction, and Energy”. USAID also developed a technical report entitled “Working with Marginalized Populations: An Annex to the Climate-Resilient Development Framework”. Additional sector-specific environmental design and management information can be found in the USAID Sector Environmental Guidelines, many of which include specific sections covering climate change.

All Activities Screened: Initial screening and risk rating must be conducted and documented for all proposed activities. Section 1 (page 5) of the ADS Guidance outlines the only exceptions, (i.e., emergencies, staffing, research, monitoring). Aside from the excepted activities, all others (including Categorical Exclusion activities) must be screened for climate risks.

All Potential Impacts: The full range of potential climate impacts which might affect the activities must be considered during the climate risk screening. This should be based on reliable available resources and information. The USAID ClimateLinks website provides country and region-specific profiles on climate vulnerability, risk and/or adaptation. The World Bank Climate Change Knowledge Portal also offers country-specific information on historical climate, future climate projections, and climate change impacts and vulnerabilities. Local knowledge and expertise (including from facilities / operations personnel who have experience with local climate risks affecting the school/hospital) should inform the screening, when available and appropriate. The DCHA Climate Integration Lead can also be consulted to provide additional resources, if needed.

TABLE 2. CLIMATE RISK RATINGS

<table>
<thead>
<tr>
<th>SEVERITY OF NEGATIVE IMPACT</th>
<th>LOW RISK</th>
<th>MODERATE RISK</th>
<th>HIGH RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW PROBABILITY</td>
<td>LOW IMPACT</td>
<td>MODERATE IMPACT</td>
<td>HIGH PROBABILITY</td>
</tr>
<tr>
<td>LOW IMPACT</td>
<td>LOW IMPACT</td>
<td>MODERATE IMPACT</td>
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<td>HIGH IMPACT</td>
<td>MODERATE IMPACT</td>
<td>MODERATE IMPACT</td>
<td>HIGH IMPACT</td>
</tr>
</tbody>
</table>

Climate Risk Rating: Based on the screening, all relevant climate risks for each proposed activity must be assigned a rating of Low, Moderate, or High. Table 2 below shows how the severity and probability of negative climate-related impacts interact to determine the climate risk rating. If a climate risk is rated as Low, then only the descriptions of the activity (including timeframe and geography), climate risk, and climate risk rating (columns 1-5) are necessary to include in the CRM Table (Table 1 above). For each climate risk that is rated as Moderate or High, the implementing partner should also describe how the risks will be addressed as well as the opportunities to strengthen climate resilience (columns 6-8 in Table 1).

All interventions related to construction should be categorized as High Risk and must be assessed and approved by Engineer of Record. The Engineer of Record is an appropriately qualified engineer or firm under contract or subcontract for the purpose of completing the engineering
design. If the engineering design has not yet been developed, the DCHA Climate Integration Lead can approve an initial CRM Screening. The Engineer of Record must still ultimately review the initial CRM Screening and revise as necessary. The Engineer of Record must submit the revised, final CRM Screening table and narrative along with a signed document confirming his or her approval.

**Example Climate Risk Management Measures:** For climate risks rated as Moderate or High, the following illustrative risk management measures are examples of what can be considered when determining and documenting how to address the climate risks (6th column of Table 1).

