# HUBERT H. HUMPHREY GLOBAL POLICY CAPSTONE FINAL REPORT

A final summary of the H.H. Humphrey global policy capstone group regarding the process and deliverables created for OneVillage Partners.

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Humphrey School of Public Affairs Submitted: May 2011

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# **Overview**

In order to better track and evaluate key statistics and trends in its three current villages, and given its limited operating budget and staff capacity, OneVillage Partners (OVP) has asked for a capstone team from the Hubert H. Humphrey School of Public Affairs to assist in developing a set of surveys. The key indicators in the surveys allow OVP to see any changes across its five program areas of agriculture, income, education, health and water and sanitation over time. The surveys are expected to provide OVP with a snapshot of the development of the current villages and supply longitudinal data (from baseline to partnership completion) in new villages.

After familiarizing themselves with OVP's organizational history, programs (current, past and future), and approach to holistic development, the capstone team drew upon their academic expertise, field experience, and external research in order to determine the most effective indicators for tracking macro-level progress across the organization's five program areas. This research is reflected in the surveys and supporting documents.

Meanwhile, it is important that these surveys are paired together with a data analysis tool so that the OVP staff can analyze and interpret the data in a meaningful way. The capstone team has created an instruction or training manual for OVP's staff so that they may be able to conduct the surveys and analyze the data themselves. Overall, OVP asked for an actionable and implementable system that is tenable within the constraints of the organization's funding and staff capacity, and the following system is meant to meet that need.

# OneVillage Partners

# Background

According to the 2010 United Nations Human Development Index, Sierra Leone is one of the poorest countries in the world standing at a rank of 158 out of the 169 listed countries. The country emerged from an eleven-year civil war that began in 1991, leaving the nation socially and economically devastated. The war ended in 2002, but millions of people who were uprooted from their homes remained in refugee camps. Much of the country's infrastructure, including homes and whole villages, was destroyed during the war.

Even today, problems of poor infrastructure, limited governmental capacity, youth unemployment, maternal and infant mortality, widespread poverty, negative impacts of the global economic downturn, and lapses in public financial management and governance still persist. The literacy rate is approximately 35 percent, 47 percent for males and 24 percent for females, and 70 percent of the population lives below the poverty line with more than half the population engaged in subsistence farming.

Jokibu, Foindu, and Pujehun are remote rural villages located in Eastern Sierra Leone. The three villages, with a total population of approximately 5,000 people, are removed from paved roads, running water, and electricity. Kenema, the nearest city to the villages and also the 3rd largest city in the country, is a 30-kilometer drive from the villages. Transportation is limited, unreliable, and expensive while technology for communication is sparse. The houses in the villages are typically made out of mud brick with thatched roofs, although OneVillage Partners has been providing some zinc roofs.

The Sierra Leone Plymouth Partnership, later known as OneVillage Partners, has been working in Jokibu, Foindu, and Pujehun since 2006. In 2010, Sierra Leone Plymouth Partnership began operating under a new name, OneVillage Partners. The name change signaled the growth of the organization into an independent non-profit that had an increase in programs, activities, and responsibilities. OneVillage Partners still continues to maintain a close administrative relationship with Plymouth Congregational Church until it is granted 501(c) 3 status.

# Vision, Mission and Philosophy of OneVillage Partners

OneVillage Partners works alongside Sierra Leoneans in select rural villages to improve quality of life through increased income generation. The hope is that the local residents eventually become financially self-sufficient. Meanwhile, OneVillage aims to develop a replicable model for holistic rural development that can eliminate extreme poverty.

OneVillage Partners supports villages by building capacity in the villagers, synthesizing current technologies, and supporting iterative advancements in the mutually reinforcing areas of education, health, water and sanitation, agriculture, and income generation.

The work of OneVillage Partners is based on four philosophies.

1. Quality of life is to varying degrees determined by household income; therefore, income must be a central focus of OneVillage Partners' programs.

- 2. Rural life can be a fulfilling, rewarding, and powerful alternative to city life. Thus, OneVillage Partners should celebrate and support it through village-level development.
- 3. Impact is most sustainable when it is done in partnership with villagers; therefore, OneVillage Partners is focused on collaboration with the villagers to ensure that they are the drivers of their own development.
- 4. Improvements in one area without reinforcing improvements in complementary areas, hinders their sustainability. Thus, OneVillage Partners takes a holistic and comprehensive approach to development by investing simultaneously across areas, which greatly affect village life (see Appendix A).

# Program Goals

OneVillage Partners has set a number of goals for each of its five program areas. They are as follows:

# Agriculture

- Goal 1: All village households reach food-sufficiency
- Goal 2: 50% of farmers maintain cash crops
- Goal 3: Maximize return on investment for all crops sold

# Water and Sanitation

Goal 1: Access to potable water year-round

Goal 2: Proper sanitation methods are practiced

# Health

- Goal 1: Foster an environment of nutritious eating
- Goal 2: Reduce morbidity experienced from communicable and infectious disease
- Goal 3: Affordable access to primary health care
- Goal 4: Advocate for and connect villages with existing services and programs

# Education

- Goal 1: 95% of all village children complete Grade 6 (Access to Primary Education)
- Goal 2: 75% of all village children pass the NPSE (Quality of Primary Education)
- Goal 3: 70% of all village youth complete JSS3
  - 60% of all village youth complete SSS3
- Goal 4: Financial access to tertiary education to qualifying village youth
- Goal 5: Alternative and basic education is available to all village adults

# **Income Generation**

- Goal 1: Provide technical training on business practices, entrepreneurship, and integrating tech in business.
- Goal 2:Provide loans, strategic inputs for business development, and training.

# The Project

# Purpose and Objectives

OneVillage Partners (OVP) is a humanitarian relief and development organization working in the villages of Jokibu, Foindu and Pujehun in eastern Sierra Leone. It first began in 2006 as an initiative that provided emergency relief to Sierra Leoneans returning home to the three villages after the war.

OVP has since transitioned from relief into development work and has developed a framework with which to do this (see Appendix B). However, in doing development work it is necessary that OVP measures, monitors and evaluates the conditions of the villages. To monitor and evaluate, it is preferable to begin by knowing the baseline of the villages before implementing any programs. This baseline information can then be compared to a similar set of information collected at a future time to see if the living conditions in the villages have improved. For OVP however, the organization was unable to formally assess and document the conditions of the villages at the time it began doing relief work. Thus, while the organization has now transitioned from doing relief to development, it still does not have a baseline with which to assess its work.

As a result, a global policy capstone team from the Hubert H. Humphrey School of Public Affairs was hired as consultants to develop a set of monitoring and evaluation tools. OneVillage Partners asked for a set of surveys that can be easily implemented by its field staff and can provide quality data on the wellbeing of the people living in the villages. The goal of the surveys is to collect information in the five program areas of agriculture, income, education, health and water and sanitation. The surveys are to focus on collecting quantitative and qualitative data and changes in attitudes, knowledge and behaviors. The data obtained will form the baseline that can then be compared to data collected in the future using the same surveys. In essence, using these tools will help the organization gain a better understanding of the villages' progress toward sustainable development. Furthermore, the information will provide the organization with an understanding of what strengths and challenges exists in the villages so that OVP may improve its strategies to accomplish its goals. In future instances, these same tools will be used to collect baseline data and to monitor the conditions of any new villages into which the organization expands its work.

# Deliverables

The following deliverables were agreed upon by OVP and the capstone team at the beginning of the project in a memorandum of understanding (MOU). It important to note that some aspects of the deliverables have changed since the MOU was signed. These changes are also noted below:

Deliverable 1: Overall plan/map of the system or conceptual framework

The OVP capstone team did not build a logic model as a conceptual framework to its data collection tools as the tools became understood as a needs assessment instrument instead of a full evaluation of program results. OVP has yet to adopt any of its programs as part of the organization's development strategy due primarily to an ad-hoc nature of their relief programs meant to alleviate the conditions in the villages. The organization has a general understanding of the ultimate outcomes it wishes to achieve; however, the formal programs that the organization intends to use to achieve these outcomes have yet to be determined. As a result, the organization has asked the

capstone team to design a set of baseline date collection tools that are detailed enough to inform the organization on the changes in the community without focusing on the programs and outputs that may create these changes. Toward this end, a logic model that is to be used as a conceptual framework was not developed.

<u>Deliverable 2</u>: Instructions for using the tools

The instructions for how to conduct the surveys and how to use the data analysis tool are included in this report.

Deliverable 3: Definition of terms included

A glossary that defines the terms used in the data analysis tool and the curriculum is included in this report.

<u>Deliverable 4</u>: Annual Outcomes Tracker Tools comprising (1) general statistics, (2) household surveys covering all five program areas, and (3) an instrument for measuring household resource flows - income, expenditures, etc.

All points of the annual outcomes tracker tools have been incorporated into the surveys to produce one data collection unit across the five program areas. Each survey includes questions that ask for information on general statistics and knowledge, attitudes and behaviors.

<u>Deliverable 5</u>: Analysis of indicators (in Excel spreadsheet form)

The analysis of indicators with built in equations is included at the data analysis tool.

<u>Deliverable 6</u>: Aggregate form (in printable Excel spreadsheet form)

The capstone team has incorporated the aggregate form as a spreadsheet that is incorporated with the data analysis tool.

Deliverable 7: Curriculum for training in-village staff to implement the evaluation system

The curriculum for training in-village staff has been developed as a beginner's guide to evaluation. The curriculum is now a guide that informs the staff on the importance of monitoring, evaluating, and recordkeeping. In conversation with organization staff and administration, OVP has agreed that the staff will produce a more comprehensive curriculum at a later date built upon the basics of this guidebook.

# Sources of Information and Assistance

This report contains information that has been drawn from a variety of sources. This includes official records from OVP such as past intern reports and previous data-collection tools created. The OVP capstone team also interviewed and conferred with members of the OVP staff (Aaron Ackerman, Jeff Hall, Emily Springer, and Kari Foley) and Board members (Rebecca Johnson) through the process of working on this project.

Our team also referenced a number of evaluation reports and tools published by the United Nations, the World Bank, various international organizations and agencies, scholars and academics in order to produce the deliverables and this report.

We further drew upon the knowledge of our peers and the expertise of more experienced academics and professionals from the Hubert H. Humphrey School of Public Affairs and from the wider University of Minnesota at large. The OVP capstone team was also able to work with a team of students from a Survey Methods course to help inform the education survey. All of these sources of information helped the capstone team complete this report. The deliverables are products of the information and assistance that the capstone team had available to them. This is especially true in the creation of the survey tools. Considering the capstone team was unable to pilot test the surveys in the villages, these surveys have been developed out of a clear understanding of survey mechanics, yet have not been adjusted to meet the specific context of the three Sierra Leonean villages.

# Primary Intended Users

The primary intended users of this project will be the staff of OneVillage Partners.

