Farmer-to-Farmer Program

CRS Ethiopia – Agribusiness Development Country Project

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Project Title:	Ethiopia Agribusiness Development Project
Duration:	October 2023 – September 2028
Location:	Oromia, Amhara, Sidama, SNNPR and Addis Ababa
Target hosts/beneficiaries:	Private Sector, Farmer Cooperative Unions, Agricultural Research Institutes and Universities working on/supporting agribusiness development
Key Partners:	Ministry of Agriculture Ethiopian Institute of Agricultural Research USAID Feed the Future Transforming Agriculture Activity USAID Market System for Growth Project Agricultural Transformation Agency

Acronyms

ACC	Agricultural Commercialization Cluster
AGP	Agricultural Growth Program
ATI	Agricultural Transformation Institute
CDCS	Country Development Cooperation Strategy
CRGE	Climate Resilience Green Economy
CRS	Catholic Relief Services
CSA	Central Statistics Agency
EIAR	Ethiopian Institute of Agricultural Research
ESA	Ethiopia Seed Activity
FAO	Food and Agricultural Organization of the United Nations
FAOSTAT	Food and Agriculture Organization Statistics
FTF	Feed the Future
F2F	Farmer-to-Farmer
ICT	Information Communication Technology
LDN	Land Degradation Neutrality
LOP	Life of Project
MEAL	Monitoring, Evaluation, Accountability and Learning
MOA	Ministry of Agriculture
MSME	Micro, Small and Medium Enterprise
NDC	Nationally Determined Contributions
NGO	Non-Governmental Organization
PICS	Purdue Improved Crop Storage
RFSA	Resilient Food Security Activity
SNNPR	Southern Nations, Nationalities, and Peoples' Region
SOW	Scope of Works
S34D	Strengthening Seed System for Development
UNFSS	United Nations Food Systems Summit
USAID	United States Agency for International Development

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1. Objective

CRS Ethiopia's Agribusiness Development Country Project seeks to generate market-driven, inclusive, and sustainable agricultural economic growth, and create employment opportunities. It aims to contribute to improved production efficiency, food security, income and resilience among target beneficiaries in Ethiopia through volunteer technical assistance to host partners, while addressing technical and organizational constraints.

2. Description of Sub-Sector Targeted and Rationale for Targeting

2.1. Description

Agriculture is the mainstay for 85% of the Ethiopian population. It constitutes 33% of the Gross Domestic Product, represents 80% of the country's export market, and employs 66% of the total population[1,2]. Ethiopia has been implementing different strategies and flagship programs to steer the agriculture sector towards manufacturing and industrial development. To achieve its transformational goals, the government is highly focused on developing sustainable and resilient production systems, strengthening market systems (market information, linkages, infrastructure)[3], building the capacity of agribusinesses and cooperatives, and strengthening research extension advisory services. To this end, the current Ethiopia Food Systems Resilience Project (EFSRP) of the Ministry of Agriculture (MOA) and the Agricultural Commercialization Cluster Program of the Agricultural Transformation Institute (ATI), are promoting market-systems-based agricultural development, focusing on strategic crops and livestock commodities.

In its ten-year Agriculture Sector Strategy, the Government of Ethiopia has identified strategic commodity value chains which include major food security crops (maize, wheat, teff and chickpea), horticulture crops (tomato and onion), livestock products (milk, meat, and poultry), and high-value crops (coffee and sesame). The commodities were selected based on their strategic importance in terms of food and nutrition security, local and export markets, sustainability of their production systems, and their value chain development is supported by mega projects and initiatives[4].

The CRS Farmer-to-Farmer Program in Ethiopia is designed to support the strategies and priorities of the Ethiopian government and USAID's Country Development Cooperation Strategy (CDCS). The government seeks to steer agricultural transformation towards sustainable food systems, manufacturing and industrial development through the development of strategic commodities and their value chains. Meanwhile, USAID's CDCS (2019–2024) has shifted its emphasis from production to agribusinesses and higher-growth value chains. CRS' Agribusiness Development Country Project will support these efforts by contributing to sustainable and inclusive economic growth of the sector improving productivity, postharvest management, marketing, agro-processing and value addition, and developing the organizational capacity of

[1] Agricultural Transformation Agency (ATA), 10-Year Strategy (2020) at https://www.ata.gov.et/wp-content/uploads/2020/12/Summary-of-ATAs-10-Year-Strategy.pdf
[2] Ethiopian Agricultural Transformation Agency, Agricultural Commercialization Cluster (ACC) Document (2019)
[3] Agricultural Transformation Agency (ATA), 10-Year Strategy (2020)
[4] Food and Agriculture Organization of the United States, Political Economy Analysis of the Ethiopian Food System (2021)

local host partners. Planning and implementation of volunteer activities will be aligned with USAID's Feed the Future (FTF) initiatives and other USAID and CRS programs to create synergies and efficiencies. The program will also contribute to FTF goals; hence, host partners will be strategically selected in the FTF zones of influence.