<table>
<thead>
<tr>
<th>Climate Risk: Construction</th>
<th>Management Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction workers may face increased risk of heat exhaustion or impacts of climate-related extreme events (e.g., heavy rain storms, flooding, dust storms or wildfires)</td>
<td>Require that construction crews receive proper hydration and are not exposed to dangerously high heat levels, in accordance with local and national health and safety requirements.</td>
</tr>
<tr>
<td>Extreme climate-related events (e.g., storms, wildfires, extreme heat and flooding), landslides, erosion, as well as sea level rise and associated storm surges can all affect the longevity of buildings and infrastructure. These impacts can be worsened or mitigated based on construction design and siting / location.</td>
<td>Ensure emergency plans are in place (and well communicated to crews) to respond to climate-related extreme events.</td>
</tr>
<tr>
<td>The impacts above can also threaten routes and transportation systems necessary to access and utilize constructed buildings.</td>
<td>Use local knowledge and best practices to integrate design measures to address specific potential climate stressors (e.g., use more resilient materials or construction methods, design for future upgrades/repairs, or elevate to accommodate rising sea levels)</td>
</tr>
<tr>
<td>-Consider alternative locations if proposed site faces higher climate risks (e.g., floods, wildfires, high winds, storms, or other site-specific threats) than other potential, appropriate locations</td>
<td>-Consider alternative locations/buildings/rooms if proposed site faces higher climate risks (e.g., floods, wildfires, high winds, storms, or other site-specific threats) than other potential, appropriate locations</td>
</tr>
<tr>
<td>-Consider locations with multiple access routes, particularly if at least one alternative is protected against relevant climate risks (e.g., paved to protect against wash-out during flooding or routed to avoid low-lying areas possibly affected by storm surges)</td>
<td>-Determine whether additional protective measures can be added to the commodity or structure in which it is housed to increase resilience to climate risks</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Climate Risk: Commodities</th>
<th>Management Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Extreme climate-related events (e.g., storms, wildfires, extreme heat, droughts, and flooding), landslides, erosion, as well as sea level rise and associated storm surges can all directly affect selected sites in which commodities will be delivered, used and maintained</td>
<td>-Consider alternative locations/buildings/rooms if proposed site faces higher climate risks (e.g., floods, wildfires, high winds, storms, or other site-specific threats) than other potential, appropriate locations</td>
</tr>
<tr>
<td>-Changing rainfall patterns, higher temperatures, or climate-related extreme events may affect transportation routes for delivery or access of commodities</td>
<td>-Determine whether additional protective measures can be added to the commodity or structure in which it is housed to increase resilience to climate risks</td>
</tr>
<tr>
<td>-Changing rainfall patterns or drought conditions could affect availability of water necessary for use or maintenance of commodities</td>
<td>-Develop and/or make use of existing weather/climate information and early warning systems to improve preparedness for and response to climate-related extreme events</td>
</tr>
<tr>
<td>-Determine or develop back-up/alternative access routes for commodity delivery or for access to and use of commodities</td>
<td>-Determine if alternative water sources are available and develop plans for accessing them if necessary</td>
</tr>
</tbody>
</table>
BEO/CIL Review Issues Letter¹
FFP Burkina Faso ViMPlus IEE (FY18-FY23)

DCHA BEO NOTE: The BEO appreciates ViMPlus’s efforts to bring together the requirements of the RFA IEE (DCHA) and RISE II PIEE (Sahel Regional Office- SRO). We understand it is a challenge. The BEO thanks SRO for their coordination on review of this IEE. This BEO Issues Letter follows MEO review and ACDI/VOCA revision of their original IEE.

The BEO commends ACDI/VOCA for preparing an excellent IEE that is organized, clear and consistent. While the level of detail provided in most of the IEE is sufficient, there is a lack of information on the scale of certain of the highest-risk activities which have the potential for significant cumulative impacts.

The BEO is approving, but has identified nine (9) technical and editorial issues that require clarification and updating.

Summary of Issues to be addressed, via A/COR direction, within four weeks of receipt of this Issues Letter (9):

1. **Issue 1. Environmental Baseline.** ViMPlus must revise Section 2 to include a description of nearby protected areas and endangered species and describe whether project activities will overlap with these areas and species’ ranges. Where possible, ViMPlus should coordinate with relevant civil society organizations to ensure project activities do not have unintended impacts. **Required (IEE).**

2. **Issue 2. Cumulative Impacts from MUS activities.** VimPlus must provide additional details on the scale of MUS activities and share the Environmental Irrigation Checklist with the MEO & BEO. VimPlus should also prepare a Water Quality Assurance Plan. **Required (IEE).**

3. **Issue 3. Mitigation measures.** ViMPlus must update their EMMP to include additional specific mitigation measures, rather than refer to Sectoral Guidelines. **Required (EMMP).**

4. **Issue 4. Construction.** ViMPlus must follow the RISE II PIEE conditions for construction of multiple sites of 1,000 m² for warehouse construction, and clarify if additional types of construction are anticipated. **Required (IEE)**

5. **Issue 5. CRM.** ViMPlus must update the “Timeframe” column in the CRM table and complete the EOR approval form for construction activities. **Required (CRM).**

