IMPROVING MONITORING AND EVALUATION IN CONSERVATION AND DEVELOPMENT EFFORTS

By

JENNY SIGALET

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Dr. Brian Belcher, Thesis Supervisor
Royal Roads University

Dr. Chris Ling, Thesis Coordinator
School of Environment and Sustainability

Michael-Anne Noble, Director
School of Environment and Sustainability

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Abstract

Efforts to alleviate poverty and conserve biodiversity require reliable methods to monitor and assess changes in conservation and development status. Projects intended to achieve biodiversity conservation and poverty alleviation objectives often fall short of their goal. Considering the investments made to support these efforts, this is a real concern to society. Evaluating the effectiveness of these efforts is crucial to receive ongoing support and to learn what’s working, what’s not and how it can be improved. This research examines current M&E and impact assessment practices and systems at conservation and development organizations garnered through a survey and interviews and documents opinions, experiences and lessons learned from key informants. Organizations are facing common barriers but share opportunities to improving M&E. Embracing a culture of learning, synthesizing a common vocabulary and implementing organizational change are important steps in improving M&E practice to provide information and data for better M&E and impact assessment.

Keywords: monitoring, evaluation, impact assessment, livelihoods, conservation
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Introduction

In 2000, the United Nations (UN) established the Millennium Development Goals (MDGs). These goals provide a blueprint to address the world’s most pressing issues around human and ecological well-being. Each goal has a series of targets assigned to it; for example, reduce biodiversity loss in order to achieve a significant reduction by 2010, or halve the proportion of people whose income is less than $1 USD a day (UNDP, 2010). International conservation and development organizations are working to achieve biodiversity conservation and livelihood improvement objectives through project-based interventions, often in support of the MDGs (Turrall, 2009). They are examining current monitoring and evaluation practice to improve the design and implementation of systems that will provide them with the methods and tools they need to effectively monitor progress, evaluate outcomes and demonstrate impacts from their projects. In an effort to establish higher standards for effective monitoring and evaluation, there are emerging best practices around the components and the implementation, and I am interested to learn how organizations that are taking on biodiversity and poverty alleviation objectives are navigating the challenges with measuring progress and change in their efforts. This study explores how international conservation and development organizations are converging in their approach to improving efforts to monitor, evaluate and assess impacts of their interventions.
Background: Conserving Biodiversity and Improving Livelihoods

Poor rural people are highly dependent upon the goods and services provided by natural resources for subsistence and as a safeguard against increasing poverty (Leisher, Sanjayan, Blockhus, Kontoleon & Larsen, 2010; Bass, Rose, & Smith, 2010). The biodiversity of a region can provide tangible benefits to the poor, including employment through resource harvest, medicinal plants, food through plant and wild animals and non-timber forest products for barter or income generation and building materials for housing (Endamana, et al., 2010). These resources are crucial to rural livelihoods (Leisher et al., 2010).

Biodiversity describes the sum total of all the Earth’s living resources (Roe, Thomas, Smith, Walpole & Elliot, 2011). It is the variability among living organisms from all sources, including diversity within and between species and of ecosystems (Convention on Biological Diversity, 1993 as cited in Roe et al., 2011). The UN’s MDGs represent an international commitment to alleviate rural poverty (MDG 1: Eradicate extreme poverty and hunger) and protect natural resources through biodiversity conservation (MDG 7: Ensure environmental sustainability). The MDGs classify impoverished people as those whose income is less than $1 USD a day. Similarly, the Millennium Ecosystem Assessment (MEA) is a call to action to assess the consequences of ecosystem change for human well-being and determine what is necessary to enhance the conservation and sustainable use of ecosystems and their contribution to human well-being (Millenium Ecosystem Assessment, 2005). These global initiatives are amplifying conservation and development efforts around the world. Organizations have been
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working to achieve biodiversity conservation and livelihood improvement objectives through project-based interventions in support of the MDGs (Turrall, 2009). The leading efforts to reduce poverty through community development interventions and protect biodiversity through resource conservation and management are overseen by conservation organizations and development organizations around the world.

What is a Conservation Organization?

Conservation organizations work to achieve biodiversity conservation by conserving natural resources such as land, air and water and prevent over exploitation of these resources. Conservation is the act of preserving or protecting natural resources in the face of environmental drivers of change, and biodiversity conservation refers to the protection, maintenance or restoration of natural resources in order to ensure their long term survival (Roe et al., 2011). Projects aiming to tackle biodiversity loss, prevent deforestation and wildlife trafficking, restore declining fisheries and mitigate the effects of climate change are currently at the forefront of the conservation movement (Schreckenberg et al., 2010, p. vii). An example of wildlife population protection efforts includes endangered or species at risk from wildlife trafficking, bushmeat hunting and habitat degradation. Deforestation and forest degradation through agricultural expansion, conservation to pastureland or palm oil plantations, destructive logging or infrastructure development occurs in some of the most biologically diverse regions of the world.

