
Building Evaluation Capacity within an Agricultural NGO using SWOT Analysis

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Abstract
Evaluation capacity building (ECB) aims to create a learning organization committed to increasing evaluation knowledge and skills among employees (Fitzpatrick, Sanders, & Worthen, 2011). ECB framework was used to determine the scope of monitoring and evaluation activities within an international agricultural non-governmental organization (NGO) using a strengths, weaknesses, opportunities, and threats analyses (SWOT). The objectives were to analyze current practices, capacity for evaluation activity at the project and organizational level, and propose a model for building evaluation capacity within the NGO. Existing documents and artifacts were content analyzed (Krippendorff, 2004) and 44 NGO employees, donor agency representatives, and similar NGO representatives were interviewed regarding their evaluation practices. Results indicated that project-level evaluation staff had sufficient training and expertise to conduct evaluation within the scope of their projects (strength). However, ECB and organizational learning from evaluation efforts were not institutionalized (weakness). The NGO lacked evaluation expertise and leadership at headquarters level due to staff attrition and lacked technology to capture data for aggregation purposes to report on progress made toward mission between projects and over time (threat). Opportunities included promoting an Evaluation Specialist to lead efforts by recruiting from within the NGO and advancing the individual’s knowledge and skills through pursuit of a doctoral degree in evaluation. The NGO is advised to adopt a knowledge management system to capture and aggregate data between projects and over time to communicate better overall mission accomplishments to stakeholders and donors.

Keywords: evaluation capacity building, international agricultural development monitoring and evaluation
Introduction

Agricultural non-governmental organizations (NGO) are important for increasing food security globally through research, extension, and education projects. Educating farmers about modern agricultural practices is a fundamental role of agricultural NGOs and government-sponsored extension services (Strong & Harder, 2011). There are over 10 million NGOs worldwide who receive funding from governments and private donations to support project activities (Nonprofit tech for good, 2017). Donors require accountability for expenditures through a process of monitoring and evaluation (M&E). NGO and extension staff should possess program planning, needs assessment, and evaluation skills to be effective in their roles (Shinn, Wingenbach, Briers, Lindner, & Baker, 2009; Strong & Harder, 2011). Gaining M&E skills is a process of formal education, on-the-job training, and support from employers through evaluation capacity building continuing education (Ghimire & Martin, 2011).

Evaluation capacity building (ECB) is a subset of evaluation practices separate from M&E functions. ECB aims to create a learning culture within an organization by “increasing knowledge, skills, and attitudes about evaluation among employees” (Fitzpatrick, Sanders, & Worthen, 2011, p. 238). ECB ideally leads to organizational learning and better decision making and was predicted to become the “next evolution of the evaluation profession” with the potential to transform organizations into dynamic learning systems (Preskill & Boyle, 2008, p. 457). However, challenges to building evaluation capacity among staff remain due to situational and environmental barriers such as lack of leadership, lack of staff training, and lack of a community of practice to reinforce skills amid more urgent organizational needs.

United States Agency for International Development (USAID) noted ECB should be a necessary practice among NGO staff to transition organizations from donor-centric external evaluation (accountability) to internal self-directed learning (monitoring) practices in the 1960’s (Schaumburg-Müller, 1996). NGOs have shifted from externally-driven expertise-oriented evaluations such as those reported by Baker, Bassey, Jimoh and Akande (2015) to internally-driven program-oriented evaluation practices and capacity building. However, program-oriented evaluations are limited by an overemphasis on objective achievement and outcome reporting; missing opportunity for organizational learning that is a central theme of participant-oriented and capacity building evaluation frameworks (Fitzpatrick et al., 2011).

