TANZANIA

Case Study Series
Community-Based Information Systems

Background

Many community-based programs provide services to mitigate the effects of the HIV and AIDS epidemic, including HIV prevention, HIV care and treatment, and services for orphans and vulnerable children (OVC). These community-based programs vary widely in terms of the data that are collected for monitoring and evaluation (M&E); the job function and skills of people who collect the data; and how and by whom the data are managed, analyzed, used, and stored. MEASURE Evaluation, with funding from the United States Agency for International Development (USAID) and support and technical input from members of the President's Emergency Plan for AIDS Relief (PEPFAR) OVC Technical Working Group (TWG), conducted case studies in three countries to understand and document how community-based information systems are designed, implemented, and used to provide information to a broad range of stakeholders.

To guide the case study, MEASURE Evaluation formulated a number of questions, including:

- Why are community-based M&E systems developed?
- What indicators are useful at the community level?
- Who uses information from such systems, and for what purpose?
- How are data stored, analyzed, and reported?
- How does information collected in these PEPFAR programs link with existing government reporting?
- What are the benefits or challenges of electronic systems

The case study team selected OVC programs as the area of focus because such programs rely heavily on community workers and community-based organizations to implement activities and monitor program progress. However, case study findings are relevant to other PEPFAR care programs such as home based care (HBC), nutrition, integrated HBC and OVC, comprehensive programs to mitigate the effects of HIV, and general community health programs that also work through local communities and are at the forefront of AIDS-free generation efforts.

This report presents the results of the Tanzania case study. Case study reports for Kenya and Zambia are presented separately. These reports are meant to be shared with country governments, programs, and donors working on community based information systems.

Programs for OVC in Tanzania

Through PEPFAR, the United States has supported comprehensive HIV and AIDS prevention, treatment, and care programs in Tanzania. OVC programs are one component of PEPFAR's response to address the needs of families, communities, and children infected with and affected by HIV and AIDS. In Tanzania, there are approximately 1.3 million orphans due to HIV and AIDS and approximately 1.4 million adults and children living with HIV,[1] presenting a vulnerable situation for families and communities across the country. For the case study, we focused on the largest

1) UNAIDS, Report on the global AIDS epidemic, 2010.

MEASURE Evaluation would like to acknowledge the many people who helped with this case study, including the USAID/Tanzania Mission—in particular Elizabeth Lema and Mary Chale, who helped with the case study selection, and the implementing partner staff of Pamoja Tuwalee, who provided their insights into the projects and assisted in the logistics of the case study visit and review of the findings. We would also like to thank the Government of Tanzania staff, implementing partner sub-grantee organizations, and many community volunteers who kindly took the time to speak with us about their experiences. We are grateful to the USAID Technical Working Group at USAID Headquarters for their guidance and input along the way—in particular Gretchen Bachman, Maury Mendenhall, Janet Shriberg, and Nicole Behnam from the Office of the Global AIDS Coordinator. We also thank USAID's Krista Stewart, MEASURE Evaluation Agreement Officer Representative, for her leadership.

program in Tanzania working to improve the lives of most vulnerable children (MVC) and mitigate the effects of HIV for people affected by the virus. Pamoja Tuwalee is a USAID/Tanzania-funded program which aims to improve the quality of life of children and households identified as most vulnerable, and to provide coordinated and sustainable care for those children. Pamoja Tuwalee is a five-year project (2010–2015) implemented by four lead partners (Africare, FHI360, Pact, and World Education Inc.). It is being implemented in six zones of Tanzania: Coast, Central, Lake, Northern, Southern, and Southern Highlands.

Pamoja Tuwalee works in tandem with the Government of Tanzania (GoT), which has a decentralized administrative system. At the central government level, the Ministry of Health and Social Welfare (MOHSW) and the Department of Social Welfare (DSW), with support from the Prime Minister's Office of Regional Administration and Local Government (PMORLAG), set and support policy involving MVC. Their National Costed Plan of Action II[2] (NCPA II) provides central and local government, donors, and implementing partners with guidance for identifying and supporting MVC. PMORLAG then coordinates work done by the districts and is responsible for hiring District Social Welfare staff positions. Within the decentralized levels, the systems which support MVC include the Local Government Authorities (LGAs) within the district, ward, and village levels. Most Vulnerable Children's Committees (MVCC) are also at all of these levels.

Methods

The case study team used a vertical case study design, meaning that information was collected from the central to community levels (see Figure 1 on page 3). At the central level, the team conducted interviews with USAID, GoT, MOHSW, and all four lead partners. Based on regional variation, we purposively selected two different prime partners. Data collection involved two lead qualitative data collectors conducting in-depth interviews with MVC program and/or M&E staff at the central, regional, district, and community-based organization (CBO) level. Focus group discussions (FGDs) were conducted with community volunteers who are responsible for providing care and support to MVC in their communities. Interviews were primarily conducted in English and focus group discussions in Swahili with use of an interpreter as needed. We obtained informed consent from all participants, and sessions were recorded if agreed by all participants. We also collected and reviewed program documents such as data quality assessment findings and program reports, as well as conducting observations of CBO filing systems.The case study design was submitted to the Futures Group Internal Research Review committee and determined to be exempt from full Institutional Review Board review.