2.2. Rationale for Targeting

Through extensive consultation with MOA, the USAID Mission, the Ethiopian Institute of Agricultural Research, the Agricultural Transformation Institute (ATI) and other stakeholders, CRS has identified maize, wheat, teff, coffee, beans, milk, beef and poultry as commodities to be supported under the agribusiness development project. Maize, wheat and teff are major food security crops which are also important sources of income for smallholder farmers. These crops are produced in the country's major agro-ecological zones (lowland – highland) and cropping systems e.g., rotations with legumes, maize-legume intercropping, teff-chickpea double cropping, etc. The government of Ethiopia is implementing initiatives to enhance wheat production, especially focusing on irrigated farming and acid soil reclamation in the highlands, and import substitution. Beans have been selected for crop rotations with cereals (maize, wheat, teff), their nutritious value, and contribution to income. The common bean[5] is also an important export commodity traded through the Ethiopian Commodity Exchange (ECEX) with an annual volume of 100,109 tons and value of over $99 million[6]. Coffee, which is a lead export commodity worth about $1.5 billion in 2021/22[7], is targeted especially to support key actors in processing, value addition and marketing. Some of the targeted value chains, such as dairy and poultry, are typically managed by women and youth, and help to address their income and nutrition needs[8].

3. Key Problems/Constraints or Opportunities

Through its research and stakeholder consultation process, CRS Ethiopia identified the major issues, potential interventions and opportunities related to agribusiness development. During the consultation workshop, these were assessed and identified along different value chains focusing on production systems, harvesting and post-harvest management, marketing, agro-processing, and value addition. Institutional, technological, policy and gender-related issues affecting agribusiness development were also identified and analyzed. Providing technical and capacity building support to host partners in addressing these issues will contribute to improved productivity, food security, income and employment opportunity, leading to inclusive and sustainable economic growth in the sector. The major constraints and opportunities identified are presented below.

Shortage of inputs and weak supply system - The provision of major agricultural inputs including improved crop and forage seeds, fertilizers, pesticides, improved livestock breeds, veterinary medicines and machinery is very limited compared to demand. For instance, the formal supply of certified and quality crop seeds through public and private companies covers only 10% of production, with informal seed systems accounting for the remaining 90%[9].

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[5] Ethiopian common beans are classified by color (red, white, green, navy, and speckled beans, each with its sub-divisions.

[6] FAOSTAT (2021)

[7] USDA report, "Coffee Annual" p6 at https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Coffee%20Annual_Addis%20Ababa_Ethiopia_ET2023-0014.pdf

[8] USAID, Country Development Cooperation Strategy (2019)

[9] MOA, Seed system Development Strategy (2016)

Recently, the MOA and ATI have been supporting certified seed multiplication and supply by private companies, including farmers' cooperative unions. Compared to many other countries, Ethiopia has low import and supply of organic fertilizer and, as a result, the average application rate for arable land is less than 40 kg/ha, which is far lower than the research recommends[10]. The recent global challenges posed by the Russia-Ukraine war have exacerbated the shortage of nitrogen-based fertilizers. The escalating price of inorganic fertilizer (170% increase since 2022) is also greatly affecting smallholder farmers' access to and use of fertilizer. Consequently, the government extension service is heavily supporting farmers on the production and use of organic fertilizers (compost, vermicompost and animal manure) in combination with the inorganic fertilizer. The supply of biofertilizer for bean production is also constrained by the limited capacity and number of companies involved in isolation and multiplication of rhizobium inoculants. The inoculants are sometimes ineffective in forming nodulation for N-fixation due to poor multiplication processes and inadequate handling of the biofertilizer. There are also limited skills and technologies for isolation and multiplication of the rhizobium strains. Furthermore, nitrogen fixing bacteria are ineffective in acidic soil and, in general, there are knowledge and assessment gaps with regarding to nitrogen fixing. As a result, vegetative growth and productivity of beans are poor, especially in acidic and degraded soils, which inhibits the profitability of the farmers and the benefits of other value chain actors.

