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United States Agency for International Development
Learning, Evaluation, and Analysis Project

Liberia Feed the Future Population-Based Survey

Presented to USAID Bureau for Food Security
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Agenda

- **Project Overview and Implementation**
- **Innovations and Effective Practices**
- **Capacity Development**
- **Lessons Learned**
- **Knowledge Sharing and Information Disemmination**
- **Survey Findings**
- **Questions and Answers**





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Project Overview and Implementation



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Project Assignment

- Optimal Solutions Group, LLC was tasked to plan, design, and implement a population-based survey (PBS) for the United States Agency for International Development's (USAID) Feed the Future initiative (FtF) in Liberia between July 2012 and March 2013
- Project Objectives:
 - Conduct a FtF baseline PBS in a defined Zone of Influence, and produce associated reports
 - Build capacity of the University of Liberia Pacific Institute of Research and Evaluation (UL-PIRE)



Overall PBS Implementation Plan



Innovations and Effective Practices

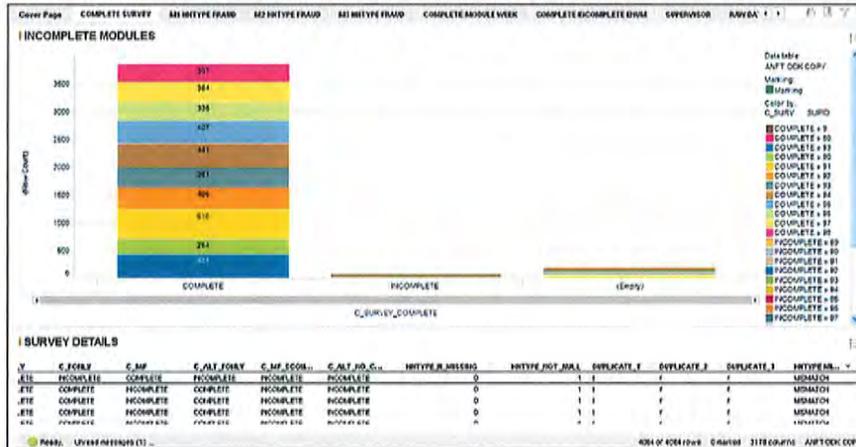
Quality Assurance – Near Real Time Analysis

- QA activities leveraged the use of technology to promote tracking efficiently and reliability of the survey results
 - GPS tracking on electronic tablets located surveys and confirmed implementation date and time
 - Dashboard for daily checks on progress and gaps
 - In depth analysis of survey results every 3 days
- Benefits included:
 - Reduced the occurrence of fraudulent survey responses
 - Provided rapid feedback during implementation to fix errors in near-real time, and share good practices

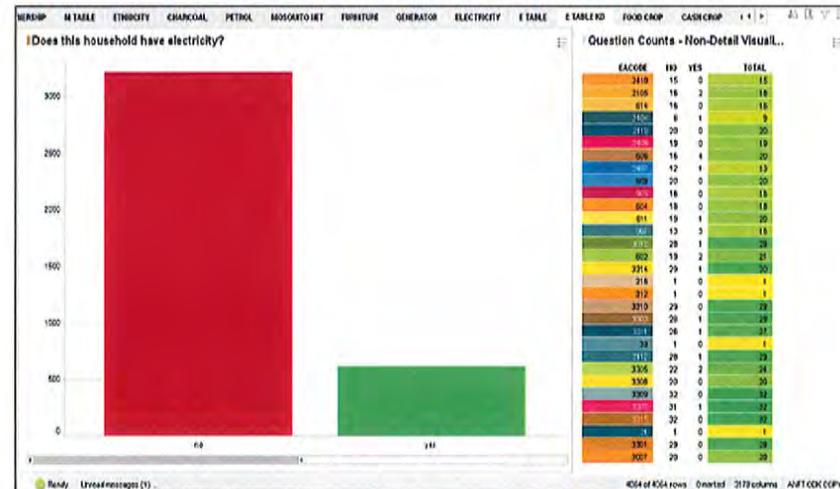
Use of Dashboard

- A Dashboard was developed to chart process and check data outputs daily (data was uploaded from ODK to Spotfire)
 - Allowed for efficient sorting of entire data set and tracking on a daily basis
 - Consolidated and arranged data on a single screen for monitoring at a glance
 - Reduced time spent on quality assurance review
 - Allowed for daily feedback to the field to fix errors with identifiers on survey and complete incomplete surveys

QA of Complete and Incomplete Surveys



QA on trends of Survey Responses





Continuous In Depth QA Analysis

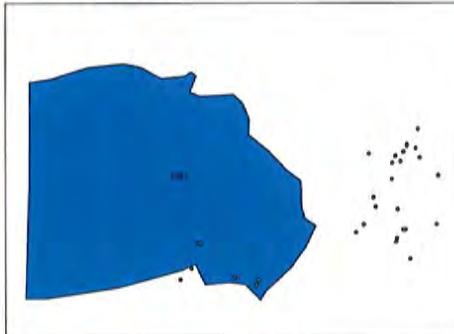
- After completion of surveying in each EA, an in depth analysis on the survey results was conducted and feedback provided to teams
- Survey teams returned to households to complete surveys that were faulty prior to leaving each EA and teams were restructured as needed.