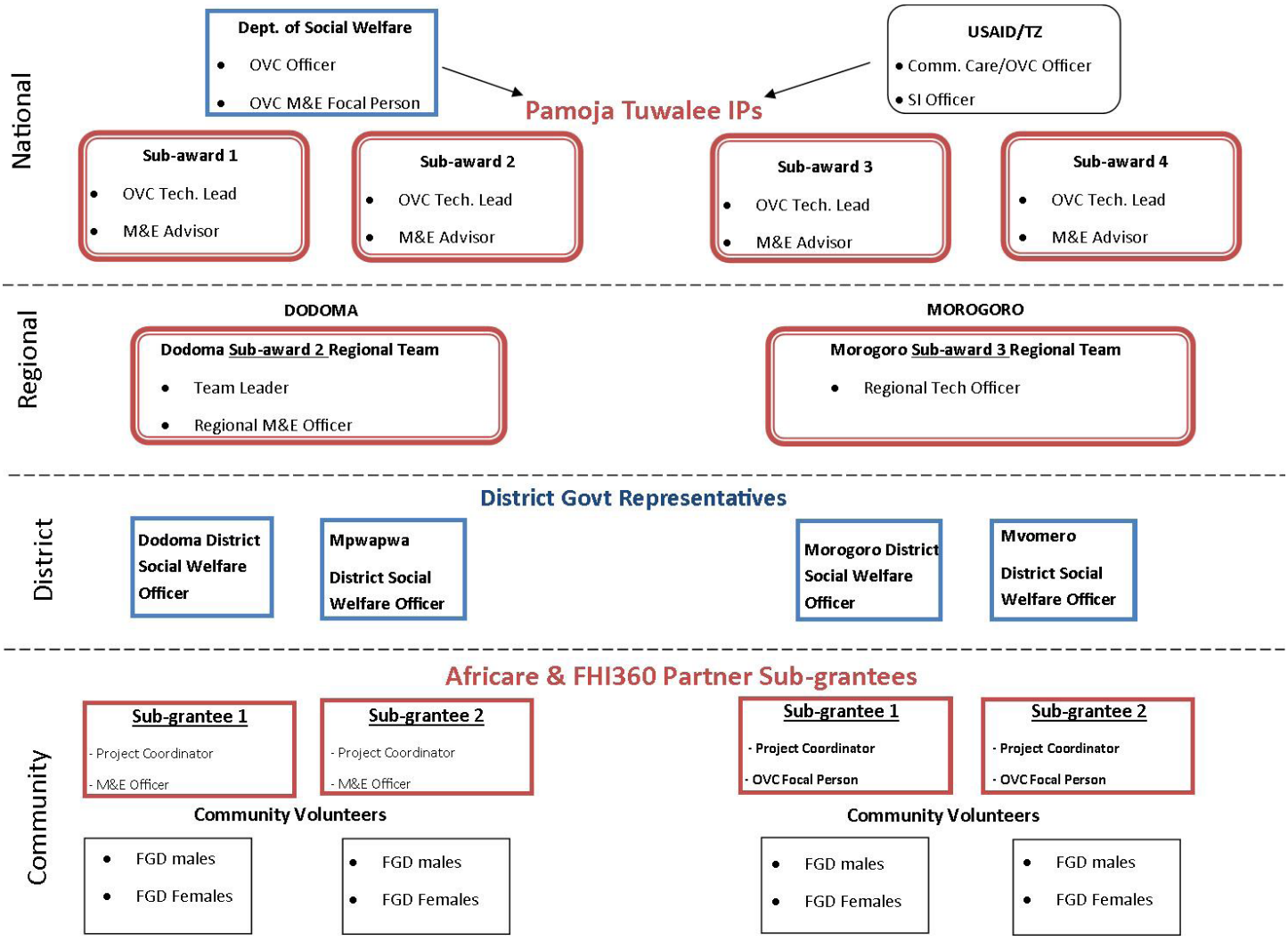
In some cases more/fewer people participated in interviews based on availability. At the central level, we interviewed two staff from USAID Tanzania, one representative of the DSW, and nine individuals representing the four prime Pamoja Tuwalee partners. At the regional level, we interviewed three individuals from one of the regional Pamoja Tuwalee partners and one individual from the other Pamoja Tuwalee partner. At the district level, we interviewed three different representatives—two district social welfare officers (DSWOs) and one district community development officer (DCDO). At the CBO level, we met with a total of nine staff members from four CBOs—two municipality and two rural locations—and then conducted eight focus group discussions with 71 participants (approximately half male, half female).

Brief Program Description

For both projects, the community volunteer is at the front line of care provision and data collection. This person is from the community and provides services according to NCPA II and PEPFAR guidelines. The current program focuses on building the capacity of caregivers, communities, and the local government to care for MVC and MVC households, rather than providing direct support (such as blankets, school fees,

2) The United Republic of Tanzania; The National Costed Plan of Action for Most Vulnerable Children; 2013–2017; Department of Social Welfare Ministry Of Health And Social Welfare.

Figure 1—OVC M&E Case Study Design in Tanzania



uniforms, and other commodities). As such, volunteers reported providing a wide variety of services which included facilitating development of Savings and Internal Lending Communities (SILC) and Income Generation Activity (IGA) groups; conducting outreach activities related to sexual health and child clubs; visiting households once per quarter to assess the status of children and provide basic health education and referrals, counseling, and support as needed; monitoring school enrollment/attendance; and counseling on food and nutrition.

Typically, one volunteer[3] per village serves between 20 to 60 MVC per month, depending on the CBO and family size. Volunteers are required to visit each household once per quarter, but visits may be more frequent depending on the child or household's status. Nearly all volunteers also work as farmers or small business owners to earn income for their families. The way volunteers serve MVC varied considerably, with some conducting home visits once a week and others conducting home visits a couple of hours each day. National guidelines on the volunteer caseload and frequency of visits to MVC currently do not exist.

3) Community volunteers typically receive partial recompense in the form of transit costs and other subsidies.

M&E Systems

The M&E staffing structure for the two projects are notably distinct.

Project 1 has staff with dedicated M&E responsibilities at the country, regional, and CBO level. For example, a country M&E advisor provides technical assistance and guidance to the regions, and there is an M&E officer at each of the two regions. The regional M&E officer reports to the regional technical officer. There is also one database manager who covers all regions, and M&E officers at each of the 15 CBOs they support.

Project 2 has three national-level M&E staff, and staff with both program and M&E responsibilities at the regional and CBO levels. For example, a regional technical officer and MVC focal persons at the CBO level also have M&E responsibilities. Each CBO also has data clerks responsible for data entry in the MVC database, assisting with statistical report compilation, and regular data verification activities. Both MVC focal persons and data clerks report to the project coordinator who oversees the M&E system at the CBO level.

Each project has its own M&E system and performance monitoring plan (PMP) plan. While both of the project awardees report on the five PEPFAR Reporting and Organizational Management Information System (PROMIS) indicators, they each have different programmatic and national indicators depending on the specific objectives of their program, country, and headquarters reporting requirements.

In addition, the GoT at various levels requests that information on MVC activities be shared. In particular, NCPA II requires that all districts go through an MVC identification and registration process. They request that each implementing partner (IP) report on the MVC selected for their programs and that this information be updated every six months. At the district level, an MVC database was established but has not been operational since a study of the system identified challenges. Plans are underway to improve this database. Other than the MVC identification and registration, the GoT does not have a standardized reporting system related to OVC/MVC. Work is currently underway to develop a national OVC M&E plan and reporting system.

Case study participants at a district social welfare office

M&E Forms

In both projects visited, community volunteers are responsible for collecting the majority of information through forms provided by the implementing partner. As each project has its own M&E system, the list of forms differs as illustrated in Table 1 (on page 5). It is important to note that not all of the forms are Pamoja Tuwalee forms, but some of the other project partners that provide technical assistance to CBOs require completion of additional forms (e.g., for Project 1 for nutrition and Adolescent and Sexual and Reproductive Health [ASRH]). Project 1 revamped their M&E forms and data collection system approximately one year ago.

Given the difference in the number and types of forms completed, as well as information provided on the form, volume and flow of information varies between the two organizations. Appendix A (on page 16) and Appendix B (on page 17) illustrate the regional monthly reporting volume/flow for Projects 1 and 2, respectively. In both cases, the bulk of reporting appears to be the MVC service provision form (Appendix C on page 18). The way in which the project collects that information influences the volume of information generated. For example, in Project 1, volunteers complete an MVC service provision form for every child visited in a month, which equates to approximately 40 forms

Table 1—List of forms completed by level

	Project 1	Project 2
Community Volunteers	• MVC registration form (as MVC registration occurs) • Volunteer registration form (one time) • MVC Service Provision form (1 per child, monthly) • Community outreach form (monthly) • IGA/SILC tracking form (monthly) • Nutrition assessment form (monthly for children under 5) • ASRH form (monthly) • Kids Club form (monthly) • Referral form (monthly per child as needed)	• MVC registration form (as MVC registration occurs) • Daily diary form (1 per household) • Monthly MVC Service Provision form (1 per month) • Quarterly Service Provision form (1 per quarter) • Referral form • Kids Club form (monthly) • SILC/IGA form (monthly)
Ward	Summary form (narrative, monthly)	
CBO	Training form	

per volunteer per month (approximately 35 per month for the service provision form and then other forms as needed). Signatures from the MVCCs and village executive officer (VEO) are required in each village—meaning 40 signatures per month. Ward executive officer (WEO) signatures are also required on every form, with approximately two villages per ward, resulting in 80 signatures per month. These forms are then submitted to the CBO. For those in the municipality, forms are brought into the office, and for those in rural areas, forms are either brought to supervision meetings or sent via courier/bus. At the CBO level, this results in approximately 1,600 forms per month to be entered.