¹ The Issues Letter describes a series of technical gaps in the 22 CFR 216 analysis. These gaps must be addressed in a revised analysis prior to the final clearance by the USAID Bureau Environmental Officer (BEO).
6. **Issue 6. Aquaculture.** ViMPlus must clarify whether or not aquaculture is anticipated as noted in the IEE, and if it is, update the IEE and EMMP accordingly to identify environmental impacts and mitigation measures. **Required (IEE, EMMP).**

7. **Issue 7. ERR/ERFs.** ViMPlus should include information in the IEE & EMMP on anticipated sectors under Interventions 39, 40 & 42 including conditions and mitigation measures, to avoid the need for ERR/ERFs. **Recommended (IEE).**

8. **Issue 8. Pesticides.** ViMPlus must develop a project-specific SUAP using the RISE II PERSUAP and ensure coordination and information-sharing across local/regional organizations and USAID partners in the area. **Required (IEE).**

9. **Issue 9. Staffing.** ViMPlus must hire a full-time environmental specialist from the beginning of the project to support implementation, monitoring, and reporting on environmental compliance and CRM requirements. **Required (IEE).**

**Recommendation 1:** In order to reduce undue burden and duplication of effort, ViMPlus should share with the BEO any relevant documentation developed during R&I and throughout implementation that can help support environmental, social, and climate analysis (i.e., feasibility studies, gender analyses, etc.)

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**Detailed Explanation of Issues:**

**Issue 1: Environmental Baseline.** Section 2, Baseline Environmental Information, is missing a discussion of nearby protected areas and endangered species.

**Discussion 1:** Section 2 of the IEE does not describe any protected areas in or near ViMPlus activities, nor endangered species with ranges that overlap FFP project areas. For example, Centre-Nord region is home to five Ramsar wetlands of international importance: Lac Bam, Lac Dem, Bassin du Nakanbé-Mané, Barrage de Tougouri, and Barrage de Yalgo. The IEE does not provide information on whether project activities will occur nearby this sites, or draw water from these sites for MUS activities. The previous ViM project was asked to develop a Scoping Statement due to planned activities to withdraw water from Lac Bam for irrigation activities. If the current project intends to work in/around any of these Ramsar Sites, the same conditions would apply (i.e., activities would receive a Positive Determination, resulting in the need to conduct a Scoping Statement).

Further, according to CITES, there are several vulnerable, endangered, and critically endangered species with ranges that overlap the Centre Nord region, such as the leopard (vulnerable) and various vulture species (critically endangered).

In addition to researching and describing these key elements of the environmental baseline situation in section 2, ViMPlus should also take preemptive measures to ensure project activities do not have
unintended impacts on vulnerable protected areas or endangered species in the region. Where possible, ViMPLus should coordinate with relevant local civil society organizations and municipalities concerning these issues. Please see the 2017 118 119 for Burkina Faso for more information on Biodiversity and Protected Areas.

**Required 1:** ViMPLus must revise Section 2 to include a description of nearby protected areas and endangered species and describe whether project activities will overlap with these areas and species’ ranges. Where possible, ViMPLus should coordinate with relevant civil society organizations to ensure project activities do not have unintended impacts.

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**Issue 2: Cumulative Impacts from MUS activities.** The scale of MUS construction and irrigation is unclear, making it difficult to understand cumulative impacts to water supply.

**Discussion 2:** ViMPLus intends to construct multiple-use water systems (MUS) with components including boreholes, latrines, hand-washing stations, drinking water sources, small-scale irrigation and livestock watering points. While may be present in other project documents, the IEE does not describe the scale of these activities to the level of detail to permit an assessment of environmental impact, including cumulative impacts. Has a feasibility study been carried out to determine the long-term sustainability of the MUS systems, considering climate change impacts to water availability?

The BEO’s preference is as follows:

1) If ViMPLus has additional information on these activities (i.e., in a feasibility study or otherwise), please share that information in an existing document or by updating the IEE.

2) If ViMPLus does not have additional information at this stage, then the activity should be categorized as deferral, requiring a subsequent IEE amendment and updated EMMP when more information is available.