Short supply and the high price of feeds are identified as major constraints to dairy, beef and poultry production. Manufactured feeds are an important input for commercial poultry, dairy and beef production systems, and account for about 70% of the total costs of production[11]. There is almost no forage farming and forage seed supply system in the country. Conventional livestock farming is dependent on grazing and feeding on crop residues. While feed formulation is normally carried out by trained professionals on commercial farms, some smaller farms still resort to manufactured feeds that are haphazardly formulated, using crop residues and grass hays, along with seasonal grazing. Limited access to, and the high price of, improved animal breeds are additional factors affecting development of the sub-sector. Along the same lines, veterinary medicines and services for animal health management are not regularly available, and the facilities and skills required for improved animal insemination and health treatment are rare.

Opportunities: The Ethiopian government's strategies for agricultural commercialization and value chain development and USAID's CDCS, are highly supportive to agribusiness development, specifically in the areas of seeds, fertilizers, and other inputs. The strategies consider private sector development to be a catalyst in shifting agriculture towards manufacturing and industrial development. Hence, it is a welcoming environment for CRS F2F to play a role in supporting private agribusiness development. The new Ethiopian Seed Policy which supports private seed sector development and input supply systems will create a conducive environment to address the challenges associated with food and forage crop seed systems. In line with this, there are emerging seed projects with which to collaborate including the USAID-funded Ethiopian Seed Activity (ESA) which is being implemented by CRS. The Farmers Service Center (FSC) initiatives currently promoted by ATI across the country, which provide agro-dealer and extension advisory services to farmers, offer opportunities for F2F to provide technical support and capacity building.

[10] IFPRI, Assessment of Policies, Value Chain, and Profitability (2013)
[11] FAO, Feed Inventory and Feed Balance in Ethiopia (2018)

Poor soil fertility and health - Soil degradation and continuous nutrient mining through biomass harvesting have led to poor soil fertility and health. Physical soil degradation through erosion, improper fertilizer use, nutrient leaching, organic matter depletion, and loss of soil biodiversity are major factors affecting soil health and fertility. Soil acidity affects 43% of all arable land (about 6 million hectares) and is a major bottleneck for wheat production in the highland regions. Aluminum and manganese toxicity in soil causes up to 100% yield losses and, as a result, about 1 million hectares of land have already been abandoned[12]. On the other hand, in lowland and irrigated areas, saline and sodic soils are becoming a major factor affecting the productivity of crops such as maize and the common bean.

Opportunities: To improve or maintain soil fertility and health, it is important to promote integrated soil fertility management, and soil reclamation and rehabilitation measures. The MOA's Soil Health and Fertility Improvement Strategy, which is currently being implemented, requires stakeholders to promote these strategic interventions. The strategy also requires private agricultural enterprises to maintain soil health and fertility and protect nature. Hence, this creates an enabling environment for CRS F2F to support host partners in implementing improved practices and applying tools for soil management and sustainable production. It also allows CRS to collaborate with other partners in implementing restoration of degraded landscape, and integrated soil fertility and health management practices that can enhance productivity of the target commodities.

Low productivity - Low productivity has been identified as the major factor affecting agribusiness development in both the crop and livestock sub-sectors. It is attributed to low soil fertility and health, low and poor quality of inputs, low genetic potential of crop varieties and animal breeds for yields, drought, pest prevalence, etc. These factors are often interrelated and need to be addressed through the integrated use of improved genotypes and locally adapted management technologies and best practices. Production statistics show that the average yields for maize, wheat, teff and beans are 4.0, 2.8, 1.8 and 1.7 tons ha^{-1}, respectively, which are far below global averages[13]. Most of the improved wheat genotypes lack resistance to rust diseases (leaf, stem and yellow rusts) which often reduce yields of the crop, especially in the high potential highlands of Shoa, Bale and Arsi. Yield potential of coffee varieties widely grown by farmers is low with the average national yield of only 0.6 tons/ha. In general, these problems suggest the need to develop and promote improved technologies including new crop varieties and animal breeds, and improved and integrated management practices. Furthermore, while improved varieties have been developed by research institutes, due to weak research extension linkages they are often not promoted. There are also weak linkages between researchers and the private sector, which is another issue to be addressed.