In the 1990s, USAID decreased internal staff by 37% and increased funding to NGOs by 57%, shifting responsibility to NGOs to manage most aspects of international development, including M&E (Kock & Weeks, 2015). However, NGO staff competencies have not kept pace with required evaluation activities. ECB continues to be a challenging endeavor for NGOs as staff are limited by a lack of evaluation competencies. Evaluation was seen as an important and top-rated skill for NGO and agricultural extension staff (Conner, Roberts, & Harder, 2013; Ghimire & Martin, 2011; Kock & Weeks, 2015; Shinn et al., 2009; Strong & Harder, 2011); however, it was often positioned as a rear-view mirror activity to meet donor-reporting requirements before moving onto the next project.

The need for this study was to investigate current ECB practices within an international agricultural NGO. The research reported here details the extent of evaluation
capacity at NGO and makes recommendations for institutionalizing best practices for organizational learning while improving staff capacity for evaluation.

**Conceptual Framework**

Evaluation capacity building (ECB) was defined as “a context-dependent, intentional action system of guided processes and practices for bringing about and sustaining a state of affairs in which quality program evaluation and its appropriate uses are ordinary and ongoing practices within and/or between one or more organizations/programs/sites” (Stockdill, Baizerman, & Compton, 2002, p. 8). ECB is realized when an organization invests in upgrading and maintaining employees’ skills regarding evaluation competencies (Carman & Fredericks, 2010; Stevahn, King, Ghere, Minnema, 2005), resulting in institutionalized evaluation practice for systematic learning and improvement. ECB has reached maturity when employees understand that evaluation is ‘the way we do things around here’ and is a necessary component of projects and contributes to organizational learning.

Quality program evaluation protocols have been summarized by Fitzpatrick et al. (2011) and Stufflebeam (2001). They recommend that projects begin with a project theory of change (typically depicted as a logic model) outlining how the project will accomplish its goals within its unique context, situation, priorities, necessary inputs, expected outputs, and protocols for capturing short, medium, and long-term outcomes and impacts. An organization that embodies ECB views the evaluation staff as integrated team members who apply evaluation logic, processes, and practices to co-create effective programs while capturing lessons learned throughout the life of the project. ECB begins with valuing organizational learning and is a never-ending commitment to improving knowledge-management, quality, and cycling lessons learned into future projects (Stockdill et al., 2002).

Competencies for evaluators include a broad taxonomy including professional practice, systematic inquiry, social science research methods, situational analysis, project management, and reflective practice (Conner et al., 2013; Kock & Weeks, 2015; Shinn et al., 2009; Stevahn et al., 2005). Ghimire and Martin (2011) reported that extension staff require skills in assessing learning experiences and outcomes, evaluating program results, assessing program impacts, and using impact data for planning future programs.

**Purpose and Objectives**

The purpose of the study was to evaluate the scope of M&E activities within an agricultural NGO, including capacity building, through a strengths, weaknesses, opportunities and threats (SWOT) analyses. The objectives were to analyze M&E activity within the organization (strengths and weaknesses), identify threats, and propose opportunities for building evaluation capacity within the NGO.

**Methodology**

SWOT analyses is a study undertaken by an organization using social science research methods to evaluate strengths, weaknesses, opportunities, and threats for improvement (Gill, Ricciardi, Bates, & James, 2017; Helms & Nixon, 2019; Osita, Onyebuchi, & Justina, 2014). The four elements are operationalized as internal (strengths and weaknesses) and external (threats and opportunities) factors that are favorable or unfavorable for the organization to achieve its mission. Strategic fit occurs when the internal situation matches the external situation and the organization is well positioned to achieve
and produce desired results. SWOT analysis can be used in a variety of contexts such as strategic planning, exploring new solutions to challenges, marketing, organizing, identifying barriers to success, or in crisis mode.

The NGO under study is a public international organization (PIO) with nonprofit status. It is headquartered in the US while most work is carried out in Africa and South Asia. The NGO has over 800 employees and strives to increase smallholder farmer income in developing countries. USAID is a major donor with European governmental equivalents and foundations accounting for additional funding.