# Stakeholder/Audience and Concerns Regarding the Project

In working on the project to develop a set of survey tools, a data summary tool and a user manual over the past seven months, the consultants conducted their work acknowledging the set of stakeholders or audience and their concerns.

Stakeholder/Audience	Concerns
OneVillage Partners	Completed project fully meets the needs of the organization as outlined in the Memorandum of Understanding; the tracking tools are usable, appropriate, and further OVP's goals; all of the deliverables are of high quality in terms of usability and research.
OVP Staff in Sierra Leone	Completed project is usable and fully achieves the purposes for which it was designed; the surveys are uncomplicated to administer and the data collection and analysis methods are usable with basic training and technology; survey tools can be used for multiple years
Villagers living in Foindu, Jokibu, Pujehun	Completed project serves their needs and interests; it produces results that are understandable and actionable; it takes into

	account their perspectives and visibly values their participation
OVP Advisory Board	Completed project fully meets the needs of the organization as outlined in the Memorandum of Understanding; it is actionable and produces good, usable feedback for OVP's programs and long-term goal of holistic, sustainable development
Neighboring villages in Kenema	Completed project generates positive externalities by facilitating the expansion of OVP's programs to neighboring villages
Plymouth Congregational Church, MN (OVP's current fiscal agent)	Completed project supports and feeds into OVP's goals and mission; it represents a sound use of time and financial resources
Global Capstone Team	Completed project gives the team valuable skills and professional experience to further their careers; it fulfills the Memorandum of Understanding and is implemented by OVP as intended; it results in the successful completion of the Humphrey School's capstone project requirement
Global Capstone Advisors	Completed project exemplifies the high standard of quality and rigor that global policy capstones are held to; it fully meets OVP's expectations as outlined in the Memorandum of Understanding; it results in the successful completion of the Humphrey School's capstone project requirement
Humphrey School of Public Affairs, University of Minnesota	Completed project exemplifies the high standard of quality and rigor that Humphrey global policy students are held to in their work and research; it projects a positive image for the Humphrey School and generates interest in its programs
The Government of Sierra Leone	Completed project supports methods of holistic, sustainable development that fosters the well-being of Sierra Leoneans in locales where OVP operates; it respects the

individuals for whom the survey will be
administered

# **Questions Asked and Challenges Faced Throughout the Project**

The following is a set of questions challenges that the consultants consistently asked and were face with, in one nuanced form or another, throughout the past seven months while working on the project. Thus, we believe that the finished product created for and delivered to the client derived from a carefully considered thought process.

# QUESTIONS

- 1. What are the outcomes that OVP expects to achieve?
- 2. How do the living standards in the villages (region) weigh against the living standards in other regions or in the country in the five areas of water/sanitation, education, agriculture, income and health?
- 3. What type of household survey design is suitable for its primary intended users (OVP field staff)?
- 4. What household survey questions will be appropriate to ask the villagers in each of the five targeted program areas?
- 5. What questions can we ask in the household surveys to gain more insight into changes in knowledge, attitudes and behaviors?
- 6. What type of household income/expenditure tracker is suitable for its primary intended users?

# CHALLENGES

- Ethics The field-staff of OVP hold dual roles being a) members of the villages and b) the data collectors of sensitive information from fellow villagers that may present a conflict of interest. Senior staff of OVP must take extra care to ensure that such information from village members is not compromised or exposed.
- 2. Inaccuracy of information The surveys and information obtained may suffer from the Hawthorne effect in which human subjects know that they are being observed and thus change their behavior, which then changes the results.
- 3. Communication The time difference between the United States and Sierra Leone and limited Internet access in the villages makes communication difficult between the consultants and the field staff whenever their expertise is necessary at points throughout the project.
- 4. Measuring and Defining Success The organization currently does not have a baseline to measure and analyze the data that it collects up against. As a result, it is difficult to determine the extent and impact of its work in the villages thus far.
- 5. Source of Information The information provided by a male head of household may vary from the female head of household. If data is collected from only one member of the household, then the data will reflect biased results.
- 6. Location OVP is headquartered in Minneapolis, Minnesota. However, its work is based in Sierra Leone. The consultants my not be able to travel to the villages to pilot test the survey tools and train the staff due to limited funding.
- Culture Drafting the surveys and income/expenditure tracker entails an understanding of the cultural and traditional norms and beliefs practiced in the villages. The consultants are non-natives and there are limited literature and information on the people, the environment and the geography.

8. Language – Even though the official language of Sierra Leone is English, the language in the three villages is Mende. However, Mende is more of a spoken language and very few villagers can speak English. Of those who can speak English, their level of understanding is basic. The deliverables are created in English so there is a challenge of inaccurate verbal translation from interviewer to respondent that may then affect the type of response that is given and recorded.

# Recommended Methodology

After consulting professionals in development evaluation practice, OVP staff and administration, and our own observations on the feasibility of various methods, the consultants recommend the following as the best methods to conduct the surveys in the villages in order to acquire the most reliable and unbiased data for the Client.

# Recommendation: Do the surveys every two to three years

The capstone team recommends that the surveys be conducted every two to three years. Collecting data over this timeframe will allow more time for changes to occur in the communities and will not place undue pressure on the organization's time and resources.

# Recommendation: Interview 40 households in each of the three villages

The total population in the three villages is approximately 5,000 persons, or approximately 525 households. Thus, the proposed sample size to conduct the surveys is estimated to be a total of 120 households or 40 households in each village. 120 households is slightly over 20 percent of all of the households in the villages. Jokibu will be slightly under 20 percent because it is the largest village with the most number of residents. Yet overall, if OVP can survey 40 households in each of the three villages then the results can be expected to accurately reflect and can be attributed towards the general population in the villages.

# Recommendation: Randomly select which households to interview

To determine which households to sample or interview, OVP should plan on using the most recent housing map as its sampling frame. Each household on the OVP map (see Appendix C for an example) will be assigned a number 1 through the total number of households in that village. 40 random numbers for each village will then be obtained by putting all the household identification numbers of each village in three (3) separate containers and then drawing out 40 numbers from each. These 40 households in each village will then be interviewed.

# Recommendation: Try to contact respondent 3 times before stopping

OVP and its interviewers should make every reasonable effort to make contact with heads of households when conducting the surveys. If a head of household is not home when the interviewer visits, the interviewers should visit again two more time to see if he/she can get an interview. If the interviewer still cannot get in contact with the head(s) of household after a total of 3 tries then he/she should stop and choose a new household to interview, returning to the container with numbers to randomly draw out another number to be interviewed. If the household does not want to participate in the surveys, the interviewer should again choose a new household to interview, drawing from the selection container.

# Recommendation: Interview male and female heads of households only

We propose that the sampling unit be male and female heads of households, meaning that only male and female heads of households should be interviewed. The male head of household and one of his wives should be interviewed. Even if other members of the household are available when the interviewer arrives, the interviewer should not interview him or her if he or she is not a head of household. This recommendation is built on the precept that the head of household will be the most knowledgeable about the survey questions being asked.

# Recommendation: Male interview males and Female interview females

The capstone team recommends that OVP choose males to interview male heads of households and females to interview female heads of households. This is because there are

cultural dynamics in which a male may not be comfortable speaking to a female or a vice versa. This is especially so for women on the subject of health.

# Recommendation: Men and women respondents should answer specific surveys

The consultants recognize that the surveys are quite large and that to have the male and the female head of household answer all the surveys would take a significant amount of OVP's time and resources. As a way to lessen the amount of time and data entry required for each household, we recommend that the surveys be split between the male and the female head of household. We recommend that the male head of household be given the demographics, agriculture and agriculture income survey, as well as the other income, savings and debt surveys. The female head of household be given the demographic survey, as well as the food security, education, health, and water and sanitation surveys. Although we realize that dividing surveys this way will lose gender specific information, we also realize that it will greatly lessen the burden of data collection for OVP and its staff.

# Recommendation: Hire Sierra Leoneans to conduct the interviews

The capstone team recommends that OVP hire Sierra Leoneans who do not have a relationship to any of the three villages to conduct the surveys. By getting non-residents of the three villages to do the interviews, respondents will be more comfortable in giving information such as income whereas respondents would be less comfortable telling to their neighbors about how much money they make. Thus, getting non-residents to do the interviews will minimize the possibility of respondents giving inaccurate information. Meanwhile, by having the interviewers as Sierra Leoneans, the respondents will still be able to communicate accurately. Respondents will also be more likely to give accurate information that they would to foreign interviewers. We have talked with evaluation teams that have successfully worked students from local universities to conduct the surveys as part of their educational experience, and we offer this as a suggestion for this project.

# Recommendation: Read the user's manual and get training before interviewing

We recommend that the interviewers be competent individuals who have read and studied evaluation guide book (attached in this report) and other resources and has significant practice with interviewing before conducting the surveys. This will ensure that the interviewers understand what they are doing and why it is important.

# Appendix A: Flowchart of mutually reinforcing program areas

#### Community Economic Relief Development Development Years Years Years 1-2 2-5 4-10 OneVillage donates OneVillage offers OneVillage subsidizes funding for loans of revolving the cost borne by immediate relief capital to villagers villagers Household Income ~ Household Income ~ Household Income ~ \$0.20 PPP \$2.50 PPP \$0.50 PPP Loans offered to foster household income Subsidies mainly to growth focused on Donations primarily increase access to increasing agricultural public services such in potable water yields with emphasis on infrastructure and as education and health as well as immediate food entreprenuership, and needs during investments in the promoting waged Hungry Season quality of these villagers, particularly services those with higher

# Appendix B: Flow of Development





# Appendix C: OneVillage Partners' Household Map

# MONITORING AND EVALUATION BASICS

OneVillage Partners Guidebook

A Guide by the OneVillage Partners Capstone Team

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Humphrey School of Public Affairs Submitted: May 2011

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#### **Introduction**

Many books and curricula have been written in recent years about monitoring and evaluation as evaluation has become recognized as a valuable tool in the program planning and management cycle. This guidebook does not intend to cover all the information that is involved in program evaluation. In fact, it cannot. There are entire textbooks dedicated to the topics of data collection, data analysis, and evaluation, not to mention the many different varieties of evaluation. Therefore, this guide is only an introduction to some of the main themes of data collection and evaluation, and the reader is strongly encouraged to find additional resources to further strengthen their skills in these methods.

There are also many ways to learn about monitoring and evaluation such that reading it in a guidebook can only be an introduction. Evaluation can be taught in trainings, internships, and shadowing of other organization's methods. Above all, evaluation takes practice. In the same way that you cannot fully learn how to ride a bicycle from reading about it in a book, or how to play football from reading about in a manual, you can also not fully understand how to do evaluation simply by reading about it. This manual then is a starting point that will give you important information about the purpose and practice of evaluation with the intent that the reader then goes out and practices it.

"Building capacity to conduct monitoring and evaluation, and using the finding effectively, takes more than short-term training and textbooks (PTR, p. 172)."