Project 2's MVC service provision form is a monthly form that requires a daily diary that the volunteer completes at each household visit. At the end of the month, he/she uses those forms from all households visited to complete the monthly report form—a single form for all MVC and services provided. The volunteer may complete approximately one form per month per village that requires a signature from the VEO. At the CBO level, this results in approximately 252 forms per month.

While these examples demonstrate how the burden of data entry at the CBO level is significantly reduced at Project 2, there are trade-offs. Table 2 presents the challenges for volunteers and CBOs when they are responsible for data aggregation. In the first example, data aggregation took place at the CBO level—an intentional strategy to reduce the burden of aggregation that volunteers were tasked with. In addition, when volunteers aggregate data and submit summary forms, it is more challenging for the program to go back and assess data quality. Data aggregation at the CBO level results in more forms and can be more labor intensive at the CBO level for data clerks, databases, security systems, etc., which may call into question the sustainability of such a system.

Table 2—Challenges based on who conducts data aggregation

Volunteer	CBO
Increased burden	More forms, more labor
Need capacity for tallying	Need capacity for entry, analysis, IT
More challenging to assess data quality	Is it sustainable?

Volume of reporting also can be influenced by the extent to which volunteers and/or CBOs have other activities outside of Pamoja Tuwalee. Many of the communities also have a Tunajali project which implements HBC activities. While not all volunteers serve HBC clients, those who did indicated that the reporting is limited to a monthly counseling and testing form. The stipends that volunteers receive for such work are different—for HBC work the stipend is 35,000 TSH per month compared to 20,000 TSH for OVC work. There are no standard rates or stipends for volunteers in Tanzania.

While each of the CBOs indicated that they have dedicated staff for M&E under Pamoja Tuwalee, the CBOs have other donors and projects that require

review by the program coordinator. In these cases, the CBO needs to complete other reports on a quarterly, semi-annual and annual basis. For example, one CBO indicated that they may produce between 16 and 20 reports in a year and the lead program officer is responsible for reviewing and signing off on each. For Project 2, CBO staff and volunteers working on Pamoja Tuwalee are dedicated for the program activities. When a CBO receives funds from other programs, their board of directors is advised to recruit new staff to ensure staff working on Pamoja Tuwalee have adequate time and resources to serve MVC.

The design of the project's data management systems contribute to enhancing data quality. However, the system's design can potentially result in an increased reporting burden for the volunteers or at the CBO levels. The burden may increase more when CBOs and volunteers have additional reporting responsibilities beyond Pamoja Tuwalee.

Data Quality Mechanisms

Training

Both projects involved regional staff in the development of M&E tools, such as tool pre-testing. Once tools were finalized, regional staff were trained on the M&E plans and tools and then stepped down a Training of Trainers (ToT) to CBOs. After that, regional offices trained the CBOs who then trained volunteers to complete the forms. The primary focus of that training was on how to complete and submit the required forms. Both projects noted that additional training on data quality was conducted, and Project 1 has plans for a data use workshop with community-based workers.

At Project 1, they also developed an M&E handbook for each CBO to guide the overall M&E process. Project 2 discussed conducting refresher trainings in addition to coaching and mentoring by the headquarters M&E team.

Both projects described processes in place for monitoring data quality at the regional level. The processes worked slightly differently for each project.

Both regional officers discussed external data quality assessments (DQAs) conducted by MEASURE Evaluation, the results of which are used to help improve reporting. Project 2 also discussed internal data quality audits they conduct in two different ways:

1. regional technical officers switch locations and cross check the MVC register and database to verify the number of MVC supported for a sample of records; and
2. within their own region, conduct verification of MVC service provision on a quarterly basis using a data verification tool.

Supportive Supervision

Both projects described supportive supervision for M&E activities.

For Project 1, the Regional M&E officer is able to visit a select number of CBOs per month for supportive supervision. Both CBOs with whom we met indicated receiving supportive supervision visits from the regional office at least quarterly. In these meetings they go through the consolidated overall data reported and discuss the implication of the data to the project. The regional office also holds quarterly review meetings where they invite a different ward(s) to present performance on target vs. achieved.

M&E officer with reporting binders

For Project 2, combined supportive supervision (for program technical and M&E issues) is conducted at three levels: a) the CBO level, whereby on a monthly basis, MVC focal persons provide support to community volunteers and the project coordinator provides coaching and mentoring to focal persons and volunteers in a sample of wards; b) the regional level, whereby the regional technical officer visits CBOs at select villages on a quarterly basis; and c) the headquarters level, whereby the headquarters staff visit regional offices, district authorities, and a selection of CBOs on a semi-annual basis.

The way in which supervision is carried out from the CBO to volunteer level differs for urban and rural locations. In the two urban locations, CBOs hold monthly meetings with all volunteers in the municipality. During the meetings, there is often joint supervision on technical and M&E aspects. The rural locations use different models. Project 1's rural CBO also holds monthly meetings, but described challenges in getting volunteers to attend. They also indicated they have limited budget and time to travel out to villages to conduct supervision visits, noting the last time they did such visits was July 2013.

Project 2's rural CBO uses an approach whereby the OVC focal person is based in the district and stations are set up around clusters of volunteers. The OVC focal person then travels to each of the stations monthly to conduct joint supervision visits. Each station has a chairperson, secretary, and other officers, and they discuss programmatic challenges as well as collecting and reviewing reports.

In addition to DQAs, data audits, and supportive supervision, the process of submitting forms also builds in a quality assurance component. For example, the forms for Project 1 require signatures from three different entities: the MVCC, VEO, and WEO; Project 2 requires such signatures from the VEO, who sits in the MVCC review meetings and is a representative of the Village Council. These signatures help hold community volunteers accountable for the information being reported, in addition to engaging local authorities in work related to MVC.

Data Management and Analysis

Storage

Discussions with CBOs and volunteers clarified how and where information generated from the M&E system is stored. Storage of forms at both projects was similar at the CBO level, with MVC registration forms filed by ward, and service provision and other forms filed by month. All of these forms were stored in binders in the CBO offices and neatly organized.

At the village/ward level, storage of forms differed depending on the type of form and data collection/submissions procedures. All of the forms for Project 1 are submitted to the CBO at the end of each month. Volunteers do not keep the forms unless they choose to photocopy them. Community volunteers often record some of the information (e.g., name, gender, age) into "counterbooks" to keep track of who they have visited, but we did not request a copy of the information tracked in such books. In addition, the names of MVC are entered into the ward or municipal MVC registry book (government office, not program office).