Data were collected to analyze strengths and weaknesses of the NGO’s current M&E system, identify threats to building evaluation capacity, and propose opportunities for the NGO to become a leading-edge evaluation practitioner among peers.

Archival documents (memos, reports, 13 funding proposals, six evaluation reports, eMails, and NGO Strategic Evaluation Plan for 2012-2015) related to institutionalizing M&E and the scope of M&E activity proposed were analyzed using content analysis methods (Krippendorff, 2004) to identify protocols and techniques applied to M&E practice. Salient themes were distilled regarding quality, depth, and breadth of M&E practices organization-wide. A systematic reading of texts and artifacts was conducted and extensive notes were taken to summarize themes for the SWOT analysis. The frame for content analysis was defined by best practices in evaluation according the American Evaluation Association (2004) and summarized by Fitzpatrick et al. (2011) and Stufflebeam (2001).

A comprehensive evaluation plan should include a theory of change (depicted as a logic model) explaining how project activities will result in an improved state of affairs for beneficiaries, plans for capturing short, medium, long-term outcomes and impacts by outlining a detailed strategy for data collection, analysis, reporting, timeline, identification of M&E personnel, and sufficient budget for M&E activity. The evaluation plan is typically juxtaposed to the project methods plan to display not only the intervention but also the intention of the organization to capture data for organizational learning and accountability.

The researcher interviewed 44 people including 21 NGO employees during the summer of 2016, two M&E specialists from two similar NGOs, and five representatives from donor agencies. The researcher conducted 16 interviews with NGO employees winter 2017 to gather additional data in-field (Accra and Tamale, Ghana, and Lomé, Togo). These interviews served as triangulating evidence to the 2016 data and to gain a deeper understanding of M&E practices at the project level. Interviewees included the Headquarters leadership, Director of Global Field Programs, Country Directors, Deputy Directors, Agronomists, Grants and Contracts Officers, Chiefs of Party, M&E Specialists, and donor agency representatives.

The 44 interviews were conducted face-to-face at NGO and donor agency headquarters or via telephone for some international staff. Participants were identified by the NGO President and Division Directors as having a leadership role within the organization or directly involved in M&E practice. All participants were solicited via eMail by the researcher following an letter from the NGO President to introduce the study. Participants were informed of their human subject rights as study participants. Those that chose to participate were engaged in a long interview
(average one hour each) that was audio-taped, transcribed, and shared back for member-checking purposes (Merriam, 1998). All interviews followed a semi-structured interview protocol that was developed in consultation with the NGO leadership team. The transcripts were cleaned and loaded into a qualitative data analysis software program, ATLIS.ti® (Scientific Software Development, 2017). The program allowed the researcher to organize and categorize the data through a process of coding, memoing, reduction, synthesis, and generation of themes (Creswell & Poth, 2018).

Strategies for enhancing trustworthiness (Tracy, 2010) included triangulating participants’ claims with archival documents and other interviewees, member checking by sharing interview transcripts and the final report with participants, peer-review and member-reflection of study findings with leadership, and conceptualizing the study with participants to ensure the results were accurate, practical, and applicable (Merriam, 1998). Procedural, situational, relational, and exiting ethics were practiced throughout the study (Tracy, 2010). All participants were ensured protection of their rights as human subjects, privacy and confidentiality were safeguarded, and reciprocity in reporting to apply findings was guaranteed to build evaluation capacity at NGO.

**Results**

M&E activity was overseen by three division directors (West Africa, East Africa, and Asia). Ninety-six staff were employed to carry out M&E from 15-100% time. The efforts were directed toward project-level M&E and staff reported to their respective Chief of Party. M&E execution began after the project was funded. Chief of Party hired one to three internal M&E staff and external consultants to conduct project-level studies. M&E staff managed all M&E activity including establishing indicators, developing data collection instruments, managing data collection and analysis, and contracting with communication specialists and external consultants for composing donor-required reports.