Some of the largest and most influential conservation organizations in the world include the Worldwide Fund for Nature (WWF), World Conservation Union (IUCN), The Nature Conservancy (TNC), Wildlife Conservation Society (WCS), African Wildlife
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Foundation (AWF), Fauna & Flora International (FFI), and Birdlife International (BLI). WWF’s mission is to conserve biodiversity through conservation of critical spaces and critical species and by reducing the negative impact of human activity (WWF, 2012). Biodiversity conservation is IUCN’s central mission and they demonstrate their commitment by tackling climate change, achieving sustainable energy, improving human well-being and building a green economy (IUCN, 2012). AWF takes a landscape approach to preserve African land, protect African species and empower African people (AWF, 2012).

At the international policy level, the UN declared 2010 the International Year of Biodiversity and in an effort to maintain momentum, named 2011-2020 the UN Decade on Biodiversity (Convention on Biological Diversity, 2012). They are encouraging governments to continue to implement and communicate results of national strategies and promote the involvement of a diversity of organizations and actors in the goal of mainstreaming biodiversity into broader economic and development activities (CBD, 2012). Mainstreaming biodiversity conservation efforts into broader development activities will result in projects or programmes that link biodiversity with livelihood improvement objectives (discussed below).

**What is a Development Organization?**

Development organizations aim to improve human well-being through projects and advocacy that support improved human health and nutrition, education, access to safe drinking water, women’s rights, and alternative income strategies and often humanitarian responses to natural disasters. The term ‘poverty’ has many definitions and goes beyond
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boundaries set by economic status. The Development Assistance Committee of the Organization for Economic Cooperation and Development (DAC-OECD) explains the intricacies of poverty: “the dimensions of poverty cover distinct aspects of human capabilities: economic (income, livelihoods, decent work), human (health, education), political (empowerment, rights, voice), socio-cultural (status, dignity) and protective (insecurity, risk vulnerability)” (OECD, 2011 as cited in Roe et al., 2011).

In addition to development and emergency response, organizations such as CARE International, Oxfam, and ActionAid, also influence policy research and raise awareness for human rights and development (Oxfam International, 2011). For example, CARE’s mission is to: “serve individuals and families in the poorest communities in the world” and their objectives are to strengthen capacity for self-help, deliver relief in emergencies and influence policy at all levels and address discrimination in all its forms (CARE, 2012). All of these efforts aim to help, in various ways, some of the world’s most vulnerable people (Wright, 2011), referred to as ‘intended beneficiaries’ or ‘project affected peoples’ (PAP) (White & Phillips, 2011). These organizations typically receive funding support from international development agencies and multi- and bi-lateral donor organizations, some of which include the United States Agency for International Development (USAID), the Canadian International Development Agency (CIDA) and the UK Dept. for International Development (DFID). The International Fund for Agricultural Development (IFAD) is a UN agency providing loans to developing countries to support rural development. To date, IFAD has invested 12 billion USD into approximately 860 projects and programmes, estimated to reach and benefit 370 million rural poor people
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(IFAD, 2011). Development efforts generally receive funding from governments (the Norwegian Agency for Development Cooperation (NORAD), for example) as well as private foundation funding and individual private donations. High profile private foundations such as the Ford Foundation and the Bill and Melinda Gates Foundation often support both conservation and development efforts. Recent estimates show global investment into addressing poverty issues to be around $126 billion USD, and between $8 and $12 billion to address biodiversity loss (Roe et al., 2011).

Integrating Conservation and Development Objectives

There are many rationales for integrating conservation and development objectives. Linking biodiversity and poverty agendas is not new; there was recognition in the 1940s that conservation provided revenue generating opportunities that could contribute to local community economic development (Adams, 2004 as cited in Roe & Elliott, 2010). Recently, it has been presented at the international level through the policy frameworks of the MDGs and the CBD targets (Roe, 2011). Global areas of high biodiversity and poverty share geographic locations, for example sub-Saharan Africa and Asia have the greatest number of poor people and areas identified as ‘hotspots’ of threatened biodiversity (Roe, 2011). Linking objectives merely because most of the world’s greatest biodiversity is geographically situated where the world’s poorest countries are may oversimplify the reason to provide rationale, although there is mounting evidence to suggest that at a variety of scales and in different ways, biodiversity and poverty do coincide (Hernandez-Morcillo et al., 2010 as cited in Roe, 2011). The fundamental link between conservation and development is that directly or
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indirectly, nature and mankind depends on the earth’s resources, and these resources are finite (WCS, 2012).