*Please note that the RISE II PIEE requires a deferral for large-scale or municipal mixed use borehole and water systems.*

Further, given the unknowns described above, the mitigation measures and indicators listed in the IEE and EMMP for irrigation activities are not detailed enough to ensure environmental safeguarding. Therefore, the MEO and BEO would appreciate the chance to review the “Environmental Irrigation Checklist” to ensure detailed mitigation measures are incorporated during implementation. ViMPLus should also refer to the [USAID Sector Environmental Guideline for Crop Production](#) (Irrigation Annex) rather than the WASH Sector Guideline in the Irrigation sections of the IEE & EMMP.

The IEE also notes the potential construction/installation of small-scale renewable energy sources in connection with MUS distribution infrastructure. Please clarify whether or not installation of renewable

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2 As mentioned above, please note that the original ViM project (2011-2016) was asked to prepare a Scoping Statement due to anticipated irrigation activities because the project was intending to use Lac Dem, a Ramsar wetland, as the water source for irrigation.
energy sources is anticipated. These activities carry a separate set of environmental and social impacts that would need to be addressed.

Finally, the BEO recommends that VimPlus prepare a Water Quality Assurance Plan (WQAP) to ensure efficient planning and implementation of water quality testing in line with USAID’s latest guidance.

**Required 2:** VimPlus must provide additional details on the scale of MUS activities and share the Environmental Irrigation Checklist with the MEO & BEO. VimPlus should also prepare a Water Quality Assurance Plan.

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**Issue 3: Mitigation Measures.** The EMMP is missing specific mitigation measures.

**Discussion 3:** The BEO appreciates ViMPlus’s consistent references to the conditions in the RISE II PIEE. However, as noted in the PIEE, the mitigation measures proposed in Section 5.0 (Conditions and Mitigation measures) are “the minimum standards to be applied and in most cases, are expected to be developed in further detail in the EMMP.” Conditions that reference conformity with USAID’s Sectoral Guidelines are appropriate, but the EMMP is where the specific mitigation measures/best practices described in the sectoral guidelines should be captured to ensure they are implemented and monitored (via appropriate indicators) throughout the life of project.

**Required 3:** ViMPlus must update their EMMP to include additional specific mitigation measures, rather than refer to Sectoral Guidelines.

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**Issue 4: Construction.** ViMPlus has not made it clear that they intend to follow the stricter conditions for construction per the RISE II PIEE.

**Discussion 4:** ViMPlus is planning rehabilitation or construction of 50 storage warehouses. The IEE currently references both sets of conditions from the RISE II PIEE (for sites <1,000 m² and for multiple sites of 1,000 m², etc…). Given the number of structures, ViMPlus must follow the conditions established by the RISE II PIEE for multiple sites of 1,000 m² (copied below) to ensure that cumulative impacts are appropriately addressed.

As stipulated in the RISE II PIEE, construction of multiple sites of 1,000 m² requires:

1. An engineer will plan and supervise all construction designs and actions.
2. Construction management plans and pre-construction site surveys will include specific mitigation measures and capture baseline data for the site. Surveys and management plans should address
   a. Water hydrology and water resources adequacy, availability, and location
   b. Soil type and slope of the site
   c. Vegetation removal and replanting requirements
   d. Land uses by the local community and access rights
3. For construction in the presence of complicating factors (described in the RISE II PIEE), the conditions and process are outlined in USAID ADS 201maw Mandatory Reference – Construction Risk Management in section V “USAID’s Preferred Approach to Construction”.

Finally, the IEE lists various different types of construction (marketing structures, transport hubs, post-harvest storage, animal housing structures, and other small structures, warehouses, health facilities and clinics, cooperative storage or processing facilities) under the descriptions for Intervention 38, Increased Access to Storage for Agricultural and Nonfarm Business. Please clarify whether construction outside of warehouses will occur. If not, please delete the other references. Different facilities have different requirements for construction, operation, and maintenance, depending on their use.

Required 4: ViMPlus must follow the RISE II PIEE conditions for construction of multiple sites of 1,000 m² for warehouse construction, and clarify if additional types of construction are anticipated.