Opportunities: The government of Ethiopia is promoting climate resilient agriculture and sustainable food systems as part of its Nationally Determined Contributions (NDC) to climate change and mitigation, and commitments to the UNFSS. As a result, the policies and strategies are designed to address the challenges of low productivity through integrated and sustainable practices. The National Research System, including universities, is mandated to support agriculture sector development based on agro-ecologies, i.e., climatic, edaphic and management suitability for the production of crops and livestock. Other actors such as ATI, MOA's Sustainable Land Management Program, World Vision, and GIZ are involved in addressing these

[12] MOA, Soil Health and Fertility Improvement Strategy (2018)
[13] Central Statistics Agency (CSA), National Agricultural Production Survey (2020)

issues. Hence, CRS will collaborate with local research institutes and universities to facilitate technology transfer to the host partners, including private sector hosts. It will promote and integrate agribusiness activities in areas where the other actors implement productivity improvement interventions.

Post-harvest losses - Poor post-harvest management and losses due to insect and rodent infestation, quality deterioration caused by poor drying (inappropriate moisture content) of produce, inappropriate storage temperature and humidity, and mold development are major problems impacting the profitability of agribusinesses in Ethiopia. Improved practices and technologies to reduce post-harvest losses are very limited, especially at the smallholder farmer level. As a result, postharvest losses of important commodities such as maize, wheat and teff are estimated at 17.6%, 14.1% and 12.6%, respectively[14]. Considering maize and wheat, the losses are higher than the average losses for African countries which are 16.8% and 12.2%, respectively. These losses also contribute to a reduction in the food supply and, hence, lead to high food prices on the market.

Opportunities: The Ministry of Agriculture has included reduction in post-harvest losses as a strategic intervention to enhance food security and economic gain from agricultural production. Private companies and farmers' cooperative unions are striving to reduce post-harvest losses through the use of new technologies (e.g., PICS bags) and improved warehouse management technologies. Hence, F2F can provide technical assistance to the private enterprises and farmers' cooperative unions on new technologies and improved warehouse management techniques.

Poor market system - Lack of access to markets, poor market infrastructure, lack of market information, market interference by middlemen and seasonality of markets are major issues affecting agribusinesses in Ethiopia. There is also no market price differentiation for quality products which dilutes the extra effort made in the production, processing and handling of commodities. In the coffee market, smallholder farmers receive low benefit margins because most of the benefits go to traders and middlemen.

Opportunities: Government and other actors are extensively supporting farmer cooperatives and private companies to enhance their access to markets and bargaining power. There is great need for market system development including information technology (IT), strengthening of market linkages, and improved marketing. Hence, CRS can support the hosts on market-oriented production and product development, market infrastructure development, application of IT in market information and financial management, brand development and market promotion.

Limited agro-processing and value addition – For both crops and livestock products, there are only a few industries involved in agro-processing, product development and value addition. This sub-sector is underdeveloped and lacks the required technologies and skills. Existing agro-processing industries are not well-linked to lines of production and consumption. As a result, most of the value-added processed grain and dairy products in the supermarkets are imported from abroad. The concepts and techniques of value addition and value proposition are not well-developed. In most cases, there is no quality control and assurance systems for the products and that results in lack of trust on the part of consumers[15].

[14] African Postharvest Losses Information System (2022)

15 Desalegn, A., Standards related foods and food products (2017)

Opportunities: The stakeholder consultation workshop provided examples of successful small-scale, local agro-processing and product value addition initiatives. The government is also providing support and incentives, including access to land by lease and access to finance with lower interest rates, to MSMEs and private sector actors engaged in agro-processing at different levels. CRS F2F will be able to leverage these to support MSMEs and farmers' cooperative unions in terms of technology use and skill transfer.

Low organizational and technical capacities - The consultation workshop identified that most private enterprises and other organizations involved in the agribusiness sector in Ethiopia have limited trained manpower, financial resources, organizational policies and manuals, business plans and facilities. This affects performance and sometimes ends in bankruptcy. The lack of organizational structure and business registration sometimes make it difficult for the government and other partners to provide formal support. Hence, organizational and technical capacity building are necessary to enhance the performance of local agribusinesses.

Opportunities: The local hosts and partners are mostly interested in seeking capacity building support and concerned local government offices have limited resources and skills to provide the required support. External project support in capacity building is appreciated by both the local host partners and government offices. Hence, CRS will contribute to capacity development and performance improvement of the host partners and local government offices.

