



USAID
FROM THE AMERICAN PEOPLE



IMPACT EVALUATION AND QUANTITATIVE POPULATION-BASED SURVEYS FOR USAID/MALI'S FEED THE FUTURE (FTF) CEREAL VALUE CHAIN (CVC) ACTIVITY

Contract Number: AID -688 -C-14- 00001

PROJECT WORK PLAN

March 2014 – March 2015

VERSION HISTORY

Version #	Developed by	Date	Description
1.0	IOS Partners, Inc.	<3/25/2014>	Draft Version
1.1	IOS Partners, Inc.	<6/2/2014>	Revised Version per Client's Comments
1.2.	IOS Partners, Inc.	<7/15 /2014>	Revised Version per Client's Comments
1.3.	IOS Partners, Inc.	<8/7 /2014>	Revised Version per Client's Comments
1.4.	IOS Partners, Inc.	<8/21/2014>	Revised Version per Client's Comments
1.4.	IOS Partners, Inc.	<9/03/2014>	Revised Version per Client's Comments

TABLE OF CONTENTS

VERSION HISTORY.....	2
APPROVAL.....	4
ACKNOWLEDGEMENTS	5
DISCLAIMER	5
LIST OF ACRONYMS	6
1. BACKGROUND.....	7
2. INTRODUCTION.....	10
2.1 PROJECT OVERVIEW.....	10
2.2 THE IMPLEMENTATION TEAM – HUMAN RESOURCES	10
3. PROPOSED ACTIVITIES	14
4. WORK PLAN	18
5. DELIVERABLES.....	24
6. GANTT CHART	25
ANNEX 1: POPULATION BASED SURVEY.....	29
ANNEX 2 SOURCES FOR CONTENT OF PBS BASELINE SURVEY REPORT.....	36
ANNEX 3: POPULATION BASED SAMPLE SURVEY QUESTIONNAIRE	39
ANNEX 4: OVERSAMPLE QUESTIONNAIRE	39

LIST OF TABLES

TABLE 1: IMPLEMENTATION TEAM.....	10
TABLE 2: ROLES AND RESPONSIBILITIES OF KEY EXPERTS	12
TABLE 3: SUMMARY BUDGET.....	13
TABLE 4: POTENTIAL CHALLENGES AND MITIGATING SOLUTIONS.....	23
TABLE 5: ESTIMATED DELIVERY SCHEDULE	24

APPROVAL

We, the undersigned acknowledge that we have reviewed the Project Work Plan presented in this document for *the Impact Evaluation of USAID/Mali's Feed the Future (FTF) Cereal Value Chain (CVC)* and hereby provide our approval.

Signature:

Date:

Print Name:

Title:

Role:

REMARKS AND OBSERVATIONS *(if any)*:

ACKNOWLEDGEMENTS

This document was prepared by the team led by **IOS Partners, Inc.**, an international economic development consultancy firm, together with **Cultural Practice LLC (CP)**, **IOD PARC (IOD)**, **CARI-SARL** and **AFAR-TCT** for the **United States Agency for International Development (USAID)/Mali**. This document presents the first deliverable under this project and intends to serve as an important planning tool for the ongoing effort to provide the consulting services for ***Impact Evaluation and Quantitative Population-Based Surveys for USAID/Mali's Feed the Future (FTF) Cereal Value Chain (CVC) Activity***. The Project has been funded by the USAID.

We would like to express our appreciation for the excellent collaboration and facilitation of project documents and meetings, which we received from **the staff of USAID/Mali, USAID Mali's Monitoring and Evaluation Accelerated Economic Growth Team, the Government of Mali, and the CVC Activity implementer - the ACDI/VOCA team.**

DISCLAIMER

The findings, interpretations, and conclusions expressed in this document are entirely those of the authors and should not be attributed in any manner to the United States Agency for International Development. The United States Agency for International Development does not guarantee the accuracy of the data included in this document nor does it accept responsibility for any consequence of its use.

LIST OF ACRONYMS

COP – Chief of Party

CP – Cultural Practice

CVC – Cereal Value Chain

DCOP – Deputy Chief of Party

FTF – Feed the Future

IICEM – Integrated Initiative for Economic Growth in Mali

IR – Intermediate Result

OH – Outcome Harvesting

PBS – Population based survey

RF – Results Framework

RFP – Request for Proposal

USAID – United States Agency for International Development

1. BACKGROUND

Mali is a landlocked country in West Africa. Ninety percent of Malians live in the southern third of the country, as most of its land mass is in the Sahara desert. Half of Mali's population is under the age of 15, and two-thirds are younger than 25 years of age. The large proportion of youth among Mali's population is one of the many issues challenging the country's ability to achieve food security, economic growth and attainment of the Millennium Development Goals.

Mali's population is demonstrating its strife for new economic opportunities by beginning a migration to the cities. It is the rural agriculture, however, that holds the great promise for spurring broad-based economic growth and livelihood development. Around 80% of the population still depends on agriculture for their livelihoods. Although much of the country is arid with only fair soil, the Niger River provides a rich base for agricultural development across multiple regions, while the southern region has a subtropical climate, making it an ideal location for diversified agricultural products and livestock. Recent localized successes in agricultural intensification and marketing demonstrate that with improved technologies, better water management, sustainable agricultural practices, local community engagement and an enhanced enabling environment, Mali's agricultural potential can be fully realized to feed its population, generate economic growth, and jumpstart regional trade.

Despite being considered generally food secure year to year, Mali has high rates of malnutrition, which contribute to poor health status and diminished economic productivity. Malian diets are cereal-based and have little diversity in terms of fruits and vegetables or sources of animal protein. The social dynamics of gender and income distribution in the household, low educational attainment, cultural norms, access to clean water, sanitation, and use of health services all contribute to lowered health and nutritional status.

Over the past six years, USAID/Mali has implemented agriculture growth activities in Mali through a value chain approach. Starting under the Presidential Initiative to End Hunger in Africa, this approach was anchored by a breadth of interventions bundled under a procurement implemented by Abt Associates, entitled **Integrated Initiative for Economic Growth in Mali (IICEM)**. This procurement was complemented by other mechanisms that addressed particular issues along the value chain. Over a period of three years from 2007 to 2010, IICEM Phase I implemented value chain interventions in 5 different sectors (rice, shallots, mango, tomato, and potato) focusing on the development of the production, marketing and enabling environment of the value chain. In 2010, IICEM Phase II began. The three year contract covered 12 sectors with a value chain approach (the original 5, plus millet/sorghum, maize, soy, garlic, tiger nut, other horticulture products, and fish farming). In November 2011, the IICEM contract and other value chain activities were officially amended to align with the FTF strategy. Employing a focused value chain approach, IICEM's scope was reduced to focus on rice and millet/sorghum value chains in the FTF regions of Sikasso, Mopti and Timbuktu.

The USAID/Mali FTF strategy¹ was approved in April 2011 and was designed to guide implementation of agriculture and nutrition interventions for the strategic period 2010 – 2015. The FTF strategy uses a value chain approach to increase economic opportunities and focuses development interventions on three core value chains: sorghum/millet, rice, and livestock. These three value chains are key to Mali's development and overall food security as the majority of the population relies directly upon these staple foods for their livelihood and food security.