The general M&E protocol consisted of preparing a preliminary M&E plan and theory of change (logic model) at proposal inception. After the project was approved for funding, the Chief of Party hired one to three M&E staff that were responsible for creating a more extensive Performance Monitoring Plan (PMP) and establishing indicators based on donor agency guidelines. Project-level M&E staff analyzed and synthesized the data, and wrote reports. Reports were sent to headquarters for storage in the archival system.

The most common methods for collecting M&E data were paper surveys administered to beneficiaries and head of household; focus groups and one-on-one interviews with beneficiaries; photographs; videos; key informant data sources such as business owners who in turn worked with farmers in private-public partnership projects; GIS/GPS for mapping farms; mobile devise administered surveys; and voucher systems that allowed tracking of agricultural inputs purchases from beneficiary farmers.

Much of the data was collected by the implementing business owners of agricultural inputs who worked directly with beneficiary farmers after receiving a sub-award from NGO. As part of the sub-award expectations, business owners gathered primary data from farmers and gave it to M&E specialists who entered it into Excel or Access database for analysis and reporting. New tools were being developed such as electronic vouchers that allowed NGO to track agricultural input sales and
distribution directly from farmers to link to business owner outputs.

There were several threats to data aggregation over time and between projects. Data, instruments, and reports were stored on local computers used by M&E staff. Primary data and documents were not transmitted to Chief of Party or headquarters staff, only finished reports. There was no system in place to collect project data for aggregation purposes. The only form of aggregation was in the written narratives of the reports (Word or PDF format), which was unusable for cross-project statistical analysis. Specific data points were not stored or shared in Excel/Access format, which would have allowed for the creation of a master database for data aggregation. In addition, high staff turnover resulted in some historical data and records being lost as computers were reformatted in-between users.

M&E staff met requirements for monitoring project activities and outputs, collected sufficient data based on established indicators, and submitted timely reports to donors. Donor agencies reported receiving frequent reports on project outputs based on established indicators. M&E staff had adequate training and skills for the required tasks. M&E staff focused primarily on monitoring function. However, the overall M&E program lacked a deeper examination of the data to move the effort toward comprehensive evaluation, learning, and sharing across projects over time.

Challenges to advancing M&E included a lack of leadership at headquarters level to direct organization-wide M&E implementation due to staff attrition. Much effort had gone into planning for and institutionalizing M&E through a 2011 M&E strategy session, a 2012 team meeting, a 2012 strategic plan, and hiring an evaluation specialist in 2015 (resigned after one year). However, little of the sound advice documented in the notes was adopted; thus, institutionalization of M&E did not gain traction. Barriers for effective M&E implementation included “isolation, duplication, little capacity for roll-up, and failure to integrate systems” (2011 meeting notes, p. 14). In addition, frequent staff turnover undermined successful M&E implementation for long-term organizational learning.

The most significant threat to organizational learning was a lack of M&E expertise and leadership at headquarters level to institutionalize evaluation practices. An M&E specialist is needed who understands projects across the organization, operating in 23 nations, and is able to create a systematic M&E protocol for gathering information and aggregating data to report on the degree NGO is addressing its primary goal: increasing global food security through small holder farmers. There is a need for a common set of indicators that are collected across all projects. Indicators should match donor agency criteria and be able to tell NGO success stories. Many individuals (University faculty, external evaluation consultants, and internal scientists) were collecting and reporting data; however, the reports and articles were infrequently shared organization wide. Organizational learning was also hampered by a lack of infrastructure to standardize, harmonize, and aggregate data across projects and time. There is an opportunity in adopting a robust knowledge management system (KMS) to collect, analyze, visualize and store outputs from all projects.