4. Proposed F2F Activities

Up to 58 short-term volunteer technical assignments will be completed over the life of the project supporting approximately 15 hosts. Scheduling will be on a demand-driven basis and opportunities for scaling up volunteer innovations will depend on gaps identified by hosts, implementing partners and initial sector-wide assessments completed by F2F staff.

Fiscal Year	FY24	FY25	FY26	FY27	FY28	Total
Assignments	4	14	14	14	12	58

Through the Agribusiness Development Country Project, F2F volunteers will deliver highly specialized short-term technical assistance addressing gaps at multiple points along the value chain. The support will address major issues in production systems, post-harvest management, marketing, and agro-processing and value addition of the selected commodities. Volunteers will also provide support on organizational and human capacity development to enhance the performance of host partners. To address the challenges of financial and technological issues, CRS F2F will support the hosts in resource mobilization through business plan development, grant proposal writing and ICT trainings. Following each training, volunteers will generate recommendations for the host partner to apply in order to improve its business performance.

CRS will continue supporting the national research system and local universities to strengthen their capacities and leverage the collaboration to facilitate transfer of new technologies and tools for agribusiness development. The field team will conduct field visits, M&E data collection, documentation and sharing of key lessons on the impacts generated.

5. Key Country Partners and their Roles

Organization	Type of Collaboration	Description and Rationale for Collaboration
Ministry of Agriculture (Crops and Livestock Executives, and local offices of agriculture)	Sector needs, host identifications, and relationship management with hosts	Responsible for policy formulation, regulation and quality control, and development of the agriculture sector (formulation, implementation and monitoring of agricultural legislations, regulations and policies). Coordinate, oversee and provide support to regional, zonal and woreda agriculture offices.
Ethiopian Institute of Agricultural Research,	Sector needs, and host identification, and technology transfer	Transfer of new technologies and tools, and provision of technical support and advice to host partners.
Federal Cooperative Agency	Sector needs, host identification, and relationship management with hosts	Policy formulation, regulation and linkages with cooperative unions.
Agricultural Transformation Institute	Sector needs and host identification	Identification and implementation of agricultural transformation agenda, development of policies and strategies with MOA. Facilitation of linkage with host partners.
Seed Enterprise enterprises (national and regional)	Sector needs identification	Support hosts in accessing improved crop and forage seeds, and in multiplication processes.
Universities	Sector needs, host identification, technology transfer	Transfer of new technologies and tools, and provision of technical support and advice to host partners.
USAID-funded CRS programs (RFSA and ESA)	Host needs identification, collaboration in implementation	Collaboration to enhance synergies and efficiencies in agribusiness development.
Feed the Future Transforming Agriculture Activity	Host needs identification and linkages	Support farmers in sustainable and climate resilient agriculture, and linkage with hosts.

6. Target hosts

The hosts will be identified and selected in consultation with key partners based on their relevance to agribusiness development. In total, 15 hosts will be selected for the agribusiness development project. The primary criteria will be that the host is either directly engaged in agribusiness or supports other partners in agribusiness development. Hence, most of the hosts will represent private companies and farmers' cooperative unions. Some universities and research institutes will be selected as hosts based on the technical and technological support they provide to other hosts in the agribusiness development of selected commodities. In addition, all the hosts need to meet other important requirements which include, but are not limited to, the following:

- Legally registered and recognized by the local government.

- Clear organizational structure and function.
- At least 40 members, owners, clients, suppliers or students.
- Interest and willingness to receive volunteer technical support and apply recommendations.
- Ability and commitment to disseminate best practices and lessons learned to other beneficiaries.
- Willingness to provide required MEAL data.
- Willingness to contribute resources required for implementation of volunteer assignments.
- Committed to comply with CRS safeguarding and protection, and gender policies.
- Location in the FTF zone of influence and suitability for cluster formation.

7. Key Feasibility Issues

7.1. Economic, Policy, Financial, Institutional, Socio-Cultural, and Environmental

The consultation workshop analyzed and identified important factors affecting (enabling or hindering) the implementation of agribusiness development in Ethiopia. The key issues are presented below.