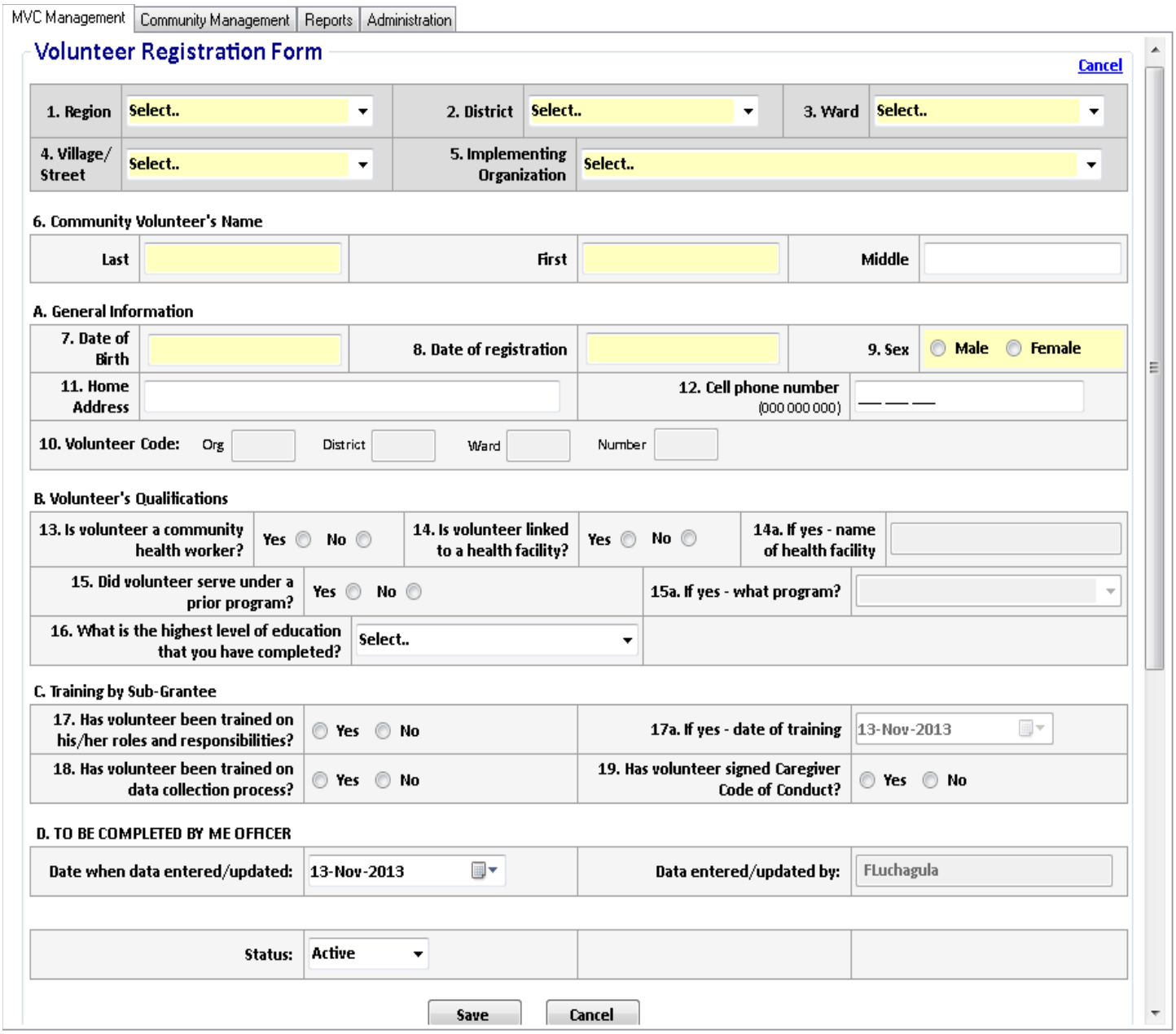
Project 2 uses a different approach whereby each community volunteer completes a narrative diary for each household visit. At the end of the month, they refer to these diaries to complete the monthly service delivery form, which is in a carbon copy book. The volunteer retains a copy and the original is given to the village office and CBO. Similar to Project 1, MVC registration information is entered into the ward/municipality MVC registry book.

Databases

Both projects have recently developed databases that are at different levels of functionality. Project 1's database maps back to the data collection forms so CBOs can enter information from the forms directly into the database (see Figure 4 on page 8). Though the data entry mechanism is complete, the server is not fully functional. CBOs are required to export their files into Excel and then submit them via email. The country office indicated that during the last reporting period, 2 of the 17 CBOs submitted data using the database.

Project 2 also has an electronic web-based database that is not yet fully functioning. The data entry screens capture information according to the MVC registration and service delivery forms. At the time of the visit, MVC registration data were actively captured in the database. Other information, such as the MVC service provision information, was provided via email in Microsoft Excel software due to low Internet connectivity in most rural sites. As a result, the project will move to data entry and then uploading data to the database in the future.

Figure 4—Screen Shot of Project 1 Database



Security and Confidentiality

This section presents how the projects ensure protection of client privacy and data through their data storage systems and backup mechanisms. Security of M&E data occurs in several ways—through storage of M&E forms, transmission of M&E forms to CBOs, and through electronic databases and transmission of such files. At the community level, files are stored in different ways. For example, counterbooks and daily diaries are stored in volunteers' homes. In the case of Project 1, volunteers only keep the MVC service provision form if they or the CBO makes copies for them. For Project 2, the volunteer, as a member of the MVCC and custodian of program data, keeps the monthly MVC service provision form. Each volunteer was given a tool bag to carry and store the tools. In some villages with secured office rooms, volunteers are given space to work and store their records as recommended by the program. In villages where volunteers do not have access to secured locations, they report keeping their forms at home, either stored in piles or bags.

For both projects, signatures are required from other administrative offices. The volunteer takes the forms to be signed to each office, and if the representative is not available, they either leave the forms in the office to be signed or come back at another time.

Community volunteers submit their reports to the CBOs on a monthly basis. Volunteers in the municipalities or at the stations submit their forms in person or during a supportive supervision visit. For the other CBO where volunteers are at rural posts, they either submit forms at a meeting or send their forms on the commuter bus which travels to town and delivers them to the CBOs. As described by one volunteer:

> *Some of our villages where volunteers work are very far, therefore it costs a lot of money in bus fare if we come and personally deliver the filled out forms to [CBO] office. At least the buses do not charge us so much to deliver the forms to town.*

Data are entered into databases for analysis at the CBO. All of the locations had password-protected computers for data entry and backup mechanisms in place. However, power supply was an issue at some of the sites, which made data entry particularly challenging for the Web-based server. Also, because of power supply challenges, staff may have to go to cafes or other locations to enter data. All the CBOs had computers to use for the Pamoja Tuwalee project, though the number varied. For example, one of the CBOs had five computers for data entry, and a variety of individuals such as staff, volunteers, and students had their own passwords and could assist with data entry. Another CBO had just two laptops.

Data Use

Ultimately, M&E systems are created to inform decision making. There was evidence of data use at all levels, though the extent to which this occurred at the community level varied in part by the forms community volunteers used and their ability to access information in the forms. At the country, regional, and CBO level, information was mainly used for programmatic reporting, tracking target vs. achievement, and identifying opportunities to improve program efforts (Table 3).

