FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

Global Food Security Strategy (GFSS)
Madagascar Interagency Country Plan

26 June 2024

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Acronyms

ACF	Action Contre la Faim
AfDB	African Development Bank
BHA	Bureau of Humanitarian Assistance
BNGRC	National Office for Risk and Disaster Management
CBO	Community Based Organization
CCIR	Cross-Cutting Intermediate Result
CDCS	Country Development Cooperation Strategy
CGIAR	Consultative Group for International Agricultural Research
CIP	Center for International Potato
CPGU	Prevention and Management Emergency Unit
CTAS	Centre Technique Agro-Écologique du Sud
DOS	Department of State
EU	European Union
FAO	Food and Agriculture Organization
FEWS	Famine Early Warning System
GFSS	Global Food Security Strategy
GBV	Gender Based Violence
GDP	Gross Domestic Product
GIZ	German Cooperation
GoM	Government of Madagascar
HDP	Humanitarian - Development - Peace
HPCP	High Priority Country Plan
IFAD	International Fund for Agriculture Development
ICS	Integrated Country Strategy
IPC	Integrated Food Security Phase Classification
IR	Intermediate Result
MAE	Ministry of Agriculture and Livestock (Elevage)
MEDD	Ministry of Environment and Sustainable Development
NRM	Natural Resource Management
OCHA	Office for the Coordination of Humanitarian Affairs
RF	Results Framework
RFSA	Resilience Food and Security Activity
RFZ	Resilience Focus Zone
SME	Small and Medium Enterprise
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
VSLA	Village Savings and Loan Association
WB	World Bank
WASH	Water, Sanitation, and Hygiene
WHH	Welt Hunger Hilfe

WFP	World Food Program
WSSH	Water Security, Sanitation, and Hygiene
ZOI	Zone of Influence

Executive Summary

Madagascar has been grappling with a growing crisis characterized by enduring food insecurity, malnutrition, and a declining resilience among its population. The demand for humanitarian assistance has doubled since 2016, driven by a complex interplay of factors, including the impacts of climate change, land degradation, and the economic repercussions of the COVID-19 pandemic. These challenges are compounded by high poverty rates, rapid deforestation, land deterioration, stagnant or declining health outcomes, and frail institutional frameworks, rendering the country increasingly vulnerable in the face of natural disasters such as floods, droughts, cyclones, extreme temperatures, and rising sea levels, magnified by the increasing frequency and intensity of weather-related shocks.

Madagascar was designated a Global Food Security Strategy (GFSS) Feed the Future country in April 2022 and as a USAID Resilience Focus Country in May 2022. The Feed the Future Madagascar Country Plan was developed during 2023 through an extensive stakeholder consultation process and analytical process to identify and designate the combined Resilience Focus Zone (RFZ) and the Zone of Influence (ZOI), called the ZOI+. The poverty rate in the targeted ZOI + is approximately 92 percent, compared to 81 percent nationally. The average stunting rate in the ZOI+ is 41 percent, near the national average of 40 percent, but fluctuates within the ZOI+ to as high as 55 percent in the Grand South.

Feed the Future will work to sustainably reduce global hunger, malnutrition, and poverty through three impact pathways in alignment with the GFSS objectives: (1) agro-ecological-economic; (2) resilience; and (3) the human and social capital impact pathways. Systems will be strengthened to mitigate, manage, and recover from shocks and enable people, households, and communities to build resilience and adapt to long-term stresses and future shocks.

In alignment with GFSS Objective 1, *inclusive and sustainable agricultural led economic growth*, the agro-ecological-economic pathway will promote a nature-positive, market-led approach to strengthen the food system in the ZOI+ through transformative shifts in both environmental and economic systems. For communities to engage in better management of natural resources (land, water and biodiversity), activities will focus on increasing economic benefits from their agriculture lands, coastal zones and ecosystem services. Market systems will build resilience using the *push-pull* approach that seeks to build the capacity of vulnerable and chronically food insecure households, with a focus on female-headed households and youth, to participate in economic activity (*the push*), while generating relevant economic opportunity and demand for smallholder production, labor, and modern agriculture technologies and services (*the pull*). A food system approach will serve to increase productivity of diverse and nutritious foods, entrepreneurship, employment and incomes, and harness the power and influence of the farmers and private sector to sustain economic and ecological benefits. Women, youth, small-scale producers, farmer associations/cooperatives, and micro, small, and medium-sized enterprises (MSMEs) will be supported to overcome barriers to entry and improve participation, productivity, and profitability.

In alignment with GFSS Objective 2, *strengthened resilience among people and systems,* the resilience impact pathway will be implemented across the ZOI+, especially in the areas of recurrent crises and high levels of humanitarian need. This pathway is focused on ensuring the foundational building blocks are in place to move from humanitarian assistance to a development and economic growth trajectory. Resilience integration is critical for communities to ensure that risk and resilience options are assessed, and people, communities, and system actors invest in approaches that further strengthen sources of asset protection and creation and human capital.

Activities will strengthen the systems needed to mitigate, manage, and recover from shocks and enable people, households, communities and markets to build resilience and adapt to long-term stresses and future shocks. Feed the Future will predominantly focus on restoring and sustainably managing land,

water, and natural resources to boost resilience, improve food systems productivity, and mitigate and adapt to the impacts of climate change. Other approaches including strengthening disaster risk mitigation and management systems and services, shock-responsive mechanisms, early warning monitoring, and adaptive social protection systems will be done through strategic sequencing, layering, and integration with partners including strengthening the Humanitarian - Development - Peace (HDP) nexus platforms nationally and sub nationally to serve as critical pieces of building resilience.

In alignment with GFSS Objective 3, *a well-nourished population, especially among women and children,* the human and social capital impact pathway will target nutrition sensitive agriculture; quality health and nutrition service delivery; and strategic and innovative social and behavior change (SBC) at the individual, household, and community levels to improve nutrition outcomes and enhance human potential, health, and productivity. This will consist of greater integration across all three objectives by enhancing the production, affordability, and marketing of nutritious foods that reduce malnutrition and improve diet quality. Dietary diversity considering the existing consumption habits will be a priority for nutrition sensitive activities. Food fortification will be promoted in tandem with existing diet habits to improve nutrition. Additionally, enhanced food safety and food processing will be considered as a priority to ensure year-round availability of safe and nutritious foods. Feed the Future will strengthen community-based maternal nutrition interventions and improve the supply chain for nutrition commodities and their availability at point of use, in coordination with private sector partners. Activities will emphasize essential nutrition actions, including counseling on appropriate food for pregnant and lactating women, iron folic acid supplementation, deworming, and nutritional education. Feed the Future will also strive to to increase access to safe drinking water and sanitation products and services to reduce the fecal-oral route of disease transmission and infectious waterborne illnesses and by supporting sustained practices of improved sanitation and hygiene behaviors that can have significant impact on nutrition and health outcomes.

A. Country Context[1]

A.1 Overall Country Context

Madagascar is an island nation in the Indian Ocean off the southeastern coast of Africa. It is among the poorest and least-developed countries in the world, beset by recurrent shocks and chronic stresses. Despite the potential for Madagascar's diverse landscapes and rich biodiversity to propel its development, it is one of the world's poorest countries. Madagascar is the only country where Gross Domestic Product (GDP) per capita has declined since independence (1960) without a protracted conflict. An estimated 81 percent of the Malagasy people live below the poverty line.

The Feed the Future Country Plan will operationalize the USG Global Food Security Strategy (GFSS) in Madagascar. The plan outlines how USG will invest in solutions and partnerships in nutrition sensitive food systems, market-led agriculture growth, sustainable management of natural resources (including land, water, and biodiversity), social cohesion and protection, and climate change mitigation and adaptation to enhance Madagascar's resilience to shocks and stresses and allow for a more prosperous and secure future.

Figure A. A map of Madagascar

Madagascar's current population of roughly 30 million will grow to an estimated 54 million by 2050 at the current population growth rate of 2.4 percent/year.[2] The population is very young, with 59 percent under 25 years of age and 41.3 percent under 15.[3] Just over 50 percent of the population are women, with an average household size of 4.2. One quarter of households are female-led. Eighty-three percent of the population is rural.[4]

The agriculture sector is the backbone of Madagascar's economy, accounting for more than one fourth of GDP and generating 30-40 percent of exports. The three agriculture sub sectors (crops, livestock, and fisheries) support 75 percent of Madagascar's population and comprise 86 percent of all jobs, 60 percent of youth employment[5], and 80 percent of rural women's employment. Unlocking the potential of this large, women and youth-led labor force is key to development.

Madagascar faces a complex set of shocks and stresses that exacerbate poverty, food insecurity, and resilience. These include cyclical and non-cyclical, human-made and natural shocks and stresses. Among

[1] In Madagascar, the term "region" is a specific administrative unit that composes multiple districts. In this plan, we use the term *Southeast, Grand South and Southwest* as shorthand to refer to groupings of specific districts. For the purposes of this plan, the *Southeast* refers to districts in the regions of Vatovavy, Fitovianay, Atsimo-Atsinanana. The Grand South refers to selected districts in the regions of Anosy, Androy, and Atsimo-Andrefana, and the Southwest refers to districts in the regions of Atsimo Andrefena and Menabe.

[2] World Population Review, "Madagascar Population 2024 (live)."

[3] United Nations Population Fund (UNFPA), "Data: Madagascar."

[4] UNFPA, *Troisieme Recensement General de la Population et de l'Habitation* (French), Feb 2021.

[5] International Fund for Agricultural Development, "Madagascar."

the array of threats facing Madagascar that must be factored into development approaches are climate-related shocks, environmental degradation, and political instability. Since the 1980s, the country's Grand South has been caught in a cycle of drought and natural disasters, crop failure, livelihood loss, and food price inflation, which together with other factors has led to increased poverty and food insecurity, and a decrease in resilience levels.[6] Notably, Madagascar was struck by back-to-back droughts during 2019-2021, the worst in 40 years, exacerbated by climate change and worsening land degradation. This had a disastrous impact on agricultural productivity and forced people to resort to desperate survival measures, such as eating locusts, raw red cactus fruits or wild fruits, and created climate migrants that moved to other more productive regions of the country.

A.2 Poverty, Food Insecurity, and Malnutrition Statistics and Trends

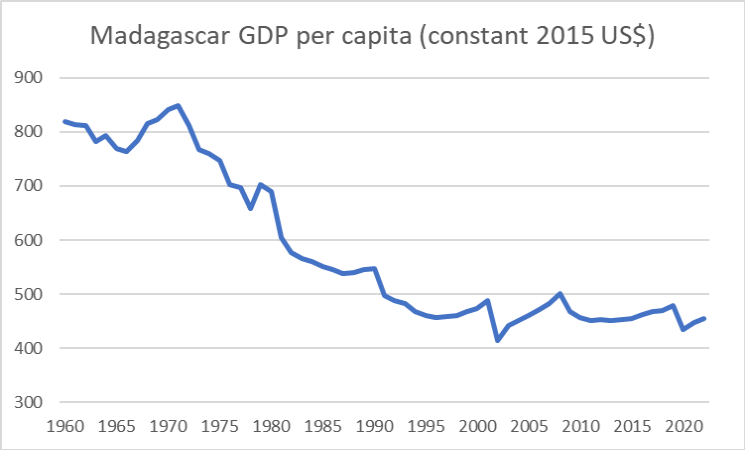


Figure B. Madagascar's GDP per capita

Poverty. Madagascar's GDP per capita has declined since independence (1960), falling from a high of $848 in 1971 to $454 in 2022.[7] More than 80 percent of the population live below the international poverty line of $2.15 per person/day, significantly higher than the African regional average of 41 percent.[8] Rural regions have twice the poverty rate as urban areas**.** Poverty rates are highest in the country's Grand South where over 90 percent of Malagasy live under the poverty line.[9]

Myriad factors hinder Madagascar's ability to alleviate poverty. Frequent changes in political leadership have led to inconsistent policies that have negatively impacted foreign investment and development projects. Madagascar has struggled to maintain democratic norms and good governance. In the years immediately following independence in 1960, Madagascar experienced modest GDP growth. Throughout the 1980s and 1990s, the country faced economic challenges, including low growth rates and high inflation. The early 2000s saw some signs of economic recovery and stability, with GDP growth reaching 5-6 percent in some years. However, a 2009 political crisis led to international sanctions and suspension of foreign aid, causing the economy to contract. Following the crisis, periods of modest growth were often offset by setbacks due to natural disasters like cyclones and drought, as well as global economic conditions impacted by the COVID-19 pandemic and the Ukraine war.[10] Other factors styming growth include rapid loss of natural capital due to environmental degradation, and low investment in human and physical capital. These constraints are discussed in more detail below.

Food Insecurity. Food insecurity dramatically increased in the last 10 years, hampering human development. As of September 2022, 8.8 million people (about 33 percent of the population) were food insecure. According to the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) Financial Tracking Service, humanitarian expenditures have increased overall since 2012 and have more

[6] ACAPS, "Madagascar: Food insecurity crisis in the Grand Sud regions," Mar 2022.
[7] World Bank, "Data: GDP per capita (constant 2014 US$) – Madagascar."
[8] Our World in Data, "From $1.90 to $2.15 a day: the updated International Poverty Line," Oct 2022.
[9] World Weather Attribution, "Factors other than climate change are the main drivers of recent food insecurity in Southern Madagascar," Dec 2021.
[10] World Bank, "Data: Madagascar."

than doubled since 2016 based on the Integrated Food Security Phase Classification (IPC) phases 4 and 5. The food security analysis (IPC) conducted in December 2021 revealed that 1.47 million people needed urgent assistance (IPC Phase 3 or above). OCHA appeals data shows the need for humanitarian assistance has doubled in the Grand South, and is increasing in the Southeast. This spike coincides with an increase in severity of multivariate shocks, including droughts, floods, cyclones and disease outbreaks. As of November 2022, 2.22 million people in the Grand South and the Southeast are facing emergency levels of food insecurity.

Although food insecurity is higher during the lean season, the situation remains critical throughout the year. Five million people are affected by recurring natural disasters, such as cyclones, floods, and droughts.[11] Food insecurity is driven by a combination of demographic vulnerabilities and structural weaknesses in the food system that impact crop, livestock, and fisheries productivity; food availability, access, and processing; and nutrition. Inadequate access to arable land, traditional farming and fishing techniques, and low mechanization further impede productivity. Other challenges faced by farming and fishing households include the lack of affordable and accessible inputs, including quality seeds and phytosanitary products.

Many households seek to diversify their income-generating activities through small commerce in local markets, often engaging in more than 13 different types of economic activities at a time. Efforts to diversify are challenging as 75 percent of the population in the Grand South and Southeast are impacted annually by at least one natural hazard (droughts, pests, and cyclones), food price spikes, or social insecurity.[12] Moreover, the inadequacy of road infrastructure limits production, access to markets, and access to inputs and food.

Malnutrition. Malnutrition is a major public health concern. Nearly 40 (39.8%) percent of Malagasy children are stunted, which reflects the impact of undernutrition and other factors on optimal growth. The 2021 DHS showed that Global Acute Malnutrition (GAM) rates reached emergency and critical levels primarily in the southern region of Androy and the southeast regions of Vatovavy, Fitovinany, and Atsimo-Atsinanana. The Grand South has the highest levels of acute malnutrition, as shown by wasting statistics and highest levels of humanitarian need and food insecurity. These areas experience high levels of stunting (55 percent in Anosy, 54 percent in Androy, and 52 percent in Atsimo-Andrefana) and the highest recurrent wasting (14 percent in Anosy, 16 percent in Androy, and 11 percent in Atsimo-Andrefana).[13] Costs associated with child undernutrition represent 14.5 percent of the country's GDP.[14]

Diets are traditionally plant-based, dominated by rice, cassava, and other starchy staples. The consumption of fruits, vegetables, plant based proteins, and animal-sourced foods is generally low due to economic constraints and cultural preferences. Micronutrient deficiencies such as vitamin A and iron deficiencies are prevalent. Access to healthy, balanced, diverse, and nutritious food also remains elusive for many due to factors such as non-compliance with food safety norms and regulations and suboptimal practices around healthy food choices. Gender-specific challenges further compound this, driven by disparities in control over time, income, work, and family assets for female caregivers.

The country has one of the lowest Human Capital Index scores in the world, ranking at 39th.[15] This means that a child will reach just 39 percent of their productivity potential.[16] Early marriages and early births perpetuate extremely high stunting rates and are a draw on human capital, women's and girl's

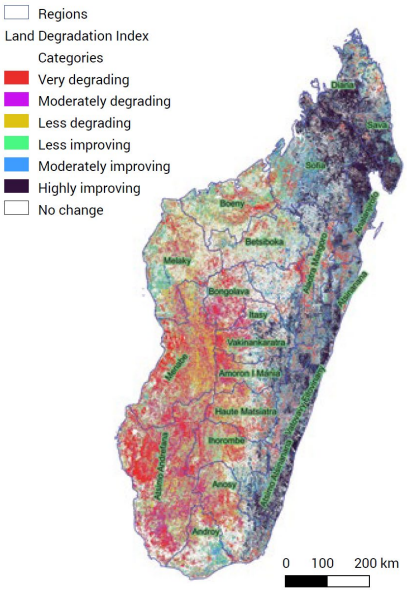
[11] Dominique Fayad, *Food Insecurity and Climate Shocks in Madagascar: Republic of Madagascar,* 2023.
[12] Ibid.
[13] Institut National de la Statistique (INSTAT) and ICF, *Enquête Démographique et de Santé à Madagascar*, 2021.
[14] World Food Programme, "Madagascar."
[15] Natasha Sharma et al., *Madagascar Country Economic Memorandum: Maximizing the Upturn to Foster a More Resilient Economy,* World Bank, 2020.
[16] World Bank, "Data: Human Capital Index (HCI) – Madagascar."

empowerment, and productivity. Stunting often begins during pregnancy, with 30 percent of children born stunted resulting in cognitive delays, low educational attainment, and decreased lifelong income earning potential and labor force productivity. Poor nutrition is also exacerbated by poor access to clean water and sanitation and insufficient healthcare. This negative cycle has contributed to the increased need for humanitarian assistance, especially among nutritionally vulnerable women and children.

A.3 Country Specific Drivers of Poverty, Food Insecurity, and Malnutrition

Key drivers of poverty, food insecurity, and malnutrition include environmental degradation, recurrent climate shocks, limited access to water, sanitation and hygiene (WASH), gender and youth disparities, limited access to education, migration, and in recent years, the effects of COVID-19 and the war in Ukraine. These drivers, which are by no means exhaustive, but rather selected to inform understanding of the Country Plan, are briefly summarized here.

Figure 2.2. Land Degradation Trends in Madagascar 1990 – 2020



Source: World Bank Team Estimation.

Figure C. Land Degradation Trends in Madagascar

Environmental Degradation. While Madagascar is well-known for its globally unique biodiversity and diverse ecosystems - the natural wealth capable of supporting its path out of poverty - these resources have not fared well. Between 1995 and 2018, Madagascar's renewable natural capital per capita (the sum of forest lands, agricultural lands, pasture lands, terrestrial protected areas, mangroves, and fisheries) dropped in value by an alarming 31 percent.[17] Ongoing deforestation, land degradation and overfishing pose significant threats to the sustainability of the country's food systems. Land degradation is a national problem, but is particularly severe in the western, southwestern, and southern regions. Net primary productivity (NPP), a measure of plant growth, showed a declining trend in 43 percent of the land area, indicating a widespread threat to food, fodder, and biofuel availability. Madagascar lost 8 percent of its forest cover from a baseline of 29 percent of land area, since 2000, primarily due to deforestation for grazing, agricultural lands, and charcoal. Forest loss was worst in the Grand South and Ihorombe Region (bordering the Grand South and Southeast), which lost 27 percent of forest cover during the period. Madagascar's deforestation has contributed to some of the highest rates of erosion and downstream flooding in the world. The economic cost of land degradation since 2000 is estimated at over $6.7 billion, amounting to 1.78 percent of GDP per year.[18]

Climate Change. Madagascar is the world's fourth most vulnerable country to the adverse effects of climate change, according to the Germanwatch Global Climate Risk Index.[19] This reality will continue to significantly affect the national economy and local livelihoods, particularly rural subsistence farmers. Poverty, slash and burn agriculture, high population growth, and weak governance contribute to continued deforestation, land degradation, and habitat loss. Indeed, in Madagascar the twin crises of climate change and biodiversity loss are inextricably linked, together conspiring in a vicious circle of decreased agricultural productivity, watershed degradation, erosion, soil fertility loss, vulnerability to climate and disasters, and a further increase in poverty. Climate change impacts have increased in

[17] World Bank, *Madagascar Country Environmental Analysis: Promoting Green, Resilient, and Inclusive Development*, 2022.
[18] Ibid.
[19] Germanwatch, "Global Climate Risk Index."

severity over the last two decades, and include: (1) extended drought periods; (2) increased rainfall variability; (3) more intense and longer duration of cyclones; and (4) floods associated with cyclones.

Recurrent drought and erratic rainfall in the Grand South over the last five years increased food insecurity and led to more humanitarian assistance. During the 2022 cyclone season four cyclones slammed into Madagascar, affecting 500,000 people, destroying over 50,000 homes and 10,000 classrooms, and flooding over 200,000 hectares of agricultural lands. Direct damage estimates were estimated at 4.8 percent of GDP. Data suggest that the cyclones increased the poverty rate among affected households by 27 percent.[20] The Grand South and Southeast regions typically bear the brunt of such weather systems. Future projections include continued warming across the island and areas of both increased and decreased precipitation.[21]

Water Insecurity. Recurrent drought, land use intensification, cyclones, and erratic rainfall, among other factors, have led to repeated emergency responses to address food and water insecurity. While the decrease in rainfall is the key contributing factor, land use changes have decreased vegetative cover, reducing the ability of the landscape to capture and store rainfall, increasing runoff and the potential for flooding. Sediment loads from erosion have greatly reduced the usable storage and capacity of dams that generate electricity or deliver water for household and agriculture use.

Limited Access to WASH. Globally, Madagascar ranks third from last in access to safe water and fourth from last in access to sanitation.[22] Water resources are diverse due to Madagascar's geographic and climatic variations, so challenges vary dramatically. In rural areas, only 35 percent of the population has an improved water supply and just 9 percent[23] has improved sanitation. In urban areas, 18 percent of the population has access to safely managed sanitation facilities[24] and 58 percent use unimproved toilets.[25] Increased severity of cyclones on the east coast has caused repeated disruptions of water services and destruction of WASH infrastructure. Only 4.2 percent of the Grand South have access to a quality water supply from an improved and reliable source, compared to the 27.7 percent national average. As a result, diarrheal diseases affect 18.3 percent of children aged 6-59 months, and febrile illnesses from all causes affect 66.2 percent of children in this region.[26]

Insufficient Health and Nutrition Services. Over 60 percent of Madagascar's people live more than five kilometers from a health center, often in very remote and difficult to reach areas without roads or communications. Distribution and retention of health workers in rural and hard-to-reach areas contributes to health disparities. Drug and medical supplies are prone to stock outs and are unavailable in some areas. Administration of the public health system is weak. Maternal mortality declined from 478 per 100,000 live births in 2012 to 426 in 2018, though less than half of all births (46 percent) are attended by a skilled health provider. In 2021, 54 percent of children under 6 months of age were exclusively breastfed, up from 51 percent in 2018.

Malaria remains the fourth leading cause of mortality and the fourth most frequent reason for health facility visits. The reasons behind this are multifaceted and likely include food insecurity among other factors. Madagascar experiences recurring and overlapping infectious disease outbreaks, measles, polio, plague, dengue, and Rift Valley Fever. Under vaccination and zero-dose children, who account for nearly half of all vaccine-preventable deaths globally, have increased since the COVID-19 pandemic. Madagascar

[20] World Bank, "Poverty & Equity Brief, Madagascar," Apr 2023.
[21] Iberdrola, "Countries most affected by climate change."
[22] UNICEF and Ministry of Water, Sanitation and Hygiene of Madagascar, "Madagascar 2019 WASH Investment Case," Apr 2019.
[23] Ibid.
[24] UN Water, "WHO/UNICEF Joint Monitoring Program for Water Supply, Sanitation and Hygiene (JMP) - 2017 Update and SDG Baselines," Jul 2017.
[25] Institut National de la Statistique (INSTAT) and ICF, *Enquête Démographique et de Santé à Madagascar*, 2021.
[26] International Monetary Fund, *Informality and Growth in Madagascar: Republic of Madagascar,* Jun 2023.

is one of just ten countries that together account for 58 percent of all measles zero-dose children globally. Atsimo Andrefena and Androy have some of the lowest rates of complete vaccination among children 12-24 months.

Low Levels of Education. Access to education and school completion are alarmingly low. More than 25 percent of students repeat at least one grade in primary school and 40 percent of children discontinue their education before completing the fifth grade. Stunting further compounds the problem due to the cognitive delay mentioned earlier. This educational disparity contributes to an illiteracy rate of 25 percent among adults and nearly 20 percent among youth.[27] Such gaps in early education hinder the majority of Malagasy children and youth from acquiring the foundational skills essential for success.

Gender Inequality. Gender disparities in Madagascar contribute to poverty and malnutrition. Women have fewer opportunities for education and formal employment, making it difficult to provide for their families adequately. Among women 25-49 years old, 37 percent were married by age 18 and 12 percent were married by age 15. Women earn on average 34 percent less than men, and female-headed households have a higher incidence of extreme poverty than male-led ones.[28] Traditions, customs, and cultures also limit women's access to decision making at the community level, as well as their access to land, healthcare, education, and economic independence. Social norms related to roles and responsibilities stereotype men as responsible for income generation and women as responsible for unpaid household duties including chores, children's education, and healthcare.[29] Child, early and forced marriage and gender-based violence (GBV) - both prevalent in Madagascar - also negatively affect food security and nutrition outcomes.

Youth Unemployment. Rural youth face disproportionately higher rates of unemployment, illiteracy, and health challenges compared to their urban counterparts. A lack of technical, vocational, and entrepreneurial skills perpetuates a cycle of poverty and food insecurity, particularly in younger households, which are more economically vulnerable. Moreover, young women in these settings are at heightened risk. They are more likely to be married or become pregnant before turning 18, and these risks are exacerbated if they lack education or are living in poverty. Only 30 percent of women currently married or in union decide themselves and 65 percent decide jointly with their partner how to use their earnings.[30] Socio-economic challenges facing young people are multifaceted and deeply interconnected, contributing to a cycle of poverty, poor health, and limited opportunities for upward mobility.[31]

Increased Migration. Migration from the south towards the north has increased due to the confluence of consecutive drought years, the economic effects of COVID-19, inflation, and the ongoing stresses of population growth and limited available arable land. In particular, this migration has caused increased pressure along the west coast where migrants are clearing forested areas to grow maize and groundnuts as cash crops. This influx has caused accelerated deforestation and conflict with the local population.

Impact of COVID. The COVID-19 pandemic further exacerbated poverty and vulnerabilities. Despite a comparatively modest number of COVID cases in Madagascar, the shock associated with the pandemic triggered a recession that was about three times deeper than in the rest of Sub-Saharan Africa (SSA), with a collapse in export revenues and private investment resulting in a 7.1 percent contraction of GDP

[27] Macrotrends, "Madagascar Literacy Rate 1960-2024."
[28] Alain W. D'Hoore and Victor Sulla, *Face of Poverty in Madagascar: Poverty, Gender, and Inequality Assessment,* World Bank, May 2014.
[29] UNICEF, *L'enfance à Madagascar: une promesse d'avenir*, Sep 2014.
[30] USAID, *USAID/Madagascar Gender Analysis for the 2020-2025 Country Development Cooperation Strategy, 2020.*
[31] USAID, *USAID/Madagascar Cross-Sectoral Youth Assessment Final Report,* 2020.

and 9.8 percent decrease in per capita income. Rising poverty is reflected in job losses in the most exposed sectors such as transport, tourism, and trade, and declining revenues in informal sectors.[32]

Impact of War in Ukraine. The war in Ukraine has led to rising food and energy prices globally and indirectly exacerbated Madagascar's inflation rate which reached 10.9% percent (year-on year) in 2022.[33] Rising food and energy prices negatively impacted household purchasing power and further increased already high levels of poverty.

A.4 Constraints In Food Systems

The contribution of agriculture (including fisheries, livestock, and agroforestry) to Madagascar's GDP was estimated at 22.4 percent in 2022. However, its current growth rate of just 1.5 percent is insufficient to lift Malagasies out of poverty and food insecurity. Constraints to growth include overexploitation of resources, land degradation, low productivity, pests such as locusts and fall armyworm, fragmented production methods, insufficient investment in research, lack of access to technology, security concerns, and geographic isolation. This Section highlights selected sector constraints to the food system necessary to improve poverty and nutrition outcomes which are key to understanding of the Madagascar Country Plan.

Land Security. Land plays both a functional and a dysfunctional role in the social, economic, and political organization of Malagasy society. Customary rights practiced and claimed by most rural inhabitants are based on the traditional lineage, the kinship ties, and cultural practices. The unsustainable practice of slash-and-burn agriculture (tavy) allows farmers to claim customary forested lands and safeguard agricultural land for future generations. Discrepancies between tenure rights (state ownership versus customary land) and weak enforcement provide households perverse incentives to clear the forest for agriculture, further exacerbating environmental degradation.

Inputs. Market systems around seed and fertilizer are particularly weak in Madagascar. The poor quality of seed regulation hinders the timely release of quality and certified seed to be used by Malagasy farmers. The law does not allow seed varieties registered in other countries to be automatically approved for commercialization nor do private seed companies and third parties, such as private laboratories, have the ability to certify seed. Madagascar prohibits the importation of genetically engineered seeds, which include technologies that increase drought tolerance and insect resistance. Due to these constraints, among others, Madagascar's Supplying Seed indicator score of 7.41 (out of 100) is significantly lower than the SSA average of 35. Madagascar does not adhere to any of the six best practices that contribute to quality fertilizer regulation; hence, the country's Registering Fertilizer score is zero lowest among SSA countries.[34] Production of cattle and ruminant animals could also be improved by importing livestock for cross-breeding to strengthen herd characteristics. At present, unclear trade policies restrict reliable access to imported inputs to produce crops and livestock.

Markets. Agricultural markets remain underdeveloped due to an agribusiness enabling environment that limits private sector actors' ability to function effectively. An assessment of laws and regulations indicates that Madagascar performs below average in the SSA in supporting market systems that facilitate supplying seed, registering fertilizer, sustaining livestock, trading food, and accessing finance. Stakeholders active in cash crops such as vanilla and pink peppercorn reference distortionary interventions which limit participants' ability to export crops and collusion among buyers to maintain artificially low farmgate prices. The demand for fish and aquaculture products, both locally and for export, is high. However, this demand has led to overexploitation of coastal areas, exacerbating the threat of food insecurity and diminishing income for local communities. One significant impediment to

[32] World Bank, *2022 Systematic Country Diagnostic Update for Madagascar.*
[33] World Bank, "The World Bank in Madagascar," 2024.
[34] World Bank: Enabling the Business of Agriculture

the development of sustainable aquaculture and the reduction of post-harvest losses along the small-scale fishery value chain is the lack of basic equipment and infrastructure. The absence of critical infrastructure, including transportation and storage facilities, as well as the high cost of electricity, poses significant challenges. These obstacles not only increase production costs for fish and aquaculture products but also create formidable barriers for new market entrants.

Finance. Small and medium enterprises (SMEs) face a multitude of challenges that hinder their growth and sustainability, significant among which is the lack of access to finance. The financial sector in Madagascar is still in a developmental stage, and loans are often beyond the reach of most SMEs. High interest rates, coupled with stringent collateral requirements, discourage business owners from taking loans for expansion or improvement. Additionally, the unstable political environment, characterized by frequent changes in regulations and taxation policies, creates an uncertain atmosphere not conducive to business growth. This uncertainty makes it difficult for SMEs to plan for the long term, limiting their ability to scale or even sustain their operations. There is also no commercially available crop insurance or risk mitigation tools to help producers manage unexpected losses from weather events or other environmental conditions.

Infrastructure. Poor road, transport, and communication infrastructure, especially during the rainy season, make it difficult to get produce to markets. Only 11.4 percent of the population has access to a good road network,[35] 15 percent have access to electricity,[36] 9.8 percent have access to the internet, and 34.1 percent have a mobile phone.[37] This leads to post-harvest losses, increased costs, and reduced access to markets, information, education, and health services. Infrastructure deficits constrain SME potential: poor road networks, unreliable electricity supply, and inadequate access to clean water hamper operational efficiency and increase the cost of doing business. Technological inadequacies, such as limited access to high-speed internet, make it challenging for these enterprises to engage in modern business practices, including online marketing and sales crucial in today's global economy. A lack of skilled labor, owing to gaps in education and training, further exacerbates these challenges, making it difficult for SMEs to innovate and remain competitive. These barriers collectively stifle the entrepreneurial spirit and hinder economic development in the country.

Digital Landscape. A 2023 USAID Rapid Digital Resilience and Food Security Assessment for Madagascar outlined constraints and opportunities for leveraging digital technologies to advance Feed the Future objectives. Madagascar ranks poorly on overall affordability of access to mobile devices and connectivity, scoring 27.6 out of a 100 on the mobile connectivity index, below both the regional and its income group average,[38] and digital skills appear to be low.[39] While these numbers may be discouraging, it also means that there is ample opportunity. The FAO is supporting the Ministry of Agriculture and Livestock (MAE) to develop a national digital agriculture strategy. The new strategy and accompanying research may be helpful in identifying opportunities for USG use of digital technologies in its Feed the Future and broader resilience programming, as well as to identify potential collaboration opportunities.

[35] Madagascar Country Economic Memorandum: Maximizing the Upturn to Foster a More Resilient Economy
[36] World Bank Press Release: $150 million to increase access to electricity services (2019)
[37] CIA: Madagascar - The World Factbook
[38] USAID, "International Data & Economic Analysis: Madagascar."
[39] World Bank, "TCdata360."

A.5. Risk and Resilience Context[40]

As indicated above, Madagascar has been grappling with a growing crisis characterized by enduring issues such as food insecurity, malnutrition, and a declining resilience among its population. The demand for humanitarian assistance has surged twofold since 2016, driven by a complex interplay of factors, including the impacts of climate change, land degradation, and economic repercussions. Madagascar bore witness to a staggering 53 natural disasters between 1980 and 2010, resulting in economic losses surpassing $1 billion. These ongoing challenges are further exacerbated by early marriages and high fertility rates, leading to alarmingly elevated levels of stunting and hindering the development of human capital, particularly for women and children. Additionally, political instability, violence, prevalent diseases such as malaria and diarrhea, and seasonal issues like crop and livestock diseases and pests collectively contribute to a cycle of recurring crises and food emergencies.

These factors significantly limit households' ability to deal with, adapt to, and recover from various shocks. In the Grand South and Southeast regions, where most households are impoverished pastoralists or subsistence farmers, the loss of crops or livestock due to climate-related events and other unforeseen crises poses a severe challenge. These households have very few resources to rely on in times of crisis. To manage such situations, they often resort to detrimental coping strategies, including inadequate nutrition, accumulating debt, or selling vital assets like livestock and essential household items. Households heavily depend on social networks within informal systems, such as communities, clans, and extended families, to navigate through shocks. Some households have attempted to diversify their sources of income, while others have resorted to selling their land or migrating as a means of coping.

In the Grand South, both women and men have traditionally relied on livestock as a form of savings, prioritizing zebu cattle. They sell animals when needed or even reduce their herds to fund traditional burial ceremonies to honor the head of the household. Furthermore, as a coping mechanism, many households are increasingly turning to the sale of forest resources for fuel and construction materials. This unsustainable exploitation of natural resources not only depletes valuable assets historically relied upon for protection and resilience, but also contributes to long-term vulnerability. While much of the migration is seasonal, many households from the Grand South have permanently relocated along the west coast due to the cumulative impact of various shocks experienced in recent years. Unfortunately, these migrating households often continue unsustainable agricultural practices, leading to further degradation of land and the expansion of vulnerable areas susceptible to climate-related shocks and stressors. This perpetuates the cycle of vulnerability in these regions, as they expand into areas more susceptible to climate-induced shocks and stresses.

Rural insecurity and conflict have also escalated in prevalence, severity, scope, and geographic spread over time, posing ongoing challenges. This insecurity, known as "*dahalo*", or bandits, was originally a traditional practice of cattle raiding as part of young men's rite of passage. However, the practice has devolved into criminal activity composed of groups of armed bandits who rustle cattle and other assets from village to village.[41] Since 2009, the rural security situation has deteriorated further due to increased arms circulation and insufficient government and community resources to combat crime. Dahalo raids expose women and children to a high risk of physical, psychological, economic, and sexual violence, as they often are used as human shields and have their assets stolen. A study conducted by UNFPA found that 44.8 percent of women living in the Ihorombe, Atsimo-Andrefana, and Anosy regions experienced some type of violence by dahalo.[42] Reports also indicate a convergence of armed groups involved in

[40] Refer to Annex 4 for a more detailed resilience analysis.
[41] USAID, *USAID/Madagascar Gender Analysis for the 2020-2025 Country Development Cooperation Strategy, 2020.*
[42] Ibid.

deforestation, migration, and cultural and natural resource conflicts, further eroding community security and livelihoods.

In response to these challenges, it is imperative to strengthen resilience approaches across all humanitarian assistance - development - social cohesion investments. Madagascar has a Prevention and Management Emergency Unit (CPGU) at the Primature and a National Office for Risk and Disaster Management (BNGRC) within the Ministry of Interior that are responsible for coordinating risk and disaster preparedness, response, and management. However, a weak government infrastructure struggles to manage these overlapping challenges, with limited capacity to mitigate risks, respond to disasters, and implement long-term adaptation practices. Recent assessments reveal that, without external financing, Madagascar lacks decentralized extension services for agriculture, livestock, fisheries, nutrition, health, and social protection beyond the district level, and the available staff are inadequately resourced. It is essential to establish robust social safety nets, particularly targeting vulnerable populations, to address these issues effectively. A comprehensive Humanitarian - Development - Peace (HDP) nexus strategy is being developed and will address these multifaceted historical and emerging issues, including conflict prevention and social cohesion, to mitigate risk exposure and safeguard development gains.

A.6 Country Strategies and Priorities

A plethora of ambitious political and strategic documents lay the groundwork for Madagascar's priorities concerning poverty, food security, nutrition, resilience, and agriculture. Key among them is the Plan Emergence Madagascar (PEM), which lays out the government's overarching national development plan for 2019-2023[43] and the 2024 Politique Générale de l'Etat (PGE) that defines the priority orientations for the next Presidential mandate 2024- 2029. At its core, the PEM and PGE hinge on good governance, and are underpinned by four foundational pillars: (1) human capital development; (2) inclusive and sustainable economic growth; (3) sustainable natural resource management; and (4) the critical availability of water and electricity for development and poverty alleviation. The PEM boldly targets an impressive $140 billion GDP by 2038 (the 2021 level was $15 billion) and lowering the poverty rate to 38 percent from the current national rate of 81 percent. Central to the strategy is the agricultural sector, food security, and resilience, forming the bedrock for poverty reduction. Priority areas include modernization of the agricultural sector, with key projects encompassing family-led, agro-businesses; market-oriented, livestock farms; and improved infrastructure supporting fishing and aquaculture. Madagascar also signed the African Continental Free Trade Agreement (AfCFTA) that entered into force in 2019. In early 2024, they began preparations to join the AfCFTA through a two-year support program with the backing of the African Development Bank. The initiative aims to develop a national strategy, in collaboration with the private sector, to expedite Madagascar's ratification of the AfCFTA, focusing on studies to maximize benefits from this integration. Active membership in the agreement would allow for the free flow of agricultural commodities into and across the continent. This could have a potential impact on food supply in the country and thereby positively affect food security conditions of the country. Additionally, the Government of Madagascar (GoM) sector-specific strategies and policies also guide development investment of which those relevant to the Country Plan are described below.