***Economic*:** The cost-benefit of volunteer technical assistance for agribusiness development was assessed based on existing experiences. The estimated cost for implementing one volunteer assignment is $12,267[16] making the total costs for the 58 assignments $711,486. Following volunteer support, it is estimated that hosts will generate gross and net incomes of $6,212,500 and $1,312,500, respectively, over the life of the project (LOP). That represents an anticipated 30% and 25% increase in gross sales and net income, respectively, by the end of the project. In addition, it is estimated that hosts will contribute $21,065 and volunteers will leverage $2,282 in resources. Most importantly, capacity building will enhance the capability and performance of the hosts. Through support provided on grant project writing, business plan development, leadership and management, the host will potentially mobilize $149,616 during the life of the project. Therefore, compared to the cost, volunteer technical support will lead to significantly greater benefits in terms of income, resources mobilized, and capacities developed. Improved organizational and human capacity will enhance the performance of the hosts and strengthen the sustainably of their agribusiness activities. The benefits will be shared with other beneficiaries though employment opportunities, dissemination of volunteer recommendations, and new or improved products and services.

Policy: The Ethiopian government policies on value chain development of strategic commodities and agricultural commercialization clusters are important driving factors for agribusiness development. Additionally, government policy promotes and incentivizes private sector engagement in agriculture and agro-processing. The government's Climate Resilience Green Economy (CRGE) strategy and Sustainable Food System Transformation commitment supports the implementation of climate resilient and sustainable agricultural practices through different projects and initiatives. Hence, it enables CRS F2F to implement integrated and climate resilient

[16] Based on volunteer and assignment related costs (staff costs for volunteer management, volunteer travel costs etc.)

interventions for sustainable agribusiness development. However, private sector engagement and agribusinesses are often limited due to small land holding size sand government bureaucracies. The expectation is that some of the government policies such as the new land policy recently approved by the council of ministers, will help to address the challenges of land insecurity and property rights.

Financial: Access to finance, especially foreign currency, is a major factor affecting agribusiness development[17]. Government policy highly encourages and supports private sector engagement in agriculture, including foreign direct investment, with special financing schemes and machinery leasing[18]. Yet, the provision is constrained by the shortage of finance, especially foreign currency. Mostly, private companies and public institutions have limited capital, which highly impairs their operational performance.

Institutional: In most cases, especially the private sector and farmers' cooperative unions, organizational structures are in place but their functioning is limited due to financial, human and material constraints. The public sector and NGOs usually have comparatively strong institutional structures and functions but, again, human capacity (technical and leadership) is often limited.

Socio-cultural: The major social issues identified during the consultation workshop include land tenure insecurity, limited skills and work experience, and limited use of modern technologies. Though the government is making efforts to address these issues, they continue to be an important challenge to development, especially in rural areas. In some areas, social, cultural and religious perceptions also affect implementation of agribusiness activities. Important examples include perceptions and preferences in terms of new technologies, and household dynamics which affect the participation of family members in projects. For instance, some agribusinesses such as poultry and dairy are preferred more by women than men yet the dominance of men in decision making affects women's choices and participation in key activities. Consequently, it can limit women's access to training and extension services, and participation in marketing and financial management.

Environmental: The major environmental issues affecting agribusiness activities include land degradation, deforestation, water scarcity, and various types of pollution especially in the industrial, urban and peri-urban areas. Some agribusiness activities (e.g., unsafe use of pesticides, excessive tillage, biomass removal from crop fields, open grazing, etc.) may negatively impact the environment's health, safety and the way the ecosystem functions. CRS will contribute to environmental protection and safety through the implementation of improved land and soil management practices (e.g., rehabilitation of degraded land) and taking measures to ensure the volunteer assignments cause no-harm to the environment.

7.2. Gender

Gender inequality, which is mostly reinforced by social, cultural and religious norms, is a major constraint to women's participation in, and the benefits they gain from, agribusiness in Ethiopia. The consultation workshop identified several interrelated issues affecting women which include limited access to and control over productive resources, income, markets, information, extension

[17]Ethiopian Agricultural Transformation Agency, Agricultural Commercialization Cluster (ACC) Document (2019)

[18] https://nbe.gov.et/financial-institutions/capital-goods-finance/

services, and education[19]. Another challenge is the social norm that dictates women should focus on domestic work rather than participate in agribusiness. Additionally, women's bargaining power is very low due to insufficient financial resources. Therefore, one challenge to address is the underlying constraint of poor financial and technical capacity.

According to the convened stakeholders, the organizational, financial and technical capacity of women who own or lead agribusinesses should be strengthened in order to enhance the benefit they gain from their agribusiness activities. Household-level gender dynamics should be addressed through training and awareness raising involving men, community elders and religious leaders.