Table 3—Data elements used and for what purposes

Data element or reporting forms	Who uses the data elements for what purposes
Number of MVC (MVC registration form)	Project and CBO—provided to the district government authorities and MVCCs for coordination, planning, and allocation of funds for MVC.
Number of MVC who received services (service delivery form)	Project and CBO—to determine which children have been served and not served within a given period. Use it to work with community volunteers on fully covering all assigned MVC. Helps to adjust targets.
Type of service received by MVC (service delivery form)	Project and CBO—to identify staff needs and refocus program efforts.
Number of caregivers enrolled in SILC	Project and CBO—to determine if more MVC caregivers need economic strengthening activities.
Number of district MVCC funds established	Project and CBO—to identify which local government authority is able to allocate funds for MVC

Program use

During quarterly review meetings, regional and CBO staff clearly described how they set time aside to discuss performance and how insights from data served as a platform for improving programs or changing strategies.

At **Project 1** regional level, data revealed low performance with regard to caregivers enrolled in SILC. Consequently, they decided to enhance efforts to enroll more caregivers in SILC.

At **Project 2** regional level, they noted they were well below their target for food and nutrition indicators. When they checked back with volunteers on the reporting, they found that volunteers were only counting the number of MVC provided food support, and not if they had provided education—which they were supposed to do. This provided an opportunity to review with CBOs and volunteers how to correctly complete the forms for this indicator.

In a **third example**, an indicator for the number of district MVCC funds was established. Performance on that indicator was low and after talking to CBOs, the regional office learned there were challenges establishing such funds at the district level, due to a shift in focus on lobbying for local government authorities (LGAs) to allocate MVC resources in their Medium Term Expenditure Framework (MTEF). As a result, they decided to shift the program focus on establishing a village MVC fund managed by MVCCs.

At the CBO level, some examples were given of how they analyze and use information for comparing target vs. achievement. They described disaggregating data by ward (on a quarterly basis) to identify any issues in performance. A Project 2 CBO M&E officer described:

> *We analyze the data we get from the field—for example, maybe we start looking by wards, arrange by ward. Then we see from this village, we look on the service, maybe last report [of] this volunteer … we normally check if the service has been provided—when we analyze the data we come up with the solution—have all children received the service? Why is this one not getting the service? When you analyze it you get to know a lot of things.*

A Project 1 CBO M&E officer also described how they use data:

> *We use the data to measure to see if we are on the right track—we look for challenges and see how to address them. We also use the information to plan for the next year. We discuss what went well, what gaps exist, and we share this with other partners at the IP meetings at the district level.*

Another Project CBO indicated that when they reviewed their data, they noted that the number of MVC receiving psychosocial support was very high. As such, they realized that all volunteers were capable of providing such support and increased the targets. Furthermore, they indicated that during those visits for psychosocial support, they could add another type of household or individual child support as needed.

Volunteer use

Community volunteers are tasked with collecting the bulk of information populating the M&E system. They reported using information to know how many children they have visited and what services they provided, to follow up on previous visits, and to determine which households to visit next. The information they need to provide to government offices varies, and occasionally they would get requests from the ward or village administration on which households need support.

Reporting to government structures

The CBO also reports information to the district. At the national level, some concern was expressed that not all CBOs report to the districts, although all CBOs reported to the district in the locations we visited. In the two municipalities we visited, the district has its own reporting template that CBOs are required to use on a quarterly basis. This was not the case in the rural districts where the CBOs provide copies of the Pamoja Tuwalee reports to the districts. Districts also hold quarterly implementing partner group (IPG) meetings to discuss reports and specific cases that warrant discussion. The districts also request the lists of MVC for use in coordination and planning. At the community level, volunteers are often asked to provide a list of the MVC served and services received to the MVCCs, village

administration, and/or ward. Such reports, as described by volunteers, help these groups with information for planning and coordination, as well as identifying which children to support with any existing funds:

> *We truly appreciate the support of [partner] in knowing the number of MVC in our district. This information helps to justify budgets which the district should allocate for MVC.*

Successes

Several successes exist in the implementation of OVC M&E activities at the projects visited. Participants at all levels spoke in a meaningful way about M&E its importance for reporting, accountability, and assessing performance. At the sites we visited, it was evident that the CBOs and community volunteers recognized the importance of sharing information with government structures such as the district and local government authorities.

The M&E structure is clear for both projects: Staff roles and responsibilities regarding M&E were fairly well delineated. Further, the relationship between program and M&E staff appears to be clear and works well. The community volunteers all knew which forms they were supposed to complete and when and how to submit them. The capacity of the M&E staff or the OVC focal persons with M&E responsibility was high, and they could clearly describe the data sources, flow, analysis, and use of information.

Data quality mechanisms are in place: Both projects described having data quality mechanisms in place, including external data quality assessments and internal processes for data quality audits. There is an emphasis on trying to improve data quality, with CBOs describing how they work with volunteers to monitor completion of forms.

Improved availability of data: For Project 1's database where CBOs can enter and run analyses, it was evident that these databases help facilitate data analysis and use of information. The M&E officer at one CBO indicated that it is much easier now to pull lists of MVC as compared to the past, when volunteers would have to go through stacks of papers to sum the total number of MVC. In addition, at a click, he can track completeness of records, target vs. achievement, and disaggregate by age and sex. It was reported at both CBOs that the database has helped to improve data accuracy and reduce double counting and that it improves the overall reporting process. The regional office also noted such benefits and noted that "there were many challenges before the database—it was very hard for compilation."

Improved capacity: In some locations, M&E was reported to have improved. One CBO reported how the M&E for Pamoja Tuwalee has helped them on other projects that their organization leads:

> *Pamoja Tuwalee has helped us have a clear M&E system: they assisted us with this. We have adopted and applied the Pamoja Tuwalee M&E plan to the other projects.*

Over time, as community volunteers have become more familiar with the forms and received supportive supervision, volunteer capacity for completing forms has increased according to some CBOs we interviewed:

> *From my experience, they have improved from where we started; it was difficult [before].*

Challenges

While there are many successes with community care M&E systems, and in this case specifically OVC M&E systems, there were also some challenges identified related to the forms, community volunteers being able to complete forms, workload, database implementation, and data use.

Forms continuously changing: As previously noted, each project uses a different set of forms. For Project 1 it was noted that the M&E forms have changed three times, and these continuous changes posed a challenge. Some of these changes were made to reflect the strategic programmatic shift from direct commodity support to household strengthening.

Forms, or information collected in forms, not used: At both locations, there was limited use of referral forms. In some instances, no volunteers had copies of the referral books and in others, volunteers indicated they did not need the referral forms. Many of Project 1's forms had a blank area for volunteer code, household code, and child code; yet the CBOs we visited had not yet developed these codes.

Volunteers complete other forms in addition to M&E forms: In both cases, there were additional forms other than what were listed in the M&E forms (e.g., Project 1 had additional forms such as the food and nutrition, SRH, and child club forms; and Project 2 had additional forms such as the MVC verification, SILC/IGA, child club, and referral forms). In general, volunteers reported that there were many forms to complete, particularly given they are volunteers. A Project 1 CBO manager summed this up and noted the implications for the CBO:

> *Filling out the MVC service provision form for each individual child who receives service is not only time consuming, but also is very expensive when so many forms have to be photocopied by [the CBO].*

Caregiver burden: Volunteers described challenges in getting households to answer all the questions needed to complete forms. One reason given for this was that caregivers resent answering questions about MVC and their household when they do not receive anything in return to help the situation. With the program switching its model from commodity provision to building resiliency, caregivers may think the program is not responding to their needs identified through the questions. A volunteer from Project 2 described it as follows:

> *Some of the parents of MVC tell us to go away and stop bothering them with questions for filling the form, because we do not give them the material support which the MVC need.*

They also face challenges if they return to a household to register another MVC in the household, as the head of household may note that the first child has yet to receive anything and question the intention of the volunteers. This is particularly true during the MVC registration process, as described by one of the volunteers:

> *Parents who are angered by poverty sometimes refuse to cooperate and provide information which is used to fill the forms.*

Obtaining signature: One of the greatest challenges related to the forms was obtaining administrative signatures. In one focus group discussion, volunteers noted that the VEO and WEO are administrative positions and not vested in the work related to MVC. As such, it was not a priority for them to sign off on the documents, and not necessarily useful. At times, volunteers experiences delays in reporting due to waiting for such signatures.