**Issue 5: CRM Screening.** The CRM Screening is missing the EOR form and uses the time-frame column incorrectly.

**Discussion 5:** Overall, ViMPlus’s CRM screening is thoughtful, detailed, and thorough. However, there are a couple of missing components that make this CRM screening incomplete, as follows:

- The “Timeframe” column should include the usable duration of the investment, and not the project period-of-performance.
- All interventions related to construction (should be categorized as High Risk), must be assessed and approved by the Engineer of Record (EOR). Please ensure that the infrastructure engineer considers climate risks during design and approves the climate risk management screening for all construction activities. The [Engineer of Record Approval Form](https://www.usaid.gov/ads/policy/200/201maw) needs to be completed and submitted to the BEO/CIL.

Required 5: ViMPlus must update the “Timeframe” column in the CRM table and complete the EOR approval form for construction activities.

**Issue 6: Aquaculture.** It is unclear if aquaculture is anticipated, and if so, this activity is missing from the EMMP.

**Discussion 6:** The IEE mentions aquaculture off-handedly as a potential method to control weeds and provide income in reservoirs/irrigation canals, and as a part of farmer extension services. However, the environmental impacts of aquaculture are not described, nor conditions or mitigation measures established in the IEE and EMMP. Aquaculture can have very different environment impacts and mitigation measures from aquaculture/livestock, and needs to be analyzed separately.

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Required 6: ViMPlus must clarify whether or not aquaculture is anticipated, and if it is, update the IEE and EMMP accordingly to identify environmental impacts and mitigation measures.

Issue 7: ERFs. ERFs are not required for Interventions 39, 40 and 42.

Discussion 7: ViMPlus’s IEE requires Environmental Review Forms/Environmental Review Reports (ERR/ERFs) for Interventions 39, 40 & 42: Launch Business Accelerator and Entrepreneurship Training for Agricultural and Non-Farm Businesses, Youth Entrepreneurship Clubs, and Facilitate Access to Vocational and Technical Skills Training. However, the BEO asks that ViMPlus rather include as much information as possible about these activities in the IEE now, in order to avoid completing ERR/ERFs. Otherwise, ViMPlus will need to manage hundreds of ERR/ERFs (the IEE states that ViMPlus will support ~500 businesses, 250 agriculture/livestock and 250 non-farm), which can quickly become an unmanageable burden.

ViMPlus should rather provide a list of expected sectors they will be training in, and include conditions and mitigation measures from the USAID Sector Environmental Guidelines for Micro and Small Enterprises. Specific updates can be provided in future Environmental Status Reports (ESRs). If ViMPlus identifies any small-grant activities that appear to be high risk, reach out to the MEO and BEO as soon as possible.

Required 7: ViMPlus should include information in the IEE & EMMP on anticipated sectors under Interventions 39, 40 & 42 including conditions and mitigation measures, to avoid the need for ERR/ERFs.

Issue 8: Pesticides. ViMPlus has not referenced the new RISE II PERSUAP for pesticide support.

Discussion 8: ViMPlus should use the newly developed RISE II PERSUAP for activities procuring, using, or promoting pesticides. The RISE II PERSUAP requires the development of a project-specific SUAP.

ViMPlus is encouraged to secure local staff with IPM/pesticide expertise, as well as coordinate with the Le Comité Sahélien des Pesticides (CSP) and Comité permanent inter-État de lutte contre la sécheresse (CILLS). ViMPlus should share lessons learned across RISE II and FFP implementing partners in line with Africa Bureau’s PERSUAP Implementation Field Review (PIFR) process, and include this requirement in the IEE itself.

Required 8: ViMPlus must develop a project-specific SUAP using the RISE II PERSUAP and ensure coordination and information-sharing across local/regional organizations and USAID partners in the area.

Issue 9: Staffing. Insufficient resources are allocated for environmental compliance safeguards.

Discussion 9: It is unclear whether or not ViMPlus plans to hire an Environmental Safeguard Specialist. Experience has shown that FFP projects are more successful when full-time environmental specialists are included on the staff to support implementation, monitoring, and reporting on environmental...
compliance and CRM requirements. Especially given the scale of ViMPlus’s anticipated activities and the likelihood of cumulative impacts, significant time and resources will be needed to ensure implementation and success. ViMPlus should refer to the Environmental Budgeting Toolkit for more information on budgeting for environmental compliance safeguards.

**Required 9:** ViMPlus must consider hiring a full-time environmental specialist from the beginning of the project to support implementation, monitoring, and reporting on environmental compliance and CRM requirements.