QA Analysis	EA Data Analysis
Appropriateness of EA selection	Commodity analysis (Water, Rice and Charcoal)
Check on response rate	Review of survey responses and gaps
Enumerator time spent on surveys	

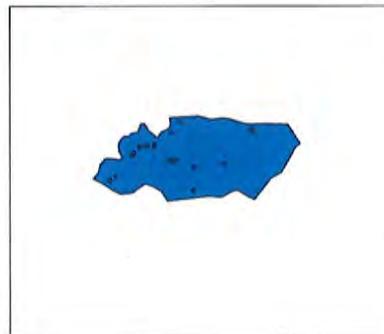


EA Household Selection QA

Supervisor 10
EA: 3104
Grade: Poor

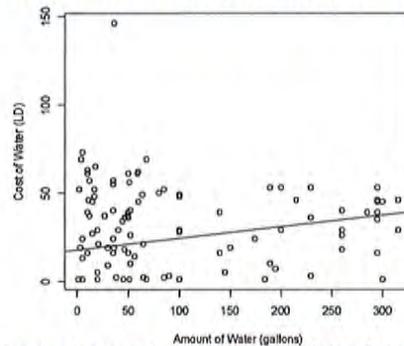


Supervisor 6
EA: 910
Grade: Perfect



Commodity Analysis

Water is consumed by all respondents, and so provides a rough test regarding the consistency of the recorded responses. Plotted the amount of water consumed by a household in the past week versus the cost of that water



The regression line is upward sloping and correlation between the indicators significantly positive, with a correlation co-efficient of 0.26.

Other Effective Practices

- Used electronic equipment for survey implementation to reduce complex data entry given the survey size
- Developed condensed survey form for electronic tablets
- Embedded quality assurance checks
- Provided mitigations for challenges (paper back up; extra tablets)
- Provided templates for documentation for promoting communication and capturing challenges during implementation
- Daily check-ins with survey implementation staff



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Capacity Development



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Building Capacity of a Local Entity: UL-PIRE

- Conducted a needs assessment of UL-PIRE's organizational and staffing capabilities
- Developed a capacity development plan for implementation at each phase
- Matched UL-PIRE team with LEAP staff for mentoring on project assignments (as possible)
- Provided re-training based on evaluations and assessments on various aspects of survey implementation (analytical; technology use; operations; management)



Building Capacity of a Local Entity: UL-PIRE

- Created Standard Operating Procedures (SOPs)
- Modified survey instrument to fit the Liberian context
- Recruited, hired, and trained survey implementation staff
- Created operations manuals for survey implementation
- Reviewed all the major components of survey implementation
 - Design and operations
 - Project and financial management
 - Data analysis and reporting



Lessons Learned



Major Lessons Learned included...

- Survey instrument (length; recall bias)
- Subcontracting versus consulting with local entity
- Processes for equipment shipment and clearance
- Establishing project protocols for accounting and expense report compliance with local entity
- Managing large teams with varying skill sets
- Effective communication and coordination within and across teams



Knowledge Sharing and Information Dissemination

Options for Knowledge Sharing and Information Dissemination

- Final Survey and Capacity Development Reports
 - Executive Summary
- Project Manuals
 - Supervisor; Enumerator; Equipment training; Data upload; Operations templates; Quality Assurance; Data Analysis

The following are being developed:

- Project Pamphlet
- **Dashboard for data access and dissemination**



Survey Findings



Sampling Design

- Cluster Sampling
 - Selected from Enumeration Areas (EA's)
 - EAs based on Liberian Census 2008
 - 120 Enumerator Areas
 - Approximately 20 households per EA
 - Total sample size of 2,400 households

- Sampling Design and Framework were based on FtF guidelines and approved by BFS

Survey Results

- Five main categories:
 - Demographics
 - Consumption
 - Poverty
 - Hunger
 - Women's Empowerment



Demographics

Survey data for demographics results

	Households Sampled	Surveys Completed	Response Rate	Household Size
Bong	359	356	0.99	4.8
Grand Bassa	198	198	1	5
Lofa	269	261	0.97	4.8
Margibi	178	176	0.99	4.9
Monrovia	882	807	0.91	4
Montserrado	136	134	0.99	5.3
Nimba	541	540	1	5.2
Unknown	94	7	0.07	NA
Outside Monrovia	1,681	1,665	0.99	5
Total	2,657	2,479	0.93	4.6

WEAI

- Measures how much input women have in productive activities and decision-making
- WEAI is a combination of two indices:
 - Five Domains of Empowerment (5DE)
 - Gender Parity Index (GPI)

Women's Empowerment Scores

	Baseline value
5DE Index	.66
GPI	.95
WEAI	.69

WEAI

Empowerment by gender in the survey area

	Empowered Females	Empowered Males
Bong	0.15	0.2
Grand Bassa	0.21	0.42
Lofa	0.18	0.33
Margibi	0.18	0.18
Monrovia	0.04	0.08
Montserrado	0.28	0.37
Nimba	0.35	0.55
Outside Monrovia	0.23	0.36
Total	0.17	0.28

NOTE: These results are not weighted according to the sampling design and thus only apply to the survey population.

Questions and Answers



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Thank you!

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