Data quality challenges: Volunteers also noted that it was challenging to obtain information such as date of birth and name of child. Additionally, they indicated that information such as HIV status was not useful to collect because it was not always reliable.

Volunteer burden: The amount of time volunteers dedicated to working with MVC varied from once a week to every day for a couple of hours. Most volunteers are engaged in other work for their income, and completing forms is often not a priority. At Project 1 volunteers spoke about the repetitive nature across the forms (e.g., household information) and said that the information could be compressed into fewer forms to reduce duplication, as described by focus group participants:

> *[The] forms are truly very many, if it were possible it would be good to consolidate them into two or three forms. Forms number 1, 2, 3, 4 and 5 have the same information repeatedly …. You fill the forms until when you sit down you ask yourself if this is an examination, you get so extremely exhausted (laughter).*

We learned that many volunteers at Project 1 do not take their forms with them to the household (to avoid building expectations of caregivers), but instead write information down in the notebook and then transfer it

to the forms when they get home. This type of situation was described as "double-work," as they have to write down the same information twice.

In one location, the quarterly report form which would require volunteers to aggregate each monthly report and enter it into a quarterly report format was also not used, though volunteers had been trained in its use. One volunteer questioned why they would be required to fill in a quarterly report given that they already complete monthly forms:

> *If given the three monthly reports, why can't you [the CBO] just produce by yourselves [themselves] those quarterly ones?*

Database rollout: backlogs and accessibility: Given the recent development of both projects' databases, there have been some challenges in the database rollout. As with any new technology, there are learning curves, and some of the CBOs experienced challenges in using the database and troubleshooting on their own. In addition, Project 1 has asked CBOs to enter in old forms to have a complete database for all MVC served. For several months, this meant CBOs had a backlog in data entry, though they are now caught up.

Project 2's Web-based system can only be accessed when on the Internet. On cloudy or rainy days, they may experience challenges with Internet connection and then are unable to access the database.

Limited use of information at the volunteer level: Finally, we asked community volunteers about how they knew they were making a difference among the children they served. Interestingly, none of the responses related to the information collected on forms; rather volunteers listed existing data sources such as school enrollment, school performance, the affect of a child, and growth monitoring clinic cards.

While volunteers noted that they used information generated from the forms, when pressed to describe how this occurs, they acknowledged that much of the information they referred to came from their counterbooks or from their own personal memories.

> *We live in this community therefore we know and understand what the children's challenges are. We don't need to read the forms, but often we just remember off-head what the issues were in our last visit to their households. —(Project 2 CBO)*

Volunteers lack of reference to the forms, may in part be due to the volunteers' inability to access forms. Project 1 does not have a mechanism for volunteers to keep a copy of their forms. Instead they transfer "important" information into counterbooks. Project 2 uses the daily diary that is kept with volunteers; however, the forms are in a bound book so volunteers would have to flip back through to find the form of any given child. At the same time, Project 2 uses and retains a monthly form that captures services provided to all children on one form, making it easier for volunteers to access summary information on the MVC they serve:

> *I used the monthly form to calculate total number of children who got supported, compared this to the total number of MVC in the village and persuaded [the] MVCC to ask families to provide more support for MVC.*

One of the CBOs at Project 1 did indicate that they are working on modifying the form that community volunteers use to enable them to capture up to 10 children at a time.

Considerations for Country Ownership

The Government of Tanzania is currently working to develop its MVC M&E plan that maps to the NCPA II. It is unknown at this time what primary data will be collected and by whom, but this case study does reveal important insights into the challenges that community volunteers and CBOs face with the amount of information they need to collect for OVC programs, as well as what is feasible to collect when scaled up country wide. As the national MVC M&E system is developed, it is important to consider what information is needed for national reporting and if community volunteers should be the ones to collect all or some of that information. Further, as evidenced in this case study, the type of form(s) utilized can have significant

implications for data volume and flow. During the case study process, it seemed unclear which department within the district/municipal councils should be ultimately responsible for coordinating MVC activities. It was seen as possible that any among the social welfare officers or community development officers could take up this responsibility. As the national systems continue to emerge, having clarification on the lead coordinating body will be important for planning and supportive supervision.

Conclusion

Community-based information systems are developed to capture information about child, household, and community-level services that can be used to monitor program progress and make adjustments along the way. The types of information used differ by user type (e.g., volunteers, CBOs, implementing partners, local government, national government), and community-based information systems are ideally designed with the information needs of its users in mind with the ultimate goal of service improvement.

Both partners have well-structured M&E systems with clear roles, responsibilities, and guidelines established. They have also invested time and resources into M&E improvements to reduce reporting burden and enhance data use, particularly at the CBO level.

While it's clear that these M&E systems are meeting programmatic reporting needs, such as measuring performance against targets, the system currently does not capture other critical questions such as referrals completed and changes in outcomes—the latter of which would require other data collection methods.

The largest responsibility for providing timely and accurate data rests with volunteers. While volunteers report using information to know who is served and how often, it is less clear how this information is used to assist volunteers' case management efforts. While volunteers don't specifically request access to more information, having basic information available to help them track what happened at a previous visit, or if a referral was followed through, could enhance their decision-making ability at the household level.

In this case study, volunteers described challenges to collecting information. Additional efforts to enhance volunteers' understanding and use of the information they collect, and to remove bottlenecks, duplicative information, and information that is not used for any type of decision making, may enhance the quality of data programs rely on to make decisions.

Impressive data management systems have been put in place, including the development of databases to improve data availability; however, some of these systems are still nascent. As the databases develop, it will be important to build the capacity of CBOs to query different data elements to answer questions of importance to them. We were unable to visit all of the Pamoja Tuwalee projects during this case study, but other innovative practices are rolling out such as the use of mobile technology to conduct small-scale studies and data use interventions with volunteers.

MEASURE Evaluation Tanzania currently is working on developing the national MVC M&E plan as well as a revised data management system to address challenges identified. The revised system would help to simplify MVC data collection tools, and at the central level, harmonize the national MVC data collection by having the data management system be interoperable with other MVC data systems such as for child protection and child labor. The new system will also be accompanied by a simple data analysis guide to enhance data use at all levels.

This case study from Tanzania, when combined with findings from the Kenya and Zambia case studies, will yield insights into information systems for community-based programs. Findings will discuss different models of community-based M&E systems; how they are developed; what indicators are the most useful at the community level; how data are used; successful strategies for collecting, storing, and analyzing data; strategies for building capacity for M&E; and the effect of changes, either externally or internally driven, to the system.