**Analysis of Capacity for M&E at the Project Level**

Thirteen funded and unfunded proposals were reviewed to determine the degree of M&E activity contained within. M&E activity included project goals, objectives and major evaluation activities.
designed to capture short, medium, and long-term outcomes, and impacts. A complete plan included target indicators, data collection and analysis protocols, and a reporting strategy. In addition, a theory of change (logic model) for the overall project should be presented. Theory of change is an explanation of how project activities will result in an improved state of affairs for project beneficiaries or the cause and effect mechanism of activity upon outcomes and impacts (Fitzpatrick et al., 2011).

An evaluation plan should include a process for capturing impacts beyond the life of the project. Impact evaluation measures the changes attributed to the intervention and answers the question: How were participants’ lives changed as a result of the project? What was the additionality of the project toward social good? Counterfactual data analysis is typically required (control and treatment groups) to fully understand the impacts of a project on a community.

Seven of 13 proposals (54%) did not include an M&E plan containing a data collection strategy, data analysis protocol, or reporting beyond promising a technical report required by donor agencies. Six of 13 proposals (46%) promised M&E activity; however, data collection protocols were not provided. Funding for M&E was included in one of 13 proposals for independent consultants. Overall, organizational integration, ownership, and commitment to M&E activity was absent from most proposals.

Six evaluation reports were reviewed to assess adherence to best practices in evaluation protocol (Fitzpatrick et al., 2011; Stufflebeam, 2001). Most reports provided a summary of findings, background of the project, and project outputs, for example number of people served, workshops offered, and acres planted. The methods for collecting data were infrequently mentioned. Evaluative judgements or answering the question: *did the project accomplish its stated goals and objectives?* were provided as targets reached. The reports did not go beyond listing outputs and provided few lessons to contribute to organizational learning.

None of the reports contained information related to American Evaluation Association (2004) standards for quality control. None of the reports provided authorship, a management plan for conducting the evaluation, a budget to explain costs related to M&E activity, or timelines for major M&E activities as recommended by the majority of evaluation models (Stufflebeam, 2001).

Opportunities for improvement: Many of the findings exceeding targets, some by as much at 669%. For example, 200 field days were promised and 1,338 were delivered. With such successes, case studies could be done to document methods for achieving success to contribute to organizational learning. It should also be explained how exceeding targets were financially supported given available funding for the project. For example, the project budgeted for 200 field days and offered 1,338. How were the additional 1,138 field days paid for? Best practices in M&E goes beyond capturing outputs to fully understanding and documenting project activities, success, and failures to contribute to organization learning. When project staff exceeds targets, there is great value in documenting success as separate case studies and publishing results on how such successes were achieved.

Staff and donor agency representatives reported many weaknesses to effective M&E efforts at NGO. Institutional level leadership for M&E was lacking. M&E efforts were decentralized and driven by regional directors and Chief of Party. Division level staff created M&E reports...
that were shared with donors, headquarters, host governments, division directors, managers, Chief of Party, regional agribusiness coordinators, and other stakeholders; however, M&E activity was not contributing to organizational learning or building evaluation capacity. One of the most important weaknesses was a lack of a knowledge management system (KMS) to collect, archive, and aggregate data for system-wide reporting across projects and time.

Donors agencies noted that NGO evaluation reports were timely and well written; however, contained minimal data on impact, lacked a systematic data collection strategy, lacked archival data, and lacked aggregated data. They suggested the NGO develop systematic evaluation protocols; discuss targets in proposals; and create indicators for each project that matched donor indicators.

**Conclusions and Recommendations**

To build evaluation capacity, the NGO should implement M&E activity - from program inception to close out - and engage in systematic organizational learning and continuous improvement. Evaluation’s role is to improve an organization’s performance by “instilling new ways of thinking” (Fitzpatrick et al., 2011, p. 14) using social science methods to collect and analyze data about overall program implementation, fidelity, and performance. Internal evaluation expertise can serve as subject matter experts for organizational learning by providing a continuous stream of feedback about project activities and short-term outcomes that aid implementation fidelity to keep the project on track.