- The Ministry of Agriculture and Livestock (Min AE) has several strategies that align with the Feed the Future objectives. A new Agriculture Policy and Strategy (2023) identifies strengthening food, agriculture and livestock production systems within the framework of the Pact on Food Sovereignty and Resilience. They have developed resilient agricultural and water catchment approaches that are being tested and scaled with a focus on the Grand South. Others

[43] With a new 5-year Presidential mandate beginning in 2024, it is anticipated there will be a refinement of the PEM for the period 2024-2029.

include the National Climate Change Strategy for the Agriculture, Livestock and Fisheries sectors (2012- 2025), the Strategy for Biological Agriculture (2023) with a green, agricultural economy as a pillar, the National Seed Strategy (2023), the Strategy for the Rural and Agriculture Training (2023-2035) focusing on youth empowerment and entrepreneurship, and the Strategy for Agriculture Digital transformation. Overall objectives are to promote a systems approach to ensure diversified, safe, and nutritious food availability and access, environment and land stewardship, market engagement, and equitable and resilient livelihoods respectful of socio-cultural identity.

- The National Strategy for Good Governance of Marine Fisheries focuses on three objectives: (1) guarantee the sustainability of marine resources and contribute to the preservation of the marine and coastal environment; (2) increase fisheries income and ensure more equitable income distribution; and (3) increase the availability and improve the quality of fishery products, including aquaculture to meet the Malagasy population's food and nutrition security.

- In the area of environmental sustainability, the National Climate Change Policy emphasizes innovative adaptation and mitigation approaches, including agro-ecological and climate smart agriculture approaches to improve land use, soil fertility, water conservation and management, agriculture production, and ecosystems services. Recognizing the challenges associated with forest and land degradation, the GoM is committed to the African Forest and Landscape Restoration Initiative (AFR100), with a target to restore 4 million hectares by 2030.

- The National Adaptation Plan of Action (revised in 2019) identifies three priority actions: (1) strengthen governance, natural resources stewardship, and adaptation integration; (2) implement priority sectoral action programs (energy, agriculture, health, land use, water, biodiversity and forestry, coastal areas, infrastructure, and risk management); and (3) mobilize climate finance for adaptation.

- Madagascar's Nationally Determined Contributions (NDCs) under the Paris Agreement on climate change include a focus on agriculture as well as forests and land use.

- The National Strategy for Risk and Disaster Management (SNGRC, 2016-2030) lays out the GoM's new disaster risk management policy, which aims to strengthen food production systems and livelihoods for more resilient communities in crisis situations.

- The Ministry of Population, Social Welfare, and Women, in collaboration with the CPGU, BNGRC, and the Ministry of Interior, are investing in social protection systems, climate-indexed insurance and risk financing, aimed to increase and protect agricultural and non-agricultural livelihood assets, build resilience to shocks and stresses, and graduate the ultra-poor and poor households to more resilient and productive livelihoods. The Ministry is also updating the National Gender Policy and Social Inclusion, reflecting the nation's evolving commitment to gender equity.

- The National Nutrition Policy (2023-2030) and the National Nutrition Multi-Sectoral Action Plan 2023-2026 seek to ensure access to adequate nutrition for all Malagasy to propel human capital development across health, food, WASH, education, and social protection systems. The GoM's action plan includes decreasing stunting, acute malnutrition, low birth weight, anemia in women of reproductive age, and obesity, while enhancing exclusive breastfeeding. It also gives strong emphasis to the importance of diversified diets and strengthening food systems to improve nutrition outcomes.

- Madagascar's commitments under the 2021 Nutrition for Growth Summit are to: (1) reduce chronic malnutrition in children under five from 41.6 percent in 2021 to 32.1 percent in 2026 under the coordination of the National Office of Nutrition; (2) reduce the global acute malnutrition rate from 6.4 percent in 2021 to 5 percent in 2026; (4) to increase by 50 percent the proportion of women of childbearing age reaching the minimum dietary diversity; (5) create a functional national digital information system to access quality nutrition data from the field in real time for decision making by 2026; (6) identify and mobilize a total of of $398 million in funding over 10 years; (7) increase its allocation for the nutrition sector by 50 percent, each year, from 2022 to 2026 for the implementation of the essential package in nutrition at the national level; and (8) develop a program to address food insecurity among the vulnerable population, advocate for more resources and coordinate stakeholders to implement the program.

- The National Water and Sanitation Strategy aims to fulfill the Sustainable Development Goal of providing 100 percent of the population with access to safe drinking water and sanitation. Specific targets are by 2023, 60 percent of the population will have access to safe water, and by 2030, 100 percent will access basic drinking water, 100 percent will be free from open defecation, and 55 percent will utilize basic latrines.

A.7 Partnership Landscape

The USG is Madagascar's largest bilateral donor and a valued development partner. Key amongst USG investments is USAID's range of development programs, spanning across democracy and governance, health, education, agriculture, environment, energy, and humanitarian assistance. The Peace Corps is relaunching its Madagascar program, with volunteers in agriculture, health, and education. The U.S. Department of Agriculture (USDA) manages two large McGovern-Dole Food for Education Programs in the Grand South and Southeast.

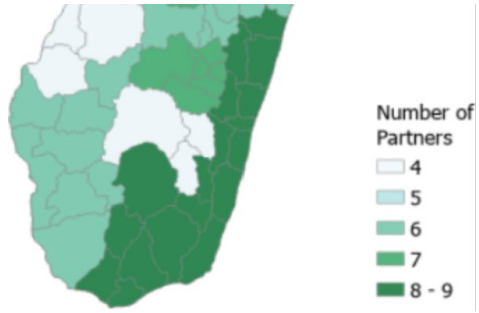


Figure D. A map of Southern Madagascar showing the US government partnership landscape

Given Madagascar's pervasive poverty and high humanitarian caseload, particularly in the Grand South and Southeast, multiple other bilateral and multilateral donors and agencies are present, providing opportunities for synergy and leverage, including World Bank, European Union (EU), International Fund for Agricultural Development (IFAD), African Development Bank (AfDB), German, French, and Japanese Cooperation, and UN Agencies (FAO, UNICEF, World Food Program).

Feed the Future will engage with these partners and other stakeholders in an iterative process that supports sequencing, layering, and integration in alignment with Madagascar's strategies, policies, and priorities. Real-time information and analysis provided by the Ministry of Agriculture and Livestock Rural Development Platform composed of GoM, private sector, and technical and financial partners will be used to collaboratively assess progress and adjust activities within a market-driven, resilient, food systems approach. These partners, and their programs, are further described in the following sections and in Annex 2B.

Multiple coordination platforms bring together donors, civil society, the private sector, and the GoM to ensure efficient programming of resources (see Section E for more detail). The African Union's Comprehensive Africa Agriculture Development Program (CAADP), signed by Madagascar in 2014, represents Africa's fully owned strategy for agriculture reform and food systems transformation. With

greater political and financial backing of the Post Malabo CAADP agenda, it could be a catalyst for specific internal efforts in Madagascar to improve nutrition outcomes, decreasing poverty through ag-led growth, enhancing agriculture trade, and responding to the climate crisis. The USG is actively involved in multiple sectoral, thematic and geographic platforms and will continue to leverage its participation and leadership to promote effective development. These coordination structures are to ensure systematic, joint planning and coordination across different types of assistance, to foster linkages and synergies, and reach the scale required to build multiple sources of resilience.

The Humanitarian-Development-Peace Nexus is a collaborative initiative co-chaired by the Prime Minister's Office and United Nations Development Program (UNDP). The platform coordinates humanitarian, development, and peace-building activities, with the aim to move beyond immediate emergency assistance towards market-led agricultural development to mitigate poverty and improve food security, nutrition, and social cohesion. This nexus approach will be particularly relevant in addressing protracted conflictual issues relating to climate mitigation, natural resources and land use that are being amplified by the *dahalo*. Initial focus of the Platform is the Anosy and Androy regions in the Grand South, as well as adjacent economic corridors. The platform categorizes these areas into a "fragile zone," consistently plagued by droughts and conflict; and a high potential "green zone." The HDP Nexus offers Feed the Future with an ideal platform for partnership and coordination.

B. Targeting

This Section identifies the geographic areas for Feed the Future intervention, along with the process, criteria, and rationale for the selection. Additional detail is provided in Annex 3.

B.1 Map of the Zone of Influence

Madagascar was designated as a Feed the Future Country in December 2022 and as a Resilience Focus Country in July 2022; therefore, a comprehensive analysis was conducted to identify the Zone of Influence Plus (ZOI+) which includes the Feed the Future Zone of Influence (ZOI) and the Resilience Focus Zone (RFZ). Programming approaches in both will contribute to the GFSS targets of reducing poverty, hunger, and malnutrition; however, the criteria are different in selecting the ZOI and RFZ.

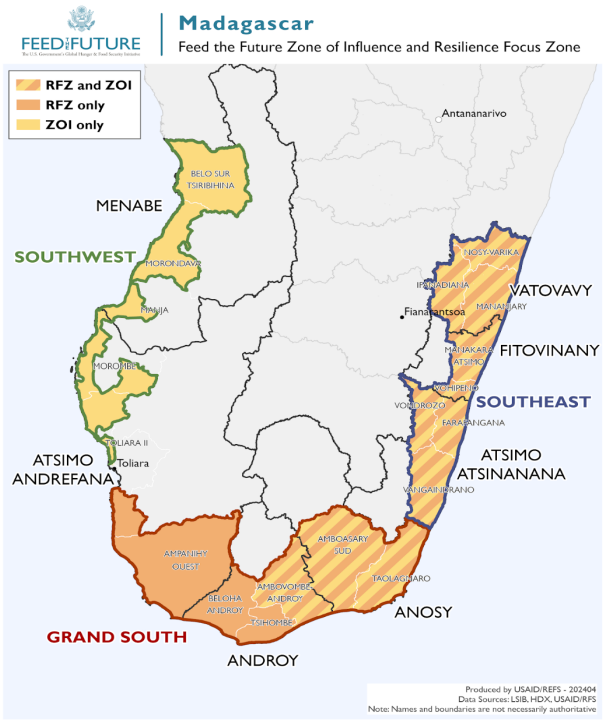


Figure E. Map of the Zone of Influence for Madagascar

The Zone of Influence (ZOI)[44] shown in orange-yellow cross-hatch on the East Coast and into two districts in the Grand South and the yellow zone in the Southwest was selected based on (1) greater opportunity for agriculture led economic growth; (2) level of need; (3) opportunities to leverage existing USG investments; and (4) ability to layer and sequence with the GoM, private sector, and other development partners. Importantly, they were selected based on the potential for communities and households to engage with local markets and private sector operators, allowing for increased economic stability within a five-year time period.

The Resilience Focus Zone (RFZ)[45] shown in both dark orange and orange-yellow hatch, as selected based on (1) recurrent crises and high levels of humanitarian assistance; (2) high levels of poverty, food insecurity, and acute malnutrition and stunting; (3) a positive enabling environment for working with the GoM, providing social services, and ensuring acceptable levels of security; and (4) the comparative advantage and opportunities to leverage other USG and non-USG investments. The programming for RFZs will focus more on building resilience, helping people maintain wellbeing, and reducing the need for humanitarian assistance. They include USAID Resilience and Food Security Assistance Programs (RFSAs) geographies and will prioritize strengthening the HDP Nexus. The dark orange areas are designated as RFZ only as they have less potential to achieve agricultural led economic growth targets within a five-year period, and more intensive work is needed to strengthen food, marketing, and other systems, and build household and community resilience.

[44] ZOI/targeting proposal - That includes and aligns the breadth of USG investments focused on reducing poverty, hunger and malnutrition to the greatest extent possible.
[45] The RFZ is determined based on criteria laid out in USAID's Guidance for Selecting Resilience Focus Countries and Focus Zone (internal USAID document). The primary performance ambition in the RFZ is to contribute to increased resilience and reduced humanitarian needs at the population level.

B.2. Designation Methodology

Almost all of Madagascar meets the ZOI and/or RFZ selection criteria. To narrow down the Feed the Future intervention area a targeting analysis was conducted utilizing the GeoCenter data analytics tool in conjunction with the ZOI Creation Support Tool (ZeaCREST). The analysis was also built on the USAID's Resilience Focus Country analysis; climate, biodiversity, nutrition, water, and health analyses; field visits; qualitative analysis (drawing from extensive USG experience); and joint discussion within the USG and with GoM national and subnational actors, NGOs/CSOs, the private sector, and bilateral/multilateral donors (refer to Annex 3 for further detail).

To right-size the ZOI for budget and approach, USAID/Madagascar applied the ZeaCREST to calculate the maximum population where Feed the Future will likely be able to directly contribute to reducing extreme poverty by 10%. The analysis gave a supportable ZOI population size of approximately 4.3 million given the projected Feed the Future budget over the next five years[46]; estimated USG budget that will contribute to reduction in poverty; and on a conservative leverage ratio of other development partner investments (GoM, donors and private sector) which will complement USG investment.[47]

Application of the targeting and rightsizing processes resulted in a proposed ZOI+ which forms a "U" starting from the three regions in the Southeast, through the three regions in the Grand South around the southernmost tip of Madagascar, and up the west coast to the Menabe region. In total, the proposed ZOI+[48] includes 19 districts in seven regions. The population within the overall ZOI+ is approximately 4.5 million, of which approximately 3.7 million are within the ZOI/RFZ zone; approximately 400,000 in the RFZ only; and approximately 440,000 in the ZOI only.[49]

Across the entire ZOI+, according to the ZOI Creation support tool, poverty and stunting are above national averages. The poverty rate in the ZOI+ is approximately 92 percent (and 93 percent for the ZOI), compared to 81 percent nationally.[50] The stunting rate in the ZOI+ is approximately 41 percent (also 41 percent for the ZOI), compared to 40 percent nationally.[51] However, the area covered by the ZOI+ is extremely diverse, and for the purpose of planning USG investment, is divided into three sub-zones: Southeast, Grand South, and Southwest.

The sub-sections below (B.2, B.3 and B.4) are tables which list the regions and districts identified in the ZOI+ exercise, organized into the (1) Southeast from Manajary to Tolagnaro; (2) Grand South from Tolagnaro west to Toliara; and (3) Southwest from Toliara to Morondava. These tables offer a snapshot of the vulnerability of the population and more specific justification for their inclusion in the ZOI+ based on the current state of poverty, malnutrition, and need for humanitarian assistance. The ZeaCrest tool was used to select the regions that were then defined at the district level based on the specific criteria. The districts where the ZOI and RFZ overlap indicate a high level of humanitarian need and a level of

[46] That calculation relies on a cost per beneficiary approach based on "The global cost of reaching a world without hunger: investment costs and policy action opportunities" and estimates the least cost to reduce poverty, hunger, and malnutrition.
[47] Note that the USG budget does not include USAID/Madagascar HL9 Nutrition investments, which are outside the ZOI+ due to current donor geographic focus and division of labor agreements. UNICEF is the principal nutrition donor in the ZOI+.
[48] In countries that are both Feed the Future target countries and Resilience Focus Countries (RFC), the "Feed the Future ZOI Plus (ZOI+)" includes two geographic areas: the ZOI and the Resilience Focus Zone (RFZ).
[49] All ZeaCreST-derived population estimates were derived from Landscan Global 2022 Sims, K., Reith, A., Bright, E., Kaufman, J., Pyle, J., Epting, J., Gonzales, J., Adams, D., Powell, E., Urban, M., & Rose, A. (2023). LandScan Global 2022 [Data set]. Oak Ridge National Laboratory. https://doi.org/10.48690/1529167
[50] Poverty data (at regional level) were derived from: World Bank 2012 Global Subnational Atlas on Poverty (GSAP) estimates based on the current international poverty line of $2.15/day in 2017 PPP.
[51] Stunting data in this section derived from: Institut National de la Statistique (INSTAT) et ICF. 2022. Enquête Démographique et de Santé à Madagascar, 2021. Antananarivo, Madagascar et Rockville, Maryland, USA: INSTAT et ICF. Note: Stunting data was provided by DHS with disaggregated estimates every 10x10km, those were normalized and estimated in this region.

readiness to transition or engage in sustainable and inclusive agricultural-led economic growth. RFZ only districts face constraints for a market-oriented food system and require a longer time horizon to shift away from humanitarian assistance. ZOI only districts represent an area with agriculture and marine led economic growth activities and a lower prevalence of humanitarian assistance.

B.3 Southeast

Southeast - Mananary to Tolagnaro					
Regions	**Districts**	**Communes**	**RFZ**	**ZOI**	**USG and Partners**
Atsimo-Atsinanana 3 of 5 districts included	Vondrozo	16	✓	✓	USG: ● USAID/BHA RFSA region (2019-24) ● USDA McGovern-Dole Food for Education (3 districts) ● USAID "Mitsiry" supports reforestation (Farafangana) Technical and Financial Partners: ● *Agricultural programs*: IFAD (DEFI), GIZ (PRADA) ● *Food System and Resilience*: EU (Afafi Sud, WHH), GIZ (PROSAR) ● *Humanitarian Assistance (HA)*: World Food Program
	Farafangana	32	✓	✓	
	Vangaindrano	29	✓	✓	
Fitovinany 2 of 3 districts included	Manakara -Atsimo	42	✓	✓	USG: ● USAID/BHA RFSA region (2019-24) ● USAID Environment and Economic Growth (spices, cocoa) WASH ● Peace Corps agriculture, education, and health Technical and Financial Partners: ● *Agriculture and Resilience Programs:* FIDA (DEFI), GIZ (PRADA) Private Sector: ● SMM Group-Honey production and export; Madecasse-Beyond Good, and Malagasy private sector partners including Symabio, Sahanala, Floribus, Jacaranda, Bioesol, Beekeeper
	Vohipeno	17	✓	✓	
Vatovavy 3 districts - all included	Mananjary	25	✓	✓	
	Nosy Varika	19	✓	✓	
	Ifanadiana	14	✓	✓	

Table A. RFZ, ZOI, and USG partnership landscape in Southeast

Geographical and Agro-Ecological Description: The Southeast includes eight districts in three regions with a total population of approximately 2.6 million, with poverty and stunting rates of 94 percent and 42 percent, respectively.[52] Zone 1 in its entirety is both in the ZOI and RFZ. These are priority regions for natural resource management, conservation, sustainable agriculture, water, and education programming. The eastern seaboard can be categorized as a tropical humid corridor with productive agricultural lands. The landscape's steep hills and valleys descend to coastal areas. This entire east coast of Madagascar was once blanketed by tropical humid forest, but has progressively been deforested over the last 70 years, leaving just a narrow corridor of now officially protected forests. This has left coastal areas more vulnerable and exposed to shocks including cyclones and disease, diminished livelihoods and jobs options, governance challenges, and increased vulnerability to the long-term impacts of climate change.

Current Agricultural and Livelihoods: The Southeast is conducive to agricultural led economic growth given existing market opportunities, even though road infrastructure and market access can be challenging. There are options for connecting communities to market corridors in different directions

[52] ZeaCreST Population estimates were derived from Landscan Global 2022 Sims, K., Reith, A., Bright, E., Kaufman, J., Pyle, J., Epting, J., Gonzales, J., Adams, D., Powell, E., Urban, M., & Rose, A. (2023). LandScan Global 2022 [Data set]. Oak Ridge National Laboratory. https://doi.org/10.48690/1529167

towards the towns and regional capitals, as well as larger cities and market centers. Tamatave to the north of Mananjary is Madagascar's major port and is connected to the region both by road and, less reliably, by an inland waterway. Fianarantsoa to the west of Manakara is the closest market hub of the central highlands and is connected by rail and road. Tolagnaro (commonly referred to as Fort Dauphin) is the major port to the south of Atsimo-Atsinanana that is connected by a road in very poor condition, hindering market access.

Key Agricultural Production and Marketing Opportunities: Food and cash crops include spices, cacao, coffee, vanilla, rice, cassava, biofortified sweet potatoes (including vitamin A-enriched orange-fleshed), small livestock fisheries and aquaculture, horticulture, fruit trees (mango, papaya, coconut, litchi), moringa, and non-timber forest products (essential oils, beekeeping, baobab fruit, and raffia).

Poverty and Malnutrition: This Southeast continues to experience high levels of stunting ranging from 41 percent in Vatovavy to 45-50 percent in areas of Atsimo-Atsinanana. While not as high as the districts in the Grand South, wasting is also significant, ranging from just 7 percent in Fitovinany to over 12 percent in Atsimo-Atsinanana.

Need for Humanitarian Assistance: There is intermittent and recently increased need for humanitarian assistance due to multivariate shocks and stresses. Cyclones and tropical storms have been increasing in frequency and severity. Significant flooding is the primary driver compounded by high food prices, cyclone damages, access issues, and water-related diseases; however other challenges include increasing climate variability, malaria, water-borne diseases, and loss of livelihoods. Between January and April 2024, over 651,000 people are expected to need assistance and 196,451 are expected to suffer from acute malnutrition including 57,973 children affected by severe acute malnutrition (SAM) and 138,478 children in moderate acute malnutrition (MAM). Key stresses and underlying issues include highly degraded land due to loss of forest coverage and biodiversity, high levels of stunting and malnutrition, education levels, and a lack of qualified human capital.

Synergy with other USG Investments and Financial Partners: USG activities include USAID/BHA's RFSA programs, WASH, USDA's McGovern-Dole Food for Education and USAID's primary education program and environment programs. USG will collaborate with other technical and financial partners (German Cooperation, EU, and FIDA) in the domains of nutrition sensitive food systems and agro-ecological market systems to achieve Feed the Future objectives. A World Bank (WB) infrastructure program is improving roads from Tolagnaro to Tamatave, including feeder roads, which will improve access to markets.

B.4 Grand South

Grand South - Tolagnaro to Toliara					
Regions	**Districts**	**Communes**	**RFZ**	**ZOI**	**USG and Partners**
Anosy 2 of 3 districts included	Tolagnaro	24	✓	✓	USG: USAID Mitsiry working with SMM Group-Honey production and export and USDA Food for Progress Technical and Financial Partners: *Agriculture and Resilience*: EU, UN agencies, WB, FIDA *Road Infrastructure*: WB. EU, African Development Bank (AfDB) Private Sector: RioTinto (ecological restoration), Poissoniere and Mada Peche (fish cold chain), Bovima (cross breeding and abattoir); AgriVal and AgriVet (large and small animal feed and marketing), Jacaranda and Eva Fruits (red pepper and litchis), and SMM (honey)
	Amboasary Sud	14	✓	✓	
Androy 3 of 5 districts included	Ambovombe	17	✓	✓	USG: USAID BHA RFSA region (2019-24) USAID BHA emergency programs USDA McGovern-Dole Food for Education program Technical and Financial Partners: *Agriculture, markets, nutrition and resilience*: EU AFAFI Sud; GIZ PROSAR, IFAD/DEFI, WFP WB Mionjo, CIP, Agro-ecological center (CTAS), Madagascar Food Bank
	Tsihombe	5	✓		
	Beloha	5	✓		
Atsimo-Andrefana 2 of 9 districts included	Ampanihy West	16	✓		USG: USAID/BHA RFSA region (2019-24); and emergency response programs Technical and Financial Partners: *Agriculture and Resilience*: UN agencies, WB Mionjo and FIDA Defi *Road infrastructure*: AfDB
	Toliara 2 (South)	Soalara Sud, Anakao, and Beheloka	✓		

Table B. RFZ, ZOI, and USG partnership landscape in Grand South

Geographical and Agro-Ecological Description: The Grand South comprises both ZOI and RFZ districts. The proposed area includes seven districts in three regions with a total population of approximately 1.8 million, with poverty and stunting rates of 93 percent and 43 percent, respectively.[53] The proposed area includes the districts of Tolagnaro (Fort Dauphin) and Amboasary Sud in Anosy Region, and neighboring Ambovombe District in Androy. While there are high levels of humanitarian need and food insecurity in these Districts, they also represent a transitional zone with greater market opportunities linked to Fort Dauphin due to more productive agriculture and coastal landscapes and a multi-usage port. The RFZ area only includes Tsihombe and Beloha districts in Androy Region, Ampanihy West District, and three communes in Toliara 2 District in Atsimo-Andrefana Region which require a longer time horizon to build a market-oriented food system.

The Grand South includes four distinct agro-ecological zones (FewsNet 2017) that can be characterized as dry sandy soils, desert, spiny forest, and coastal fishing. Most of the forests have been degraded due

[53] ZeaCreST

to agricultural expansion, charcoal, and building materials. This landscape transitions from humid to dry zones between Tolagnaro to Ambovombe, to the central highlands to the north, and gradually to plains and dry forests to the Southwest towards Toliara. The Grand South has been historically, culturally, and politically marginalized, leading to greater isolation and limited investment in infrastructure, systems, and services, resulting in food emergencies and fewer opportunities for growth. Over the past several years, there has been a reinvigoration of investments in the Grand South in all areas of development, including in agriculture (crops, livestock, and fisheries), mining, diversified alternative livelihoods, and infrastructure.

Current Agricultural and Livelihoods: Historically, people in the Grand South rely predominantly on a mix of transhumance, semi-nomadic, and sedentary agricultural livelihoods. Rearing of Madagascar Zebu (a local drought-resistant breed of cattle) is a form of wealth and resilience; however, zebu is also linked to significant shocks to economic stability when the herd is slaughtered for funerals and burial ceremonies and the household loses these assets. Zebu are also linked to growing conflict led by the *dahalo* (cattle rustlers), many of whom are armed. Maize production for markets as well as some consumption is predominant. Fisheries and agricultural production of staples play an important role in subsistence and markets.

Key Agriculture Production and Marketing Opportunities: Due to the drought-prone environment, climate change and the projected non-viability of maize as a staple crop, the Grand South is shifting toward other livelihood options. These include sorghum for both subsistence and animal feed; cassava and cassava flour production; cowpea; green gram; sweet potato (orange-fleshed and other varieties); groundnuts; and rice, onions, and tomatoes in humid zones. Livestock opportunities consist of poultry, small ruminants (goats and sheep), cross breeding of zebu and limousin beef cattle, and animal feed made of sorghum, fish meal, fodder grasses, or improved cactus varieties. The fisheries sector includes offshore wild caught fishing and aquaculture (tilapia). Other processing and non-timber forest products include exotic honey (red cactus, neoli, and others), raffia, and sisal. Off-farm livelihoods opportunities comprise of agricultural business services, agro- and other processing, ecotourism, agrotourism, vending and market operators, digital services (agro- and other), transport, artisanal crafts, boatbuilding, hospitality services, and jobs in the mining industry.

Poverty and Malnutrition: The Grand South has the country's highest levels of acute malnutrition, as shown by wasting statistics and highest levels of humanitarian need and food insecurity. These districts continue to experience high levels of stunting ranging from 55 percent in Anosy, 54 percent in Androy, to 52 percent in areas of Atsimo-Andrefana. The Grand South experiences the highest recurring levels of wasting ranging from 14 percent in Anosy, 16 percent in Androy, to 11 percent in Atsimo-Andrefana.[54]

Need for Humanitarian Assistance: Over the last 5-7 years, the Grand South has experienced consecutive years of drought and erratic rainfall, linked to climatic patterns, including periodic El Niño effects, ongoing wind erosion and sandstorms, and flooding due to fragile lands. These severe weather events have impacted harvest and resulted in an increase in nutrition emergencies and humanitarian assistance. Other shocks include crops and livestock pests (locusts, fall armyworm), malaria and other diseases, increasing conflict and rural insecurity, and price shocks. Long-term stresses include ongoing political instability and inadequate governance, poor land management, population growth, extreme under-investment in development of human capital, women, youth, and isolation. The confluence of COVID-19, the war in Ukraine, and climate shocks since 2020 have increased food insecurity, malnutrition, and famine in this zone. These events have also spurred increased seasonal and permanent migration out of the Grand South and up the west coast.

[54] District level DHS Nutrition indicators, May 2023.

Synergy with other USG Investments and Financial Partners: In addition to alignment with BHA's humanitarian assistance and RFSAs, Feed the Future will leverage and coordinate with other multi-sectoral programs operating in the Grand South to achieve Feed the Future objectives. These include humanitarian assistance, nutrition, food systems, environment, and WASH activities. Key programs include: (1) World Bank $200 million program facilitating resilience activities to transition from humanitarian aid to development; (2) UN Agencies (FAO, WFP and UNICEF) providing cash and food assistance, climate smart agriculture, school feeding, and health and nutrition services; (3) a new $70 million EU project that aims to bolster resilient food systems and preserve environment; (4) IFAD program (2018-2028) to enhance income, food, and nutritional security; and (5) French and German NGOs (GRET, WFF, ACF) supporting climate smart agriculture approaches. USDA's McGovern-Dole Food for Education and the World Food Program are also implementing school feeding programs that include opportunities for local and regional food purchase.

B.5 Southwest

Southwest - Toliara to Morondava					
Regions	**Districts**	**Communes**	**RFZ**	**ZOI**	**USG and Partners**
Atsimo-Andrefana 2 of 9 districts included	Toliara 2 (Northern Communes)	8 of 19 communes[55]		✓	<u>USG</u>: USAID Environment, fisheries, and blue economy USDA Food for Progress program <u>Technical and Financial Partners</u>**:** *Agriculture, fisheries, and resilience:* WWF, Blue Ventures, Fanamby, IFAD/ADSII, AfDB irrigated rice parmeter, agro processing pole in Tulear, and road rehabilitation (RN19); WB Integrated Growth Pole; and value chain investments (ie peanuts, pulses) <u>Private Sector</u>**:** Ocean Farmers; Malakass (cassava flour and orange sweet potato); Nemaco works on fisheries; Sahanala; Star Breweries; Agrival and Agrivet (animal feed), Miarakap, and Madagascar Ingredients (black eyed beans, lima beans, paprika, chili peppers
	Morombe	Antongo Vaovao, Cu Morombe, Befandefa (3 of 8 communes)		✓	
Menabe 3 of 5 districts included	Morondava	5		✓	
	Belo-sur-Tsiribihina	14		✓	
	Manja	Andranopasy (1 of 6 communes)		✓	

Table C. RFZ, ZOI, and USG partnership landscape in Southwest

Geographical and Agro-Ecological Description: The Southwest extends along the coast and is designated as ZOI only. The ZOI includes the districts of: Toliara 2 (8 northern communes) and Morombe in Atsimo-Andrefana Region, and the districts of Morondava, Belo-sur-Tsiribihina, and one commune in Manja, in the Menabe Region. The total population is approximately 500,000, with poverty and stunting rates of 83 percent and 26 percent, respectively.[56] North of Toliara, the dry desert of the south transitions to more fertile plains, and the central highlands and plateaus gradually slope and transition to dry tropical forest. Water is more abundant, and soil is more fertile due to a large river basin with rivers and tributaries emptying into the Fiherenana Delta. Mangroves, forests and a sandy coastline stretch up the west coast to Morondava. Overall, these districts have more opportunities due to water availability, more fertile soils and productivity, access to markets in the highlands, the two larger cities of Toliara and Morondava, employment, and other off-farm diverse livelihoods. Morondava is home to several iconic ecotourism attractions, including Baobab Alley, UNESCO World Heritage site

[55] Ankilimaliniky, Milenaky, Antanimieva, Befandriana-Sud, Ankililoaka, Belalanda, Soahazo
[56] ZeaCreST

Bemaraha Tsingy (limestone forests), and the dry tropical Kirindy Forest in the Menabe Antimena Protected Area, home to some of Madagascar's unique flora and fauna.

Climate trends however, suggest the Southwest is getting dryer due primarily to the highly degraded landscape. Feed the Future investment will leverage current USAID environment, marine, and health activities and the USDA Food for Progress identification of Madagascar as a priority country. There will be a particular focus on mitigating effects of increased migration from the Grand South, which has dramatically accelerated over the last decade, and surged even more in 2020-21 during the height of the COVID-19 pandemic. This migration is exacerbating conflict and insecurity related to the *dahalo*, natural resources and land degradation, and illegal clearing of forest for maize resulting in a loss of 50 percent of the forest within the Menabe Antimena Protected Area.

Current Agriculture and Livelihoods: The Southwest has traditionally focused on agriculture and fisheries for their livelihoods. These regions have many rice paddies, particularly in areas with suitable water supply; other crops include cassava, sweet potatoes, pulses, maize, groundnuts, and cotton. Along the entire coast, there is strong cultural and economic reliance on fishing. However, agricultural productivity and livelihood opportunities are being threatened due to large-scale and rapid deforestation from maize cultivation within protected areas over the last 10 years, natural resources and land degradation, charcoal production, and overfishing - increasing exposure and vulnerability to climate shocks and stresses, and conflict.

Key Agricultural Production and Marketing Opportunities: Agriculture and food products include sorghum as an alternative to maize; tuber crops including orange fleshed sweet potatoes; pulses (eg. pigeon peas, black eye beans, and lima beans); groundnuts; fruit trees (mangos, moringa, papaya, coconut, baobab); anti-erosion grasses, such as vetiver; and wild plants such as oiala (wild yam), babo (succulent root), balo, guava, lamoty (crab-apple), jujube, and tamarind. Livestock opportunities include poultry, small ruminants, and animal feed consisting of sorghum, fishmeal, and fodder grasses. The fisheries sector has both wild caught fishing and aquaculture including sea cucumber, seaweed, fish, octopus, and seafood. Other processing and non-timber forest products include exotic honey (baobab, palissander, neoli, and others), essential oils, raffia, and sisal. Off-farm livelihoods opportunities include farm labor on larger farms, agricultural and nutrition business development services such as animal health and veterinary extension; agro-and other processing; ecotourism; agrotourism; supplying hotels and tourist sites with fresh food; vending and market operators; digital services (agro- and other); transport; artisan crafts; boat building; and hospitality services.

Poverty and Malnutrition: The Southwest districts experience lower levels of stunting compared to the Grand South and Southeast; however, they are still high, ranging from 23 percent in Toliara 2 to over 35 percent in Morondava. Wasting levels are also lower, ranging between 4.5 and 6.8 percent. Acute malnutrition and food insecurity are higher particularly on the Mahafaly Plateau.

Need for humanitarian assistance: There is periodic increased need for humanitarian assistance in the Southwest due to multivariate shocks and stresses. While cyclones and storms tend to bring beneficial water to this region, periodically, large storms such as Cyclone Freddie in 2023 - the longest on record - hover over the coast and cause significant flooding and crop loss. Moreover, climate data point to these regions becoming dryer over time. For example, the 2022 dry spell resulted in IPC Acute Malnutrition Scale alert levels. Other shocks and stresses include malaria and water-borne diseases, locusts, and other crops and livestock pests and diseases.

Synergy with USG Investments and d other Financial and Technical Partners: Feed the Future will build on the current USAID biodiversity and climate change adaptation terrestrial and marine programs that are focused on market-led economic growth within a sustainable landscape approach as well as USAID health system strengthening and governance interventions. As an USDA Food for Progress FY 24 Priority country, Feed the Future will collaborate closely with the USDA Food for

Progress programs in the economic growth poles of Tulear and Fort Dauphin to (1) improve and increase agricultural productivity and food security; (2) expand trade of agricultural products - domestically and internationally; and (3) promote climate smart agriculture approaches. Feed the Future investments will leverage and coordinate with other multi-sectoral donor programs, including the IFAD eight-year program focused on climate-resilient production and market systems; and environment and agriculture NGOs addressing the increased deforestation and land degradation issues. The African Development Bank (AfDB) is providing a $178 million loan to the GoM to improve roads and the port, rehabilitate rice irrigation, and facilitate trade and commerce through the development of an agro-processing zone in Tulear.

C. Results Framework

The Results Framework (RF) illustrated below and described in subsection C.1 represents Madagascar's comprehensive approach to achieving the GFSS objectives and priorities. The RF organizes GFSS Objectives, Intermediate Results (IRs) and Cross-Cutting IRs (CCIRs) in a framework that shows the linkages and interrelationships for USG investments to address the key risks and constraints to food security, resilience, and poverty reduction in Madagascar and achieve significant impact in the ZOI+.

C.1 Results Framework Summary

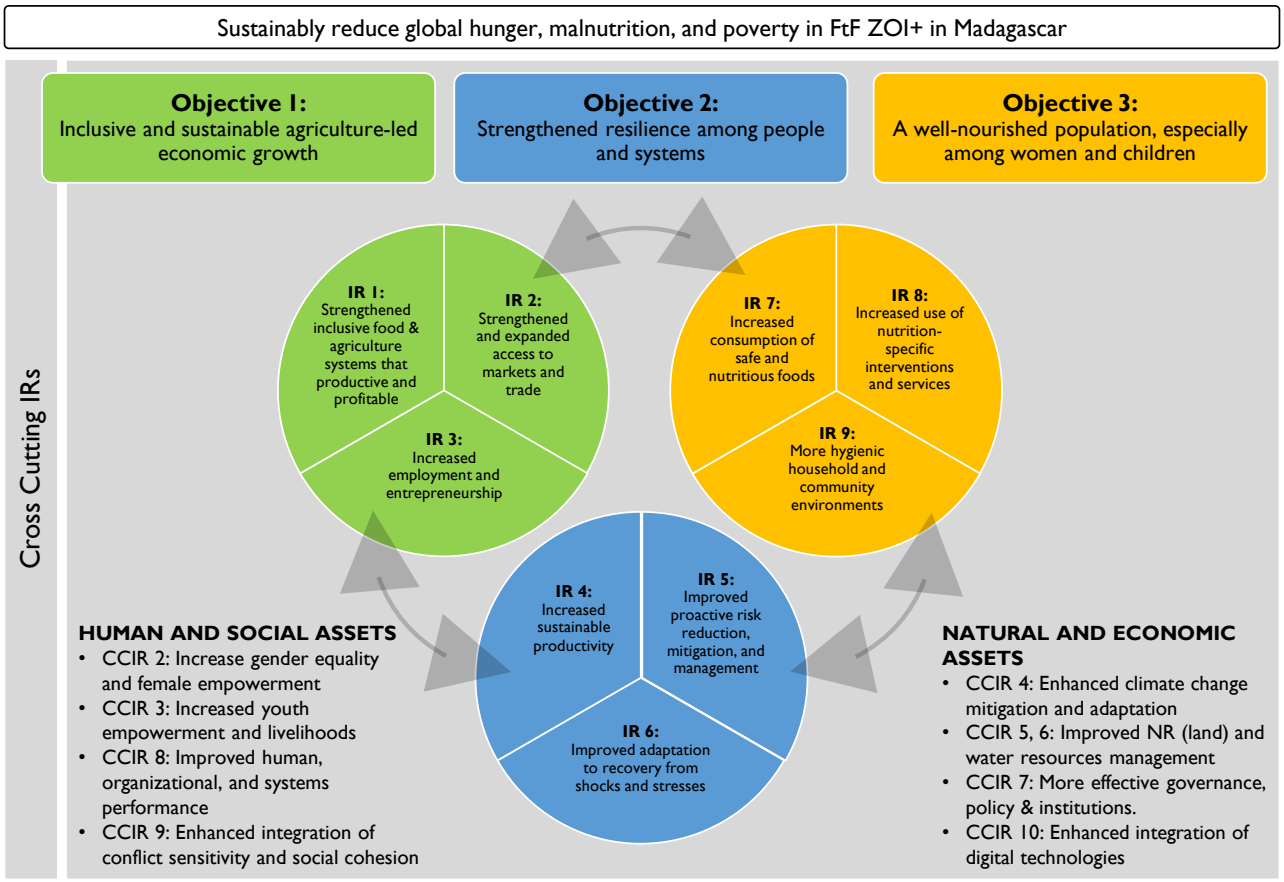


Figure F. Results Framework for Madagascar's Feed the Future Country Plan

Madagascar's Feed the Future Country Plan Results Framework (RF) is based on an agro-ecological economic approach to a resilient food system to sustainably reduce poverty, hunger, and malnutrition in the ZOI+ by:

- Enhancing an inclusive and resilient food system through a market-led approach that prioritizes meeting the nutritional needs of women and children;
- Expanding the focus on resilience with particular attention on those experiencing chronic seasonal shocks and stresses; and
- Prioritizing climate resilience through natural resources (land, water and biodiversity) management in support of a robust food system.