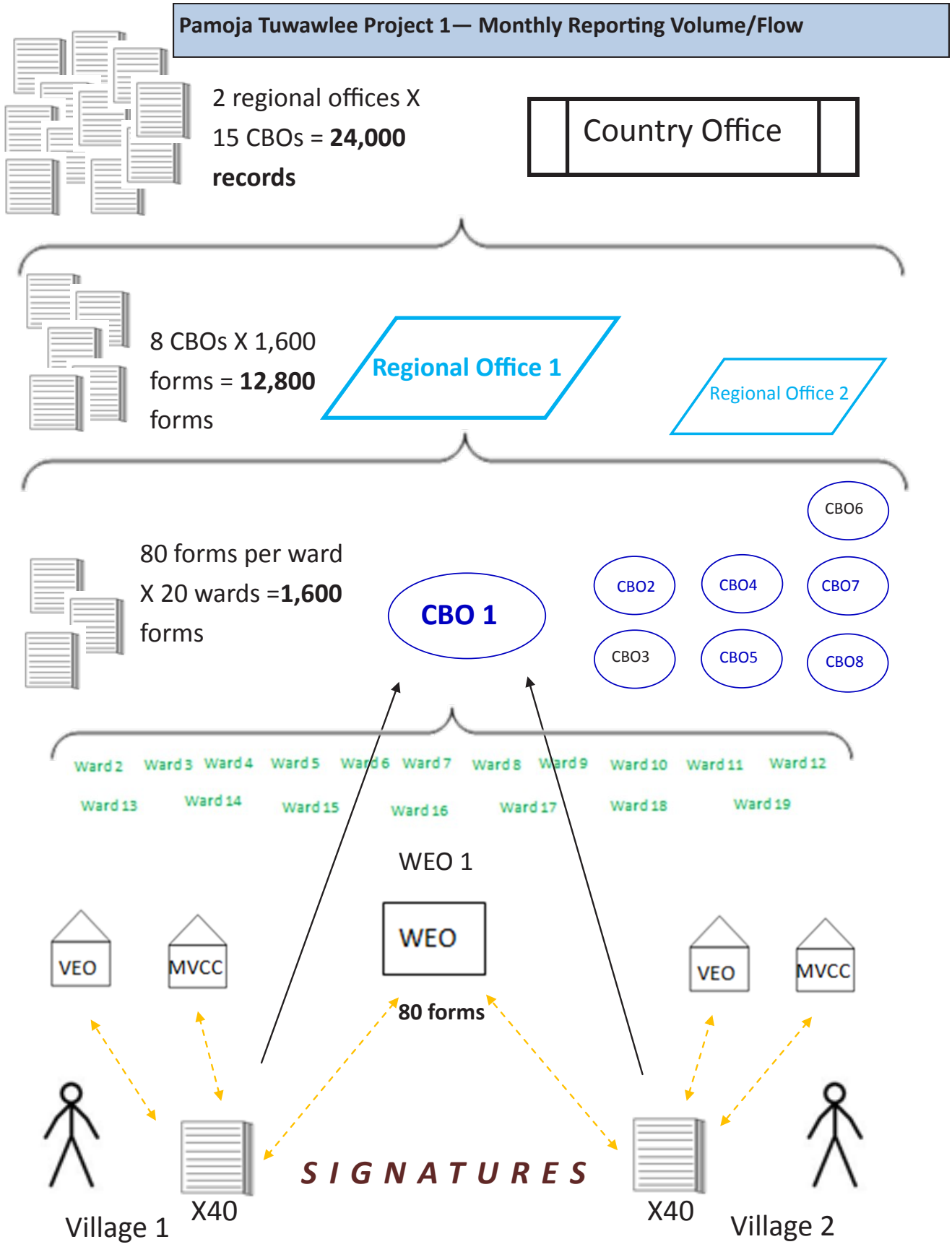
Acronyms

ASRH	Adolescent Sexual and Reproductive Health
CBO	Community Based Organization
DCDO	District Community Development Officer
DQA	Data Quality Assessments
DSW	Department of Social Welfare
DSWO	District Social Welfare Officers
FGD	Focus Group Discussions
GOT	Government of Tanzania
HBC	Home Based Care
IGA	Income Generation Activity
IP	Implementing Partner
IPG	Implementing partner group
LGA	Local Government Authority
M&E	Monitoring and Evaluation
MOHSW	Ministry of Health and Social Welfare
MTEF	Medium Term Expenditure Framework
MVC	Most Vulnerable Children
MVCC	Most Vulnerable Children's Committees
NCPA II	National Costed Plan of Action II
OVC	Orphans and Vulnerable Children
PEPFAR	President's Emergency Plan for AIDS Relief
PMORALG	Prime Minister's Office, Regional Administration and Local Government Authorities
PMP	Performance Monitoring Plan
PROMIS	PEPFAR Reporting and Organizational Management Information System
SILC	Savings and Internal Lending Communities
TOT	Training of Trainers
TWG	Technical Working Group (TWG)
USAID	United States Agency for International Development
VEO	Village Executive Officer
WEO	Ward Executive Officer

USAID FROM THE AMERICAN PEOPLE PEPFAR MEASURE Evaluation

This research has been supported by the President's Emergency Plan for AIDS Relief (PEPFAR) through the United States Agency for International Development (USAID) under the terms of MEASURE Evaluation cooperative agreement GHA-A-00-08-00003-00, which is implemented by the Carolina Population Center, University of North Carolina at Chapel Hill. Views expressed are not necessarily those of PEPFAR, USAID, or the United States government.

Appendix A—Project 1 Monthly Reporting Volume and Flow



Appendix B—Project 2 Monthly Reporting Volume and Flow

10 CBOs X 252 forms = 2,520 forms

Pamoja Tuwawlee Project 2— Monthly Reporting Volume/Flow

COUNTRY OFFICE

3 CBOs X 252 forms = 756 forms

REGIONAL OFFICE

2 districts X 66 volunteers = 252 forms

CBO 2 | CBO 3 | CBO 1

44 forms X 3 stations = 132 forms for a District

District 1
OVC Focal Person

District 2

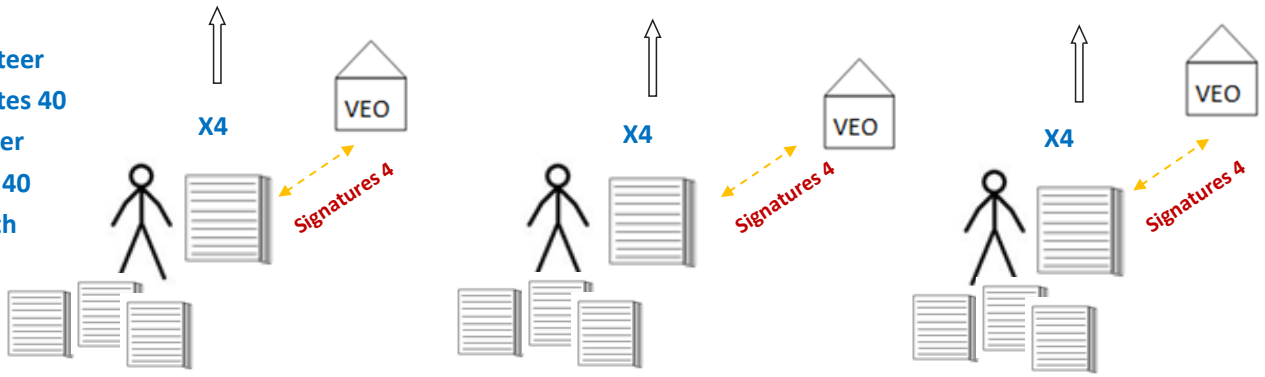
11 volunteers per station x 4 forms = 44 per station

Station 1
11 vol * 4 forms

Station 2
11 vol * 4 forms

Station 3
11 vol * 4 forms

1 volunteer completes 40 forms per month. 40 stay with him/



Appendix C

PAMOJA TUWALEE MVC PROJECT

3. MVC/Household Service Provision Form

Instructions:
(1) This form is used to record services provided by volunteers to an individual MVC and/or household.
(2) If a volunteer provides services to more than one MVC within the same household, one form must be completed for each MVC.
(3) Essential fields are: identifiers (#1-5), Child's name (#8), Date of birth (#9), Child's sex (#10), and at least 1 service provided (#15).