NGO has an opportunity to transform evaluation activity into meaningful organizational learning and continuous improvement to accomplish their mission. Torres and Preskill (2001, p. 388) defined organization learning as “a process of continuous growth and improvement that (a) uses information or feedback about both process and outcomes (i.e. evaluation findings) to make changes; (b) is integrated with work activities, and within the organization’s infrastructure (e.g., its culture, systems and structures, and leadership and communication mechanisms); and (c) invokes the alignment of values, attitudes, and perception’s among organizational members.” Alaimo (2008) noted that “evaluation becomes a part of organizational learning when it is institutionalized as part of the organization’s information, power structure, processes, and systems that influence decision making and action” (p. 77).

Unfortunately, many NGOs have found evaluation activity disappointing and ineffective for organizational learning (Hoole & Patterson, 2008) as reports are generated for donor agencies to meet requirements, yet contribute little to program effectiveness. In addition, donor agencies often do not use evaluation findings to help organizations make programmatic changes. Organizations that engage in evaluation as an honest, transparent, and ongoing discussion rather than as a bureaucratic process become learning cultures driven by leadership who is willing to learn from mistakes, reward good ideas, and encourage staff toward continuous improvement (Hoole & Patterson, 2008).

Alaimo (2008) found that CEOs who encouraged evaluation activity as program-driven and outcome-focused (versus donor agency accountability driven) 1) hired staff dedicated to evaluation, 2) used evaluation results to improve programs, and 3) demonstrated a long-term commitment for program evaluation.

**Build Evaluation Capacity System-Wide**
NGO should engage in long-term evaluation capacity building (ECB) to institutionalize evaluative logic, processes, practices, and enhance practitioner’s skill at every stage of project development, from ideation (Brown & Kelsey, 2016) to development and implementation. ECB has reached a state of maturity when employees understand that evaluation is ‘the way we do things around here’ and is a necessary component of projects.

Engage in Impact Reporting
NGO evaluation teams should engage in impact evaluation as requested by donor agencies. Impact evaluation goes beyond counting numbers of participants; kilos of products delivered; number of workshops offered. It strives to systematically unpack the key variables underlying change. The World Bank and other international development organizations emphasized impact evaluation and the use of randomized controlled trials to establish cause and effect mechanisms for change (Mertens & Wilson, 2012).

Adopt a Knowledge Management System
Organizational learning was a primary weakness of M&E at NGO. A knowledge management system (KMS) should be identified and adopted along with identifying an M&E specialist and building M&E infrastructure. The M&E specialist needs a functional KMS to implement successful M&E protocols, engage in evaluation capacity building, and engage in rigorous data collection and accurate reporting across projects and time.

Promote an M&E Leader from Within the NGO
NGO should identify an internal M&E specialists that possess tacit knowledge of donor agency requirements, practical field experience, appropriate educational background (bachelor of science and Master’s degrees), and aspirations for doctoral studies to become the M&E leader. The individual would oversee donor agency reporting requirements as well as create a framework to capture long-term and systematic data for organizational learning and sharing. The framework should include:

1) Developing strategic indicators from NGO’s mission and donor agency expectations;
2) Select and customize a USAID and International Aid Transparency Initiative (IATI) compliant and approved database to unify data collection into one global system;
3) Develop a system to archive data that is centralized and cloud-based;
4) Engage in reflective practice to incorporate learning and sharing from data into future agricultural development activity, leading to a better understanding of the causal variables for making progress toward advancing agriculture practices to enhance food security;
5) Provide training and professional development to all project-level M&E staff; and
6) Create a community of practice among M&E staff by organizing frequent professional development meetings to build evaluation capacity and a culture of cross-talk and learning.

Evaluation Team Organizational and Reporting Structure
M&E activity has two key functions – organization learning and accountability to stakeholders and donor agencies. To maintain appropriate accountability functions, the evaluation specialist should...
report directly to a subcommittee, or Evaluation Advisory Group (EAG) appointed from the NGO Board of Directors.

References