As reinforced by stakeholders during consultations, this Feed the Future core RF underscores the need to engage in holistic, multisectoral, and well-coordinated approaches across all objectives, intermediary

results (IRs) and cross-cutting IRs (CCIRs) to build combinations of sources of resilience capacities and build and protect a range of productive assets, including financial, physical, environmental, social, human, and political across multiple levels and scales that require a 10-15 year time horizon.

More specifically, the impact pathways, based on stakeholder consultations, will contribute to progress on the GFSS five priorities as follows:

Ambitious Approach to Climate Change (CCIR 4, 5, 6, 7, 9): Feed the Future interventions will align with the USAID Climate Change Strategy (2022 - 2030), USAID Biodiversity Policy, and Government of Madagascar Climate Change strategies, adaptation and mitigation approaches (CCIR 4). Feed the Future will prioritize investments to ensure a more resilient food system linked to natural resources (land, water, and biodiversity) management (CCIR 5, 6), based on the specificity of different land and seascapes. Social and cultural norms will be taken into account that shape the realities of people, examining dynamics that dictate access to and control over resources, particularly for women, youth, and marginalized groups. Mitigation efforts will include managing climate risks in programming, preventing deforestation and land degradation, and contributing to biodiversity conservation. Specific adaptation activities will include regreening of various ecosystems, enhancing climate resilience in vulnerable communities, expanding climate smart agriculture and agro-ecological practices, and integrated water catchment management. Modern technologies will also be promoted in collaboration with the private sector to increase pest resistance; drought and flood-resistant tolerant crops; and green energy. These will be key to addressing climate change vulnerability, preserving ecosystem services and restoring degraded land and crops-livestock systems. Additionally, Feed the Future will collaborate with USG programs focused on promoting transparent governance and citizen engagement to support effective climate action through partnerships with civil society organizations (CSOs) and women's associations advocating for environmental justice.

Work Across the Relevant Areas of Food Systems (CCIR 7, 8, IR 1, 4): In alignment with USAID/REFS' Food Systems Framework, Feed the Future will support Madagascar in building a more resilient food system, ensuring that all segments of society have access to nutritious food. The country faces significant challenges in ensuring food security and improving nutrition outcomes for its people. It is prone to climate variability and shocks, making it essential to promote agro-ecological practices along with modern agriculture technologies to ensure agricultural sustainability and bolster economic growth, diversification, sustainable natural resources (land, water and biodiversity) management, and climate resilience. Feed the Future investments in a food system approach also need to be strategically linked to risk management, ensuring that farmers have access to shock-responsive services and adapt to the ever-changing environmental conditions. This approach recognizes the diversity of micro-systems that link households to producer groups, financial services, markets and nutrition services, among others. As a collaborator, Feed the Future will partner on food system transformation processes through a multi-stakeholder engagement at national and sub-national (local) level. Efforts will focus on strengthening the entire food system, from production to consumption, that will include systemic solutions such as quality seed development and climate resilient nature-based solutions.

Equity and Inclusion (CCIR 2, 8): Feed the Future will develop and use existing analyses, including Madagascar Gender and Inclusive Development Analyses (CCIR 2), to better understand the local contexts, systems, and priorities needed to achieve major shifts in key systems and services, uncovering the barriers and motivations for women, youth, and other disadvantaged groups to adopt and sustain behaviors that are critical to systems change. In alignment with USAID Generating Resilience and Opportunities for Women (GROW), Feed the Future will work to shift social and gender norms to provide a greater voice for marginalized and underrepresented groups. Feed the Future will identify the differential impacts on women, youth, and other identified marginalized groups based on their access to services, education, livelihood, and impact of climate change. Building the agency of women by fostering more equitable and democratic decision making is key to addressing food insecurity and malnutrition.

More gender-transformative and socio-economical food systems (CCIR 8) will be promoted to allow women to adopt improved nutrition-related behaviors, access safe and high-quality food, earn and use income effectively while increasing resiliency. Traditional leaders will be mobilized as advocates for re-imagining gender-based roles and identities to lift social and cultural barriers to women and youth empowerment.

Integration of Conflict Mitigation and Social Cohesion (CCIR 7, 9): Integrating conflict mitigation and ensuring good governance in Madagascar intertwines legal, socio-economic, anthropological, and environmental facets. Key strategies include the enhancement of legal frameworks and policies to ensure equitability and sustainability, understanding seasonal and permanent migration and displacement; and promotion of land tenure security and sustainable land use and resource management. Cultural practices and existing migratory patterns have evolved to cause wider-spread incidences of armed conflict, and continue to pull in youth and threaten livelihoods' resilience. Efforts have been made to break this cycle and integrate migrants into communities, develop alternative livelihoods, enhance community security, and collaborate with the security forces. As such, local community engagement, governance, and a focus on community-based conflict mitigation, employing mediation and conflict resolution training while ensuring equitable resource access will be integrated into programming. The private sector in Madagascar also plays an important role to ensure traceability of value chains and goods to favor zero natural resources degradation and support labor rights to decrease related conflicts. Good governance needs to be underscored by transparency, accountability, capacity building, policy enforcement, and behavior change in managing resources and supporting local institutions.

Proactively Counter the COVID-19 Pandemic's Long-Term Effects: Feed the Future will collaborate with other partners to continue to revitalize agricultural markets and supply chains that were disrupted by the COVID-19 pandemic and strengthen resilience to future shocks and stresses. Feed the Future will also address any long-term negative impacts on nutrition and work to strengthen the health system to deal with other emergent diseases.

C.2 Alignment with USG Madagascar Strategies

The Madagascar Feed the Future Country Plan aligns with the Madagascar Integrated Country Strategy (ICS), updated and renewed in 2024, which aligns all USG agencies in the country. The Mission goals are: (1) Madagascar and Comoros are reliable regional and global partners with strengthened inclusive democratic governance that promote stability and security; (2) inclusive economic growth underpinned by mutually beneficial trade and investment and sustainable natural resources management; and (3) human capacity strengthened as a foundation for country owned democratic governance, security and development.

The USAID/Madagascar Country Development Cooperation Strategy (CDCS) 2020-2025 aims for improved wellbeing and resilience of the Malagasy people, prioritizing cross-sectoral initiatives in areas including education, environment, agriculture, economic growth, health and nutrition. It also emphasizes governance reforms for political stability and accountability.

C.2.1 Current Programs

Although Madagascar is a new Feed the Future country, agriculture, resilience, and nutrition programming is not new to the USAID programs in Madagascar. Current USAID programs include:

- USAID/BHA Resilience and Food Security Activities (RFSA) that are increasing diversified nutritional diets and household resilience through nutrition sensitive agriculture activities such as orange fleshed sweet potatoes, increasing farm production, promoting Village Savings and

Loan Associations (VSLA), strengthening community disaster risk reduction systems, and improving nutrition among mothers and children through the first 1,000 days.

- USAID biodiversity, climate change adaptation, and sustainable landscapes programs that have taken a nature based, market systems approach to address drivers to deforestation of Protected Areas (PAs). Activities are focused on increasing climate smart agriculture; promoting agroforestry; diversifying incomes with fish ponds, honey, and keyhole vegetable gardens; creating and strengthening farmer cooperatives; enhancing value chains for cash crops (chocolate, vanilla, spices, seaweed, sea cucumbers, etc.) in close collaboration with the private sector, and an incubator program to support numerous Malagasy startups.

- USAID/Power Africa investments in renewable energy support agricultural resilience and productivity by improving yields through solar irrigation, reducing post-harvest losses through cool and cold storage, and enhancing farmer revenue through agro-processing (milling and other activities that add value to agricultural goods).

- Robust health and nutrition programs focus on building the capacity of health sector actors at the district level and below to deliver health services and programs in their catchment areas. In alignment with the Global Malnutrition Prevention and Treatment Act, nutrition-specific interventions emphasize strengthening primary health and community health systems. Specifically, these include capacity building for health providers to provide high quality basic nutrition services; support to women for breastfeeding; antenatal micronutrient supplementation; prevention of wasting through basic health services for children and referral for treatment of wasting; and vitamin A supplementation. Support also includes capacity building of regional and district level coordination mechanisms to implement and monitor national policies and strategies.

- USAID WSSH (Water Security, Sanitation, and Hygiene) programs are guided by the Madagascar High Priority Country Plan[57] to develop systematic partnerships with water and sanitation institutions, communities, private sector actors, civil society organizations, GoM and beneficiaries to improve access to water and sanitation services. It aims notably to increase access to equitable, safe, reliable, and affordable drinking water services, to improve performance and climate resilience of water and sanitation service providers, to allocate and use water resources more equitably and efficiently, to enhance reliability and quality of water resources through protection, restoration, and nature-based solutions to improve the climate resilience of water resource management. A comprehensive water assessment is being undertaken to address challenges related to climate change, population growth, and underdeveloped water infrastructure in the Grand South.

- The Education Program, *Foundational Learning for a Better Future - Lova,* is strengthening the capacity of students, teachers, and school communities to prepare for potential climate-related impacts and ensure continuous learning in two of Madagascar's most climate-vulnerable regions: Atsimo-Atsinanana and Androy.

[57]High-Priority Country Plan. In 2022, Madagascar was re-designated as a High-Priority Country under the new U.S. government Global Water Strategy and is developing a new strategic plan

- Ukraine Supplemental Funding is being used to support the following Feed the Future activities:
    - Capacity building, market value chain assessment and linkages for climate smart groundnut, sorghum and millet production through the Peanut Innovation Lab and Kansas State University;
    - Agriculture recovery and strengthening climate resilient households in two districts in the Grand South with FAO, including poultry and small ruminant production;
    - Soil mapping, field level soil fertility analysis and farmer decision making tools with the Feed the Future Soil Fertility Innovation Lab;
    - Food fortification assessment, capacity building, nutrition policy and behavior change through USAID's Advancing Food Fortification Opportunities to Reinforce Diets (AFFORD);
    - An Inclusive Development Assessment (IDA) focused on youth in the ZOI through USAID's Inclusive Development Activity for Mission Support (IDAMS).

These foundational assessments and activities will inform and enhance the Feed the Future new design and provide valuable insight for the Mission's new CDCS. Other USG Agencies in Madagascar whose current programs support Feed the Future objectives include the USDA's McGovern-Dole Food for Education and Child Nutrition program; USDA Food for Progress; U.S. Forest Service support for watershed approaches encompassing expertise in land, water, forest and fire management; Peace Corps programs in education, health, and agriculture; the Department of Labor support for child labor rights and counter-trafficking; and the U.S. Treasury support to national-level financial policy and services. Furthermore, the USG collaborates in specialized programs including the President's Malaria Initiative, Water for the World, ONE Health, Power Africa, Prosper Africa, END Wildlife Trafficking, and Youth Leadership across Africa (YALI) Presidential Initiative.

The Vision for Adapted Crops and Soils (VACS) program will provide information to increase agricultural productivity and nutrition by developing diverse climate-resilient indigenous crop varieties and building healthy soils. The Mission is currently working with the International Fertilizer Development Center (the prime implementing partner for VACS) on improving soil and water management; with the Sorghum and Millet Global Consortium to fast track the release of new varieties of climate adapted traditional crops with high nutritional value such as sorghum and millet; and with the International Potato Center on multiplying and disseminating drought tolerant orange flesh sweet potato to strengthen food security and improve nutrition, especially for women and children in the South.

The USDA Foreign Agricultural Service Climate Change Adaptation Plan (2022) also provides an opportunity for the USDA/FAS representation in South Africa to expand collaboration with Madagascar through its network of Climate Hubs to develop and deliver science-based, region-specific information and technologies to natural resource managers and communities while enabling climate-informed decision making through international technical exchanges. All of these strategies and initiatives support broader administration goals including climate change, resilience, economic growth, global health, good governance, and equity and inclusion.

C.2.2 Layering, Sequencing and Integrating of Resources to Achieve Results

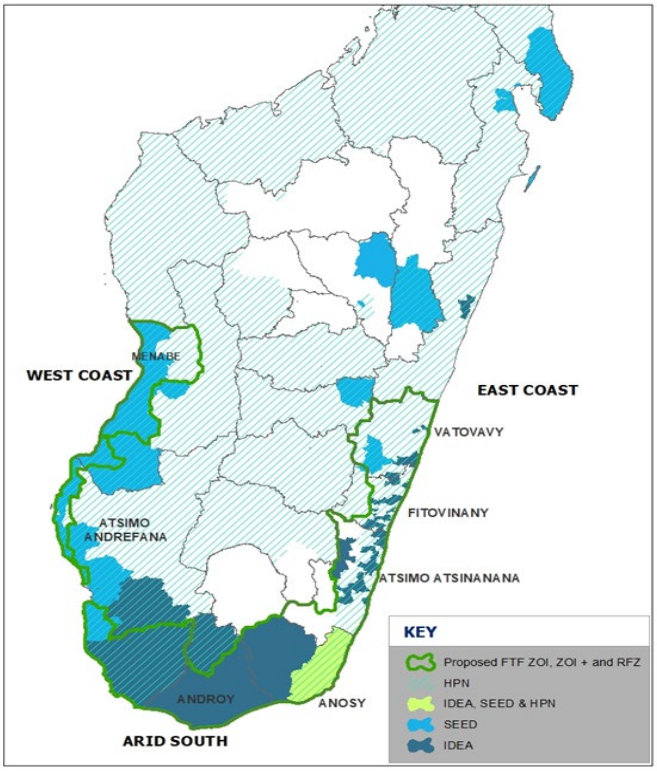


Figure G. USG Coordination in Madagascar

As highlighted above, the Feed the Future Madagascar Country Plan represents a holistic and comprehensive interagency strategy to be pursued by strategically layering, sequencing, and integrating various activities from different USG programs. The Country Plan intentionally seeks synergies and complementarities with other partners (donors, private sector, the GoM), aiming to collectively achieve the desired outcomes. This plan incorporates activities within the ZOI+ that contribute to the Feed the Future objectives and intermediary results and impact pathways.

Crucial to the success of this plan is the inclusion of the five-year BHA Resilience and Food Security program (2024 - 2029), USDA McGovern-Dole Food for Education, USDA Food for Progress, U.S. Forest Service and Peace Corps programs. Other USAID programs within the ZOI also provide additional opportunities to enhance resilience, food systems, and human and social capital.

These programs include natural resources (land, water, and biodiversity) management and climate adaptation programs promoting climate-smart agriculture (including marine), and agroforestry practices in collaboration with the private sector; health program activities encompassing specific nutrition programs, health systems strengthening, and malaria reduction; and WASH activities focused on expanding access to equitable, safe, and affordable drinking water. The new USAID education program will strengthen the capacities of students, teachers, and school communities.

The alignment and evolution of activity opportunities will be responsive to the availability of Feed the Future funding over the five-year lifespan of the Country Plan. This will take into account current strategies, programs, and activities in key areas such as food security, agriculture, fisheries and marine resources, health and nutrition, WASH, and natural resources management at both national and regional levels. Feed the Future will establish programmatic linkages through the HDP Nexus. This strategy leverages the comparative advantages and opportunities of various GoM and partner initiatives to build and collaboratively reinforce multiple sources of resilience. During the activity design phase, targeted interventions will be identified based on the available resource levels, USG comparative advantages, and ongoing activities by other USG entities, technical and financial partners, and the private sector. This will ensure complementarity and synergy in reaching the results as defined in the country plan.

C.3 Rationale for Impact Pathways

The following three subsections present Madagascar's Feed the Future Impact Pathways, organizing GFSS Objectives, IRs, CCIRs and Madagascar specific sub-IRs in a manner that defines the Madagascar Feed the Future Country Plan. Graphical depictions of these pathways are supported by a narrative to define approaches, explain complex interrelationships, and identify key actions and actors.

C.3.1 Agro-Ecological-Economic Impact Pathway

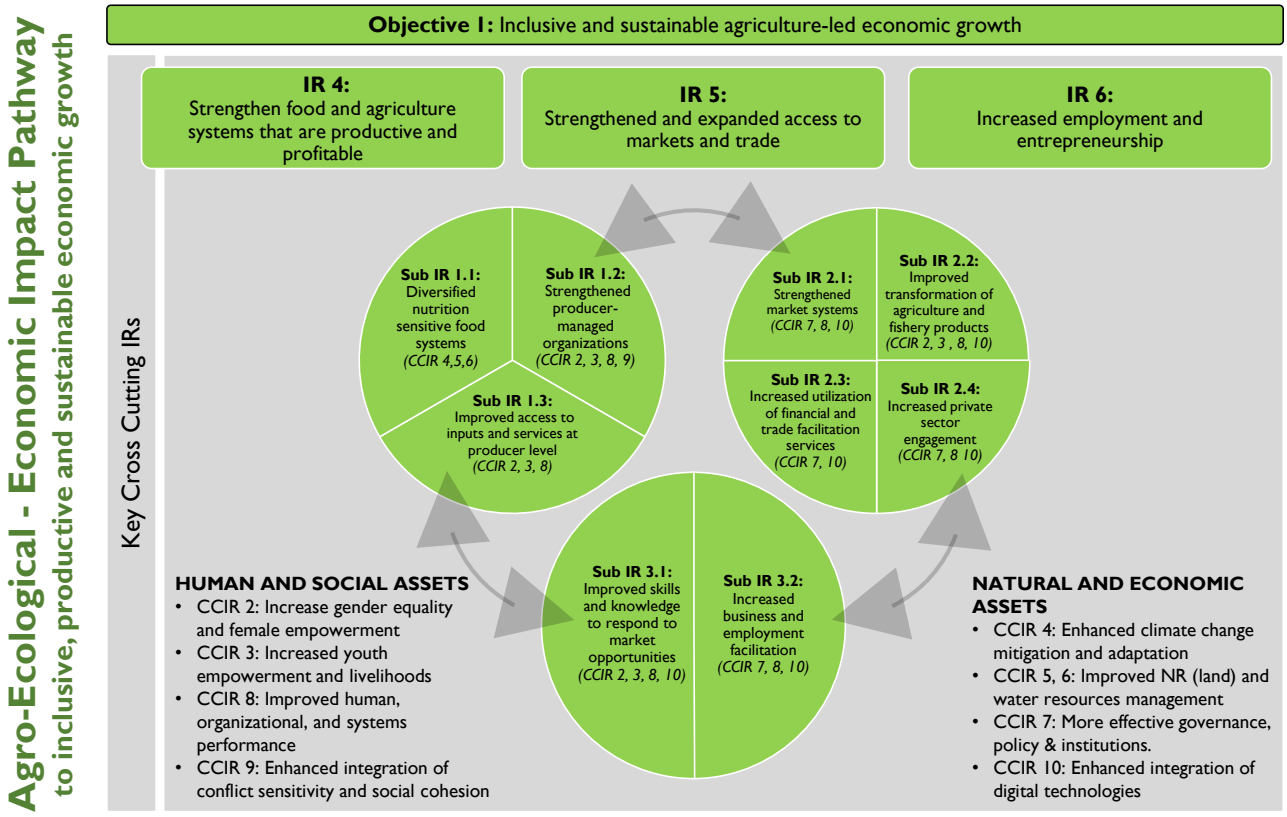


Figure H. Agro-Ecological-Economic Impact Pathway

The agro-ecological-economic impact pathway (objective 1) will promote a nature-positive, market-led approach to strengthening food systems through transformative shifts in both environmental and economic systems. Climate resilient natural resources (terrestrial and marine) and land management are critical aspects deeply intertwined with both socio-economic development and environmental sustainability. For communities to engage in better management of natural resource (land, water and biodiversity) management, they must be able to accrue increased economic benefits from their agricultural lands, coastal zones, and ecosystem services. Modern agricultural technologies will be promoted as critical tools to increase agricultural sustainability by increasing pest resistance, drought/flood tolerance, and nutrition density of foods. A market-led approach will serve to increase productivity of diverse and nutritious foods, entrepreneurship, employment and incomes, and harness the power and influence of the farmers and private sector to sustain economic and ecological benefits. It will focus on supporting women, youth, small-scale producers, farmer groups/cooperatives, and micro, small, and medium-sized enterprises (MSMEs) to overcome barriers to entry and improve participation, productivity, and profitability.

Under IR 1, *strengthened food and agricultural systems that are productive and profitable*, Feed the Future will maintain the productivity of agricultural landscapes and coastal seascapes as the anchor to achieving sustainable and inclusive food systems.

The resilience of biodiversity and ecosystems in biologically significant areas (forests, mangroves, wetlands, and reefs) to climate change will be strengthened by supporting nature-based solutions for climate mitigation and adaptation (CCIR 4, 5, 6). Agroecological farming, coupled with modern agriculture technologies, will improve farm resilience through improved soil fertility, water conservation, and increased farm diversification (sub IR 1.1). In target coastal areas, Feed the Future activities will reinforce the management of coastal fisheries in complementarity with the USAID marine program, including aquaculture, as a way to contribute improved nutrition and income (sub IR 1.1). Another key building block in this pathway is improving the competency of the smallholder producer and fisher associations (especially women and youth organizations) as they work towards increased resilience, environmental stewardship, social cohesion, and equitable business relationships (CCIR 2, 3). To achieve this, Feed the Future will enhance (i) producer organization's financial and business skills and management (sub IR 1.2), and (ii) improve access to inputs and services with a focus on improving the seed systems, livestock and veterinary services, and fisheries-related inputs (sub IR 1.3). Feed the Future will layer and sequence these building blocks based on farmers' competency level and economic status helping them to move from vulnerability to economic resilience and prosperity by recognizing the local context's uniqueness, opportunities, and constraints to agriculture. USG Agencies contributing include USAID, USDA, and Peace Corps.

Under IR 2, *strengthened and expanded access to markets and trade,* Feed the Future will use a market-led approach to a resilient, diversified food system creating new economic opportunities for smallholder producers and entrepreneurs (IR2, CCIR 7,8). Resilience will be built through the use of the *push-pull* approach that seeks to build the capacity of vulnerable and chronically food insecure households, with a focus on female-headed households, to participate in economic activities *(the push)*, while mobilizing market-led agricultural growth to generate relevant economic opportunities and demand for smallholder production, labor, and services *(the pull)* (sub IR 2.1).

This approach will leverage (i) the interconnections between value chains and opportunities for transformation (sub IR 2.2); (ii) services such as finance, extension and input supply (sub IR 2.3); (iii) private sector investments in supply chains, supply-chain management, and value addition particularly through the application of renewable energy technologies (sub IR 2.4, CCIR8); (iv) the enabling environment that includes norms, policies and regulations that govern or influence how the food system operates and who gains or losses from market participation (CC IR 7); and (v) digital tools that can reduce transaction costs and ease the sharing of information, payments, products and services between actors (CC IR 10). USG Agencies contributing include: USAID, USDA, Peace Corps, DOS, Treasury.

Under IR 3, *increased employment and entrepreneurship*, Feed the Future will reinforce skills and capacity in savings and finance, business development and marketing, and job creation and investment, with a focus on youth and women (sub IR 3.1). These investments in human capacity and market and performance -oriented management systems will enable Madagascar's farmers, livestock owners, and fishers to diversify their livelihoods. It will also allow them to participate in a more equitable and inclusive commercialized food system as the foundation for sustained growth in rural incomes (sub IR 3.2). USG Agencies contributing include: USAID, DOS, Treasury.

Key assumptions and risks associated with achieving the agro-ecological-economic impact pathway:

Critical assumptions	Risk factors
• Political stability allows for the sequencing and layering of activities with the other technical and financial partners. • Current GoM financial engagement in Agriculture and Natural Resources Management is maintained or increased. • Consumer demand for blue and green economy products[58] from Madagascar continues to increase internationally. • Government and other donors (WB, AfDB, and EU) increase investment in road and water infrastructure to be layered within ZOI+.	• MSMEs do not engage in trade or partnership with the stakeholders from the targeted communes for competitiveness purposes (road, water, and commercial products). • Entrepreneurship growth remains limited within the ZOI to pull agriculture production from the targeted area. • Current illiteracy rate of the population remains as a main constraint to improved human capacity and behavior change. • Weak governance and corruption

Table D. Key assumptions and risks associated with achieving the agro-ecological-economic impact pathway

C.3.2 Resilience Impact Pathway

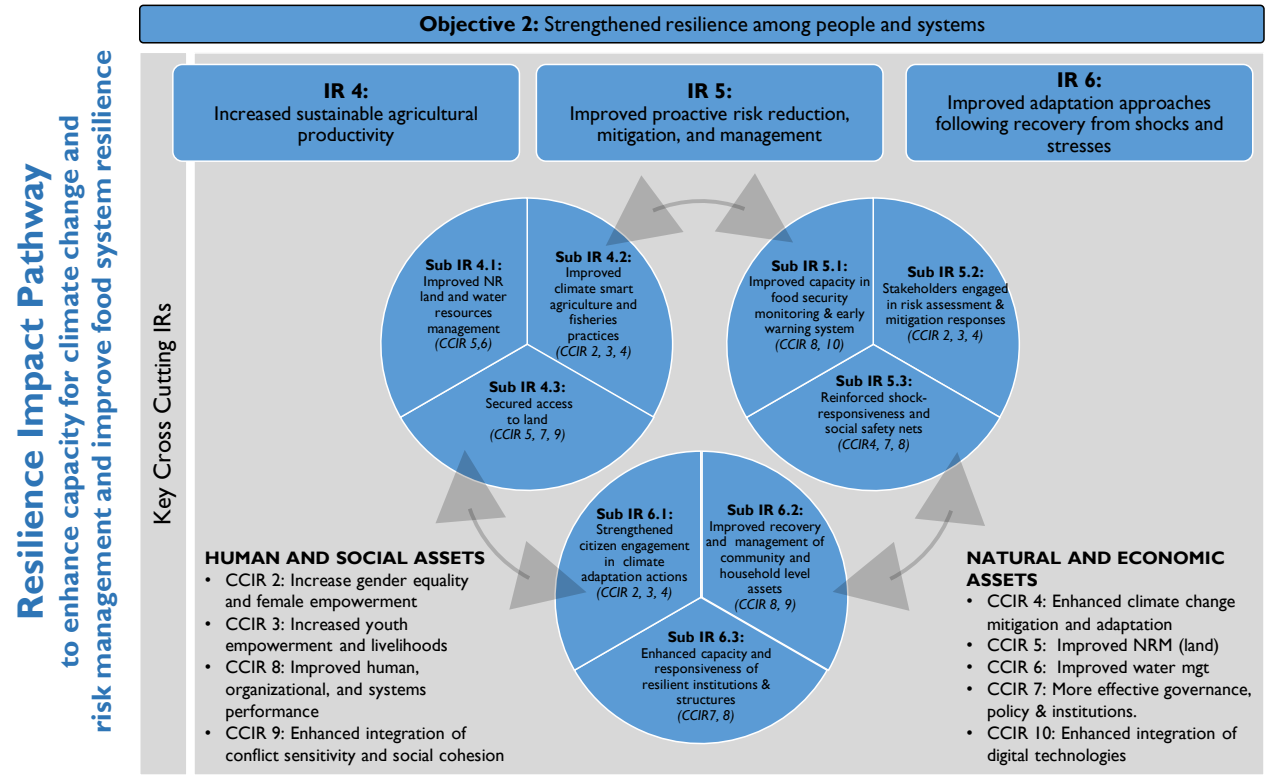


Figure I. Resilience Impact Pathway

[58] Green economy is low carbon, resource efficient and socially inclusive; and blue economy is the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem UN definition)

The Resilience Impact Pathway (Objective 2), is applicable across the ZOI+, especially in areas of recurrent crises and high levels of humanitarian need (RFZ).

This pathway is specifically focused on ensuring the foundational building blocks are in place to move from humanitarian assistance supported through USAID and other donors to a development and economic growth trajectory. Resilience integration is critical for communities across the ZOI+ to ensure that risk and resilience options are assessed, and people, communities, and system actors invest in approaches that further strengthen sources of asset protection and creation and prevent these areas from becoming more vulnerable and in need of humanitarian assistance. Feed the Future will strengthen the systems needed to mitigate, manage, and recover from shocks and enable people, households, and communities to build resilience and adapt to long-term stresses and future shocks (IR 5, 6). A key emphasis of this pathway is to restore and sustainably manage land, water, and natural resources to boost resilience, improve productivity, and mitigate and adapt to the impacts of climate change (IR 4, CCIR 4, 5, 6). With a deterioration of the rural security situation in the ZOI+, young boys are particularly at risk of recruitment into "*Dahalo*" *groups* due to limited alternative opportunities. Recognizing the impact of conflict dynamics, it is essential to incorporate conflict-sensitive approaches to mitigate conflict at the community level and foster social cohesion in resilience efforts. (CCIR 9) Strategic sequencing, layering and integration, as well as strengthening the HDP platforms nationally and subnationally are a critical piece of building resilience. This will be especially important to strengthen disaster risk mitigation and management systems and services, shock-responsive mechanisms, early warning monitoring, and adaptive social protection systems (IR 5 & 6).

Under IR 4, *increased sustainable agricultural productivity*, a fundamental building block is to address the issues of land and water management that are the two highest priorities for the Madagascar ZOI+. This reflects the fundamental and urgent need to restore degraded land and water sources (sub IR 4.1, CCIR 5, 6) necessary for a viable food system to address the local population's dwindling access to viable agricultural land, coastal, and marine resources. Agro-ecological farming practices, coupled with modern agriculture technologies, will improve soil fertility and water availability for a resilient, diversified food system (sub IR 4.2, CCIR 2, 3, 4). Securing equitable access to land, especially for marginalized groups, women, and youth (sub IR 4.3, CCIR 5, 9) is another critical element to sustaining productivity. It is important to understand land and resource rights that may be fueling or mitigating from both a cultural and economic perspective, creating expectations regarding resource stewardship, and ensuring a voice for the vulnerable groups. Other priorities will include on and off-farm livelihoods linked to food systems that will contribute to risk diversification, especially for youth, women, and other people who do not have land or other productive assets (CCIR 3). USG Agencies contributing include USAID, USDA, U.S. Forest Service, Peace Corps, and Department of State (DOS).

Under IR 5, *improved proactive risk reduction, mitigation, and management*, Feed the Future will collaborate with partners to strengthen data and information on shocks and stresses and foster coordination of national climate information and early warning systems by the National Office of Disaster and Catastrophic Management (BNGRC). Programming will also support and coordinate with the CPGU, the BNGRC, the UN and Development Finance Organizations' investments in risk financing and linking these systems to national social protection systems. (sub IR 5.1). Stakeholders will be engaged in the risk and resilience assessments of economic, social, and environmental conditions to put into place risk reduction plans and mitigation mechanisms, such as diversified livelihoods and crop insurance (sub IR 5.2). Informal and national social protection systems, such as shock-responsive gender- and youth-sensitive social and economic safety nets, are other important mitigation mechanisms to manage risk and recovery as well as graduating the poorest and most marginalized populations from poverty to more productive and resilient livelihoods. (sub IR 5.3).

The digitized social registry and social protection net programs will be strengthened through collaborative partnerships with the Ministry of Population, Social Welfare, and Women, the World

Bank, UN agencies, other financing partners, and with local implementing partners that will also serve to reinforce gender equality (sub-IR 5.3, CCIR 4, 7, 10). USG Agencies contributing include USAID, and Treasury.

Under IR 6, *improved adaptation approaches following recovery from shocks and stresses*, citizen and multi-stakeholder engagement is critical to promote effective climate adaptation actions that are suitable to the farming system, socioeconomic, and agro-ecological conditions across the ZOI+ and especially the RFZ (sub IR 6.1). Livelihoods and risk diversification approaches will be critical investments to protect assets and improve recovery through diversified crop varieties, quality seed, saving groups, and off farm employment that allow members to meet immediate needs while building wealth, and resilience to climate change and other shocks and stresses. (IR4, sub IR 6.1, 6.2). These actions must consider gender, age, natural resource (land, soil, water) access and conditions, pest and disease pressures, changes in temperature and rainfall and cultural conditions to ensure viable responses (CCIR 2, 4). This will be further improved by an enhanced capacity and responsiveness of resilient institutions and structures to proactively support impacted households, particularly female headed ones (sub IR 6.3). USG Agencies contributing include USAID, USDA, and Peace Corps.

Key assumptions and risks associated with achieving the resilience impact pathway:

Critical assumptions	Risk factors
• Political stability during the five years of the first phase of the Feed the Future (2024-2029). • GoM continues to prioritize land reform to secure land rights in rural areas. • GoM prioritizes sustainable management of natural resources and land restoration.	• Disaster risk management structure continues to be inadequately decentralized. • Accelerated climate change. • Weak GoM coordination across ministries involved in resilience building and disaster management.

Table E. Key assumptions and risks associated with achieving the resilience impact pathway

C.3.3 Human and Social Impact Pathway

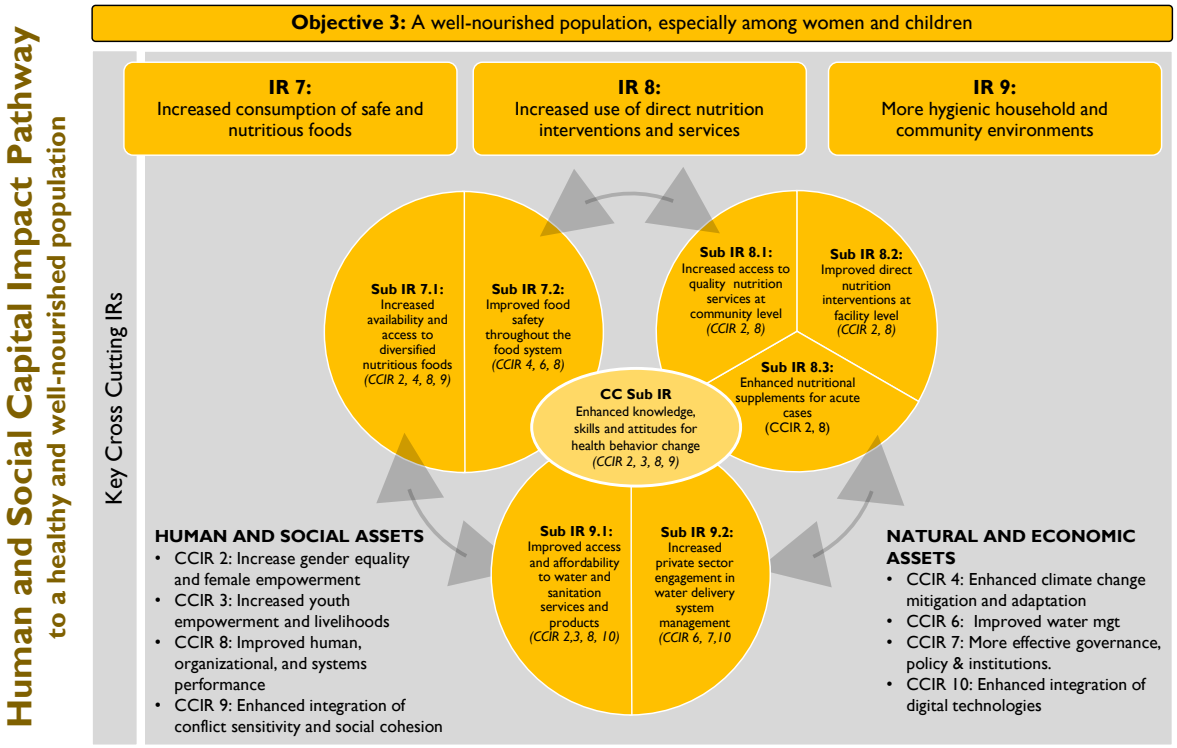


Figure J. Human and Social Capital Impact Pathway

The Human and Social Capital Impact Pathway (Objective 3) will be achieved by an integrated and multi-sectoral approach that addresses the immediate and underlying causes of malnutrition through nutrition-specific and-sensitive approaches, in alignment with the USAID Multi-Sectoral Nutrition Strategy 2014-2025 and GoM Nutrition Multi-sectoral Action Plan for 2022-2026, and the US Global Water Strategy (2022-07) that is working towards a water-secure world. The focus will be on enhancing the nutrition status of women of reproductive age, including pregnant women, lactating mothers, and children under five (IR 7, CCIR 2, 8). Feed the Future impact pathways for IR 7 and IR 8 are therefore closely linked to increased gender equality and female empowerment (CCIR 2).

Given that most households depend on markets to supply a significant portion of their diet, investments under Objective 1 and 2 will intentionally program toward Objective 3 to increase agricultural productivity and trade, contribute to the purchasing power of beneficiaries, and increase the availability of affordable, nutritious, and safe foods year round. Feed the Future will focus on effective policy, institutions and organizational performance to ensure an effective health system with functional facilities and services (CCIR 7, 8), sustainable and equitable water resources management (CCIR 5 and 9), and access to safe drinking water sanitation services and hygiene practices.

Under IR 7, *increased consumption of safe and nutritious foods*, Feed the Future will utilize a community-centered, multisectoral approach, aimed to embed nutrition-sensitive strategies throughout the food value chain—from production and processing to distribution, marketing, and ultimately consumption (sub IR 7.1). Key initiatives will include promoting nutrient-dense commodities, engaging with SMSEs in the private sector, and addressing food loss, waste, and other barriers such as food safety (sub IR 7.2). A tiered commodity approach will be used, distinguishing between nutrient-dense and high-value cash commodities, to create a balanced focus on both nutrition and economic outcomes (sub IR 7.1).

Lastly, it aims to fortify system-wide resilience by fostering a healthy enabling environment conducive to the sustained growth of the food system (CCIR 8). Identifying and addressing underlying factors and barriers to positive nutrition behaviors, by engaging communities, will be important to understanding root causes of certain behaviors and practices, social and cultural norms, and resource availability, desirability, accessibility. (CCIR 3). USG Agencies contributing include USAID, USDA, and Peace Corps.

Under IR 8, *increased use of direct nutrition interventions and services*, Feed the Future will strengthen the delivery of direct health and nutrition services at the community and facility level to improve the demand for services and nutrition outcomes. Weaknesses and gaps in technical skills for community health workers and facility providers will be addressed to ensure that respectful and comprehensive care is delivered at facilities and in the community. This includes supporting quality counseling of mothers and caregivers including behavior-change communication regarding optimal feeding practice, food safety, and dietary sources of vitamin A, protein, and iron (sub-IR 8.1). Increased use of appropriate practices in infant and young child feeding like complementary feeding will include improved dietary diversity and meal frequency will emphasize the consumption of nutritious and safe food (sub-IR 8.2). Supporting activities will also strengthen the capacity of existing social protection systems that include enhanced nutritional supplements for acute cases (sub-IR 8.3). In collaboration with GoM/WB Safety Nets and Resilience Program and other key partners, Feed the Future will support different packages based on need: (1) productive safety net with large focus on Cash For Work (CFW), land management, agricultural livelihoods; (2) cash transfers complemented by VSLA, agriculture, nutrition, and health; and (3) social registry and child protection and related complementary programming. Improved systems for supply chain management, data collection and management, human resources and administrative management of nutrition and health institutions is a critical underpinning to ensure access and delivery of quality health and nutrition services (CCIR 7, 8). USG Agencies contributing include USAID, USDA, and Peace Corps.

Under IR 9, *more hygienic household and community environments*, Feed the Future will strive to reduce the fecal-oral route of disease transmission and infectious waterborne illnesses by supporting sustained practices of improved sanitation and hygiene behaviors that can also have significant impact on nutrition and health outcomes. (CCIR 3,7) Feed the Future will use private sector water service providers to build and manage small drinking water systems by developing creditworthy and sustainable business models (sub IR 9.2). WASH enterprises will be supported to provide payment plans or engage VLSAs to improve access and affordability to water and sanitation services products (sub IR 9.1).