CRS is committed to ensuring gender equality across all its programs and will conduct a gender analysis to identify host-specific issues, and design and implement gender responsive and/or transformative assignments to enhance women's engagement in agribusiness. The Ethiopian government's policy which enforces gender mainstreaming in all public and private entities will be a major enabling factor to address the issues.

7.3. Climate change

The consultation workshop identified that climate change is a key factor challenging Ethiopia's agriculture sector. Agriculture is mostly dependent on rainfall and susceptible to changes in precipitation due to climate change. Rainfall patterns (amounts and distribution) are often unpredictable and, as a result, drought is a common phenomenon affecting crop and livestock production. The recent 2022 drought in the Horn of Africa killed about 4.5 million livestock in the country[20]. In the drought prone areas across the rift valley, maize and wheat productivity reduced by 30% and 25%, respectively[21]. Late onset and early secession of rainfall is common and affects crop and livestock productivity. Rising temperatures compounded with erratic rainfall also create the conditions in which devastating insect pests (e.g., desert locust and fall armyworm in the northern and eastern Ethiopia) thrive, and diseases (e.g., rusts in southeastern Ethiopia) spread. As a result of erratic rainfall, flooding is also becoming a problem in some areas. Climate change is inducing land degradation, making agriculture highly vulnerable and creating pressure on the food security of millions of Ethiopians.

In response to these challenges, Ethiopia has shown tremendous commitments in implementing NDCs to global climate change mitigation and adaption by designing and implementing policies, strategies and initiatives. The CRGE strategy, which was announced at COP17 in Durban and coordinated among different sectors, has been implemented for about 13 years. The country adopted the Drought Resilience and Sustainability Initiative in 2012 and Land Degradation Neutrality (LDN) in 2015. Ethiopia has set goals to reduce greenhouse gas emissions by 68.8% (to 125.8 Mt CO2eq) by 2030[22]. To this end, it has been implementing its flagship Sustainable Land Management Program and strategic actions including Reducing Emission from Deforestation and Forest Degradation (REDD+), Green Legacy Initiative and Forest

[19]USAID Feed the Future, Gender-based constraints and opportunities to agricultural intensification in Ethiopia (2016)

[20] Ethiopia-Agriculture Taskforce, drought response situation (2022)
[21] Mezgebu *et al.*, Narrowing crop yield gaps in Ethiopia under current and future climate (2022)
[22] Federal Democratic Republic of Ethiopia, Nationally Determined Contribution (2021)

Development Plan. Many partner organizations involved in the green sector including ATI, GIZ and World Vision, are also implementing projects which support climate resilient agriculture and food system development in the country.

CRS has been working in Ethiopia for over sixty years responding to natural and man-made disasters affecting vulnerable communities. It is committed to climate risk mitigation, including recovery from drought and flooding. Through F2F, in collaboration with other stakeholders, CRS will promote climate change mitigation and adaptation practices, and measures that can reduce land degradation. At the farm level, CRS will help host partners and beneficiaries identify and implement locally adapted climate smart agricultural practices to ensure sustainable production of the selected commodities.

iii.a. Country specific climate risk assessment and management planning

Country specific climate risk	Strategy to respond to the climate risk
Crop failure, livestock losses, reduced yields and quality due to drought, heat stress and flooding.	- Implement volunteer assignments that can strengthen climate smart agriculture and production diversification - Integrate climate change mitigation into volunteer assignments
Changes in crop suitability due to shifting agroecological zones	- Integrate local adaptation of crops and varieties into volunteer assignments
Increased incidence of pests and diseases (e.g., fall armyworm, desert locust, coffee berry borer, livestock diseases)	- Integrate disease and pest predictions, and integrated management systems into volunteer assignments
Soil degradation from heavy rainfall, flooding, and erosion	- Integrate soil and water conservation, and rehabilitation of degraded lands into volunteer assignments
Reduced livestock production and productivity due to drought and reduced feeding options	- Support hosts in integrated livestock management, including forage development, feed and nutrition and health management
Increased milk spoilage due to warmer temperatures	- Support hosts in milk processing and cold chain development.