# The Foundation of Valuable Evaluation

# The Purpose of Monitoring and Evaluation

The purpose of monitoring and evaluation is to assign value or merit to the thing being observed, and to do so in a structured way. In program evaluation, this value is found in discovering how good a program is, if it has accomplished its goals, or how well it helped the participants of the program. As we will read later, we assign value to things in our lives every day – the food we eat or the quality of sports teams – but these are often not done in a structured way. Evaluation is different in that it takes a plan of what it wants to find out, works through the details of how to find that information, and then goes about the work of gathering and analyzing that information. We will talk later about some of the components of such structured evaluations.

To be clear, evaluation is not about finding fault, but about finding what works best to help the community. The things that we are teaching and training, whether we are talking about washing hands, or how to be a better farmer, or how to run a business, are so important that we want to make sure that what we are doing is working. Evaluation helps us determine this.

In addition, one of evaluation's most fundamental purposes is to be USED. Too often we see evaluation as something we have to do in order to make funders happy, but evaluation has incredible value in helping us see how we can design and implement better programs. The normal routine of work has us doing trainings, giving bed nets, or helping schools. But evaluation helps us know if doing these things are actually making a difference. Is it actually helping? If we learn that programs are working well, we can then have confidence that we are doing things right and should keep it up. If we find out that what we are doing is not working well, then that is also helpful because it shows us that what we are doing is not creating the change we wanted. We can then explore better ways that we can create change. To be clear, the practice of using evaluation is more than just gathering information and reporting it. It is instead a learning tool for organizations to find out what is important to the people they want to serve, and to discover if the programs they have created meet those needs so that the organization can change to better serve their communities where necessary.

#### Valuing Evaluation

There are many organizations that say they are interested in evaluation, but many organizations do not know what it takes to do quality evaluation or how they can use it in their organization. Organizations large and small often misunderstand what evaluation means, and the value it could have for their organization, its mission, and its programs.

As stated earlier, for an organization to value evaluation means that they are going to have to use evaluation in a way that allows them to learn and change. However, using evaluation is difficult, and takes a committed effort to using the information that is gained to inform what

programs are done and how they are done. Many organizations look at the time and money that it takes to do evaluation and worry that these are resources that are not being used for programs. In a way, that is true. But what is also possible is that without evaluation, organizations may spend time and money on programs that are not helping the

Only when evaluation is valued will it lead to change

community at all. The ultimate purpose of evaluation is to find out what is working and what is not within our programs. It therefore needs to be valued as essential to our programs so that the limited time and money of our organization can be used most effectively and efficiently.

Valuing evaluation therefore also means investing in it, and this is not something to take lightly. Serious attention to the use of evaluation involves financial and time costs that can be large. These costs can be found in training of staff in better evaluation methods or better ways of interpreting the information pulled from evaluation. Costs could also be found in more dramatic events, like changing program focus given what stakeholders are telling you through these evaluations. The point is that if we as an organization say that we value evaluation, we also recognize the costs *as well as the benefits gained* from using evaluations in our work.

#### The need for participation

We often believe that we know the needs of the people we are trying to serve. We see people that are hungry, without clean water, or without good health and determine that these are "needs" that should be met. But how do we know? What if there are other issues in a person's life that are much more important, issues that we simply cannot see? If we do not ask the people we are trying to serve what is most important to them, then we may be creating programs that do not address the most important problems in our community's lives.

This is one of the greatest reasons for having participation in all aspects of a program, from its design all the way through to its implementation and evaluation. By gaining participation, we begin to understand the people we are trying to serve. In addition, when an individual has participated in the creation of a program, or knows that a program is being designed to meet the needs that they personally defined, then the program becomes much more meaningful. It becomes the *community's program*.

In addition, inviting people to be a part of their own change shows an incredible measure of respect for them. They are the ones that know their situation the best. They know their strengths and their weaknesses; they have priorities of what they want changed; and they often

have ideas of where solutions can come from. Simply by asking people what they think, we begin to communicate that we are not going to be bringing projects to them, or even that we are going to be doing things for them, but that we are going to be working **with** them to find the best ways to improve their situation.

In addition, including the insights of the individuals, families, and communities we are trying to serve requires a humility that recognizes that we do not have all the answers. Trying to help a community grow and develop is an incredibly challenging and complex process. What development



Figure 1 The cycle of program planning and evaluation



practitioners have realized over the years is that the best chances for success come when the knowledge and experience of the development professional is matched with the equally important knowledge and experiences of the people they are trying to serve. If the practitioner tries to conduct program evaluation solely out of their own knowledge, then they will be doing little more than making educated guesses as to the problems and the solutions in the community. If local families and communities work on their own, they may be missing out on the valuable skills and new options that may not have been tried before. But by working together, working with each other, amazing work can be done and incredible change can be accomplished.

# **Core Components of OVP Evaluation**

# The ingredients of impact

Program evaluation does not work unless the evaluators have a clear understanding of the different ingredients that work toward achieving our goals. These "ingredients" are often referred to *inputs, activities, outputs, outcomes, and impact*. Each of these components work together to provide the evaluator with a clear way of understanding if programs or activities are working well. We will go through each of these components to understand how they can help us look at programs through a more evaluative lens. Please look over the following graph as an introduction into what these terms mean.



A focus on the different parts of a program is meant to show that **development is a process.** It is impossible to simply take money, tools, or knowledge and turn it into economic development in our communities. There are steps in the process that if we miss, we may not be able to accomplish our final goals.

Each of the components of a program flow into one another with the intended result of accomplishing a large scale impact. The best way to demonstrate this is through an example. Say that we are evaluating a program that is meant to increase the use of medicine in households and decrease child illnesses, with the ultimate goal of lowering child mortality. What would be the inputs of such a program? They would certainly be the time of the staff who are working on the program, as well as the money that is used to buy supplies and training materials, which would be considered the inputs of the program. All of these are inputs because they are the resources that are necessary in order to do any activities.

So what would the activities of this program be? They could be trainings on the benefits of using medicines when family members are sick. Another activity could be home visits that a healthcare worker makes to homes to help give advice to sick family members. An activity that could help might be free clinic visits that encourage members to come in and get vaccinations. All of these activities have taken the many inputs that were listed before and through the energy, coordination, and tasks of staff have used those inputs to make outputs.

So what are the outputs? Outputs are the *direct* and *logical* result of the activity, so in this example there are several outputs. One of them might be that a certain number of children were vaccinated, or that a certain number of trainings on health were given. For the healthcare worker visiting homes, the output would probably be the number of people she was able to help while doing this activity.

As the previous chart stated, with enough outputs focused on a single issue, the intent is to accomplish an outcome. In this example, the outcomes of the project are what were stated earlier: to increase the use of medicine in households and decrease child illnesses. These are mid-term goals that the organization hopes to accomplish by creating enough outputs that an actual change begins to happen in the lives of its participants.

Lastly, we look at the greater impact, which was also stated at the beginning of this example: lowering child mortality. Impact is a long-term change that has a broad effect, changing the lives of many people in the society. In this case, lowering the number of child deaths in the community is the intended impact, and with enough successful outcomes aimed at the many factors of child mortality, the hope is that the impact can be successfully accomplished. How we determine if we are successful or not is the topic of our next section.



# **Evaluation Indicators**

The use of indicators is an important part of designing any evaluation. Indicators are simply the qualities or attributes of an issue or problem that you would like to measure. But using indicators is not new; we use them every day. For example, every day when you eat a meal of rice, there are indicators that you use to determine if it is done well. How does it taste? Does it have any other substances like rocks in it? Was it done well, or is it burned or still crunchy? Was there enough to meet your hunger? In this case, taste, consistency, level of completion, and quantity are all indicators that make up what makes a good bowl of rice.

In the same way, you have many different indicators for whether a football team did well or poorly. To say that a team is a "good" team has many different indicators that go into that judgment. How was their passing? Were they able to contain the strongest opponents? Were they fast enough or skilled enough to get around the opponents? Were they good sportsmen?

Programs work very much the same way as a game of football. There is not a straight line that leads from the activities and trainings we do to a direct goal. Instead, there are barriers and obstacles that can set us back, strategies we thought would work that do not, and some strategies that you thought would not work, do. But in football you can see all these things with your eyes. It is clear if a pass does not make it to a team member or if strategies for getting

around the defense are working. In programs it's much more difficult to see how we are doing. This is where evaluation comes in.

Evaluation allows us to see if our strategies are working, if our activities are accurately reaching the people we want them to reach, and ultimately if we have reached our goals or not. When doing evaluations, we also need to set indicators to determine if our programs are performing in the way we wanted. Indicators tell us how well our project is working. They can describe both the activities we are doing and whether we are achieving our expected results in a project. Indicators can include both numbers that describe how much things have changed or stories, pictures, or observations that show or describe what the change is like and how it helped the community.

However, determining if programs are running well is much more difficult than determining if a bowl of rice meets your standards. Programs are complex activities working with different types of people using many different strategies. Once again, to say that a program is "good" or "bad" does not tell you very much about the program. If you were to measure a "good"

Indicators describe both the activities we are doing and whether we are achieving our expected results in our project. Indicators should be SMART.

program, how would you do it? Is there a special look to programs that are "good"? And how do you know if a program is "good"? These questions are simply meant to help show how indicators, truly good indicators, can be chosen. The indicators you chose for a program should be qualities <u>specific</u> to the program that are <u>easy to measure</u> and can be <u>easily seen or observed</u>. Many development evaluators use the word SMART to remember the necessary characteristics of evaluation indicators. SMART stands for <u>Specific</u>, <u>Measureable</u>, <u>Achievable</u>, <u>Relevant</u>, and <u>Time-bound</u>.

<u>S</u> pecific	<ul> <li>Indicators should reflect those things the project intends to change, avoiding measures that are largely subject to external influences</li> </ul>
<u>M</u> easurable	<ul> <li>Indicators must</li> <li>be precisely defined so that their measurement and interpretation is unambiguous</li> <li>give objective data, independent of who is collecting the data</li> <li>be comparable across groups and projects thus allowing changes to be compared and combined</li> </ul>
<u>A</u> chievable	<ul> <li>Indicators should be achievable by the project and therefore sensitive to changes the project aims to make</li> </ul>
<u>R</u> elevant	<ul> <li>Indicators should be relevant to the project in question</li> <li>It must be feasible to collect data within a reasonable time and at a reasonable cost</li> </ul>
<u>T</u> ime-bound	<ul> <li>Indicators should describe by when a certain change is expected</li> </ul>

#### Figure 2: SMART indicators

Source: CRWRC Results-Based Management Training (2008)

For example, imagine you want to measure an education program that helps primary school children learn how to read. What would be qualities of a "good" education program? We could say "increased intelligence of students," which is a good goal, but probably not a good indicator because it is very difficult to measure and is not as specific to our program as we would like. Instead, we could have an indicator of "words read in a minute" or "student's attitude towards reading." Both of these would be specific to what we are trying to do in our program, and could be easily measured and observed by testing a child on the number of words he or she was able to read in a minute, or by asking them how much they like reading based on scale.

It is important to note once again that the participation of the people we are serving needs to be part of the indicators that are chosen. For example, mothers and fathers have opinions about what is important to them regarding their children's reading, and those opinions are essential to include in program indicators. The programs we do are for them, and their input needs to be a part of what we measure as important.

# When to Use Program Evaluation

The answer to "When can we use evaluation?" is a loud "ALWAYS!" You can use evaluation to measure the impact of the time spent on a program, the change in hunger of people who work with your program, the number of people coming to trainings, or the how much income people have gained as a result of working with our programs. But there are certain ways that evaluation is used that will be helpful to discuss here. These different ways to use evaluation are:

- 1. Evaluation for final assessment
- 2. Evaluation for program improvement
- 3. Evaluation for program design

# Evaluation for final assessment (Summative Evaluation)

Evaluation that is done for final assessment of programs, sometimes called summative evaluation, is what many people are most familiar with. This is the type of evaluation that comes at the end of a project to show what resources have been used and more importantly, what change has been made. The indicators used for this type of evaluation are focused on the large goals the organization had for a specific program, and the evaluation is used to measure the program's ability to meet those goals.

Although this is the most common, this guidebook is going to spend the least amount of time discussing it, namely because it is also the least helpful. We earlier said that one of the most important characteristics about evaluation is that it is used and that that use is often translated into changing a program to make it better. But if the only type of evaluation that we use is one that is at the very end of the project, what changes can we make? How can we use that information? The truth is that very little use or change comes out of summative evaluations. What is more helpful is monitoring and evaluation done *during* and even *before* the program design"

# Evaluation for improvement

Evaluation for improvement is the use of evaluation during the program so that we can use what we learn to make changes to our program, making it better and more effective than it was before. Much of this work will be wrapped up in monitoring the outputs and outcomes of the program.

Measuring outputs will be looking for how well your activities are running, and the progress towards meeting your objectives. By monitoring this information, you can see whether there needs to be changes in the way you are running trainings, distributions, or other activities. For example, monitoring can help determine which day of the week has the best attendance for certain trainings. Or it could help measure what part of town is most accessible for distributions based on villager feedback. In any case, gathering this level of information allows you to make positive changes to activities so that they better meet the need or satisfaction of the communities we are serving.

Measurement of outcomes looks at the changes that have resulted from your activities, and how these results have helped make progress toward your overall impact. These measurements assess the small goals that help us achieve our larger impact. These may be more difficult to measure because they are often focused on behavior change or attitudes.

Feel free to look back at the section discusses program activities, outputs, outcomes, and impacts, as well as the glossary at the end of this book to recall the meanings and importance of each of these parts of a program.

#### Evaluation for program design (Needs Assessment)

When we design programs, we are trying to put together activities and strategies that will help meet a need in the community. As OVP staff, we are not just thinking about the hungry people in our villages, but we are also thinking about what has made them hungry in the first place (drought, theft, rotted crops, etc.) and how we can address those causes so that people do not go hungry again. But the question becomes, "How do we know what is wrong in the communities?" and "How do we know what is important to them?" We can often give a general guess as to some of the big issues in our community, but we do not know all the details of the many people we are serving. Additionally, we do not know how severe the situation is? Getting information before we even start a program can serve as a great tool to understand what the situation is and also to gain an understanding of how serious problems are.

Before even starting any program we need to create what is known as a **needs assessment**, which would give us a set of information called a "**baseline**". A baseline is a series of information that shows what the community looks like before we do anything. By gaining the information necessary to create a baseline, we can later look back and compare the way the community looks to the way it looked before we came to the community. For example, imagine that we wanted to start a program in Jokibu teaching people the importance of washing their hands before they ate. Before we did any programs, training, or other activities, we would want to create a baseline to find out how many people were already washing their hands before eating, and how many were not. Now imagine that we took a survey and found that only 2 people out of every 10 people that we talked to washed their hands before eating. This would be a baseline. It is what the community was doing before we started doing any programs. With this information, we can now see the situation and how severe the situation is.

The other incredible trait of a baseline is that it gives us information to compare later information against. Using the previous example, if we do any programs, trainings, or activities around the issue of washing your hands before eating, we can do the same survey later to find out if we are actually helping. If we find out that many Evaluation of a situation can be done before programs even begin, giving information on the most important issues and the best way to use our time and resources.

more people were washing their hands, then it may be a safe assumption that the programs are working well. But if we find that still only 2 out of every 10 people are washing their hands, then

we know that what we are doing is not working and we should try to find something that will work better. If we had never done a baseline, we would never have known that what we were doing was not working, and all the hard work and the time spent trying to help our community succeed would have been wasted. Baselines are a valuable measurement to have to better understand our impact.

### Skills of Evaluation

So far we have been talking about the general purposes and practices of monitoring and evaluation. But there are also some important core skills that are important to the monitoring and evaluation that OneVillage Partners will be doing in the communities where they work. The rest of the guidebook will focus on these core competencies of evaluation work in OneVillage Partners villages.

#### Interviewing

One of the main ways that OneVillage Partners will be collecting information from the villages we work with is through interviewing. Interviewing can be done during regular monitoring of projects and during final evaluations. These interviews can range from a 10 minute conversation to a survey form that takes over an hour. Interviews can also be simply reading from a document and filling in responses or having an unstructured conversation with people that gives needed information.

#### Some Do's for Interviews

- Locate elders/leaders first, explain who you are and what you are doing, and ask their permission to interview
- Ask individuals' permission to interview them; for example, 'Is it OK if I ask you a few question about the conditions here?'
- Always thank the respondent when you finish
- Prioritize discussions with women and children, and other people likely to experience particular difficulty
- Avoid large crowds following you around if possible, since this is likely to intimidate interviewees.

Source: Schofield (2003)

In whatever form, interviewing can be difficult to do well, primarily because it can be very difficult to get accurate information when people are talking face to face, especially when it involves sensitive information. But there are some key skills to interviewing that structure the way the conversation flows to help ensure that responses are accurate reflections of the respondent's real situation.

When doing an interview, the main goal is to build as much trust between you and the respondent as possible, while reducing any perceived costs that respondent may feel. In interviewing, trust is essential. People will not talk to you, and certainly will not give correct information on sensitive topics, unless they feel you are a person they can trust with that information. One way of respecting that trust is to assure the respondent that whatever is said in the interview is confidential, meaning that you will not give this information to anyone unless you have the permission of the respondent. This cannot be emphasized enough. Make sure that people understand why you wish to talk to them and what you will do with the information they share. You may not use names or information specific to a certain household that you have gathered information from. This is a matter of trust, and without trust we cannot

get the valuable and accurate information we need.

Other ways of building trust include starting with questions that are factual and relatively straightforward to answer. Move on to more sensitive issues, if necessary, only when the person you are interviewing is more at ease. Make sure people know that you value their time and participation. Do not end the interview too abruptly. Take responsibility and try to be conscious that discussing any sensitive issues may affect the respondent.

When we say that we want to reduce costs, we mean that we want to make the respondent feel as comfortable as possible during the interview. There are a number of ways to do this. Avoid

embarrassing people and only ask for sensitive information when it is absolutely necessary. Show respect for the respondent and let them know that you value the information that they provide. Ask questions that are not complicated and are easy to understand. Once again, we never want the individual to feel embarrassed or uniformed due to confusing questions. And try to make interviews as convenient as possible and choose times that work best for them.



- Build trust
- Reduce costs
- Use Rewards

Lastly, it is important to use rewards in your interviewing. We do not mean using money or gifts, but to show respect and encouragement through the way you interact with respondents. Once again, this means showing respect for the respondent no matter what. Say thank you and let them know once again that you value the time and information they are giving. Encourage them and compliment them throughout the interview. And make it clear how being a part of this interview will help the organization and the community. All of these "rewards" will encourage respondents to be more involved and more willing to help in providing the information that you want.

#### Accurate Measurement

No matter what tool is used to collect data, errors are possible. If we want the most accurate information possible in order to have the best programs possible, then it is important that we think about these possible errors before they happen and think of ways that we can avoid them or reduce them. There are a number of ways that errors can come into the data we are collecting, but the three we will focus on here are (1) errors that occur as a result of the interviewer, (2) errors that occur from writing down responses or entering them in the computer, and (3) errors that come from interviewing the wrong people (called *sample error*). We will talk about each of these three sources of error below.

# Interviewer error and bias

To avoid interview error and bias, an interviewer must first be skilled at the lessons discussed in the previous section on interviewing. But there are also additional areas that are important to be skilled at. It is important that an interviewer be skilled at paying attention to many different types of detail. They need to be sure that they are entering data correctly, which will be discussed in the next section, but they also need to be aware of the different forces that result in bad data. They need to be aware of how their relationship with the respondent may lead to inaccurate information. Here are some possible causes of error:

• Is it possible that the respondent is saying they are poorer than they really are because they think they will get more services out of the organization? If this is the case, it may be wise to have an outside person who is not part of the organization lead the interview.

- Is there pressure from family of friends to answer a question a certain way? In such cases it is probably best to do an interview away from other family and friends so the respondent can speak freely.
- Will the respondent answer a certain way because the interviewer is a different gender than the respondent? In such case it is important to think how to get the most accurate information. We suggest the men interview men, and women interview women to yield the most accurate information.

It is also important to think about how the interviewer might skew the evaluation. Questions should not be leading, which means that they should not try to get a specific answer. When evaluating programs, we often want to hear positive information about the work we are doing, but if there are complaints, we need to know these as well in order to better design our activities. It is for this reason that, whenever possible, it is best that interviews are not done by the same managers who conducted the program. Interviewing should be done by someone that does not have a preference whether the program does well or not. For this reason, it is often best to have interviewing and evaluation done by someone from outside the organization.

#### Data entry error

Data entry error can happen as a result of accidentally writing down the wrong information, using the wrong code, or not double-checking to see that gathered data matches what respondents stated. Once again, staff must pay attention to detail so that any mistakes can be caught and corrected.

Data entry error can be tested in a number of ways. First, it is important from time to time to spot check the accuracy of data entry by selecting a random number of surveys that have been entered into the computer and checking them with the paper copy. This is a simple and quick way to test that transferring data to the computer has been done accurately.

Another important way of checking data is through using multiple methods of gathering the same information (often called *triangulation*). This is to say that it helps to determine the accuracy of you information if you have used surveys, interviews, staff observations, focus groups, or any combination of ways to collect information. If all of these different methods give the same information, then it helps verify that the information is correct. If they are different, then it will be important to find out why they are different and see if it is the result of any errors in data entry.

#### Sample error

Sample error comes from getting information from people that does not help you better understand the larger population you are trying to serve. There is often a danger of interviewing only the households that we know or the households that are doing really well in order to make our programs look successful. But selecting people to talk to in this way gives us information that is not helpful in understanding the needs of the larger community, or the ways that our programs can better serve them. Sample error could also come from interviewing people that are not relevant to the population we are trying to serve. We could interview people in Freetown, but that would not help us better understand the life of people living in our villages. In the same way, if we are measuring the impact of our programs on agriculture, then it is important that we only interview people that do agriculture. Interviewing someone outside of agriculture would not be relevant to the information we are trying to get. One of the ways to avoid sampling error is by using **random sampling** to choose who you will be interviewing. Random sampling means that everyone has an equal chance of being interviewed. This means that the selection of people you are interviewing is not biased by anything, including the person doing the selecting. There are number of ways that this can be done which won't be discussed here, but it is important to know that in order to get the most accurate information, random sampling should be the main way that you select who you are going to interview.

Common Errors	Ways to Avoid them
Interviewer Bias	Make sure interviewers are practiced with the interview     or survey
	<ul> <li>Make sure everyone knows what information they are collecting, the houses they will be going to, and the questions they will be asking</li> </ul>
	Practice interviewing with each other before going into the community
	• Try to think of possible problems that might occur and ways to avoid them or deal with them if they do occur.
Errors caused in writing down and transferring data to computers	<ul> <li>Make all surveys the same format</li> <li>Put information in computers as soon as possible</li> <li>Have enough material (paper, pencils, etc.) to record all responses and avoid losing information</li> <li>Use multiple modes (surveys, focus groups, staff observations) to cross-check information.</li> </ul>
Errors caused through sample error	<ul> <li>Select people to interview on a random basis, meaning that everyone has an equal possibility of being interviewed.</li> <li>Get information from people in your target population, meaning the group of people you are trying to serve.</li> </ul>

 Table 1: Common Errors during data collection and how to reduce them

Source: IFAD Guide for Project M & E (2002)

# Data Management

Once data has been collected from the household, the information should be kept in a safe and secure location until it can be transferred to headquarters. A data management system is important and without it, the analyst and his/her team will constantly have trouble matching data to respondents, or even finding the data at all.

Data organization can be fairly simple. In can be done manually, meaning that data/surveys are organized in binders with tabs for individual documents or documents that can be bundled together. Groups of surveys should be ordered according to household identification numbers and/or in chronological order. Data/surveys can also be organized electronically. Materials can be electronically stored in computer spreadsheets or databases, which are particularly useful to share with the entire analyst team over a network. This may also be the best

mechanism to quickly and efficiently transfer data from the field in Sierra Leone to the office in Minnesota for recordkeeping and data-analysis. To do this, field staff will scan the completed surveys into electronic files. This will then be shared with office staff and the analyst team in Minnesota where they will input this data into the data-analysis tool. Whether the analyst team uses a manual data-filing system, an electronic system, or a combination of both, the team will need to **keep records protected and secure so that they are kept confidential**.

With interview surveys, field staff may scan and send completed questionnaires to headquarters on a daily basis or at least two to three times per a week when data collection continues to be an ongoing process. Headquarters can then be sure that these questionnaires are kept safely and securely. Here are the **advantages** to electronically submitting questionnaires as they are completed:

- Avoids delay in the electronic transfer of this information at the end of the surveying period because the volume of surveys collected can be considerable and time consuming if transferred in a single time at the end.
- Allows office staff to begin organizing and inputting information into data analysis tool while interviews are ongoing. This avoids delays and decreases timeline for data processing and analysis whereas doing all this at the end of the surveying period will require an extended timeline.
- Allows field and staff to sight-edit for discrepancies and completeness in the data collected while transferring documents to computer files and while preparing data for analysis. Should anything arise to require it, individual data collectors can be questioned to clarify these discrepancies and the individual will be more likely to recall the information/event while it is still fresh in their memory.
- Avoids losing any completed questionnaires, which are valuable and are irreplaceable.
- Any adjustments to the process of data-collecting and handling of questionnaires can be made while still being an ongoing process to avoid any inefficiencies or major problems instead of facing the same challenge from start to end already knowing that it needs to be fixed.
- Allows trainers and senior staff to see if interviewers were instructed properly and if any additional instructions are necessary.

Interview questionnaires coming in from the field to headquarters should be checked to be sure the interviewer has recorded the date of the interview and perhaps when it was received in the office. While it is not necessary to keep both paper and electronic copies of completed surveys indefinitely, it is necessary to keep the paper copy the program being evaluated is completed. The paper copy must be discarded (e.g. shredded) in a secure manner ensuring that all confidential information is completely destroyed.

# Learning from Records

As we have talked about through this guidebook, the purpose for evaluation is to learn and to use the information that we gather in ways that help us better serve the communities we are in. In the same way, electronic copies of completed questionnaires are being kept in an organized and easily identifiable manner so that analysts/staff may go directly to needed information and reference them in the future with little hassle of trying to figure out the organizational system of the records. This is especially important in longitudinal survey projects.

After information has been collected over a longer period, we will be able to look back and see the changes that have happened over the months and years that we have been working. This is an incredible way to show how our work has brought change in the communities where we are working and is an encouraging way to show that what we do is making a significant impact.

#### Personal Evaluation

Lastly, it should be made clear that the tools and skills of evaluation do not just have to be limited to the programs we are implementing. They can also be used in our personal and professional lives to help each one of us set goals for ourselves and measure our progress toward attaining those goals. By setting goals, choosing indicators of success, and then measuring our progress toward that success, we can discover the barriers that stand before us, figure out how to overcome them, and challenge ourselves to accomplish greater.

We encourage you as a staff of OneVillage Partners to use these tools for yourself. As a staff person of OVP, whether in any of the programs you do or in the administration of your work, what are the goals that you want to accomplish? We encourage you to set those goals, write them down, and determine the indicators that will help you best track your progress towards success.

#### **APPENDIX A – Evaluation Resources**

#### The Road to Results: Designing and Conducting Effective Development Evaluations (Morra Imas and Rist, 2009)

This comprehensive text is an essential tool for those involved in development evaluation. It presents concepts and procedures for evaluation in a development context. It provides procedures and examples on how to set up a monitoring and evaluation system, how to conduct participatory evaluations and do social mapping, and how to construct a "rigorous" quasi-experimental design to answer an impact question. http://publications.worldbank.org/index.php?main page=product info&products id=2360 1

#### My M and E

MyM&E is an interactive web 2.0 platform to share knowledge on Country-led M&E systems worldwide. In addition to being a learning resource, the platform is a valuable tool for creating a global community, as well as identifying good practices and lessons learned, on Country-led M&E systems.

www.mymande.org/

#### The SPHERE Project: Humanitarian Charter and Minimum Standards in Humanitarian Response

Sphere was launched in 1997 by a group of humanitarian NGOs and the Red Cross/Red Crescent Movement. It has developed a handbook which includes a Humanitarian Charter, Standards for four sectors (Water/Sanitation and Hygiene Promotion; Food Security; Nutrition and Food Aid; Settlement and Non- Food Items and Health Services) plus Standards common to all sectors. The Charter and Standards contribute to an operational framework for accountability in disaster assistance. The handbook is revised regularly in consultation with users. The most recent revision was published in 2011. www.sphereproject.org

#### Managing for Impact in Rural Development: A Guide for project monitoring and evaluation

Published by the International Fund for Agricultural Development, this guidebook is an excellent resource on monitoring and evaluation in developing regions. It is available for free online and can be downloaded in multiple sections. In addition to detailed information on the processes of evaluation, one of the greatest resources found in this book are 34 data collection methods along with instructions that can be used in development evaluations to gather any number of sources of data. www.ifad.org/evaluation/guide/index.htm

# APPENDIX B – Evaluation capacity building objectives (From Policy to Results; p 226, 227)

Knowledge (Co	gnitive)
ECB part	cipants understand:
• th	at evaluation involves purposeful, planned, and systematic activities;
• e'	valuation terms and concepts;
• th	e relationship between research and evaluation;
• h	ow evaluation processes and findings can contribute to decision-making;
• th	e strengths and weaknesses of different evaluation approaches;
• th	e strengths and weaknesses of different data collection methods;
• he	ow to apply basic statistical analyses to quantitative data;
• he	ow to apply basic content and thematic analyses to qualitative data;
• he	ow politics can affect evaluation processes and findings;
• th ai	e importance of using culturally appropriate and responsive evaluation approaches nd methods;
• W	hat constitutes ethical evaluation practice;
● th	at various stakeholders may have differing opinions, experiences, and
p	erspectives about an evaluation;
• th	e relationship between a program's goals, objectives, activities, and expected utcomes;
● th	e knowledge, skills, and experiences to look for when hiring an evaluator
Skills (behavio	rs)
ECB part	cipants are able to:
• de	evelop a program logic model;
• de	evelop key evaluation questions;
• W	rite an evaluation plan;
• de	esign data collection instruments;
• cł	noose appropriate and relevant data collection methods;
• C0	ollect credible and reliable data;
• ai	nalyze quantitative data;
• ai	nalyze qualitative data;
• in	terpret results and draw conclusions;
• de	evelop an evaluation budget;
• C0	ommunicate and report evaluation processes and findings using a variety of
St	rategies;
• U:	se the Program Evaluation Standards and/ of the AEA Guiding Principles for
	valualors,
• le	autorial outers about evaluation,
• 0	anage the evaluation process
• 11	anage the evaluation process.
Beliefs (Affecti	ve)
ECB part	cipants believe that:
• 6'	valuation yields useful information;
• e'	valuation can be a positive experience;
• e'	valuation should be part of a program's design process;
• e'	valuation contributes to a program's success;
• e	valuation adds value to the organization;
• e'	valuation is an important part of their work;
• e'	valuation is worth the time and money.

# EVALUATION GLOSSARY

Helpful Vocabulary in Evaluation Settings

### **GLOSSARY/ DEFINITION OF TERMS**

From the OECD-DAC Glossary of Key Terms in Evaluation and Results-Based Management

#### Accountability

Obligation to demonstrate that work has been conducted in compliance with agreed rules and standards or to report fairly and accurately on performance results vis à vis mandated roles and/or plans. This may require a careful, even legally defensible, demonstration that the work is consistent with the contract terms.

Note: Accountability in development may refer to the obligations of partners to act according to clearly defined responsibilities, roles and performance expectations, often with respect to the prudent use of resources. For evaluators, it connotes the responsibility to provide accurate, fair and credible monitoring reports and performance assessments. For public sector managers and policymakers, accountability is to taxpayers/citizens.

#### Activity

Actions taken or work performed through which inputs, such as funds, technical assistance and other types of resources are mobilized to produce specific outputs. *Related term: development intervention.* Analytical tools Methods used to process and interpret information during an evaluation

#### Appraisal

An overall assessment of the relevance, feasibility and potential sustainability of a development intervention prior to a decision of funding.

Note: In development agencies, banks, etc., the purpose of appraisal is to enable decisionmakers to decide whether the activity represents an appropriate use of corporate resources. *Related term: ex-ante evaluation* 

#### Assumptions

Hypotheses about factors or risks which could affect the progress or success of a development intervention.

Note: Assumptions can also be understood as hypothesized conditions that bear on the validity of the evaluation itself, e.g., about the characteristics of the population when designing a sampling procedure for a survey. Assumptions are made explicit in theory based evaluations where evaluation tracks systematically the anticipated results chain.

#### Attribution

The ascription of a causal link between observed (or expected to be observed) changes and a specific intervention.

Note: Attribution refers to that which is to be credited for the observed changes or results achieved. It represents the extent to which observed development effects can be attributed To a specific intervention or to the performance of one or more partner taking account of other interventions, (anticipated or unanticipated) confounding factors, or external shocks.

#### Audit

An independent, objective assurance activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a

systematic, disciplined approach to assess and improve the effectiveness of risk management, control and governance processes.

Note: a distinction is made between regularity (financial) auditing, which focuses on compliance with applicable statutes and regulations; and performance auditing, which is concerned with relevance, economy, efficiency and effectiveness. Internal auditing provides an assessment of internal controls undertaken by a unit reporting to management while auditing is conducted by an independent organization.

#### **Base-Line Study**

An analysis describing the situation prior to a development intervention, against which progress can be assessed or comparisons made.

#### Benchmark

Reference point or standard against which performance or achievements can be assessed.

Note: A benchmark refers to the performance that has been achieved in the recent past by other comparable organizations, or what can be reasonably inferred to have been achieved in the circumstances.

#### **Beneficiaries**

The individuals, groups, or organizations, whether targeted or not, that benefit, directly or indirectly, from the development intervention. *Related Terms: reach, target group* 

#### **Cluster Evaluation**

An evaluation of a set of related activities, projects and/or programs.

#### Conclusions

Conclusions point out the factors of success and failure of the evaluated intervention, with special attention paid to the intended and unintended results and impacts, and more generally to any other strength or weakness. A conclusion draws on data collection and analyses undertaken, through a transparent chain of arguments.

#### Counterfactual

The situation or condition which hypothetically may prevail for individuals, organizations, or groups was there no development intervention.

# **Data Collection Tools**

Methodologies used to identify information sources and collect information during an evaluation.

Note: Examples are informal and formal surveys, direct and participatory observation, community interviews, focus groups, expert opinion, case studies, and literature search.

#### **Development Objective**

Intended impact contributing to physical, financial, institutional, social, environmental, or other benefits to a society, community, or group of people via one or more development interventions.

# Economy

Absence of waste for a given output.

Note: An activity is economical when the costs of the scarce resources used approximate the minimum needed to achieve planned objectives.

#### Effect

Intended or unintended change due directly or indirectly to an intervention. *Related terms: results, outcome.* 

#### Effectiveness

The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.

Note: Also used as an aggregate measure of (or judgment about) the merit or worth of an activity, i.e. the extent to which an intervention has attained, or is expected to attain, its major relevant objectives efficiently in a sustainable fashion and with a positive institutional development impact.

Related term: efficacy

#### Efficiency

A measure of how economically resources/ inputs (funds, expertise, time, etc.) are converted

#### Evaluability

Extent to which an activity or a program can be evaluated in a reliable and credible fashion.

Note: Evaluability assessment calls for the early review of a proposed activity in order to ascertain whether its objectives are adequately defined and its results verifiable.

#### **Evaluation**

The systematic and objective assessment of an on-going or completed project, program or policy, its design, implementation and results. The aim is to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact and sustainability.

An evaluation should provide information that is credible and useful, enabling the incorporation of lessons learned into the decision–making process of both recipients and donors. Evaluation also refers to the process of determining the worth or significance of an activity, policy or program. An assessment, as systematic and objective as possible, of a planned, on-going, or completed development intervention.

Note: Evaluation in some instances involves the definition of appropriate standards, the examination of performance against those standards, an assessment of actual and expected results and the identification of relevant lessons. *Related term: review.* 

#### **Ex-Ante Evaluation**

An evaluation that is performed before implementation of a development intervention. *Related terms: appraisal, quality at entry.* 

#### **Ex-Post Evaluation**

Evaluation of a development intervention after it has been completed.

Note: It may be undertaken directly after or long after completion. The intention is to identify the factors of success or failure, to assess the sustainability of results and impacts, and to draw conclusions that may inform other interventions.

#### **External Evaluation**

The evaluation of a development intervention conducted by entities and/or individuals outside the donor and implementing organizations.

#### Feedback

The transmission of findings generated through the evaluation process to parties for whom it is relevant and useful so as to facilitate learning. This may involve the collection and dissemination of findings, conclusions, recommendations and lessons from experience.

#### Finding

A finding uses evidence from one or more evaluations to allow for a factual statement.

#### **Formative Evaluation**

Evaluation intended to improve performance, most often conducted during the implementation phase of projects or programs.

Note: Formative evaluations may also be conducted for other reasons such as compliance, legal requirements or as part of a larger evaluation initiative. *Related term: process evaluation*.

#### Goal

The higher-order objective to which a development intervention is intended to contribute. *Related term: development objective.* 

#### Impacts

Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended.

#### Independent Evaluation

An evaluation carried out by entities and persons free of the control of those responsible for the design and implementation of the development intervention.

Note: The credibility of an evaluation depends in part on how independently it has been carried out. Independence implies freedom from political influence and organizational pressure. It is characterized by full access to information and by full autonomy in carrying out investigations and reporting findings.

#### Inputs

The financial, human, and material resources used for the development intervention.

#### **Internal Evaluation**

Evaluation of a development intervention conducted by a unit and/or individuals reporting to the management of the donor, partner, or implementing organization. *Related term: self-evaluation.* 

#### **Joint Evaluation**

An evaluation to which different donor agencies and/or partners participate.

Note: There are various degrees of "jointness" depending on the extent to which individual partners cooperate in the evaluation process, merge their evaluation resources and combine their evaluation reporting. Joint evaluations can help overcome attribution problems in assessing the effectiveness of programs and strategies, the complementarity of efforts supported by different partners, the quality of aid coordination, etc.

#### **Lessons Learned**

Generalizations based on evaluation experiences with projects, programs, or policies that abstract from the specific circumstances to broader situations. Frequently, lessons highlight strengths or weaknesses in preparation, design, and implementation that affect performance, outcome, and impact.

#### Logical Framework (Logframe)

Management tool used to improve the design of interventions, most often at the project level. It involves identifying strategic elements (inputs, outputs, outcomes, impact) and their causal relationships, indicators, and the assumptions or risks that may influence success and failure. It thus facilitates planning, execution and evaluation of a development intervention. *Related term: results based management.* 

#### **Meta-Evaluation**

The term is used for evaluations designed to aggregate findings from a series of evaluations. It can also be used to denote the evaluation of an evaluation to judge its quality and/or assess the performance of the evaluators.

#### **Mid-Term Evaluation**

Evaluation performed towards the middle of the period of implementation of the intervention. *Related term: formative evaluation.* 

#### Monitoring

A continuing function that uses systematic collection of data on specific indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and progress on the use of allocated funds.

Related term: performance monitoring, indicator.

#### Outcome

The likely or achieved short-term and medium-term effects of an intervention's outputs. *Related terms: result, outputs, impacts, effect* 

#### Outputs

The products, capital goods and services which result from a development intervention; may also include changes resulting from the intervention which are relevant to the achievement of outcomes.

#### **Participatory Evaluation**

Evaluation method in which representatives of agencies and stakeholders (including beneficiaries) work together in designing, carrying out and interpreting an evaluation.

#### **Partners**

The individuals and/or organizations that collaborate to achieve mutually agreed upon objectives.

Note: The concept of partnership connotes shared goals, common responsibility for outcomes, distinct accountabilities and reciprocal obligations. Partners may include governments, civil society, non-governmental organizations, universities, professional and business associations, multilateral organizations, private companies, etc.

#### Performance

The degree to which a development intervention or a development partner operates according to specific indicators/ criteria/ standards/ guidelines or achieves results in accordance with stated goals or plans.

#### **Performance Indicator**

A variable that allows the verification of changes in the development intervention or shows results relative to what was planned.

Related terms: performance monitoring, performance measurement.

#### **Performance Measurement**

A system for assessing performance of development interventions against stated goals. Related terms: performance monitoring, indicator.

#### **Performance Monitoring**

A continuous process of collecting and analyzing data to compare how well a project, program, or policy is being implemented against expected results.

#### **Process Evaluation**

An evaluation of the internal dynamics of implementing organizations, their policy instruments, their service delivery mechanisms, their management practices, and the linkages among these. Related term: formative evaluation.

#### **Program Evaluation**

Evaluation of a set of interventions, marshaled to attain specific global, regional, country, or sector development objectives.

Note: a development program is a time bound intervention involving multiple activities that may cut across sectors, themes and/or geographic areas.

#### **Project Evaluation**

Evaluation of an individual development intervention designed to achieve specific objectives within specified resources and implementation schedules, often within the framework of a broader program.

Note: Cost benefit analysis is a major instrument of project evaluation for projects with measurable benefits. When benefits cannot be quantified, cost effectiveness is a suitable approach.

#### **Project or Program Objective**

The intended physical, financial, institutional, social, environmental, or other development results to which a project or program is expected to contribute.

#### Purpose

The publicly stated objectives of the development program or project.

#### **Quality Assurance**

Quality assurance encompasses any activity that is concerned with assessing and improving the merit or the worth of a development intervention or its compliance with given standards.

Note: examples of quality assurance activities include appraisal, RBM, reviews during implementation, evaluations, etc. Quality assurance may also refer to the assessment of the quality of a portfolio and its development effectiveness.

#### Reach

The beneficiaries and other stakeholders of a development intervention. *Related term: beneficiaries.* 

#### Recommendations

Proposals aimed at enhancing the effectiveness, quality, or efficiency of a development intervention; at redesigning the objectives; and/or at the reallocation of resources. Recommendations should be linked to conclusions.

#### Relevance

The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs global priorities and partners' and donors' policies.

Note: Retrospectively, the question of relevance often becomes a question as to whether the objectives of an intervention or its design are still appropriate given changed circumstances.

# Reliability

Consistency or dependability of data and evaluation judgments, with reference to the quality of the instruments, procedures and analyses used to collect and interpret evaluation data.

Note: evaluation information is reliable when repeated observations using similar instruments under similar conditions produce similar results.

#### Respondent

The individual or household that information is being collected from, whether through survey or interview methods.

#### Results

The output, outcome or impact (intended or unintended, positive and/or negative) of a development intervention.

Related terms: outcome, effect, impacts.

# **Results Chain**

The causal sequence for a development intervention that stipulates the necessary sequence to achieve desired objectives beginning with inputs, moving through activities and outputs, and culminating in outcomes, impacts, and feedback. In some agencies, reach is part of the results chain.

Related terms: assumptions, results framework.

#### **Results Framework**

The program logic that explains how the development objective is to be achieved, including causal relationships and underlying assumptions. *Related terms: results chain, logical framework.* 

#### **Results-Based Management (RBM)**

A management strategy focusing on performance and achievement of outputs, outcomes and impacts.

Related term: logical framework.

#### Review

An assessment of the performance of an intervention, periodically or on an ad hoc basis.

Note: Frequently "evaluation" is used for a more comprehensive and/or more in-depth assessment than "review". Reviews tend to emphasize operational aspects. Sometimes the terms "review" and "evaluation" are used as synonyms. *Related term: evaluation.* 

#### **Risk Analysis**

An analysis or an assessment of factors (called assumptions in the logframe) affect or are likely to affect the successful achievement of an intervention's objectives. A detailed examination of the potential unwanted and negative consequences to human life, health, property, or the environment posed by development interventions; a systematic process to provide information regarding such undesirable consequences; the process of quantification of the probabilities and expected impacts for identified risks

#### Sector Program Evaluation

Evaluation of a cluster of development interventions in a sector within one country or across countries, all of which contribute to the achievement of a specific development goal.

Note: a sector includes development activities commonly grouped together for the purpose of public action such as health, education, agriculture, transport etc.

#### Self-Evaluation

An evaluation by those who are entrusted with the design and delivery of a development intervention.

#### Stakeholders

Agencies, organizations, groups or individuals who have a direct or indirect interest in the development intervention or its evaluation.

#### **Summative Evaluation**

A study conducted at the end of an intervention (or a phase of that intervention) to determine the extent to which anticipated outcomes were produced. Summative evaluation is intended to provide information about the worth of the program. *Related term: impact evaluation.* 

#### **Sustainability**

The continuation of benefits from a development intervention after major development assistance has been completed. The probability of continued long-term benefits. The resilience to risk of the net benefit flows over time.

#### **Target Group**

The specific individuals or organizations for whose benefit the development intervention is undertaken.

#### Terms of Reference

Written document sometimes used with the same meaning are "scope of work" and "evaluation mandate".

#### Triangulation

The use of three or more theories, sources or types of information, or types of analysis to verify and substantiate an assessment.

Note: by combining multiple data sources, methods, analyses or theories, evaluators seek to overcome the bias that comes from single informants, single methods, single observer or single theory studies.

#### Validity

The extent to which the data collection strategies and instruments measure what they purport to measure.

# DATA SUMMARY TOOL INSTRUCTIONS

# Purpose

The data summary tool is intended to hold, to organize and to aggregate the data gathered from the household surveys. While the tool will not provide advanced statistical analysis of the data gathered from surveys, it will:

- provide OVP basic descriptive statistics that are useful for understanding the quality of life in the villages;
- provide OVP detailed information that can be used to set a baseline for future evaluation of the villages;
- allow OVP staff to gain insight into the practices, attitudes, knowledge and behaviors of villagers;
- show OVP the progress it has made toward meeting its goals in each of the five program areas
- give to OVP's stakeholders, such as funders, a "snapshot" picture of life in the villages in real numbers, such as rates of certain illnesses, quantity of agricultural yields, or percentage of women receiving pre-natal and post-natal care; and
- enable OVP's staff to easily compare and visualize the data.

Advanced statistical analysis is best accomplished by individuals who have specialized training and experience using statistical analysis software such as Stata, SPSS, or SAS. An advanced statistical analysis can be used to show various relationships and trends in the data. For example, health and nutrition are correlated and an advanced statistical analysis of the data will be able show that increasing nutritional intake results in the better health of individuals. This information can then be used to inform and design policies and/or programs that specifically target any area that need additional assistance.

Unfortunately, the data summary tool cannot do this advanced analysis. However, this summary tool does build the foundation for advanced analysis in the future if OVP chooses. In the meantime, the data summary tool will help OVP gain a better understanding of the conditions in the villages and realize the progress it has made towards its goals.

# Using Data: A Brief Introduction

Data is information we can use to make informed decisions, but the data itself cannot make those decisions for us. A good understanding of how to use data is the first step in making sound decisions. The sections below are meant to provide some basic lessons in working with and understanding data.

#### Limitations of Using Data

Data is a very powerful and useful tool that has a wide variety of functions and applications. Nevertheless, there are some important limitations to keep in mind when using data.

First, the data is only as good as the methodology used to collect it. Any data that is gathered from poor or misleading questions and interviews, from non-random samples and small sample sizes, or from poorly trained or careless data collectors will provide information that is not useful and inaccurate. In essence, poor data will also result in poor decisions.

Second, data is not necessarily lifeless or neutral. Perhaps the most important thing to remember about data, especially when it is gathered from household surveys, is that behind every number is a person and a life. Thus, the data must <u>not</u> be used in a way that puts a person or any members of their household or community at a negative risk. The data must be used carefully and ethically. It should never be sold for profit, used for political motives, or shared with others who may misuse it.

Third, collecting data comes with the responsibility to use it in a just and fair manner. We owe a lot to those who volunteer their personal information to us. As such, they also trust that we treat this information with respect, with responsibility, and with confidentiality. The respondents continue to be the owners of the information they provide; therefore, they should participate in any decision-making process that involves the information that they provide. The respondents' involvement is a key to ensuring that the decisions based on their data meets their needs, meets the needs of their community and is consistent with their vision, goals, and values.

# **Overview of the Data Summary Tool**

1. Forms

#### **Introduction**

The capstone team recommends using Google forms to enter the data gathered from the surveys into Excel spreadsheets. Google forms are similar to other data entry and survey programs such as InfoSeek, but they have the benefit of being cost-free and usable from almost anywhere with Internet access.

#### From surveys to Google forms

The capstone team has created a form for each of the surveys, and the questions in the forms correspond to the questions in the surveys. Each question in the forms is identifiable with one or two letters followed by a number. The letters indicates the name of the survey and the number indicates the question number (i.e.: FS.4 = Food Security survey, question 4). If single questions have multiple parts, the identifiers (A), (B), (C), etc. will indicate the separate parts. These parts have the same alphabetical distinction used in the surveys themselves.

The reason for the letter/number identification in the forms is because Excel will have trouble comparing columns of data with the same "name." For example, if you want to compare question 1 in the Health survey with question 1 in the Respondent Education survey and both response columns are called "1," Excel will not easily recognize the difference between them. The number/letter identification makes sure that there are no duplicate column names that could muddle the comparisons. The letters used to identify each survey are:

- A = Agriculture and Agriculture Income
- NH = Non-farm and Other Income
- N = Expenditures, Savings and Debt
- WI = Wealth Indicators
- FS = Food Security
- ER = Education Respondent
- EH = Education Household
- H = Health

- HI = Health Illnesses
- WS = Water and Sanitation

In the Google form, both of the Demographic surveys purposely use question descriptors (Age, Sex, Village, etc.) instead of the letter/number form because many comparisons will likely be made along these variables. By keeping the names that describe these key pieces of information, they is simply easier to recognize when making comparisons.

#### Entering data into Google forms

The OVP staff person, volunteer or intern entering data into the Google forms should have basic knowledge and experience using computers and good attention to detail. Entering data through Google forms is less likely to result in error than entering data manually into a spreadsheet, but it still requires that the data entry person be careful, alert, and focused.

To enter data, follow the link that leads to a form and enter the information from its corresponding survey. In general, *there should be one form for one respondent*. The exception to this rule comes from the forms that gather information on individual household members (the Demographic – Household survey, the Non-farm Income survey, the Education – Household survey, and the Health – Illnesses survey). In this case, one form should be filled out for each household member listed in the surveys.

The link to a form can be reused over and over again to enter data from each survey. Once a form is filled out, simply click the "Submit" button, and then click the "Go back to the form" link in the page that comes up to enter data from another survey.

Household I.D. is the identification number used for each set of surveys. That is, all of the surveys administered at a single household will share a single household I.D. number. This number is important for making sure that none of the data from the surveys are duplicated or missing. In the household member surveys (the Demographic – Household survey, the Nonfarm Income survey, the Education – Household survey, and the Health – Illnesses survey), the *Household Member I.D.* is also important for keeping track of information. The Household I.D. and Household Member I.D. questions help to keep track of information by making sure there are no duplicates or missing data. They also help to ensure anonymity of the respondents; after all the data is entered, the only identifying information on them should be I.D. numbers.

#### Security

Google forms are secure as long as they are password and username protected, and the forms themselves will not be at risk for manipulation as long as the links to them are not shared with others outside of the organization. You can keep Google forms secure by limiting <u>sharing</u> and by keeping permission to view settings high.

#### 2. Spreadsheets

#### Introduction

The data entered into Google forms will go directly to a spreadsheet. If it is more desirable to enter data manually into spreadsheets and not use the forms at all, the empty spreadsheets can simply be downloaded onto a computer. There, they will be like any other Excel spreadsheets and an Internet connection will not be necessary to enter data into them.

If Google forms are used for data entry, the spreadsheets should not be downloaded onto a computer until all the data have been entered. Once all the data have been entered, the

spreadsheets should be downloaded onto a computer where the data can be analyzed. The reason for this is that Google's version of Excel has limited functions and Microsoft Excel is much more reliable and adept at the kinds of analysis OVP will be doing. It is recommended that once data analysis is conducted, the spreadsheets are not uploaded once again into Google's version of Excel, as it sometimes muddles the functions and formulas.

#### Combining spreadsheets into a workbook

All of the spreadsheets from the different forms will be downloaded separately. To combine them all into a single workbook:

- 1. Download all spreadsheets and save them in a place where they are easily retrievable.
- 2. Open a new Excel workbook and Save As "OVP\_survey\_data\_2011" (or another name of your choosing). Keep this workbook open.
- 3. Open the spreadsheets.
- 4. Right-click on the Sheet that all the data is on in one of the spreadsheets. From the menu that appears, select "Move or Copy..."
- 5. In the window that pops up, select "OVP\_survey\_data\_2011" under the "To book:" dropdown menu. Put it before "Sheet 1."
- 6. Do this for all of the other spreadsheets, putting them in whatever order you choose in the "OVP\_survey\_data\_2011" workbook.
- 7. Save "OVP\_survey\_data\_2011" when you're done.

# **Question formats**

There are three primary question formats in the forms: multiple choice, checkboxes, and text entry and each of these will look somewhat different in a spreadsheet.

- Multiple choice questions take only one response and are fairly simple to analyze with the <u>COUNTIF</u> function.
- Checkbox questions correspond to "Check all that apply" questions in the surveys. Checkbox questions may take multiple responses and are slightly more difficult to analyze in a spreadsheet. The reason for this difficulty is that Excel cannot "count" multiple entries in a single cell – it can only count one entry (number or word) per cell. To analyze data from checkbox questions, the responses will have to be separated out in the Excel spreadsheet into multiple cells through <u>splitting content</u>.
- Text entry is the last question type in the forms and requires the person entering data to type a word or number into the text box provided on the form. Some multiple choice questions have text entry components for "Other" responses. "Other" responses can be analyzed through COUNTIF or separated out through <u>sorting</u> and other methods described later. Most other text entry questions in the forms will involve numeric data, such as acres of land rented, mosquito nets owned, or cost of agricultural inputs. Numeric data in text entry questions can yield fast but useful information with descriptive statistics functions like <u>min</u>, <u>max</u>, <u>average</u>, and **percentages**.

# Instructions for Data Summary Tool

# Section 1 - Introduction

Each survey has corresponding forms to enter data. When data is entered through a form, it goes directly into a spreadsheet. Accompanying every "data" spreadsheet is an analysis spreadsheet that performs basic descriptive statistic and summary calculations. These instructions pertain to using the forms and data analysis spreadsheets.

# Section 2 - Names

Some of the surveys had to be divided into multiple forms in order to perform analysis optimally. This table shows which forms correspond to each survey:

Survey	Forms
Demographic – Respondent	Demographic Information –
	Respondent
Demographic – Household	Demographic Information –
	Household
Agriculture and Agricultural	Agriculture and Agricultural
Income	Income
Other Income, Expenditures,	(1) Non-farm Income
Savings, & Debt	
	(2) Expenditures, Savings and
	Debt
Wealth Indicators	Wealth Indicators
Food Security	Food Security
Education – Respondent	Education - Respondent
Education – Household	Education – Household
Health	(1) Health
	(2) Health – Illnesses
Water and Sanitation (Wat	Water and Sanitation
San)	

### Section 3 – Navigating Google forms and spreadsheets

The forms and spreadsheets are stored in Google Docs. They are grouped in their own folder called "OneVillage Partners Surveys." Each of the items in this folder is a survey spreadsheet. By clicking on one of them, "Health" for example, you will go to the spreadsheet where all of the data from the surveys will go.

To access a form once you are looking at a spreadsheet, click on the "Form" drop-down menu. Here, you can either edit a form or enter data from the surveys into it. To edit a form, click "Edit form" from either the "Form" or "Tools" drop-down menu. To enter data into a form, click "Go to live form" from either drop-down menu.

The other drop-down menus have many of the same basic options and organization as those in Microsoft Excel. Additionally, the editing bar on the spreadsheet performs similar (or the same) shortcut tasks as a Microsoft Excel editing bar. The formula bar is especially useful for editing functions (equations) and it is recommended to use it instead of editing functions in the cells themselves.



\*\*Word of caution: In the data spreadsheets, <u>DO NOT</u> delete rows or columns. If you need to clear the data, simply go to the "Edit" drop-down menu and click "Delete values." This will clear all of the cells without deleting the rows and columns. However, once you clear the data in this way, you cannot get it back.

#### Section 4 – Entering data and editing forms

Once you go to a live form, it is very easy to enter data. Simply enter the information from the hard copies of the surveys and submit the form. The data will immediately go into the data

spreadsheet. Once you submit a completed form, click the "Go back to the form" link to enter in the data from another survey.

If you are without reliable Internet access, you should hold off on entering data through the forms or avoid using them and enter the data manually into the spreadsheet. *If you are going somewhere with poor Internet access, be sure to download the spreadsheets to your computer and save them as Microsoft Excel files beforehand. This way, you will not need Internet access to begin data entry.* 

Editing the forms is fairly simple, but it has some quirks to be aware of. First, if you decide to add a question to a form, the added question will appear in the last column of the data spreadsheet no matter what. Similarly, if you delete a question, it will appear as a blank column where the question's column was. This empty column can be deleted but a warning message will appear on the screen before you do cautioning you against it. There is a risk that it will change the structure of the spreadsheet when data is entered through forms. A better idea would be to "hide" the column leftover from a deleted question by clicking on the small icon that appears when you move your cursor over the column header. Click that icon and select "Hide."

Changing the text for a question in a form will not cause any problems. Simply click the pencil icon in the form undergoing edits to change any of the text or even the question type.

#### Section 5 – Data analysis

The analysis spreadsheets for each form contains built-in functions (computational formulas in Excel) that automatically analyze data as it is entered. These functions (simply called formulas from here onwards) are mostly tasked with summarizing data – *their purpose is <u>not</u> to conduct advanced statistical analysis on the data, but rather <u>to compute and display data in ways that are useful.</u>* 

#### Data Spreadsheets

The data spreadsheets are where data from the surveys is automatically entered through the forms. For data spreadsheets about the respondent, there are 120 rows where data will go. The 120 rows are based on the recommendation to interview 120 household heads, or 40 from each village. If not all 120 rows are filled, it will not affect the analysis component, but it will make the data itself less reliable to a greater or lesser degree.

If more than 120 respondents are added through the forms, rows will be added automatically. If data entry is manual, more rows will have to be entered manually. *If more rows are added, this affects many of the computations in the analysis spreadsheets.* The formulas will have to be edited to reflect the larger limit. Spreadsheets for forms that ask about each member of the household are longer – 200 rows, to reflect the higher number of people for which information is entered.

#### Analysis Spreadsheets

Most of the analysis spreadsheets do not analyze every question from the surveys. Instead, they analyze Indicators, which are key questions from the surveys that are capable of giving concise information about important areas. For example, in the Expenditures, Savings and Debt analysis spreadsheet, there are Indicators about the number of households with debt (loans) and the average value of the loans. Information is available about whom the loan is from, when it was taken, and what its terms were, but this information is less valuable than knowing key Indicators like debt prevalence and average size of debt. However, further analysis of questions that are not currently in the analysis spreadsheets is certainly possible. It

would simply require someone to build them into the analysis spreadsheet. Anyone with basic knowledge on how to create equations in Excel could do this.

The analysis spreadsheets will automatically calculate data as it is entered in the data spreadsheet. There is no need to enter any numbers into the analysis spreadsheet – everything is calculated automatically. When the spreadsheets are downloaded as Microsoft Excel files, the analysis spreadsheets and their formulas will remain intact. However, downloading the spreadsheets into Microsoft Excel and then uploading it into Google again is not advised. Doing this increases the likelihood that re-formatting problems will arise and that the formulas in the analysis spreadsheet will be disrupted.

The majority of the analysis occurs in the analysis spreadsheet. However, certain formulas are built into the data spreadsheets, which are then "pulled" into the analysis spreadsheets for further calculations. This isn't common, but it is a helpful way of structuring some of the analysis. If there are formulas in a data spreadsheet, they will always be at the bottom of the sheet underneath a dark grey row that separates them from the data. It is important to keep these formulas intact as they feed directly in to the analysis spreadsheet.

# Tips and Trouble-shooting

Splitting Cells in Excel (for "Check all that apply" questions)

In order to make sure that the responses from "Check all that apply" questions are able to be counted in Excel, you will have to split the cell so that each number has its own cell. This is very easy:

1. Once you enter all of the data and download the workbook into Microsoft Excel, you can use the "Convert text to column" wizard to split the data grouped together in one column into multiple columns.

2. Select the column with grouped data. Go to the "Text to column" wizard under the data tab.

3. Select "Delimited" if it is not already selected. Click the "Next" button.

4. Unselect "Tab" and instead select "Comma." Click the "Next" button.

5. Select "General" and in the "Destination" text entry box, select the empty, labeled cells following the one with all the grouped data manually.

6. Click the "Finish" button. All of the data in the cell for a question with grouped data should be divided one number per column in every row.



Word of caution: once you go through these steps, you may have to manually make sure each number is in its appropriate column, i.e.: there are no 1's in the 2's column. Leave empty cells blank - do not type in zero or enter anything else. For every question where you will have to split cells, the response columns have already been added into the spreadsheet.

# Formulas that only work in Microsoft Excel

At only one place in the spreadsheets is there a formula that can only be calculated in Microsoft Excel – it is in the Agriculture and Agricultural Income analysis spreadsheet. To activate this formula (which shows up with the "#NAME?" error sign in the spreadsheet) simply download the Agriculture and Agricultural Income spreadsheets into Microsoft Excel once all the data has been entered. In Microsoft Excel, double click on the #NAME? cell and then hit enter on the keyboard. This will activate the cell and it should perform a calculation immediately.

#### Checking formulas

If ever it seems as if the numbers coming out of the analysis sheet are incorrect or off, just check the cell and review the formula it contains. When cells, rows or columns are altered or moved around, calculation errors can occur. Also, until data is entered into the data spreadsheets, the cells in the analysis spreadsheet that contain formulas will either contain 0's or #DIV/0! alerts. Just ignore these – as soon as data is entered, the appropriate numbers will appear.

# Google Forms

The links below lead to the live Google form for each of the program areas. The information that is input into these forms are automatically filtered into a Google excel sheet once the submit button is pressed.

Demographic Information Respondent:

https://spreadsheets.google.com/viewform?hl=en&formkey=dGUyS0IyMkxOOElqd1RnTIRheG5 mZIE6MQ#gid=0

Demographic Information Household:

https://spreadsheets.google.com/viewform?hl=en&formkey=dEhOS1ZtZnk4OG43Vi1zbk1UR2p KR0E6MQ#gid=0

Agriculture and Agricultural Income:

https://spreadsheets.google.com/viewform?hl=en&formkey=dGNLX1VtaTJoWDIEcnJG b2NTSFJkZVE6MQ#gid=0

Non-Farm Income:

https://spreadsheets.google.com/viewform?hl=en&formkey=dGIIeFFXaUhMd0x1TFJFV 1dCZlk1S3c6MQ#gid=0

Expenditures, Savings and Debt

https://spreadsheets.google.com/viewform?hl=en&formkey=dDZmWTh6UjJfSmN0T0tm UHNSM0pSV2c6MQ#gid=0

Food Security:

https://spreadsheets.google.com/viewform?hl=en&formkey=dE1naVRTT0NvSVNpWVdQbTJwY 2tuMUE6MQ#gid=0

Wealth Indicators:

https://spreadsheets.google.com/viewform?hl=en&formkey=dFR3Q0xYTTYtLTdnbC15RTY3ZV FLbVE6MQ#gid=0

Health:

https://spreadsheets.google.com/viewform?hl=en&formkey=dGlJaGFlUmlBMUJjb2ZnL U1wRTlpSGc6MQ#gid=0 Health – Illnesses:

https://spreadsheets.google.com/viewform?hl=en&formkey=dEVvbUg1SkFzUDIUYmprUkZERV pST0E6MQ#gid=0

Education – Respondent

https://spreadsheets.google.com/viewform?hl=en&formkey=dGtFeGdaQ2JURGRBR21XbWpia TUxeFE6MQ#gid=0

Education – Household

https://spreadsheets.google.com/viewform?hl=en&formkey=dFpxX0xyOXR5WIU1Nm5BN2gtb2 1GQ2c6MQ#gid=0

Water & Sanitation:

https://spreadsheets.google.com/viewform?hl=en&formkey=dHUxLTF3Zzk2R1B3SmZ4eIRCVG IzMXc6MQ#gid=0