¹The USAID/Mali FTF strategy can be found here:

http://www.feedthefuture.gov/sites/default/files/country/strategies/files/MaliFTFMulti-YearStrategy_0.pdf

FTF has an overall goal of sustainably reducing global poverty and hunger. This goal will be achieved through two inter-related objectives of (1) inclusive agriculture growth and (2) improved nutritional status, especially of women and children. The following are the Intermediate Results (IR) that USAID/Mali has identified to be necessary for achieving these objectives and overall FTF goal. The complete Results Framework (RF) for the USAID/Mali FTF Strategy can be found in Annex A.

Objective 1: Inclusive Agriculture Growth

IR 1: Improved Agricultural Productivity

IR 2: Expanding Markets and Trade

IR 3: Increased Private Sector Investment in Agriculture and Nutrition Related Activities

IR 4: Increased Resilience of Vulnerable Communities and Households (also contributes to objective 2)

Objective 2: Improved Nutritional Status, Especially of Women and Children

IR 1: Increased Resilience of Vulnerable Communities and Households

IR 2: Improved Access to Diverse and Quality Foods

IR 3: Improved Nutrition Related Behavior

IR 4: Increased Utilization of High Impact Services and Healthy Behaviors

There are two main projects under the FTF initiative: the Cereal Value Chain (CVC) Project and the Livestock Value Chain (LVC) Project.

The CVC Project is a five-year initiative that aims to sustainably reduce poverty and hunger in target intervention areas. The CVC will promote the integrated, women-empowering, and inclusive development of the sorghum/millet and rice value chains and contribute to strengthening resilience of vulnerable communities and populations. The project is composed of a core award – called “CVC Activity” – fashioned after IICEM as well as complementary value chain interventions. The CVC Activity will focus on key interventions necessary for value chain integration and competitiveness such as production, research and technology dissemination, marketing, processing, trade, finance, capacity building and elements of policy reform. Key aspects of the implementation approach will include: capacity building across an array of business development services and agricultural production skills; strengthening of relationships among value chain actors and support services; assisted coordination and facilitation of the value chain approach for other interventions implemented by other implementers under the broader CVC Project, and promoting an enabling environment necessary for long-term competitiveness².

The LVC Project, focusing on cattle and small ruminants, envisions a more competitive livestock sector in which smallholders, including women and vulnerable households, participate in and benefit from this sector. Over a five-year period, the project is expected to include investments in perimeter development for the delineation of communal lands to be set aside for livestock grazing; modernizing livestock veterinary services; improving livestock fodder (tree/shrub) production; and improving access to credit for the livestock value chain. The largest activity under the LVC Project, Livestock for Growth Activity, will use a value chain approach to strengthen and increase the competitiveness of the livestock value chain. The activity will facilitate horizontal and vertical relationships of actors, foster

² Additional information on this activity can be found here:

<https://www.fbo.gov/index?s=opportunity&mode=form&id=8ad2c6221a255dcfcc4e3dc60ccb664f&tab=core&cvew=1>

relationships with supporting services and markets, and address key constraints in the enabling environment in order to ensure sustainable growth that benefits the value chain actors, including smallholders.

2. INTRODUCTION

This Work Plan for conducting the Population Based Survey for Feed the Future and the continuing Impact Evaluation of USAID/Mali's Feed the Future (FTF) Cereal Value Chain (CVC) Activity provides detailed activities for year one of implementation. The Work Plan includes the principal activities that will be undertaken, the rationale behind these activities, and a timeframe for when activities will commence and end. It also includes budgetary forecasts for proposed activities.

2.1 PROJECT OVERVIEW

The project for **Impact Evaluation and Quantitative Population-Based Surveys for USAID/Mali's FTF Cereal Value Chain (CVC) Activity** aims to: **a) undertake an impact evaluation of the CVC Activity;** and **b) conduct statistically representative population based surveys (PBS)** for the indicators within the broader FTF initiative in Mali. These activities will provide information and data to support future programmatic decisions and help meet Mali's FTF reporting requirements. This intervention will capture the value of USAID's investments in Mali and assess the effectiveness of USAID's value chain approach as a driver for inclusive economic development, allowing for more effective resource allocation and better targeted management decisions.

2.2 THE IMPLEMENTATION TEAM – HUMAN RESOURCES

The IOS Consortium is composed of several organizations and professionals who have long experience in carrying out survey research on value chains, food security, health and nutrition issues in in Africa and around the world.

IOS Partners, Inc. as the prime contractor, will lead the team in implementing a facilitative, market systems approach. This five year-long mission will be implemented in partnership with Cultural Practice LLC, IOD PARC, and the Malian organizations CARI-SARL and AFAR-TCT, and with the external support of our resource organization International Initiative for Impact Evaluation.

Key Experts

The project contemplated inclusion of the following Key Experts on the team:

Table 1: Implementation Team

Position	Name	Organization	LOE for year 1
Chief of Party	Peter Appleton	IOS Partners, Inc.	220 days
Deputy Chief of Party	Oumar Male	CARI-SARL	260 days
Agronomist/M&E	TBD	IOS Partners, Inc.	88 days
Logistics Coordinator	Moussa Traore	IOS Partners, Inc.	230 days
Gender Expert	Christina Manfre	Cultural Practice	57 days

Non-Key Experts

In addition to the five key positions listed above, we have access to a pool of technical experts who will be involved in the project on a short-term basis, as and when required. Level of effort indicated

below is indicative only and might change during the course of project implementation.

1. Impact Evaluation Team

Position	Name	Organization	LOE for year 1
Senior Statistician	Dr. Stuart Astill	IOD Parc	18 days
Community Development Specialist	Mariam Kieta	IOS Partners, Inc.	60 days
Local Monitoring and Evaluation Specialist	TBD	IOS Partners, Inc.	40 days
Senior Gender Specialist	Lydia Nyambura Mungai	IOS Partners, Inc.	30 days
Cereals Agronomist	TBD	IOS Partners, Inc.	40 days
Agricultural Economist	Sidiki Sonogo	IOS Partners, Inc.	20 days
International Monitoring and Evaluation Specialist	TBD	IOS Partners, Inc.	20 days

2. Survey Team

Position	Name	Organization	LOE for year 1
Senior Statistician	Dr. Stuart Astill	IOD Parc	40 days
Senior Gender Specialist	Lydia Nyambura Mungai	IOS Partners, Inc.	30 days
ICT Specialist	Pedro Souss	IOS Partners, Inc.	60 days
Agricultural Economist	Sidiki Sonogo	IOS Partners, Inc.	40 days
PBS Analyst	TBD	IOS Partners, Inc.	40 days

The Survey field staff will be provided through a sub contract with Sabine SARL and will include a statistical reviewers, enumerators, and field supervisors for selected survey sites to oversee the data collection process and implement ongoing data quality controls.

3. Project Support Team includes a Financial and Accounting Expert/ Administrative Assistant, a Driver, and security personnel.