1. Region:		2. District:		3. Ward:		4. Village/Street:		5. Implementing Organization:	

6. Community Volunteer's Name

Last:		First:		Middle:		7. Volunteer Code:	

8. Child's Name

Last:		First:		Middle:		9. Date of birth	Day	Mo	YR	10. Sex	☐ Male ☐ Female

A. Services Provided to MVC *Tick all services provided to MVC and/or MVC household during period indicated in #11.*

11. Month during which service/s were provided:		12. Year:		13. HH Code:		14. Child Code:	

15. Type of service provided		Tick if provided			Tick if provided			Tick if provided
Health	(1) Referral to basic health care	☐	Food and nutrition	(1) Providion of food	☐	Protection & Legal	(1) Birth certificate provision	☐
	(2) Primary health education	☐		(2) Nutrition education/counselling	☐		(2) Referral to protection/legal	☐
	(3) Provision of CHF card	☐		(3) Mid-upper arm circumfrence			(3) Other	☐
	(4) Provision of insecticized mosquito net	☐		5.5-12.4 cm [Red]	☐	Shelter	(1) House renovated/built	☐
	(5) Provision of clinic card	☐		12.5-13.4 cm [Yellow]	☐		(2) Other	☐
	(6) Other	☐		13.5-25.5 cm [Green]	☐	HES		Yes / No
							(1) Member of IGA group?	☐ / ☐
Educa-tional support	(1) Support for primary education	☐		(4) Other	☐		(2) Member of SILC group?	☐ / ☐
	(2) Fee for secondary/vocational education	☐	Psycho-social support	(1) Psychosocial counselling/Spritual support	☐			
	(3) Other support for secondary education	☐		(2) Referral to kids clubs	☐			
	(4) Other support for vocational training	☐		(3) Other	☐			

16. General comments:	

C. TO BE COMPLETED BY SUB-GRANTEE

Date when form submitted by volunteer:	Day	Month	Year	Date when form entered into database:	Day	Month	Year	Name of person entering form into database:	
Data quality issues identified (if none, write "none"):									

Form reviewed and approved by:

_____ MVC Committee

_____ Village Executive Officer

_____ Ward Executive Officer

Version: 2013-09-30

Appendix C *continued*

TAARIFA YA HUDUMA KWA WWKMH KWA MWEZI	Mwezi _____ Mwaka _____
Taarifa hii ya huduma kwa WWKMH itatakiwa kujazwa kila mwezi na KWWKMH au watoa huduma kwa watoto katika jamii husika. Taarifa hii itakusanywa na KWWKMH ya mtaa na kupelekwa kwa kamati ya kata na hatimaye kwa Idara ya Ustawi wa jamii ya wilaya	Jina la mtoa huduma _____

Mkoa _____	Halmashauri: _____	Kata/ Shehia:	Kijiji/Mtaa_____

Na	**WWKMH**			**MKUU WA KAYA**			Huduma zilizotolewa (*weka namba ya huduma iliyotolewa kwa kila mtoto kulingana na geresho hapo chini)*							
	Jina	Umri	Jinsi (Me/ ke)	Jina	Umri	Jinsi (Me/ ke)								

MAGERESHO YA HUDUMA ZILIZOTOLEWA

ELIMU & MAFUNZO YA UFUNDI STADI	CHAKULA & LISHE	MAKAZI & MALEZI	ULINZI & USALAMA	AFYA YA MSINGI	HUDUMA & MISAADA YA KISAIKOLOJIA
1. Vifaa vya shule 2. Sare za shule 3. Ada ya shule 4. Usafiri 5. Kufuatilia maendeleo ya mtoto shuleni 6. Ada ya bweni 7. Kumtembelea shuleni 8. Wezesha kujiunga na ufundi stadi	9. Tathmini ya hali ya lishe kwa kaya/WWKMH 10. Huduma za kuboresha usalama wa chakula 11. Chakula kwa njia ya virutubisho 12. Mafunzo ya elimu ya lishe 13. Utoaji wa chakula "LISHE" (miaka 0-8) 14. Huduma ya lishe ya ziada. 15. Kilimo cha bustani za mboga mboga za kaya au jamii	16. Malazi 17. Mavazi 18. Usafi 19. Ukarabati wa nyumba 20. Ujenzi wa nyumba 21. Malezi na msaada kwa familia	22 . Msaada wa kisheria 23 . Kupata cheti cha kuzaliwa 24 . Msaada wa kuandaa mpango wa urithi 25 . Malezi (Mama mkubwa)	26 . Kujiunga na CHF (Mfuko wa afya ya jamii) 27 . Huduma za matibabu 28 . Chanjo (0-5) 29 . Matibabu ya maji 30 . Kupata vyandarua vilivyowekwa dawa 31 . Elimu ya kuboresha afya	32. Huduma za ushauri 33. Ushiriki Klabu ya watoto 34. Huduma za kidini 35. Kutembelewa nyumbani 36 Kupewa vitu vya kuchezea 37. Mwongozo katika stadi za maisha na mahusiano

KUIMARISHA UCHUMI WA KAYA	RUFAA
38. Tathimini ya hali ya Kiuchumi kwa kaya 39. Kushiriki upatu au aina yoyote ya mzungusho wa fedha 40. Makundi ya uzalishaji na uongezaji kipato 41. Amana za mtaji 42. Wezeshwa kwa mpango wa upatikanaji mikopo ya riba nafuu 43. Kuwezeshwa kupata ujuzi/stadi za ufundi na upatikanaji wa fursa za ajira na vitendea kazi. 44. Shughuli za kiuchumi zinazolenga kuchangia gharama za elimu 45.Kuwezesha kaya kupata rasilimali 46. Miradi ya ufugaji kwa kaya	47. Rufaa kwa malezi ya kambo 48. Rufaa kwa huduma za kiafya 49. Rufaa kwa makundi ya uzalishaji 50. Rufaa kwa huduma za ushauri 51. Rufaa kwa huduma za kielimu 52. Rufaa kwa elimu ya ufundi stadi 53. Mhamisho/ kupewa fedha 54. Rufaa ya chakula au lishe 55 Rufaa ya huduma za kiroho/ kidini

Imetayarishwa na:	Cheo:	Tarehe:
Imehakikiwa na:	Cheo:	Tarehe: