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VISTA Viable Sweetpotato Technologies in Africa

MOZAMBIQUE- Monitoring & Evaluation Plan

USAID FROM THE AMERICAN PEOPLE

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

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Overview

- Project rationale (overall objectives and alignment with feed the future objectives)
- The indicators
- Logical framework (goal, outputs, inputs/activities per indicator)
- Activity's logical framework
- Responsibility for performance indicator data collection
- Data collection mechanisms/approaches
- Performance indicator reference sheets
- Evaluation activities and special studies

Outline of the M&E Plan

I. Introduction
- Logical framework (purpose/objective I)
- Logical framework (purpose/objective II)
- Logical framework (purpose/objective III)

II. THE Activity's LOGICAL FRAMEWORK

III. Monitoring and Evaluation Plan
- A. Responsibility for performance indicator data collection
- B. Types of indicators
- D. Quarterly reporting requirements
- E. Performance reviews
- F. Assessing data quality
- G. Evaluation activities and special studies
- H. Review and updating of M&EP

Annex A: performance indicator reference sheets

Annex B: performance indicator targets

Annex C: performance management task schedule

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Overall objective

The Goal of VISTA-Mozambique is to contribute to improved nutrition, food security and incomes of smallholder farming families through increased production and better utilization of nutritious OFSP varieties, especially by those most at risk of vitamin A deficiency- children under five years of age and pregnant and lactating women

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SPECIFIC OBJECTIVES

1. Increased production of OFSP among at least 102,500 direct and 375,000 indirect beneficiary HH through use of productive, locally adapted varieties, quality planting material, and sustainable agricultural practices

2. Increased consumption of OFSP by children under five years of age and women in at least 102,500 beneficiary HH vulnerable to VAD and other forms of malnutrition

3. Increased agricultural incomes among at least 10,000 HH from sales of OFSP roots in local and urban markets, including fresh root and leaf markets, institutional markets, and commercial processing

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Overall objectives and alignment with FtF Objectives

- The goal and objectives of VISTA are aligned to the two main objectives of FtF in Mozambique:
    1. Inclusive agriculture sector growth, and
    2. Improved nutritional status of Mozambicans, especially children under five and pregnant and lactating women
- The project will directly support the following USAID/FTF Intermediate Results (IR):
- IR-1: Improved Agricultural Productivity,
- IR-2: Expanding Markets and Trade,
- IR-7: Improved nutrition-related behaviors, and
- IR-8: Improved Use of Maternal and Child Health and Nutrition Services

The 12 Project FtF Indicators

IR-1: Improved Agricultural Productivity (6)

EG.3.2-17: Number of farmers and others who have applied improved technologies or management practices with USG assistance (WOG) (RAA)

EG.3.2-18: Number of hectares of land under improved technologies or management practices with USG assistance (RAA) (WOG)

EG.3-1: Number of households benefiting directly from USG assistance under Feed the Future (RAA)

EG.3.2-1: Number of individuals who have received USG-supported short-term agricultural sector productivity or food security training (RAA)

EG.3.2-20: Number of for-profit private enterprises, producer organizations, water users associations, women's groups, trade and business associations and community-based organizations (CBOs) that applied improved organization-level technologies or management practices with USG assistance

EG.3-6: Farmer's gross margin per hectare, per animal, per cage obtained with USG assistance

IR-2: Expanding Markets and Trade (1)

EG.3.2-19: Value of small-holder incremental sales generated with USG assistance (RAA)

IR-7: Improved nutrition-related behaviors (1)

HL.9-2: Number of children under two (0-23 months) reached with community-level nutrition interventions through USG-supported (RAA)

IR-8: Improved Use of Maternal and Child Health and Nutrition Services (2)

HL.9-1: Number of children under five (0-59 months) reached by USG supported nutrition programs (RAA)

HL.9-4: Number of individuals receiving nutrition-related professional training (RAA) through USG-supported programs (RAA)

GENDER INDICATORS (2)

GNDR-2: Percentage of female participants in USG-assisted programs designed to increase access to productive economic resources (assets, credit, income or employment)

GNDR-4: Percentage of participants reporting increased agreement with the concept that males and females should have equal access to social, economic, and political opportunities

PERFORMANCE INDICATOR TARGETS

FTF indicators	TARGETS		
	VISTA 2014 (Oct 2014 – Sep 2017)	VISTA Expansion (Oct 2016 – Sep 2021)	TOTAL
EG.3.2-17: Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance	135,000	240,000	375,000
EG.3.2-18: Number of hectares of land under improved technologies or management practices with USG assistance	5,175	9,800	14,975
EG.3.2-19: Value of small-holder incremental sales generated with USG assistance (Thousands USD)	284	665	949
EG.3.-6: Farmer's gross margin per hectare, per animal, per cage obtained with USG assistance	800 baseline with 15% annual increase	800 baseline with 15% annual increase	1,400
EG.3.2-20: Number of for-profit private enterprises, producers organizations, water users associations, women's groups, trade and business associations and community-based organizations (CBOs) that applied improved organization-level technologies or management practices with USG assistance	114	80	194
EG.3.2-1: Number of individuals who have received USG-supported short-term agricultural sector productivity or food security training	25,000	100,000	125,000
EG.3-1: Number of households benefiting directly from USG assistance under Feed the Future	22,500	80,000	102,500
HL.9-4: Number of individuals receiving nutrition-related professional training (RAA) through USG-supported programs	330	2,000	2,330
HL.9-1: Number of children under five (0-59 months) reached by USG supported nutrition programs	49,950	150,000	199,950
HL.9-2: Number of children under two (0-23 months) reached with community-level nutrition interventions through USG-supported programs	9,000	32,000	41,000
GNDR-2: Percentage of female participants in USG-assisted programs designed to increase access to productive economic resources (assets, credit, income or employment)	80	80	80
GNDR-4: Percentage of target population reporting increased agreement with the concept that males and females should have equal access to social, economic, and political opportunities.	70	70	70

Highlights on the Logical Framework

	INDICATOR	DATA SOURCES
Objective 1: **Increased production of OFSP among at least 102,500 direct and 375,000 indirect beneficiary HH through use of productive, locally adapted varieties, quality planting material, and sustainable agricultural practices**	EG.3.2-18: Number of hectares under improved technologies or management practices with USG assistance (RAA) (WOG)	Report from the agronomist, sample surveys, and TIA
	EG.3.2-17: Number of farmers and others who have applied improved technologies or management practices as a result of USG assistance (RAA) (WOG)	List of beneficiaries reported in Quarter and annual reports
	EG.3-1: Number of households benefiting directly from USG assistance under Feed the Future (RAA)	Quarterly and annual reports, surveys
	EG.3.2-1: Number of individuals who have received USG-supported short-term agricultural sector productivity or food security training (RAA) (WOG)	Training reports
	Indicator GNDR-2: Percentage of female participants in USG-assisted programs designed to increase access to productive economic resources (assets, credit, income or employment)	Baseline and endline surveys
	Indicator GNDR-4: Percentage of target population reporting increased agreement with the concept that males and females should have equal access to social, economic, and political opportunities	Baseline and endline surveys

Highlights on the Activity's Logical Framework

Objective 1: Increased production of OFSP among at least 102,500 direct and 375,000 indirect beneficiary HH through use of productive, locally adapted varieties, quality planting material, and sustainable agricultural practices

# of the FtF indicator	Description of the Activities	Partners	Timing
EG.3.2-18 EG.3-1	• Multiplication of planting materials of five improved OFSP varieties (establishment or expansion of nurseries and training of multipliers). • Building on ongoing work with NARS partners, we will select best-bet varieties for dissemination and build up supply. A stock of disease-free planting material will be established at PAN in Nampula & in Gurué.	IIAM and CIP.	**Q1, Q2 every project FY**
EG.3.2-17 EG.3.2-1 GNDR-2, GNDR-4	• Farmer-led varietal demonstrations ('Mother-Baby-Trial' methodology) and selection of preferred varieties • Variety selection according to site specify will be conducted. This exercises will be carried out in a participative manner to involve as much as possible the potential farmers and consumers in the targeted areas.	IIAM and CIP.	**Q3 thru the end of the project**
EG.3.2-17 EG.3.2-1 GNDR-2, GNDR-4	• Marketing and distribution of quality planting materials of preferred varieties to at least 80,000 direct beneficiary HH with children under five, and farmer-to-farmer diffusion to 240,000 indirect beneficiary HH. • Lead farmers identified as DVM's will be trained in multiplication techniques and will be supported with small-scale irrigation infrastructure and equipment, such as net tunnels to reduce disease load on their multiplication plots. Most of the distribution will be based at the DVM site	IIAM, SDAE, CIP.	**Q3 thru the end of the project**
EG.3-1 EG.3.2-18 EG.3.2-17 EG.3.2-1 GNDR-2, GNDR-4	Operational studies to determine factors affecting production of OFSP among resource-poor HH.	**CIP,** **IIAM**	**All**

Data Collection Mechanisms

- Agronomic and cultural practices : (protocols of the agronomic trials will be designed to collect data from the field, some tools will be developed under CSPro and ODK collect)
- Multiplication and distribution of SP planting material (track forms/vouches/lists previously prepared by the agronomists and M&E focal point)
- Trainings, meetings, field days, promotions (through the list of participants)
- Beneficiaries surveys (Baselines surveys, mid-term and end-line surveys)

PERFORMANCE INDICATOR REFERENCE SHEETS

PERFORMANCE INDICATOR REFERENCE SHEET 1

Development Objective: Enhanced food security, resilience of smallholder farming, and agricultural growth through increased production and utilization of nutritious sweetpotato in Nampula and Zambezia provinces, benefitting especially those most at risk of vitamin A deficiency-children under five years of age and pregnant.

Objective 1: Increased production of OFSP among at least 102,500 direct and 375,000 indirect beneficiary HH through use of productive, locally adapted varieties, quality planting material, and sustainable agricultural practices

Intermediate Result 1: Improved Agriculture Productivity, Sub-IR 1.2: Enhanced Technology Development, Dissemination, Management, and Innovation

Performance Indicator: EG.3.2-18: Number of hectares of land under improved technologies or management practices with USG assistance

DESCRIPTION

Precise Definition (s): This indicator measures the area (in hectares) of land cultivated using USG-promoted improved technology (ies) or management practice (s) during the current reporting year. Technologies to be counted are agriculture-related, land-based technologies and innovations, including those that address climate change adaptation and mitigation. For VISTA Project, the relevant technologies include the 15 OFSP drought tolerant varieties released in 2011, the new 7 orange and purple varieties, the different types of multiplications such as the standard and modified DVM, the rapid multiplication, and use of net tunnels for production of clean planting varieties.

Unit of Measure: Area in hectares

Disaggregated by: Technology type (crop genetics, c. practices, disease management), sex (male, female), and by FTFMS-only disaggregate: Commodity

Justification/Management Utility: The number of hectares of OFSP established under different technologies will help track and uptake of the technologies promoted by VISTA, while determining the number of beneficiaries during the project implementation, and on the other hand could be used a proxy of the amount of roots consumed and supplied to local markets. In general, each hectare of OFSP generates about 10 to 15 tons of planting material that is enough to distribute to about 1250 to 1875 beneficiaries (providing 8kg/beneficiary).

Indicator's Relevance to Gender: In general, most of OFSP is produced or controlled by women; however, the involvement of men will help understand the importance of the crop within the households and particularly in the market.

PERFORMANCE INDICATOR REFERENCE SHEETS

PLAN FOR DATA ACQUISITION

Data Collection Method:

- The number of kilograms of vine distributed: used as the leading proxy to determine the predicted areas established under the plots of the final beneficiaries.
- Regular visits to farmers who received planting material to sample the size of planted areas and certify the level of variety development and overall adaptation.
- survey of direct beneficiary will be conducted at the end of each of the cropping season to collect data that will help to legitimate the predicted areas using the amount of vines distributed.

Data Source (s):

- The agronomists, M&E assistants, and the district level field
- Surveys that will be conducted during the end of each cropping season.
- In the end, these figures will be compared with those from the National Agriculture Survey (TIA) that estimates the area of OFSP and the local white fleshed varieties.

Frequency/Timing of Data Acquisition: Reported quarterly, however the pool data will be available annually after the validation conducted at the end of the cropping season.

PERFORMANCE INDICATOR REFERENCE SHEETS

DATA QUALITY ISSUES

- Date of initial Data quality Assessment: September 2017
- Known Data Limitations and Significance (if any): Estimate the area per variety and disaggregated by sex could be a challenge.
- Actions Taken or Planned to Address Data Limitations: Due to the need to have the area per variety, most of these data will be collected in samples previously selected. by CIP agronomists and not partners. CIP is piloting the crop cutting approach to measure the crop yields per variety and the area under these technologies. Under this approach, beneficiary samples will be conducted to access the yield of storage roots and vines, and complementary the area established under each of the varieties distributed during implementation
- Data of Future Data Quality Assessments: September 2018

PLAN FOR DATA ANALYSIS, REVIEW, & REPORTING

- Data Analysis: Database will be created, and the raw data will be analysed by district, disaggregated by varieties and sex. In general, the M&E Coordinator will lead the data analysis.
- Presentation of Data: Most of the data will be presented in tables and charts in the quarterly progress, annual and survey reports.
- Review of Data: The review of the data will be conducted annually by CIP and USAID-Mozambique teams. Most of this process will take place between July-September, before the submission of the annual reports in October.
- Reporting of Data: CIP will submit the official reports to USAID-Mozambique in October each year for the validity of the 5-year project. Leonor Domingos is the activity manager with USAID-Mozambique

EVALUATION ACTIVITIES AND SPECIAL STUDIES

Evaluation/Study Subject	Timeframe for Evaluation	Key Research Question(s)
Evaluation of the efficiency of Triple S method in Nampula and Zambezia provinces	February 2018	Is the level of sprouting similar for the new varieties in the semi-arid and lowland areas of Nampula and Zambezia?
Efficiency of clean planting material planted in open plots versus the material from the net tunnel	September 2018	Is the net tunnel in fact important to supply clean planting material compared to the open field multiplications? What are the yield differences?
Identification of varieties with most important traits for juice and bread. Evaluation of Rural versus urban preferences	December 2017	Are the variety differences important for juice and bread production? Are the rural and urban consumers different in terms of juice and bread preferences? What are the intrinsic attributes associated with the preference of the varieties for juice and bread production
Willingness to pay for the vines and commercial roots. A comparison between the new and local sweetpotato varieties in Nampula and Zambezia provinces	October 2017	Are the farmers and consumers really willing to pay more for the information and nutritional quality of the new OFSP varieties?
Determinants of the addition and acceptance of OFSP into the local food system of farming households	June 2018	What factors determine whether or not a household willingly adds sweetpotato to their local food consumption environment
Does the inclusion of a feeding bowl in nutrition counselling influence dietary diversification and feeding frequency in children 6-24 months	TBD	Will the minimum acceptable diet in rural farming be influenced by the introduction and use of a feeding bowl during complementary feeding phase of a child's life?

PERFORMANCE MANAGEMENT TASK SCHEDULE

DESCRIPTION	LEAD PARTNERS	TIMING
Project Recruitment. CIP staff to be hired will be recruited and in Alto Molocue. Government extension personnel selected.	CIP, SDAE	Q1
Office set up. Establishing a new office in Nampula and a field office	CIP, IIAM	Q1
Program procurements (capital items, including vehicles and motorcycles), using CIP procurement system.	CIP regional and country office.	Q1, Q2, Q3
Stakeholder meetings and Partner Identification. Finalization of partner selection and target areas. MOUs with partners and/or sub- grants signed where appropriate	CIP and partners.	Q1, Q2, Q3
Sensitization meetings at District level. District level community support and inform them on the objectives. meetings with political and community leader to ask for their support and inform them on the objectives.	CIP, IIAM, SDAE.	Q2, Q3, Q5, Q6
Staff and partner trainings on OFSP production and project management. Using modules of Everything you ever wanted to know about Sweetpotato course and step down trainings in each province,	CIP, IIAM	Q1, Q2, Q5, Q6 (and refresher as needed)
Partner training on OFSP utilization and marketing. This step-down training of extension personnel is best conducted during the harvest period.	CIP, IIAM	Q4, Q8, Q12 (and sub-sequent years as needed)
Annual reporting and work plan updates to contribute to FTF reporting, planning and review processes.	CIP at country level.	Q5, Q9, Q13, Q17, Q20

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OBRIGADO

The International Potato Center (known by its Spanish acronym CIP) is a research-for-development organization with a focus on potato, sweetpotato, and Andean roots and tubers. CIP is dedicated to delivering sustainable science-based solutions to the pressing world issues of hunger, poverty, gender equity, climate change and the preservation of our Earth's fragile biodiversity and natural resources.

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