Table 2: Roles and Responsibilities of Key Experts

Name	Position	Primary Responsibilities
Dr. Peter Appleton	Chief of Party	<ul style="list-style-type: none"> ✓ Lead the Inception Mission and prepare the Inception Report ✓ Meet regularly with all relevant stakeholders, including USAID/Mali and the CVC Activity and LVC Activity Implementer ✓ Regular visits to Bamako and the rest of the field ✓ Review all relevant information and documentation ✓ Develop the impact evaluation plan and report and incorporate Client's feedback ✓ Supervise the collection of the evaluation data ✓ Prepare the final evaluation report with input from IOD Parc ✓ Design the quantitative and qualitative surveys, including the composition of focus groups based on input from IOD Parc ✓ Develop and present the baseline data report, incorporate Client's feedback based on input from IOD Parc ✓ Develop and present the midterm data report, incorporate Client's feedback ✓ Prepare and present the final data report, review and include Client's comments ✓ Finalize the Annual Work Plans, finalize the Quarterly Reports, review the Trip Reports ✓ Design and deliver a Training Plan for the transfer of knowledge to the local team ✓ Final review of all deliverables
Oumar Male	Deputy Chief of Party	<ul style="list-style-type: none"> ✓ Participate in the Inception Mission ✓ Meet regularly with all relevant stakeholders, including USAID/Mali and the CVC Activity Implementer ✓ Review all relevant information and documentation ✓ Lead the collection of the evaluation data and contribute to the impact evaluation report ✓ Contribute extensively to the preparation of the baseline, midterm, and final data reports ✓ Prepare the Annual Work plans, Prepare Quarterly Reports and prepare the trip reports ✓ Coordinate survey activities ✓ Assess Needs and Draft a Training Plan for the transfer of knowledge to the local team ✓ Assist the COP in all technical and operational matters ✓ Gradually assume larger responsibilities as to the entire M&E activity
TBD	M&E	<ul style="list-style-type: none"> ✓ Value Chains Analysis ✓ Adapt USAID indicators to Malian context ✓ Assist in deciding control/sample communes with input from IOD Parc and local statistician ✓ Contribute to the analysis of impact evaluation data ✓ Contribute to the analysis of final report

Moussa Traore	Logistics Coordinator	<ul style="list-style-type: none"> ✓ Responsible for all in-country logistics inside and outside Bamako ✓ Arrange and schedule meetings ✓ Organize all in-country travel and accommodation ✓ Coordinate the activities of the survey team
Cristina Manfre	Gender Expert	<ul style="list-style-type: none"> ✓ Bring the gender analysis to all impact evaluation and survey activities ✓ Ensure the collection of sex disaggregated data ✓ Analyze sex-disaggregated data to measure project and FTF gender impacts ✓ Propose measures to improve CVC gender impact ✓ Assess role of women in the value chains ✓ Assess role of women in improving family nutrition ✓ Assess income-generating opportunities in CVC value-chains and alternative sources of income

2.3 FINANCIAL RESOURCES

Summary Budget

Below is a summary budget detailing amounts allocated for the implementation of project activities from Year 1 through to Year 5. Budget line items are indicative.

Table 3: Summary Budget

LINE ITEMS	Projected Year 1	Projected Year 2	Projected Year 3	Projected Year 4	Projected Year 5	TOTAL
Direct Costs	\$ 715.454,55	\$ 403.054,98	\$ 704.507,29	\$ 401.959,00	\$ 750.246,55	\$ 2.975.222,37
Indirect Costs	\$ 495.246,24	\$ 247.780,36	\$ 327.898,82	\$ 238.270,37	\$ 356.382,97	\$ 1.665.578,77
Total Estimated Cost	\$ 1.210.700,79	\$ 650.835,33	\$ 1.032.406,11	\$ 640.229,38	\$ 1.106.629,52	\$ 4.640.801,13
Fixed Fee	\$ 48.428,03	\$ 26.033,41	\$ 41.296,24	\$ 25.609,18	\$ 44.265,18	\$ 185.632,05
(TEC) + Fixed Fee	\$ 1.259.128,82	\$ 676.868,75	\$ 1.073.702,36	\$ 665.838,55	\$ 1.150.894,70	\$ 4.826.433,18

3. PROPOSED ACTIVITIES

The overall goal of this project is to objectively measure the impact of the CVC Activity through an impact evaluation, while helping USAID/Mali better understand the merits and possible shortcomings of the FTF value chain approach in cereals. Another objective is to implement the baseline PBS to provide baseline information on the FTF high-level indicators - as well as the resilience indicator 'depth of poverty'- throughout the broader FTF zone of influence. To achieve this goal, we present, below, four key objectives and respective activities under these objectives.

Objective 1: Conduct statistically representative population based surveys (PBS) for the indicators within the broader FTF initiative in Mali.

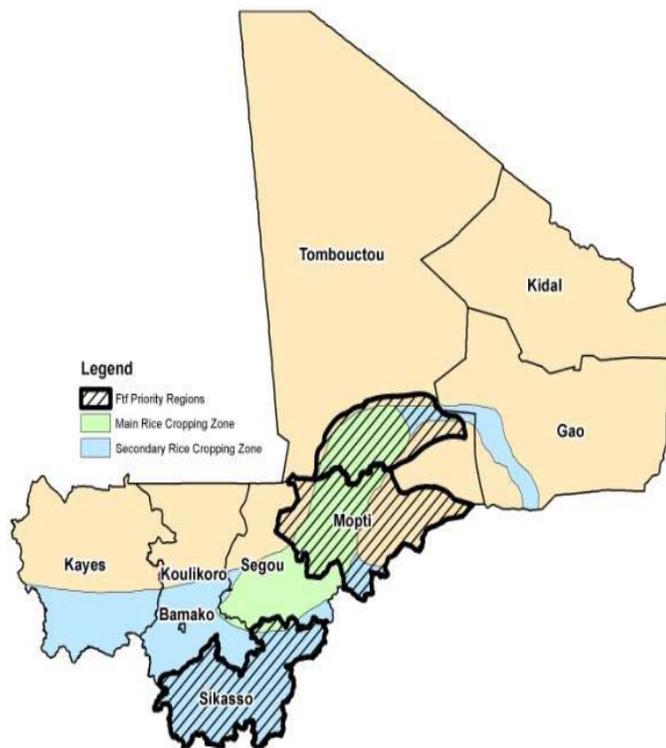
Activities surrounding the PBS include:

1. Confirm the key FTF (11) indicators using USAID framework and implementing partner indicators to develop a list of PBS survey questions. The FTF baseline survey in Senegal and Ghana will be used as the primary source of questions. The FTF agriculture module of the Ghana survey as well as the INSTAT national agriculture survey will be reviewed and compared with the questions that are being asked by the CVC implementer for its baseline survey to determine the most appropriate survey questions to ensure that all survey questions are appropriately covered;
2. Trained and culturally/language astute enumerators will assure maximum accuracy in recording and transferring respondents' answers to survey database.
3. Work with INSTAT to determine the sample size and targeted households for the survey based on target population for FTF activities, and develop the survey questionnaire (to be drawn from Senegal and Ghana FTF surveys and customized for Mali);
4. Recruit and train top survey implementing organizations and data collection staff with survey experience;
5. Enumerate households on paper and transfer data to supervisors;
6. Verify data with field supervisors using callbacks and correct discrepancies;
7. Backup data and transfer data to statistical analysts;
8. Clean data and generate data tables;
9. Compile, review and analyze data gathered with each survey providing key data findings for generating baseline figures of the FTF ZOI-level indicators.

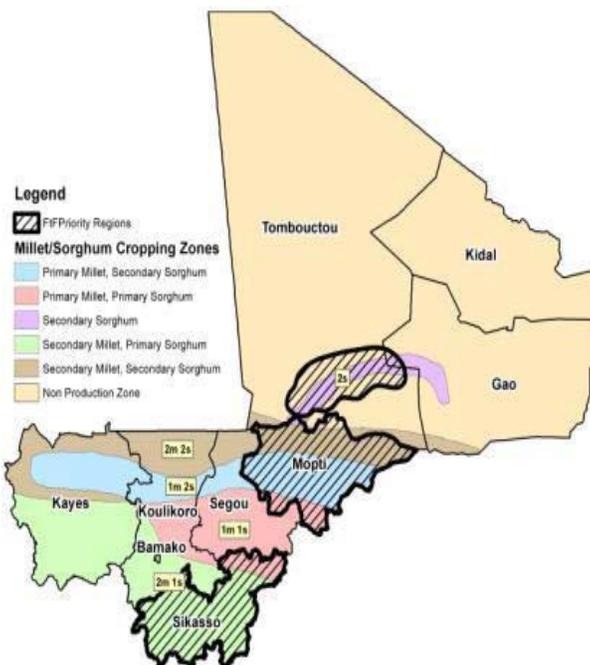
Our approach has a strong capacity development and training component aimed at strengthening the ability of our partners' and senior Malian researchers' to carry out future population based surveys. These skills are critical to improving governance and management of value chain businesses to assure sustainability of broader changes brought about through the FTF intervention.

Map of FTF Zone of Influence

Please see below map of FTF Zone of Influence for more details.



Green Zones indicate rice production (Ségou region).



Region of Sikasso in the South and Mopti to the center in blue indicate millet and sorghum production.

Objective 2: Provide ongoing evaluation services to objectively assess the impact of the CVC Activity in generating inclusive agriculture growth and improving the nutritional status, especially of women and children, in Mali.

Under this objective, the IOS team will verify and assess the impact of the CVC Activity and provide information and data to support future programmatic decisions and help meet Mali's FTF reporting requirements. The impact evaluation will measure the change in development outcome that is attributable to the CVC intervention and which would not have happened without the intervention, as demonstrated by the counterfactual. The CVC impact evaluation is based on cause and effect and includes a credible and rigorously defined counterfactual to control for factors other than the intervention that might account for the observed change. Comparisons are made between beneficiaries in the treatment or a control group of non-targeted households to provide the strongest evidence of a relationship between the results generated by the CVC intervention and the development outcome measured.

The specific activities will include:

1. Document review;
2. Identification of major participants in targeted value chains;
3. Sampling: selection of intervention and counterfactual households within CVC;
4. Planning, design, review and adaptation of data collection instruments;
5. Selecting samples: communities; focus group participants; interviewees; etc.
6. Conducting interviews and focus groups discussions and making direct observations;
7. Carrying out impact evaluation data collection and analyses; in line with the methodology presented in Impact Evaluation Plan;
8. Designing a STATA template, data entry, data quality control;
9. Preliminary and final analysis;
10. Write report, incorporating data tables into report;
11. Communication of results and recommendations to USAID and CVC;
12. Present findings to stakeholders.

Objective 3. Guide CVC's Annual Outcome Mapping and Harvesting Exercises, Determine Main Project Outcomes (inc. unforeseen ones), Offer Corrective Actions and Exploit New Opportunities.

1. Introduce Outcome Mapping and Harvesting to Mali: USAID staff, CVC staff and CVC partners;
2. Train Outcome Mapping and Harvesting Informants from CVC;
3. Train Managers provided by IOS and CVC Evaluators working with the OM/OH exercises;
4. Identify, formulate and classify Harvested Outcomes;
5. Virtual substantiation of 20% of outcomes;
6. Establishment of Outcome Mapping/Harvest Database;
7. Analyze and report on Outcomes; and
8. Present findings to CVC and USAID and other donors and researchers (if so desired).

Objective 4. Present results of Surveys to USAID and CVC, and, at their request and with their permission, to other USAID projects and USG activities, and others as USAID desires.

1. Provide USAID and CVC with analysis based on surveys, OM/OH and its own experience on possible synergies between the CVC project and the USAID Livestock Project and interventions;
2. Attend conferences or workshops and present results associated with the CVC project;
3. To assist USAID and CVC managers with other research or value chain studies, which may be called for during the course of project implementation;
4. Assist USAID and the CVC project in maximizing the impact of interventions on women, youth and low-status individuals within the communities.

4. WORK PLAN

The Work Plan includes the principal activities that will be undertaken, the rationale behind these activities, and a timeframe for their implementation.

Work Activity 1 – Establish Office and hire staff

April 1 – 30, 2014

- Temporary project office opened in Bamako April 7, 2014
- 4 key staff for project hired by April 15, 2014
 - COP: Dr. Peter Appleton
 - DCOP: Dr. Oumar Male
 - Project/Logistics Coordinator: Mr. Moussa Traoré
 - Project Administrative Assistant: Ms. Djenebou Diarra
- Rental of short term vehicle
- Setting up local bank accounts, and other financial arrangements with Ecobank

May 1 – December 31, 2014

- Relocate office to permanent location
- Hire additional Key staff (M&E and Gender specialists) and support staff (driver, security)
- Purchase 1 vehicle
- Purchase office equipment and furnishings
- Other activities related to office organization

Work Activity 2 – Population Based Survey: Conduct statistically representative baseline population based survey (PBS) for the indicators within the broader FTF initiative in Mali.

Summary of Activity 2

Geographical coverage: The Baseline Population Based Survey of 101 communes in the FTF zone of Influence in Mopti, Segou and Sikasso excludes the 12 communes in Timbuktu where activities have been postponed due to insecurity.

FTF Modules: The FTF modules include 11 modules focusing on household economic well being, nutrition and poverty as well as the Women Empowerment in Agriculture (WEIA) module.

April 1 – August 31, 2014

- a) Define key indicators using USAID FTF surveys in Senegal and Ghana to develop PBS survey questions.

The FTF indicators for Mali have been compared with and supplemented by the FTF indicators for Senegal and Ghana resulting in the confirmation of the Mali indicators, which were used to establish the PBS questions and the survey questionnaire. (Indicators are presented in Annexes 1 and 2 and PBS questions and the survey questionnaire in Annex 3.)

- b) Working with INSTAT to determine the households to survey based on target population for the FTF activities, and generate a list of survey questions disaggregated by gender and other criteria.
- c) Questions in 11 modules of the FTF and survey questionnaire have been obtained for Senegal and Ghana and have been adjusted to fit the Malian context.

Specific adjustments to the Senegal questionnaire were made in 3 ways:

- 1) Interchange of FTF standard Module E: Dépenses pour la consommation with the Mali/INSTAT Module: Dépenses pour la consommation;
- 2) Adaption of questions to Malian context, for example, deletion of « availability of cable TV » as there is no cable TV in rural Mali, etc.;
- 3) Adaption of French language used in Senegal PBS survey to French used in Mali.

The exchange of Module E - Dépenses pour la consommation was undertaken at the recommendation of INSTAT and supported by USAID/Mali.

Changes 2 and 3 were undertaken during the 5 day Supervisors' and Enumerators' Training Course at the suggestions of the supervisors and enumerators.

- d) Prepare RFP for recruitment of survey organizations
 - The RFP was prepared in order to invite local organizations to bid on undertaking the baseline PBS and submitted to USAID for comments on May 1, 2014.
 - A pre-solicitation meeting was held with local organizations interested in undertaking the survey.
 - Letters of interest were received from 8 local organizations confirming interest in bidding on the baseline PBS RFP.
 - RFP invitation was released on June 3, 2014 and firms were provided 10 days to respond.
 - Five proposals were received and evaluated from June 12 to June 15, 2014.
 - Firm whose proposal received the highest evaluation was awarded the project and invited for contract negotiations, concluding in the signed contract with the selected firm on June 28, 2014.
- e) Prepare Supervisors' and Enumerators' Training Course and train survey implementing organization's data collection staff
 - Prepare the plan for organizing the training and recruitment of training staff, which was submitted to USAID for comments on April 28, 2014.
 - PBS training course for enumerators and supervisors was successfully conducted from July 11-18, 2014.
- f) Working with INSTAT to determine sample size and location of households.
 - Preliminary sample size determined on April 21, 2014 using FTF methodology, Volume 9.
 - IOD Park undertook reconfirmation and substantiation of sample size on June 2, 2014 and further clarification to USAID was provided on August 1, 2014.
- g) Generate proven procedures for selecting households within selected sites.

- Prepare enumerator manual, which details procedures for selecting sample households as well as enumeration processes to be followed. This was completed on July 2, 2014.
- h) Determine enumeration tools and data collection methodology.
 - Evaluate efficiency and effectiveness of paper questionnaires, smart phones, tablets and laptops as toll for data collection. This was completed by May 31, 2014.
 - Confirmed tool to be used and prepared implementation plan by June 1, 2014.
- i) Determine data base to be used for data entry and analysis.
 - Evaluate alternative methods used in previous FTF surveys: May 1-10, 2014.
 - Determine data base to be used to optimize benefits of selected data collection tool.
- j) Implement Contractor supervisor and enumerator training course.
 - 5 day training course was taught from July 11 through 18, 2014.
 - Certify supervisors and enumerators and confirm their participation in PBS.
 - Pre-testing of survey instruments was conducted on July 28, 2014.
 - Questionnaires modified as a result of pre-test.
- k) Enumerate households
 - The FTF ZOI areas will be enumerated during a period of 30 days.
 - Surveys commenced on Aug 2, 2014.
- l) Transfer data to supervisors
 - Data collected will be transferred to team of supervisors daily: August - September, 2014.
- m) Verify data with field supervisors daily using callbacks and correct discrepancies
 - Supervisors to review data each evening and report discrepancies to IOS Partners
 - Supervisors to correct discrepancies: August – September, 2014.
- n) Backup data and transfer data to statistical analysts September – October 2014.
 - Recruit and train data entry staff in Mali
 - Supervise and validate data entered
- o) Clean data and generate data tables from September – October 2014.
- p) Analyze data and prepare Baseline Data Report and develop a Baseline Presentation for presentation to impact evaluation specialists, USAID technical staff and CVC project personnel: November – December 2014.

Work Activity 3 - Impact Evaluation: Provide evaluation services to objectively assess the

impact of the CVC Activity in generating inclusive agriculture growth and improving the nutritional status, especially of women and children, in Mali.

Under this objective the IOS team will verify and assess the impact of the CVC activity and provide information and data to support future programmatic decisions and help meet Mali's FTF reporting requirements. The specific activities will include:

April 1 – September 30, 2014 (Some preparatory work and interaction with the CVC Activity implementer has been on going, while IE activities will only begin upon approval of Impact Evaluation Plan submitted to USAID on August 11, 2014)

- a) Document review April 1 - 30, 2014
 - Detailed review of documents provided by USAID, CVC Activity implementer and other organizations.
 - Briefing meetings with USAID and the CVC Activity implementer.
- b) Identification of major participants, i.e. producers, traders, processors, distributors in targeted value chains: April 1 -30, 2014 in cooperation with ACIDI/VOCA.
- c) Analyze CVC indicators and prepare Impact Evaluation Plan to include baseline survey, outcome mapping, community forums and other data collection methods: May- August 2014.

Baseline Impact Evaluation Survey (activities will begin upon approval of Impact Evaluation Plan)

- d) Prepare CVC baseline impact evaluation survey
 - Determine the sample size, households to be surveyed and survey questionnaires: July 2014.
 - Determine counterfactual sample size, households to be surveyed for impact evaluation from: July-Aug 2014.
- e) Undertake CVC baseline survey through contract with the Malian company: Sept 2014 (activities will begin upon approval of impact evaluation plan).
- f) Design a data entry template, undertake data entry, data quality control for impact evaluation: Aug – October 2014.
- g) Preliminary and final analysis: October – November 2014.
- h) Develop Evaluation Data Collection Report, incorporating data tables into report: November – December 2014.
- i) Communication of results and recommendations to USAID and the CVC Activity Implementer: December 2014.
- j) Present findings to stakeholders as per USAID direction: December 2014.

Community/Business Forums (activities will begin upon approval of Impact Evaluation Plan)

- k) Identification of major participants in targeted value chains for baseline data collection.
- l) Hold 2 community/business group forums prior to October 15, 2014.
- m) Hold 1 community/business group forums in November, January and March 2015 in Mopti, Sikasso and Segou each.

- n) Conduct interviews and focus groups and make direct observations.

Mini-Surveys (activities will begin upon approval of Impact Evaluation Plan)

- o) Identify missing or suspicious data from the CVC baseline impact evaluation survey.
- p) Formulate spot mini surveys to confirm data from CVC baseline impact evaluation survey as required.
- q) Undertake 1 mini survey to confirm CVC baseline data in November in Mopti, Sikasso and Segou.

Work Activity 4 – Outcome Mapping and Harvesting: Guide CVC’s Annual Outcome Mapping and Harvesting Exercises, Determine Main Project Outcomes (including Unforeseen Ones), Offer Corrective Actions and Exploit New Opportunities

- a) Introduce Outcome Mapping and Harvesting to Mali: USAID staff, CVC staff and CVC partners in September 2014.
- b) Train Outcome Mapping and Harvesting Informants from the CVC project: September 2014.
- c) Train Managers provided by IOS and CVC Evaluators working with the OM/OH exercises: September /October 2014.
- d) Identify, formulate and classify Harvested Outcomes: November 2014.
- e) Establishment of Outcome Mapping/Harvest Database: October/November 2014.
- f) Analyze and report on Outcomes: November /December 2014.
- g) Present findings to CVC and USAID and other donors and researchers (if so desired): December 2014.

The Outcome Mapping and Harvesting (OM/OH) methodology was proposed in IOS Partners’ Technical Proposal and our Impact Evaluation Plan. Through this method, we propose to generate information about major project outcomes among targeted communities and identify the various actors involved in producing them. OM/OH will allow USAID and CVC to take annually corrective actions to enhance positive outcomes (foreseen or not) and to minimize negative outcomes. It will also specify quantitatively and qualitatively the roles of USAID and CVC in influencing outcomes, suggesting ways in which change in directions desired by participants can best be achieved.

The method is inspired by the definition of outcome as a change in the behavior, relationships, actions, activities, policies, or practices of an individual, group, community, organization, or institution.³ Using OM/OH, the evaluator or harvester gleans information from reports, personal interviews, and other sources to document, first, the changes in a social, actor, and second, how a given project, program or initiative has contributed to outcomes. These outcomes can be succinctly described, commonly in two or three 1-2 sentence paragraphs and are sufficiently concrete and measurable so that they can be verified.

Work Activity 5 – Survey Report: Present results of Surveys to USAID and CVC, and at their request and with their permission, to other USAID project and USG activities, and others as USAID desires.

³ This definition of outcome was developed by the Canadian International Development Research Centre (IDRC) about 10 years ago and is widely used by development and social change programs. See Earl, S., Carden, F., & Smutylo, T. (2001). *Outcome Mapping: Building Learning and Reflection into Development Programs*. Ottawa: IDRC (retrievable from http://www.idrc.ca/en/ev-26586-201-1-DO_TOPIC.html) and the Outcome Mapping Learning Community at www.outcomemapping.ca.

- a) Provide USAID and CVC implementer with analysis based on surveys, OM/OH and its own experience on possible synergies between the CVC Activity and the USAID Livestock Project and interventions.
- Baseline survey completed by November 2014, final report December 2014.
 - Staff available to undertake specific tasks requested by USAID.
- b) Attend conferences or workshops and present results associated with the CVC project.
- COP and DCOP attended Outcome Mapping and Harvesting Workshop in Ghana from April 28 -30, 2014.
- c) Assist USAID and the CVC Activity implementer with other research or value chain studies, which may be called for during the course of project implementation, as required.
- d) Assist USAID and the CVC Activity implementer in maximizing impact of interventions on women, youth and low-status individuals within the communities: May 1- December 30, 2014.

Potential Challenges and Solutions

In an effort to design an effective work plan, our Team has identified at this early stage a number of anticipated challenges and possible mitigating solutions.

Table 4: Potential Challenges and Mitigating Solutions

Challenge	Changes in the security situation
Solution	Given the recent security concerns in Mali, the oversight teams and the local experts will evaluate evolving security issues as necessary, including communicating with implementers to ensure that safety is a priority.
Challenge	Ethical considerations of data management and confidentiality
Solution	Implement password protections between enumerators/field supervisors; Identify individuals in ways, which protect their confidentiality while still facilitating spot-checks, callbacks, and future interviews of the same respondent.
Challenge	Lack of electricity/power – electronic survey capture is generally used to collect survey data; in-car alternators to recharge batteries; Unite-to-Light solar lights
Solution	In the case of power outages, independent power sources are planned for. Redundancy in survey collection will ensure that time is not lost due to outages. Data entry and power for computers will be assured by solar-powered back-up.
Challenge	Internet outages
Solution	External modems will be used where internet connections are interrupted. External hard drives will also be used to store data to ensure against lost data.
Challenge	Ensuring data quality and appropriate responses to survey questions
Solution	Field supervisors will oversee interviewers to control quality. This includes ensuring that interviewers do not abuse local knowledge and report results based on pre-supposed knowledge. Supervisors will evaluate at least 10% of households interviewed in order to ensure validity of reported results.

5. DELIVERABLES

All work shall be delivered according to the following illustrative schedule:

Table 5: Estimated delivery schedule

Documents	Illustrative Due Date
<i>CVC Impact Evaluation</i>	
Inception report developed and approved	Month 1
Impact evaluation plan developed and approved	Month 4
Evaluation data collection reports	MONTH 8
Evaluation final report developed and approved	MONTH 8
<i>Population-Based Data Collection</i>	
Baseline data report developed and approved	Month 7
Baseline presentation developed and approved	Month 7
Midterm data report developed and approved	Month 31
Midterm presentation developed and approved	Month 31
Final data report developed and approved	Month 56
Final data presentation developed and approved	Month 56
<i>General</i>	
Annual Work Plans	Month 2 and annually by Sept 1 subsequently
Quarterly Reports	Month 4 and every quarter thereafter
Trip Reports	10 days after each trip

No.	ACTIVITY	MONTHS												
		April	May	June	July	August	September	October	November	December				
Deliverable name/Task name														
2.9	Determine sample and control sites with a team of international and Malian experts													
2.10	Generate proven procedures for selecting households within selected sites													
2.11	Prepare enumerator manual													
2.12	Determine enumeration tools and data collection methodology													
2.13	Evaluate efficiency and effectiveness of paper questionnaires, smart phones, tablets and laptops as toll for data collection													
2.14	Confirm tool to be used and prepare implementation plan													
2.15	Determine data base to be used for data entry and analysis													
2.16	Evaluate alternative methods used in previous FTF surveys													
2.17	Implement Contractor supervisor and enumerator training course													
2.18	Enumerate households													
2.19	Back up data throughout the process													
2.20	Transfer data to supervisors													
2.21	Verify data with field supervisors daily using callbacks and correct discrepancies													
2.22	Transfer data to statistical analysts													
2.23	Recruit and train data entry staff in Mali													
2.24	Supervise and validate data entered													
2.25	Clean data and generate data tables													
2.26	Analyze data and write reports for use by evaluation specialists, USAID technical staff and CVC project personnel													
3.	Activity 3 - Impact Evaluation Baseline													

No.	ACTIVITY	MONTHS												
		April	May	June	July	August	September	October	November	December				
Deliverable name/Task name														
	Survey (activities to commence once IE Plan is approved)													
3.1	Documentation review													
3.2	Identification of major participants in targeted value chains													
3.3	Sampling: selection of intervention and counterfactual communities with CVC													
3.4	Planning, design, review and adaptation of data collection instruments													
3.5	Selecting samples: communities; focus group participants; interviewees													
3.6	Community/Business Forums - Identification of major participants in targeted value chains for baseline data collection.													
3.7	Mini-Surveys - identify missing or suspicious data from CVC baseline impact evaluation survey.													
3.8	Verify CVC survey and counterfactual survey for CVC baseline													
3.9	Designing a data entry template, data entry, data quality control - Agriculture baseline survey													
3.10	Preliminary and final analysis - Agriculture baseline survey													
3.11	Report, incorporating data tables into report - Agriculture baseline survey													
3.12	Communication of results and recommendations to USAID and CVC													
3.13	Survey analysis and report presented USAID and ACDI/VOCA													
3.14	Present findings to stakeholders													
4.	Activity 4 - Outcome Mapping													

No.	ACTIVITY	MONTHS											
		April	May	June	July	August	September	October	November	December			
Deliverable name/Task name													
4.1	Introduce Outcome Mapping and Harvesting to Mali												
4.2	Train Outcome Mapping and Harvesting Informants from CVC												
4.3	Train Managers provided by IOS and CVC Evaluators working with the OM/OH exercises												
4.4	Identify Formulate and Classify Harvested Outcomes												
4.5	Virtual substantiation of 20% of outcomes												
4.6	Establishment of Outcome Mapping/Harvest Database												
4.7	Analyze and report on Outcomes												
4.8	Present findings to CVC and USAID and other donors and researchers												
5.	Activity 5 – Survey Report												
5.1	Establish a full-time presence												
5.2	Provide USAID and CVC with analysis on possible synergies between CVC and the USAID Livestock Project and interventions												
5.3	Attend conferences or workshops and present results associated with the CVC project												
5.4	To assist USAID and CVC managers with other research or value chain studies during the course of project implementation.												
5.5	Assist USAID and CVC to maximize impact of interventions on women, youth and low-status individuals within the communities												
5.6	Bring governance or other issues affecting impacts to the attention of USAID and CVC												

ANNEX 1: POPULATION BASED SURVEY

A. Population-Based Data Collection

Objective:

IOS will provide USAID/Mali with Baseline, Midterm and Final Data Reports that provide disaggregated data for the required high-level FTF indicators, which include per capita expenditures, prevalence of poverty, women's empowerment in agriculture index, and nutrition indicators. The reports will define the data collection tools and describe the data collection and analysis process (both planned and actual), as well as will include disaggregated summary tables. The raw data will be provided to USAID/Mali in a manner that preserves the participants' anonymity.

Population Based Survey

In line with the above objective, IOS Partners is undertaking the Baseline PBS survey by contracting with a local survey organization (Sabine SARL) through a RFP that was issued on June 3, 2014. The contract was awarded to Sabine SARL on July 3, 2014, the supervisor and enumerator training took place between July 11- 16, 2014. The PBS was pre-tested on July 25th and commenced on August 4, 2014.