Climate risk will be assessed throughout the portfolio, including in the site selection of water systems, selection of construction sites, and design and placement of latrines (CCIR 4,6). Successful access to clean and safe drinking water also depends on improving climate resilient protection and management of freshwater resources and of associated ecosystems (CCIR 4,5,6) and strengthening water and sanitation sector governance, financing, institutions and markets (CCIR 8). USG Agencies contributing include USAID, USDA, and Peace Corps.

Key assumptions and risks associated with achieving the human and social capital impact pathways:

Critical assumptions	Risk factors
• Coordination with partners and donors related to geographic coverages and nutrition approaches allows balanced and adequate support to nutrition among communes.	• Conflicting approaches to community water delivery may significantly undermine the private sector engagement model in water. • Preference of food distribution over transiting to food production among USG-supported communes, resulting in the refusal to graduate from food aid.

Table F. Key assumptions and risks associated with achieving the human and social capital impact pathways

D. Program Components

Based on the USG's experience, lessons learned, and more than 100 stakeholder consultations, the GFSS Country Plan's key program components were identified to achieve the impact pathways in the ZOI+. Each of these five components are illustrated in the graphic below with their respective programming approaches. Note that two program components, Climate Resilient, Natural Resources Management and Systems, Institutions & Policy Engagement, are cross-cutting and are at times also included within the three core components.

CROSS CUTTING COMPONENTS:

- The Climate Resilient, Natural Resources Management Component focuses on the foundational relationship between natural resources and land management and the socio-economic, cultural, and environmental dimensions to address climate regulation, mitigation, and adaptation and to preserve and maintain ecosystem services (land, water and biodiversity) vital for agriculture and coastal landscapes.
- The Systems, Institutions, and Policy Component serves to facilitate the understanding and management of interrelated socio-economic, political, and environmental issues to ensure that policies and interventions are not only holistic but also synergistic, providing multi-faceted solutions that address the root causes of hunger.

CORE COMPONENTS:

- The Resilient and Diversified Food System Component underscores the need to reinforce a diversified food systems approach, which is seen as crucial for enhancing resilience, as well as restoring and sustaining the productivity of agricultural landscapes.
- The Market-Led Agricultural Growth Component focuses on the importance of efficient and responsive markets to enhance access to goods and services in order to reach and uplift the more vulnerable population.
- The Inclusive Human Capital Component emphasizes the need to layer, sequence and integrate nutrition, agriculture, health, and water, sanitation, and hygiene (WASH) approaches to address the issues of acute malnutrition and stunting, particularly among children and women.

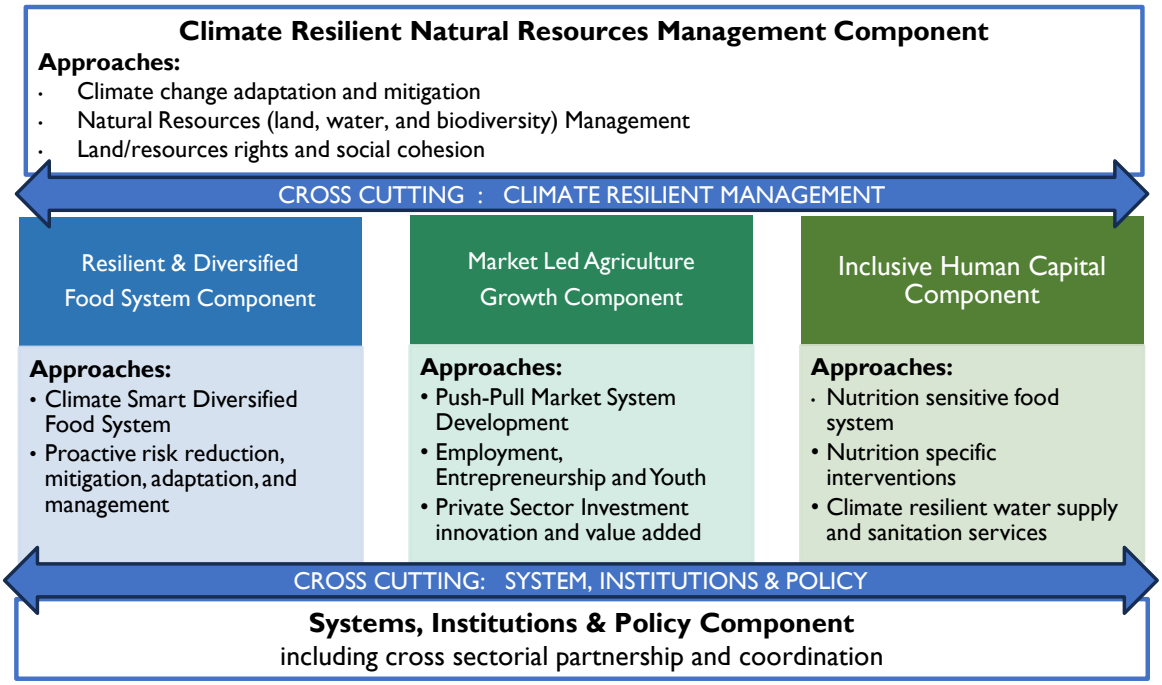


Figure K. Components of Madagascar's GFSS Country Plan

Each of the five components and programmatic approaches are further described below including how they fit together to achieve the three objectives of the GFSS.

D.1 Climate Resilient Natural Resource Management (NRM) Component[59]

Agriculture and food systems are essential to human survival, and are being severely threatened in Madagascar by natural resource degradation, loss of biological diversity and climate change. Land is a pivotal resource for its largely agrarian society, while also being an essential habitat for its unique ecosystems. Yet agricultural extensification and unsustainable farming practices, deforestation, land degradation, and overfishing pose significant threats to the country's food systems and biodiversity.

Results and lessons learned over the last 30 years in Madagascar have shown deficiencies in addressing the complex, front-line interactions between humans and the ecosystem services on which they so deeply depend. Farmers and fishers need direct economic incentives to invest in sustainable natural resource management (NRM), fishing, and land management practices to improve ecosystem services.

[59] As per the 2020 USAID ENRM Framework, NRM is the management of natural resources, including land, water, soil, plants and animals to sustain nature's productivity.

There needs to be a greater understanding and appreciation of the cultural and socioeconomic realities, resource-use patterns of local communities to sustainably address the drivers of natural resource and land degradation and the impact on productivity and food and economic security.

Feed the Future will conduct climate risk assessments to mainstream NRM (land, water and biodiversity) as a necessary prerequisite for boosting resilience, improving food security and food systems productivity, mitigating and adapting to the impacts of climate change, and reducing threats to ecosystem services that are vital to rural economies. Mainstreaming means that NRM will be incorporated as part of cross-sectoral programming, coordinated across different scales, and consistently jointly measured and monitored.[60] For instance, plot and farm level climate smart practices would be accompanied by conservation of ecosystem services—such as water cycling and soil conservation/ fertility—upon which the farming system depends. The approach will include both strengthening the equity, inclusion, and gender and youth responsiveness of the local population and support for policies that improve land and resource governance.

The importance of Madagascar's unique biological resources within and outside of the protected areas network is also recognized. If surrounding areas are poorly managed or neglected, critical ecosystems will become increasingly geographically isolated, interrupting gene-flow and endangering the capacity to sustain critical biodiversity. At the same time, water quality and availability will decrease, while vulnerability to erosion, flooding, landslides, and other effects of severe weather may increase. The preservation of ecological services will be integral to the management of agriculture landscapes, forest habitats, water catchments, and coastal zones to ensure sustainable land use and productivity.

The Climate NRM component will focus on three programmatic approaches:

1. **Climate Change Adaptation and Mitigation (CC IR 4, Link to IR 1, 4, 5, 6, CCIR 5, 7):** The USG, GoM, and its partners are committed to reduce climate change vulnerability and promote mitigation and adaptation measures that will strengthen resilience among people, ecosystems, and biodiversity to allow for inclusive agriculture led economic growth, particularly to address cyclones in the Southeast and droughts in the Grand South. Approaches will focus on landscape and seascape management and/or restoration with the purpose to improve their different functions of production, regulation and protection. More specifically, this means (i) improving production of agricultural land (soil fertility and water conservation) and coastal zones, (ii) protecting and managing water availability and regulation, such as water catchments and flood plains, and (iii) preserving and sustaining biodiversity and ecosystems services in terrestrial and marine protected areas. Improved water resources management, including efforts to conserve and restore watersheds and associated ecosystems, is critically important. In particular, degraded watersheds are increasingly common, limiting the ability of natural systems to buffer the impacts of increased water flow and climate change that disproportionately affects low-income people and marginalized groups by compromising livelihoods, health, and food. In the Grand South and the Southwest, climate resilient solutions and adaptation will focus on agro-ecological farming approaches that include windbreaks, crop rotations with nitrogen fixing plants and fast-growing, native plants and trees species within agricultural lands. In the Southeast, flooding will need to be controlled through riverbank protection, building dykes, and removing sand siltation. Benefits will include increased farm production, climate resilience, carbon sequestration, and sustainability of landscapes and seascapes allowing biodiversity to thrive and to mitigate climate change.

[60] Michael Colby, Diane Russell, and Jennifer Harte, 2020. *NRM in Resilience and Food Security Portfolio Review Briefer,* USAID.

2. **Natural Resource (land, water and biodiversity) Management (CCIR 5, 6, 7 Link to IR 1, 4):** Feed the Future interventions will be structured around agro-ecosystems and/or watersheds. Broader land-use patterns that influence the productivity of agricultural landscapes and seascapes in relation to natural resources, biological significant areas, and ecosystems services will be assessed. Water insecurity destabilizes food systems by increasing the risk of famine, competition over resources, and threats to fragile ecosystems and biodiversity through the expansion of agriculture into new geographies**.** Activities will address the socio-economic drivers of deforestation and land degradation that are impacting all landscapes across the ZOI+ by promoting sound NRM management to build natural assets by synergizing and incentivizing actions across partners working within the same zone. Nature based solutions will purposefully address restoration and management of degraded agricultural landscapes and seascapes through people-centered approaches to increase productivity and resilience and maintain and improve ecosystem services (land, soil, water, and biodiversity). Solutions will be based on critical topographical and climatic conditions, and vulnerability to droughts, cyclones, and erratic rainfall and will maximize benefits for groundwater recharge and water storage, flood prevention, and the reduction of pollutants. Water resource management planning and governance as integral to agricultural productivity will address water catchment management and/or water harvesting (i.e. dew harvesting, rainwater harvesting, etc.) within and across water uses. Tree nurseries will be enhanced with both indigenous and exotic species that can serve to enhance the conservation, recovery and sustainable management of natural resources, water catchments and other ecosystems within target landscapes and coastal zones to directly benefit agriculture and fishery production and sustainable green energy solutions.

3. **Land/Resource Rights and Social Cohesion (CCIR 2, 5, 7, 9 - Link to IR 1, 4):** Securing land, marine and coastal tenure rights will be fundamental to the willingness of Feed the Future households to sustainably manage natural resources. Feed the Future activities will work at all levels - local, regional, and national - to secure resource rights by addressing the exclusionary customs and policies that make it possible to secure and/or inherit land and access resources. Feed the Future will integrate women in local organizations, cooperatives, and VSLAs to address high rates of illiteracy among women regarding their land and resource rights. Interacting and collaboration with both the communities and government, Feed the Future will use a mix of formal and informal approaches depending on the local context that includes: (i) traditional land agreements (DINAs); (ii) land tenure certificates; (iii) private title property; and (iv) Community Based NRM agreements (GCF and GELOSE). More specifically, Feed the Future interventions will address social norms and policies that currently limit women's land and resource rights while benefiting both women and men, and linking land and resources rights security with services and economic opportunities (extension, climate services, climate insurance, financial literacy, and financial services).

The Climate Resilient NRM program component cuts across all ZOI+ administrative regions. The target beneficiaries include marginalized households and communities with a focus on women and youth, smallholder farmers, government environmental services, and private sector operators.

Feed the Future partners will work with national, regional and communal authorities, traditional leaders and community-based organizations (CBOs). The asset of this component is that improved ecosystem services (forest, water, soil, and biodiversity) will lead to more sustainable food and agriculture systems.

The risks and constraints include lack of environmental governance, corruption, continued land and soil degradation negatively impacting productivity and incomes, inequitable access to resources leading to social tension and conflicts, and pollution and poor water management causing health problems.

D.2 Resilient and Diversified Food System

Throughout the ZOI+, food crops, livestock, and fish production yields are low, vulnerable to climate change variability, and do not always provide households with adequate food and income throughout the year. A resilient and diversified food systems approach is key to building resilience and restoring and maintaining the productivity of agricultural landscapes. Food systems will allow for the opportunities to move from both lower to higher return farm and non-farm activities and mitigate risks that move the rural poor out of complete dependence on subsistence level agriculture production to increased economic stability. In particular, Feed the Future needs to focus on food systems to fit regional needs, target populations, and intervention goals. This includes: (i) climate resilient staple value chains with a focus on food crops (eg. sorghum, millet, cowpeas), livestock, and fisheries that are consumed locally and appropriate for the local market in order to improve household income and local food security; (ii) commodity value chains with a focus on high-income crops and products; and (iii) nutritious foods value chains that target market-focused, nutrient- rich crops and livestock, ensuring year-round access to nutritious options.

The low productivity of food crops, livestock, and fish are exacerbated by increasingly intense cyclones, droughts, floods, overexploitation, and other shocks. Crop and livestock pests and diseases, household member sickness and death, increased GBV, and conflict are also often cited by vulnerable households as additional shocks. Feed the Future investments through USG humanitarian and development programming with strategic and programmatic linkages to complementary GoM and donor-funded programs will focus on sustainably improving the resilience of the most vulnerable populations in shock and stressed prone areas. Young boys are particularly at risk of recruitment into violent, armed groups due to limited alternative opportunities. Reports also indicate a convergence of armed groups involved in deforestation, migration, and cultural and natural resource conflicts, further eroding community security and livelihoods.

To overcome low production and climate shock and stressors, Feed the Future will closely collaborate and build on innovative technologies, practices and experience by leveraging multiple partners including Agroecological Professionals of Madagascar (GSDM); Centre Technique Agro-Écologique du Sud (CTAS), a Malagasy NGO; Feed the Future Innovation Labs; the Consultative Group for International Agricultural Research (CGIAR); the French Research Organization (CIRAD); and the National Agricultural Research System (FOFIFA).

This program component will focus on two approaches:

1. **Climate-Smart Diversified Food System (IR 1 and 4)**: Feed the Future will promote diversified nutrition-sensitive food systems that are in harmony with the societal and natural environments. Natural resources (land, soil, water, and genetic diversity) and their management, especially those linked to climate vulnerability, are essential elements of the enabling environment for a sustainable food system. To achieve this, food systems must encompass the entire range of actors and their interlinked value-added activities from production to consumption. Producers will be supported in understanding the impacts of climate change on their land and water sources, and the options that are available to them for making a shift towards climate-smart, nature-based solutions. The food system should consist of diversified food products originating from food and value crops, livestock production, fisheries, and/or aquaculture. Value chains for small ruminants and poultry will be strengthened as well as supportive sectors to include animal feed and veterinary services. For aquatic systems, traditional fish farming, integrated aquaculture or rotational crop-fish systems will be promoted following the same principles of maximizing diversity. Inland fisheries will also be encouraged for communities with limited access to ocean resources and for those located in isolated areas and near rivers, lakes, and other inland bodies of water. Growing and consuming a diverse range of biofortified crops, fruits, vegetables, and animal and fish-sourced products will contribute to improved nutritional outcomes and are instrumental to improving overall health and human capital, stabilizing yearly incomes, and recovering from shocks.

2. **Proactive Risk Reduction, Mitigation, Adaptation, and Management (IR 5, 6; and linked to CCIR 2, 3, 4, 7, 9):** Feed the Future will focus on key risk reduction and adaptation strategies, emphasizing the importance of natural, economic, human, and social asset management for resilience. This entails sustainable investment in crops and livestock as well as diversification of physical, land, and financial assets. Critical actions include early preparation to protect assets during shocks, holistic asset protection approaches to mitigate preharvest and postharvest losses, and economic inclusion strategies focused on women and other marginalized groups. This also includes collaborating with the Ministry of Population, Social Welfare and Gender, and financial and technical partners to strengthen social protection administrative systems, and existing support and coordination with risk financing mechanisms through the CPGU and BNGRC.

Financial accessibility is an important pillar of resilience that includes mobile banking and insurance products, VSLAs, and microfinance institutions to expand savings and lending. These financial mechanisms, often led by women and youth, transition households from subsistence to commercial activities, thereby boosting resilience. Social capital will be strengthened through agricultural cooperatives and VSLAs, which serve as platforms for community engagement. Food banks will also be supported with an objective to decrease food waste and loss through the collection, storage, management, and distribution of food in an effective and sustainable way. The ability of the government and communities to better predict potential shocks through comprehensive early warning systems like the USG's Famine Early Warning System (FEWSnet) will be strengthened to increase preparedness and reduce the risks and negative impacts of shocks.

This program component will target beneficiaries across all ZOI+ districts with a focus on RFZ districts that are vulnerable to shocks and stresses. Special attention will be made for historically vulnerable and marginalized groups and communities, particularly women, children, and youth. Feed the Future will partner with GoM, UN agencies and other technical and financial partners and community-based organizations (CBOs). Assets for this approach are local knowledge about weather patterns, land management, and agro-ecological zones, which will guide the layering and sequencing of different climate smart agriculture practices, including diversified multi-cropping and VSLAs that serve as strong bonds for local-level financing and coping mechanisms. Risks and constraints include smallholder farmers' inability to access or afford inputs, unpredictable weather patterns leading to low yields or losses, crop and livestock pests and disease, lack of adequate fertile land and water for production and livestock during the dry seasons, lack of technical skills in marketing and price fluctuations, especially during the harvest season, and weak GoM early warning and social protection systems.

D.3 Market-Led Agriculture Growth

The Market-Led Agriculture Growth Component will emphasize moving beyond the commodity value chain to market-based agricultural development initiatives that address the interconnections within the food system and between and within value chains. Market systems will build resilience using the *push-pull* approach that seeks to build the capacity of vulnerable and chronically food insecure households, with a focus on female-headed households, to participate in economic activity *(the push)*, while generating relevant economic opportunity and demand for smallholder production, labor, and services *(the pull).* Feed the Future will take a systemic approach to understand market systems, augment existing competitive markets, and avoid market distortions through excessive, unsustainable subsidies. By identifying and addressing the root causes of constraints to economic growth including norms, policies, and regulations, markets can work more efficiently and inclusively for marginalized market actors (e.g., the very poor, women, and youth). Opportunities where private sector "lead" firms, with the resources and incentives, can invest in the supply chains, supply-chain management, and value addition will be leveraged. Feed the Future will utilize digital tools that reduce transaction costs and ease the sharing of information, payments, products, and services between value chain actors.

Addressing market dynamics will involve influencing markets to be more inclusive, ensuring smallholder farmers, pastoralists, and fishers can access essential inputs, financial services, and markets effectively. Feed the Future will strengthen producer-led groups and cooperatives to play a crucial role in shaping agricultural and market practices by bolstering the capacity of producers to organize, ensure accountability, and manage associations for collective, market-based actions, thereby leveraging economies of scale. An emphasis will be placed on seed and input systems involving partnering with governmental and non-governmental entities, and private-sector companies, to facilitate seed multiplication and delivery toward smallholder farmers with the most promising and appreciated varieties. Priorities identified for livestock include improved mixed crops systems, rangeland management and fodder production, especially in agro-pastoral areas, and other animal feed ventures. Priorities for fishers include improving sustainable offshore fishing practices, aquaculture linking associations to buyers and improved cold chain infrastructure and services. These interventions

represent an important opportunity to strengthen women's livelihoods and income generation. Furthermore, infrastructure, particularly road infrastructure throughout Madagascar, presents a substantial challenge for the development of sustainable market and food systems, requiring strong partnerships to improve road and marine transportation systems to ensure the effective transport of goods and services.

The Market Led Agriculture Growth component will focus on three approaches:

1. **Push-Pull Market System Development (IR 1, 2 link to CCIR 7, 6, 10):** Feed the Future will target participants with a range of needs, capacity, and know-how. The Push-Pull approach identifies where participants are ready for market-orientation and designs interventions based on their needs.
    a. "Push" participants are the most vulnerable, ranging from those hit hardest by prolonged shocks, to subsistence farmers transitioning to market-driven production. Interventions for this group start at the household level to secure land, increase farm production, and build capacity of the farmer in order to integrate them into farmer associations/cooperatives to take collective market-based actions. These interventions will primarily be led by resilience and food security activities in the RFZ.
    b. "Pull" participants are food secure and engaged in the market. Interventions for this group will focus on encouraging entrepreneurship and employment within a competitive market system and enabling an environment that stimulates increased productivity, commercialization, and a broader consumption base, fostering expansive non-farm enterprises and a flourishing value chain.

2. **Employment, Entrepreneurship, and Youth (IR 3, link to CCIR 2, 3, 10):** As landscapes reflect the society that shapes them, it is key to engage young people to take a lead in planning and implementing interventions, where a dynamic rural economy generates plentiful opportunities for environmental stewardship, market led food systems and meaningful employment. Feed the Future investments will employ deliberate approaches to prepare young people to take advantage of new economic and social roles that emerge in agriculture and other market systems. More gender-transformative and socio-economical agriculture systems will allow women and youth to adopt improved nutrition-related behaviors, access safe and high-quality food, earn and use income effectively while increasing resiliency. Vocational, entrepreneurship, coupled with business and life skills tailored to young people's specific social, economic, and geographic context will prepare them for more productive and remunerative farming, livestock, fishing, and business-related livelihood activities (CCIR 3). Financial literacy training will also be important for youth and entrepreneurs to start new businesses. Innovation challenges and incubator programs will be explored and initiated to help start-ups access seed money to test and start new businesses. In addition, Feed the Future will mobilize financial and service providers to offer favorable terms for small-holder farmers and SMEs to access savings, credit, and insurance.

3. **Private Sector Investment, Innovation, and Value Addition (IR 2, link to CCIR 7, 8, 10) :** Feed the Future will partner with the private sector to overcome constraints and capitalize on opportunities in the food system based on mutual interests with producer associations, prioritizing women and youth. Currently, the private sector in Madagascar faces growing social and ecological challenges, including resource scarcity, unstable climate, and stakeholder conflicts, that require solutions beyond a company's traditional sphere of control. Under Feed the Future, private sector partnerships will provide an opportunity to define "shared values" that enhance mutual business interests by ensuring agriculture production is addressing sustainable land management (soil fertility and water conservation), managing climate

risks, avoiding deforestation, and protecting biodiversity. Leveraging private investment and innovation and influencing markets to be socially and environmentally responsible and inclusive are key elements to enable smallholder farmers to establish partnerships that improve access to essential goods and services, production inputs, and market opportunities. Partnerships with Prosper Africa to promote trade and investment opportunities with agriculture related firms, and with Power Africa to invest in the private sector and expand investments in off-grid solutions that may include solar irrigation pumps for agriculture, renewable energy powered cold storage units, power to telecommunication systems, lighting in schools and health centers, and the establishment of water pumping stations for the provision of clean water.

This program component will work in ZOI+ districts as defined in Section B and, potentially indirectly, outside ZOI districts to strengthen the market system. The target participants are smallholder farmers (push and pull participants), particularly women and youth, and farmer groups and cooperatives and agri-SMEs. Feed the Future will partner with the GoM, agro-dealers, agro-vets, and SMEs providing financial and value addition services, and other private sector actors. The assets of this component are business development service providers and an increased private sector engagement and consumer demand for blue and green economy products from Madagascar. Risks and constraints include lack of quality seeds, poor post-harvest management technologies, poor access to markets and storage facilities, lack of new technologies for processing, competition from imported products, inability to meet the product quality and quantity standards for the markets, lack of adequate working capital, and price fluctuations, especially during the harvest season.

D.4 Inclusive Human Capital Component

Reductions in malnutrition in Madagascar, particularly among women, adolescent girls, and children under 5, will require a multi-sectoral, integrated approach aligned with the GoM's Multi-sector Nutrition Action Plan. To address nutritional gaps and the prevalence of stunting, nutrition programming will target children in the first 1,000 days of their lives and pregnant and lactating women. Diarrheal disease is the leading cause of death for children under five in Madagascar, and as much as 50% of stunting can be linked directly or indirectly to poor sanitation, hygiene, and lack of safe drinking water. Nutrition-sensitive and nutrition-specific activities will therefore be layered with WASH activities where possible as the two are inextricably linked. The consumption of safe, nutritious food relies on the availability of safe drinking water and good sanitation.

The Inclusive Human Capital component will focus on three approaches:

1. **Nutrition Sensitive Food System (IR 7 linked CCIR 2, 7, 8):** Feed the Future will implement a nutrition-sensitive agriculture approach that focuses on production, market availability of food, income and women's empowerment. Feed the Future investments will support greater integration across all three objectives by enhancing the production, affordability, and marketing of nutritious foods that reduce malnutrition and improve diet quality. Dietary diversity considering the existing consumption habits will be a priority for nutrition sensitive activities. Food fortification will be considered in tandem with existing diet habits to improve

nutrition. Additionally, enhanced food safety and food processing will be considered as a priority to ensure year-round availability of safe and nutritious foods. Nutrition sensitive agriculture, quality health and nutrition service delivery and strategic and innovative social and behavior change (SBC) will be targeted appropriately at the individual, household, and community levels to improve nutrition outcomes and enhance human potential, health, and productivity. This will favor women and youth as effective "change agents," for social and behavior change messaging to increase the uptake and adoption of improved practices (CCIR 8). Other nutrition-sensitive approaches include nutrition training in schools (USDA) and home and school kitchen gardens.

2. **Nutrition-Specific Interventions (IR 8, linked to CCIR 2, 3, 7, 8):** As nutrition-sensitive agriculture approaches alone will not result in improved nutrition gains, Feed the Future will layer and sequence on nutrition-specific interventions within the GoM health system in the ZOI+. Management capability and their health workforce capacity will be strengthened by investing in pre-service and in-service training and implementing an accreditation system for private and public health training institutions. This will include training and supervising health agents who provide nutrition services at health centers and improve maternal, newborn, and child health (MNCH) and disease prevention and management, including adolescent health and preconception nutrition, maternal dietary supplementation, micronutrient supplementation or fortification, and breastfeeding and complementary feeding, as well as prevention and treatment of malaria. Activities aimed at achieving change and/or increasing demand for health and nutrition services at an individual or household level will be implemented in partnership with existing institutions responsible for providing these services, in coordination with private sector partners.

3. **Climate Resilient Water Supply and Sanitation Services (IR 9 linked to CCIR 2, 6, 7):**
   Feed the Future will incorporate resilience across its WASH programming to advance, sustain, and safeguard progress in water and sanitation. This is particularly important in the face of shocks and stressors, such as the recent drought in the south, increasing water stress induced by climate change, and recurrent destruction due to cyclones. Feed the Future will build on the USAID/Madagascar's WSSH (Water Security, Sanitation and Hygiene) program and apply a market-based approach to increasing access to drinking water and sanitation products and services via private providers. This approach will be further expanded by engaging private providers to increase access to safe drinking water and sanitation products and services. This will combine private sector supply of products and services with consumer demand, coordinated through communal government with support from civil society. Feed the Future will also work to improve climate-resilient management and protection of freshwater resources.

   Rural water and sanitation activities will work to develop groundwater and surface water resources for drinking water in rural communes. In collaboration with other financial partners, USG is assessing water resources development in the Grand South to address challenges related to climate change, population growth, and underdeveloped water infrastructure. Feed the Future will use water resource assessments as a basis to develop regional and local water use agreements that more equitably allocate water among users to ensure more effective responses to climate impacts.

This program component will work in all ZOI+ districts with high malnutrition rates. The target participants include women, children, and marginalized populations. Feed the Future will partner with government policymakers, the private sector, and partners engaged in nutrition and WASH programs. The assets for this component are the ability to layer and sequence activities with complementary agriculture, HPN, and education programs, such as early childhood development and existing USDA's

McGovern-Dole Food for Education that will serve to strengthen collaboration toward nutrition objectives. The risks and constraints include lack of money to purchase food, inability to grow food during the dry season, lack of food storage and preservation tools and techniques, lack of nutritious foods in the market, and degradation of water resources, and climate induced elements.

D.5 Systems, Institutions, and Policy

Investing in systems at all levels is paramount for the success of the Feed the Future program. Vulnerable populations depend on the functionality of various systems—be they social, ecological, economic, governmental, or political—to support development outcomes. The resilience of these systems in the face of shocks and stressors, coupled with the ability of system actors to adapt and learn in response to opportunities or challenges, holds the key to sustaining the impacts of investments. To bridge these efforts, the GoM, in partnership with financial and technical collaborators, has begun to ensure a more effective multi-sector system approach that aligns with shared GoM strategies and outcomes within the broader framework of partnerships. Feed the Future will actively engage a diverse array of stakeholders, including marginalized groups, to collaboratively shape long-term strategies for transformative change that align with local priorities. This process will entail delving into the intricate fabric of local contexts, systems, and obstacles, including individual motivations. These insights are essential for catalyzing significant shifts in critical systems and transformational change.

The institutional and policy environments in Madagascar are critical for the outcomes of Feed the Future. To achieve the desired outcomes, Madagascar must have a stable macro-political environment. Feed the Future will prioritize strengthening local, regional, and national agencies' and institutions' capacities and promote active engagement of the private sector. These agencies and institutions span across various sectors and systems, encompassing environment, agriculture, energy, education, social protection, and healthcare. Feed the Future aims to facilitate well-informed decision-making and, in the long run, drive meaningful and sustainable progress.

The USG has collaborative relationships with the Office of the Prime Minister and the National Nutrition Office (ONN), BNGRC, Ministry of Agriculture and Livestock (MinAE), Ministry of Environment and Sustainable Development (MEDD), National Office the Environment (ONE), the Ministry of Fisheries and Blue Economy (MPEB), the Ministry of Health, Ministry of WASH, Ministry of Commerce and the Ministry of Education. Feed the Future will work in collaboration with the GoM ministries at different levels to address various factors within the institutional and policy environment, such as resource and land rights, and structural investments within food and agriculture systems, including markets and infrastructure.

The USG will collaborate with the GoM, financial partners, the private sector, and civil society to facilitate and accelerate change in the following key policy areas:

Climate Adaptation and Mitigation: This will involve advocating and supporting national GoM climate mitigation and adaptation policies through a multi-sectoral approach with MEDD, MinAE, MPEB and Min WASH. Key focuses include improving agricultural land, coastal zones, and mangroves; protecting and managing water resources; and preserving biodiversity and ecosystem services.

Enabling Environment for Private Sector: This will include supporting the government in implementing the new law to strengthen cooperatives and federations to improve their advocacy for government policies and regulations, access to finance, and streamline the organic certification process. Collaboration with the MPEB is also planned to finalize the blue economy policy, focusing on coastal and marine planning and managing marine protected areas for economic community benefits.

Agriculture Trade: This will involve collaboration with various governmental bodies and the private sector to address barriers to imports and exports. Key concerns are tariffs on climate-smart agricultural equipment, export licenses, import of improved seed varieties, and various trade policy adjustments.

Diet Quality: As part of integrated health programming, the USG is strengthening the policies and strategies of the ONN and Ministry of Public Health (MOPH) to implement their national action plan and promoting and supporting improved nutrition practices, nutrition service delivery and community-based activities, with a focus on pregnant and lactating women. In addition, the USG will support the GoM in implementing its national strategy for food fortification. This includes strengthening the leadership and coordination of the National Alliance for Food Fortification and partnering with the private sector to scale up fortified food production.

These policy areas represent a comprehensive approach to environmental sustainability, economic development, and improving food security, diet quality, and health and nutrition in Madagascar. This will serve to both fortify the resilience of vulnerable communities and ensure the long-term sustainability of GoM, private sector, and donor investments. *(Refer to annex 4 for a more detailed description of GFSS Madagascar Feed the Future priority policies)*

E. Stakeholder Engagement Platforms

E.1 External Stakeholder Engagement

For meaningful and transformative change to occur within the Feed the Future Madagascar program, strong, accountable partnerships must continue to be forged among government agencies, civil society, local communities and the private sector. During the design phase of the Feed the Future Country Plan, more than 132 inclusive stakeholder engagement meetings were organized at multiple levels—national, regional, communal, and field—to ensure broad-based input and buy-in. This multi-level, multi-stakeholder approach served to promote well-rounded, context-sensitive program approaches and interventions, aligning diverse actors towards common objectives, and thereby enriching the overall Feed the Future impact pathways. *(Refer to Annex 1 for a comprehensive list of stakeholders and consultation outcomes).*

In the pursuit of partnership and collaboration, Feed the Future will engage in a comprehensive approach that involves all these stakeholders, with particular emphasis on marginalized and underrepresented groups. This inclusivity is crucial in developing sustainable, long-term roadmaps for transformative change that resonates with local priorities. A deep understanding of local contexts and priorities is needed to drive significant shifts in key systems and services. This involves identifying the barriers and motivations that influence individual actors in adopting and sustaining behaviors critical to systems change. Furthermore, all players (including govt entities) must play an active partnership role that includes contributions to a common strategic framework with cash, in-kind goods/services/equipment and personnel, which are transparently committed to the implementation of this strategy and can be held accountable for its success.

Feed the Future will continue to support and act as a facilitator in strengthening multi-stakeholder platforms at various levels to: (i) foster a unified vision for managing interventions, encouraging all actors to invest their resources—be it time, funding, or political capital—towards a common framework; (ii) nurture horizontal relationships, promoting cooperation among local stakeholders to align their actions and intentions; (iii) bridge vertical gaps by connecting local participants with communal, regional, and national actors; and (iv) invest at the local-level in nutritious and climate-resilient indigenous and traditional crops while building value chains for these crops to incentivize farmers to shift away from less resilient crops. These collaborative frameworks will not only foster better coordination, but also ensure a mutual understanding of the conditions, trends, approaches, challenges, and opportunities unique to each targeted zone. This shared awareness will enable more informed decision-making and more effective interventions, advancing the common goal of a resilient and nutritionally sensitive food and market ecosystem.

At the national level, there will be USG interagency high-level engagement in joint discussions and initiatives in collaboration with other financial and technical partners. There will be focus on common concerns, ranging from advocating for policy or legislative changes to pushing for enhanced transparency within governance frameworks across a breadth of sectors. This includes working groups and platforms in emergency and humanitarian assistance, health, nutrition, WASH, environment, climate resilient agriculture and food systems, marine and fisheries management, education, and governance. This comprehensive engagement ensures that USG engagement and expertise is channeled effectively to address Madagascar's multifaceted strategies and priorities at different levels. (Reference Annex 2 for a more detailed description of the platforms)

At the Regional and Communal level, Feed the Future will support government structures to strengthen their leadership responsibility to ensure viable partnerships and coordination. Stakeholder engagement and collaboration will be fostered among government, local civil society, private sector, donors and

technical implementing partners to advance transformative change. The sequencing, layering, and integration approach will also be used to improve coordination and partnerships. Feed the Future will engage with Governors and Mayors by facilitating the use of spatial and Regional and Communal Development Plans as a common framework to create regional and communal alliances among different stakeholders that align, harmonize and coordinate interventions. This will strengthen the capacity of local systems, reduce fragmentation, and ensure that support provided by the USG and our partners becomes more collaborative and cost-effective. These alliances will also serve as a platform to share results, lessons learned and best practices for common approaches including nature-based solutions, social protection networks, resilient nutrition sensitive food systems, market system development to build economies of scale and market-led infrastructure investments, water management and sanitation, and private sector engagement.

E.2 USG Interagency Coordination

The Feed the Future Coordinator will lead quarterly interagency Feed the Future meetings with Mission leadership and the Feed the Future Core Team. The Feed the Future Coordinator will participate in or receive reports on all stakeholder engagement platforms as envisioned above, using this quarterly interagency leadership meeting to share stakeholder feedback on Feed the Future programs, and on challenges and opportunities currently present in the food and market systems. Adjustments will be made in response and pivot any relevant aspects of design, implementation or evaluation as needed. These meetings also will allow for a crowding in of USG resources to respond to challenges and take advantage of opportunities within the market system, regardless of sector. It is envisioned that this will be a useful source of information for activity and program design and monitoring impact throughout the USG agencies, as well as helping to inform communications, planning, site visits and special initiatives.

F. Annexes (available upon request from USAID/Madagascar)

Annex 1: Stakeholder Consultation

Annex 2: Stakeholder Platforms

Annex 3: Resilience and ZOI/RFZ Criteria

Annex 4: GFSS Madagascar Feed the Future Policy Priorities

G. Notes and References

Notes

[1] In Madagascar, the term "region" is a specific administrative unit that composes multiple districts. In this plan, we use the term Southeast, Grand South, and Southwest as shorthand to refer to groupings of specific districts. For the purposes of this plan, the Southeast refers to districts in the regions of Vatovavy, Fitovianay, and Atsimo-Atsinanana. The Grand South refers to selected districts in the regions of Anosy, Androy, and Atsimo-Andrefana, and the Southwest refers to districts in the regions of Atsimo Andrefena and Menabe.

[40] Refer to Annex 4 for a more detailed resilience analysis.

[43] With a new 5-year Presidential mandate beginning in 2024, it is anticipated there will be a refinement of the PEM for the period 2024-2029.

[44] ZOI/targeting proposal - That includes and aligns the breadth of USG investments focused on reducing poverty, hunger, and malnutrition to the greatest extent possible.

[45] The RFZ is determined based on criteria laid out in USAID's Guidance for Selecting Resilience Focus Countries and Focus Zones (internal USAID document). The primary performance ambition in the RFZ is to contribute to increased resilience and reduced humanitarian needs at the population level.

[46] That calculation relies on a cost-per-beneficiary approach based on "The global cost of reaching a world without hunger: investment costs and policy action opportunities" and estimates the least cost to reduce poverty, hunger, and malnutrition.

[47] Note that the USG budget does not include USAID/Madagascar HL9 Nutrition investments, which are outside the ZOI+ due to current donor geographic focus and division of labor agreements. UNICEF is the principal nutrition donor in the ZOI+.

[48] In countries that are both Feed the Future target countries and Resilience Focus Countries (RFC), the "Feed the Future ZOI Plus (ZOI+)" includes two geographic areas: the ZOI and the Resilience Focus Zone (RFZ).

[49] All ZeaCreST-derived population estimates were derived from Landscan Global 2022 Sims, K., Reith, A., Bright, E., Kaufman, J., Pyle, J., Epting, J., Gonzales, J., Adams, D., Powell, E., Urban, M., & Rose, A. (2023). LandScan Global 2022 [Data set]. Oak Ridge National Laboratory. https://doi.org/10.48690/1529167

[50] Poverty data (at regional level) were derived from: World Bank 2012 Global Subnational Atlas on Poverty (GSAP) estimates based on the current international poverty line of $2.15/day in 2017 PPP.

[51] Stunting data in this section derived from: Institut National de la Statistique (INSTAT) et ICF. 2022. Enquête Démographique et de Santé à Madagascar, 2021. Antananarivo, Madagascar et Rockville, Maryland, USA: INSTAT et ICF. Note: Stunting data was provided by DHS with disaggregated estimates every 10x10km, those were normalized and estimated in this region.

[55] Ankilimaliniky, Milenaky, Antanimieva, Befandriana-Sud, Ankililoaka, Belalanda, Soahazo

[58] Green economy is low carbon, resource-efficient, and socially inclusive; and blue economy is the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystems (UN definition).

[59] As per the 2020 USAID ENRM Framework, NRM is the management of natural resources, including land, water, soil, plants, and animals, to sustain nature's productivity.

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