8. Other Resources to Accomplish Desired Objectives

In Ethiopia, CRS has a long presence and position working with USAID, different government sectors, and local and multilateral organizations. It implements relief and development projects through a network of local partners whose capacities it has built. These partners will collaborate with F2F to identify hosts and disseminate volunteer recommendations. CRS is also implementing other projects within the agriculture sector, including the USAID-funded RFSA and ESA. F2F will leverage their experiences and form collaborations to create synergies and efficiencies.

The highly organized structure and function of CRS will allow F2F to mobilize required support including administrative and financial staff support, allocated office facilities and vehicles. CRS will continue to seek to leverage F2F to secure associate awards. Collaborating with the other USAID-funded CRS programs, F2F will leverage resources and investments made by those programs to integrate volunteer support and enhance impact at the partner and beneficiary levels.

9. Project Logical Framework

Objective Statement	Key Performance Indicator Targets	Sources of data	Assumptions
Purpose: To generate market-driven, inclusive, and sustainable agricultural economic growth, create employment opportunities, and contribute to improved production efficiency, food security, income and resilience of target beneficiaries in Ethiopia through volunteer technical assistance to host partners by addressing their technical and organizational constraints.			
Impact SO1: Enhanced economic growth in the agricultural sector by strengthening agribusiness development. SO2: US Public Understanding of international agricultural issues and USG development programs Improved. .	- $6,212,500 total gross sales at life of project (LOP) - $1,312,500 total net income at LOP. - 30 percent increase in annual gross sales of total assisted hosts (LOP) - 25 percent increase in annual net income of total assisted hosts (LOP) - 5,360 of area under improved management influence (Ha) - 8,490 direct beneficiaries benefited. - Hosts organizational development index (ODI) increased by 0.5 score in an average (4 is maximum score) - $3,354,330 value of rural/agricultural lending expended by hosts. - 6,418 rural/agricultural loans issued by hosts. - Five new or improved products developed. - 10 new or improved services developed.	Host records, host baseline and impact documentation and indicator performance tracking table (IPTT)	Weather and global market trends remain conducive to project implementation and application of volunteer recommendations
Outcomes SO1 & SO2: -New and improved agribusiness management practices recommended by volunteers applied -Resources mobilized by hosts and leveraged by volunteers, and used for implementation of assignments and recommendations	- $214,106 value of resources mobilized by hosts. - 139 volunteer recommendations applied by hosts. - 15 volunteer experts continued connection with hosts since assignment completed. - $3,266 Value of resources leveraged by volunteers and implementer in the U.S - $14,251 worth of volunteer technical assistance contributed from the U.S.	Host baseline and capacity development plan, monitoring reports volunteer survey, implementer record and IPTT table	Availability of complementary services to support and sustain implementation of volunteer recommendations

Objective Statement	Key Performance Indicator Targets	Sources of data	Assumptions
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Outputs SO1 & SO2: -Organizational and human capacities of hosts strengthened -Volunteers recommended improved and new techniques to hosts to improve their agribusiness performance -New and improved/best practices disseminated using media platforms	- 2,324 persons trained. - 174 volunteer recommendations made. - 15 host organizations assisted. - 14 publications, Radio, or TV broadcasted (worldwide 35 in host countries and 42 in the U.S.) - 115 social media posted by implementers, expert volunteers, hosts and staff (worldwide) - 45 group presentations made by implementer and volunteer's (worldwide)	Participants sign in sheet, volunteer report, monitoring report and IPTT table	Media and government regulation are supportive of these program activities
Inputs SO1 & SO2: -SOWs developed and volunteers recruited -Volunteer assignments implemented -Hosts contributed resources towards implementation of assignments	- $30,145 value of host contribution - 58 volunteer assignments - 29 new volunteers - 29 women volunteers - Nine U.S. paired remote volunteers (PRVs) - 1,046 days of volunteer service - 58 Scope of works (SOWs)	Host contribution record, volunteer report, IPTT table	Security situation in program area is conducive for volunteers to complete volunteer assignments
Custom indicators SO1: -Capacity of hosts enhanced in integrating gender in agribusiness development -Capacity of enterprises for improved for enhanced investments	- Eight host organizations' gender ODI scores increased as measured by CRS gender ODI assessment tool at LOP. - Three enterprises' organizational capacity increased as measured by the CRS MSME assessment tool at LOP. - 25 percent increase in investment made by private sector enterprises (PSEs) at LOP	Hosts baseline, gender and MSME tools at baseline and impact assessment	Implementation of volunteer recommendations specially from gender and enterprise volunteer assignments