Timing

The Population Based Survey will be carried out at three points in time and thus will allow measurement of changes and the size of changes over time from the baseline, mid-term and final surveys.

Survey Logistics

Sabine SARL, a local Malian survey company has been selected to undertake the baseline PBS. The contract will ensure that sufficient enumerators and supervisors are hired so that, after training, surveys can be completed within one month from start to finish, based on a planning value of two surveys per interview team per day.

Sampling calculation

The presentation below gives an overview of the approach taken to selecting the sample for the Population Based Survey (PBS) following the Feed the Future (FtF) guidance and using the recommended FANTA III approach.

The sampling approach is focused on the three key indicators: prevalence of poverty, rate of stunting for children under 60 months and prevalence of underweight children under 60 months. Following the FTF Guidance Vol. 9 (March 1, 2012) in the M&E Guidance series (for Underweight and Stunted) and the updated Vol 9.1 (January 17, 2013), the assumptions made for the five year changes for baseline figures are as below:

Indicator	Initial	After 5 years	Percentage point fall	% fall
Poverty	51.4%	43.7%	7.7pp	15%

Underweight	26.7%	21.4%	5.3pp	20%
Stunted	37.7%	30.2%	7.5pp	20%

In taking the target changes, the smaller 15% fall has been used as this gives the cautious (i.e. larger sample) view of the required sample size.

Sample size calculation

The standard FTF approach to the three indicators is applied to get the basic number of units (households for poverty, children for underweight and stunting).

The 'design effect' parameter, which corrects for effects of using cluster samples, is advised in guidance to be inferred from other similar surveys or to use the generic value of '2' where there is no better information. We propose a lower, but cautious, design effect figure for stunting and underweight taken from the 2006 Mali DHS (CPS et al 2007: Annex B). The other key variables in this calculation are the standard FTF parameters given in the FTF M&E Guidance Vol. 8.

Indicator	Start proportion (P1)	End proportion (P2)	Design effect	Initial sample unit number	Derived households	Proposed sample size (households)
Poverty	0.514	0.437	2	1135 households		1170
Underweight	0.267	0.214	2	1602 children	2222	
Underweight	0.267	0.214	1.524	1221 children	1694	1755
Stunting	0.377	0.302	2	980 children		
Stunting	0.377	0.302	1.631	799 children		1755
WEIA						1755

The underweight indicator drives the overall sample size. Using the approach in the FANTA III addendum (Stukel and Deitchler 2012), with population figures taken from the Mali 2009 Population Census (Ministère de l'Économie et des finances et al, 2011: 15-18), we get a requirement for a sample of 1534 households, then inflated by the standard 10% for non-response to give **1694**.

As a result of information from USAID suggesting the need for a relatively higher sample size for WEIA, we have chosen to apply the WEIA module in all 1755 households surveyed.

References

- Cellule de Planification et de Statistique du Ministère de la Santé (CPS/MS), Direction Nationale de la Statistique et de l'Informatique du Ministère de l'Économie, de l'Industrie et du Commerce (DNSI/MEIC) et Macro International Inc. 2007. *Enquête Démographique et de Santé du Mali 2006*. Calverton, Maryland, USA : CPS/DNSI et Macro International Inc.
- Magnani, Robert. 1999. *Sampling Guide*. Washington, D.C.: FHI 360/FANTA.
- Ministère de l'Économie et des finances, Institut Nationale de la Statistique et Bureau Central du Recensement. 2011. *4eme recensement général de la population et de l'habitat du Mali (RGPH-2009) : Analyse des résultats définitifs Thème 2- Etat et structure de la population*.
- Stukel, Diana; and Deitchler, Megan. 2012. *Addendum to FANTA Sampling Guide by Robert*

Magnani (1999): Correction to Section 3.3.1 Determining the Number of Households That Need to be Contacted. Washington, DC: FHI 360/ FANTA.

Modules and associated sample sizes

PBS Base: Modules A and B

These modules are always required; they produce essential metadata for every unit.

PBS household: Modules C, D, E and F

- Modules C and E are required for the prevalence of poverty.
- Module D is not required for any of the indicators, but can be used for some poverty analysis.
- Module F is for the prevalence of households with moderate or severe hunger.

The household sample size must be at a minimum that is required by the poverty sample size calculation (1030 households). We will collect data from 1170 households.

PBS women: Modules G and H

- Module G is the WEAI, on a per woman basis, expected by guidance to take 30-45 minutes per respondent.
- Module H is women's dietary diversity and anthropometry required for indicators.

In calculating the sample size for WEAI, we can expect almost exactly the same number of eligible women as there are households – we are sampling 1755 households to ensure a sample large enough to detect changes.

For Module H, there will on average be more than one woman eligible per household in Mali. Our sample is 585.

PBS children: Module I

Module I is the children's anthropometry section. In order to meet the FTF guidelines, sample size for children we are sampling is 1755 households.

Sample allocation

A sample of 1170 has been drawn to which all modules will be administered. An oversampling has been undertaken for an additional 585 households where modules A, B, C, G, and I will be administered.

In total, the INSTAT full random cluster sample of 27 households in each of 65 clusters has resulted in 1755 households being surveyed conforming to the sample requirements of the underweight, stunting and WEIA indicators.

Details on modules allocated to each sample follow below.

Questionnaire modules

IDENTIFICATION	SECTIONS	SIZE TARGET HOUSEHOLD
Main Sample	Module A: Formulaire d'Identification des Ménages – PBS Module B: Autorisation Informée –PBS Module C: Liste des Membres du Ménage et Information sur le Ménage Module D: Caractéristiques du Logement Module E: Dépenses pour la consommation Modue E2: Dépenses non-alimentaires durant les 7 derniers jours MODULE E3: Depenses non-alimentaires durant le mois dernier MODULE E4: Depenses non-alimentaires durant les 3 derniers mois MODULE E5: Depenses non-alimentaires durant les 12 derniers mois MODULE 6: Depenses pour le logement MODULE E7: Depenses en biens durables Module F: Echelle de la Faim dans les Ménages (HHS) Module G: Autonomisation des Femmes dans l'Index de l'Agriculture MODULE G1: Identification Individuelle Module G: Accès au Capital Productif MODULE G3 suite: Accès au Crédit Module G4: Leadership individuelle et influence dans la communauté Module G5: Prise de Décision Module G5: suite: Motivation Pour *la Prise de Décision Module G6: La Répartition du Temps Module G6 suite: Satisfaction avec la répartition du temps Module H: Anthropométrie et diversité du régime alimentaire des femmes Module I: Anthropométrie de l'enfant et alimentation du nourrisson et de l'enfant	1170 Target All PBS modules according to eligible criteria
Over Sample	Module A: Formulaire d'Identification des Ménages – PBS Module B: Autorisation Informée –PBS Module C: Liste des Membres du Ménage et Information sur le Ménage Module G: Autonomisation des Femmes dans l'Index de l'Agriculture MODULE G1: Identification Individuelle Module G: Accès au Capital Productif MODULE G3 suite: Accès au Crédit Module G4: Leadership individuelle et influence dans la communauté	585 Target Module I only if children <5 years in household

	Module G5: Prise de Décision Module G5 suite: Motivation Pour la Prise de Décision Module G6: La Répartition du Temps Module G6 suite: Satisfaction avec la répartition du temps Module I: Anthropométrie de l'enfant et alimentation du nourrisson et de l'enfant	
--	--	--

Identification of the survey households

We developed our sampling procedure based around the sample needs outlined in the relevant sections above and we then liaised with INSTAT Mali and Sabine (our survey company) who were able to confirm our plans were in line with the structure of their sampling frames from their Census data and met quality expectations, and also to verify that the survey company was practically able to carry out the procedures that we specified.

For the first level of cluster sampling our procedure specified the creation of a simple random sample from a complete list of the 'Sections d'Enumeration' (SE - the standard cluster sample level* used to draw from the Mali Census) within the FtF ZoI. This was done on the basis of a random ordering of the complete list of SE in the FtF ZoI and taking the first 65 in that randomly ordered list.

The second level of sampling was then based on the maps of each SE that consisted of a village, a number of habitations, a part of a village or part of a larger town or city as each case occurred. A totally random sample of households was taken within each cluster. The selection procedure takes place in the field and is as follows 1) a complete enumeration is done of every household within the boundary of the SE as shown on the map - these are recorded; 2) from a randomly chosen starting household in the list, every nth household is selected into the sample where n is the survey step calculated by the total number of households divided by the number required for the sample. This approach is an internationally accepted approach , its application in Mali has been used previously and the process was taught according to INSTAT methodologies in our enumerators' and supervisors' training course.

To ensure the lowest levels of non-response contact is to be made by supervisors with the Mayors of the municipalities and the village chiefs and their advisers to notify them of the households to be surveyed. Thereafter, enumerators and supervisors will work closely with the heads of villages and the communes, as appropriate. However in line with best practice there was no substitution of households in the event of non-response; the non-response is dealt with statistically at the analysis stage to avoid any potential bias in results.⁴

INSTAT's involvement in approving the methodology for the survey implementation has allowed us to obtain a 'statistical VISA' needed for compliance to Mali law. The various training manuals for interviewers and supervisors used in previous INSTAT surveys, as well as user manuals for weighing and measuring equipment and details of collection and analysis of the data, were made available by INSTAT.

⁴ This is the cluster sample frame from the 2009 national census (RGPH 2009) as used by DHS, SMART and MICS within Mali.

DHS (Demographic and Health Survey) page 5 in Cellule de Planification et de Statistique du Ministère de la Santé (CPS/MS), Direction Nationale de la Statistique et de l'Informatique du Ministère de l'Économie, de l'Industrie et du Commerce (DNSI/MEIC) et Macro International Inc. 2007. Enquête Démographique et de Santé du Mali 2006. Calverton, Maryland, USA : CPS/DNSI et Macro International Inc.

SMART (Standardized Monitoring and Assessment of Relief and Transitions) page 7 in République du Mali 2014. Guide des Enquêteurs: Enquête Nationale de Nutrition et de Mortalité Rétrospective – Protocole base sur la méthodologie SMART. Bamako, Mali

MICS (multiple indicator cluster survey) page 31 in Cellule de Planification et de Statistique du secteur santé, développement social et la promotion de la famille (CPS/SSDSPF), Institut National de la Statistique (INSTAT). 2011 Enquête par Grappes à Indicateurs Multiples 2009 - 2010, Rapport final, Bamako Mali

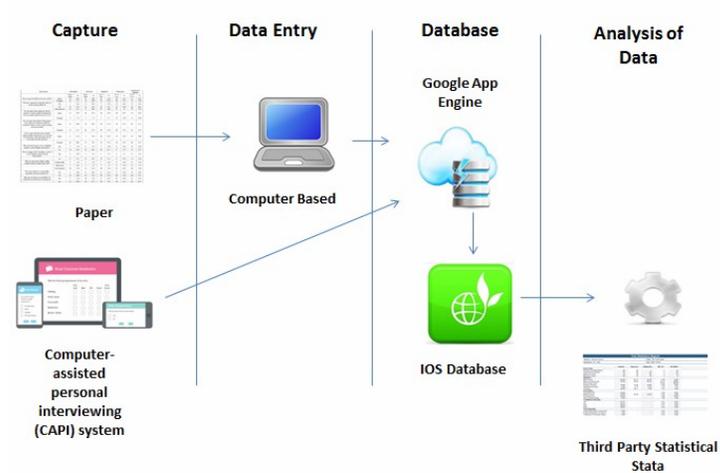
INSTAT has determined the number of "Section d'enumeration" (65) and the number of households to be surveyed by Section d'enumeration according to methodologies used by INSTAT in undertaking the national census.

All households surveyed are geo-referenced from the GPS reading to be able to find the same households in future surveys. Each team of investigators and supervisors are equipped with GPS and will have training on the use of the devices.

Data Management Solution

Data management process includes four steps: **(1) Capture of survey data:** Computer **(2) Data Entry:** using computer solutions, **(3) IOS Database:** central repository of information, and **(4) Analytical tool** for predicative analytics: STATA.

The work flow chart of the proposed survey data capturing solution is presented below:



The data entry will be performed using a computer based data entry software and the double entry method of data entry to ensure accuracy.

ANNEX 2: SOURCES FOR CONTENT OF PBS BASELINE SURVEY REPORT

Overview of the Sample Population

INDICATOR	SOURCE
Demographic and Socioeconomic Characteristics	Module
• Gendered Household Distribution	PBS – Module C
• Household Size	PBS – Module C
• Distribution of Respondents by Gender	PBS – Module C
• Distribution of Respondents by Age	PBS – Module C
• Educational Attainment	PBS – Module C
• Marital Status	PBS – Module C
Resources and Household Assets	Module
• Tenancy, Dwelling and Utility	PBS – Module D

Per Capita Expenditure and Poverty Indicators

INDICATOR	SOURCE	QUESTIONS
Consumption Aggregate		
• Household Food Consumption	PBS – Module E.1	
• Consumer Durables	PBS – Module E.7	
• Housing	PBS – Module E.6	
• Non-Food Consumption	PBS – Module E.2, E.3, E.4 & E.5	
Consumption Aggregates Summary		
• Prevalence of Poverty	PBS – Module E	
Women's Anthropometry		
• BMI for Reproductive Age Women	PBS – Module H03 to H08	
Women's Dietary Diversity		
• Dietary Diversity Score for Reproductive Age Women	PBS – Module H14 to H30	
Children Malnutrition		
• Exclusive Breastfeeding	PBS – Module I	
• Minimum Acceptable Diet	PBS – Module I	
Children Anthropometry		
• Reference Group and Standardized Z-Scores of Anthropometric Indicators	PBS – Module I06 to I11	
• Prevalence of Stunting, Underweight and Wasting	PBS – Module I06 to I11	
• Underweight Children	PBS – Module I06 to I11	
• Stunted Children	PBS – Module I06 to	

INDICATOR	SOURCE	QUESTIONS
	I11	
<ul style="list-style-type: none"> • Wasted Children 	PBS – Module I06 to I11	
<ul style="list-style-type: none"> • The Prevalence of Malnutrition by Age 	PBS – Module I06 to I11	
Household Hunger Scale		
<ul style="list-style-type: none"> • Women’s Empowerment in Agriculture Index 	PBS – Module G	
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • WEAI Results 	PBS – Module G	
<ul style="list-style-type: none"> <ul style="list-style-type: none"> • Household Hunger Scale 	PBS – Module F	

ANNEX 3: POPULATION BASED SAMPLE SURVEY QUESTIONNAIRE

Please see enclosed.

ANNEX 4: OVERSAMPLE QUESTIONNAIRE

Please see enclosed.