Integrated conservation and development projects (ICDPs) were first introduced in the mid-1980s by WWF in an attempt to manage the shortcomings associated with the traditional protectionist approach to conservation and resource management (Hughes & Flintan, 2001). There is no universally accepted definition of an ICDP, but ICDPs are widely acknowledged as projects with both biodiversity conservation goals and rural development components (Hughes & Flintan, 2001). The working definition has evolved, but a common characteristic is that these projects “seek to address biodiversity conservation objectives through the use of socio-economic investment tools” (Sanjayan et al., 1997, as cited in Hughes & Flintan, 2001). ICDPs work to develop and teach local communities of methods of sustainable natural resource management and agriculture that provide livelihood benefits to people while conserving biodiversity. Examples can include ecotourism, community-based wildlife management and extractive resources (Agrawal and Redford, 2006).

ICDPs have been widely implemented but are also regarded as a highly controversial approach to biodiversity conservation, mainly because of the high investments into an untested approach (McShane and Wells, 2004). They rely on the assumption that diversified local livelihood opportunities will reduce pressure on nearby natural resources and that local people and their practices are the foremost threat to the biodiversity of the region of interest (Hughes & Flintan, 2001). The primary challenge with ICDPs is the ambiguity in which they link biodiversity conservation and poverty
alleviation. There has been little attempt to systematically define the nature of the linkage or to measure it (Salafsky & Wollenberg, 2000).

**Monitoring, Evaluation and Assessing Impact**

Organizations focusing on conservation, development and integrated conservation and development are monitoring and evaluating project-based interventions that take place at the field level (for example, a women’s empowerment project in rural India) as well as at the programme level (meeting the objectives of WWF’s forest and climate initiative, for example). They are working to improve how they evaluate outcomes of their projects (Wilder & Walpole, 2008) and provide evidence of impacts stemming from their efforts (Turrall, 2009). Monitoring, evaluation and impact assessments provide a way to track change throughout the life of a project and show outcomes and impact on conservation or livelihood status. In order to effectively demonstrate that they are achieving their goals and using external funding effectively, organizations need to monitor and evaluate their projects. Monitoring, evaluation and impact assessment are different but interrelated and interdependent concepts. In practice, these processes overlap and are part of the same organizational learning process and organizations in both the conservation and development communities tend to lump these processes together (Bose, 2007). The tools, methods and approaches used in M&E can be complementary
or substitutable, including logical frameworks, formal surveys, rapid appraisal methods and participatory tools such as Most Significant Change\(^1\) and Outcome Mapping\(^2\).

Ideally, good M&E practice involves a logic model in order to begin to think about the activities, resources, outputs and stakeholders involved. A theory of change or causal model is a set of ideas describing what the change should be, how the process of change should occur; what drives the process of change; the resources needed; who the stakeholders are and what is the resulting outcome the process to reach the outcome may look like (Furman, 2009). A project’s theory of change should also recognize that systems are complex, and the project plays but one small part in the system. Baseline data should be collected to provide a benchmark for monitoring change. Staff and resources support the regular collection of information and it is fed back into the system in order to make real time, necessary adjustments. Finally, the information garnered through monitoring should feed into other evaluations and impact assessment.

Monitoring and evaluation, however, are not straightforward activities. Experience suggests that developing frameworks for monitoring and evaluation is relatively easy compared to the real challenge of effective implementation at the project level (Bose, 2007). In addition, practical experience and previous lessons learned in the field have been overlooked, and often go unanalyzed and undocumented (Stem, Margoluis, Salafsky & Brown, 2005).

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\(^1\) Davies, R. & Dart, J. (2005). The ‘most significant change’ (MSC) technique: A guide to its use. Available at: http://www.mande.co.uk/docs/MSCGuide.pdf

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Monitoring

The OECD defines monitoring as “a continuing function that uses systematic collection of data on specified indicators to provide managers and the main stakeholders of an ongoing intervention with indications of the extent of progress and achievement of objectives and progress in the use of allocated funds (OECD, 2002). Monitoring collects data and tracks progress of activities within a programme or project, and allows programme managers to observe progress or improve performance. Monitoring information can be collected on a continual or a periodic basis throughout the life of the project, and guidelines indicate that 2-3% of the project budget should be dedicated to monitoring activities (Winderl, n.d.).

Monitoring can provide project or programme managers with the information they need for day-to-day decisions in a project environment where change is a constant; provide early warning of problematic activities or processes; help guide the project against the outlined goals and objectives; stimulate learning among staff and those involved and assess progress to enable accountability requirements (IFAD, 2002).

Evaluation

The OECD defines evaluation as: “The systematic and objective assessment of an ongoing or completed project, programme or policy, its design, implementation and results. The aim is to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact and sustainability. Evaluations should provide information that is credible and useful, enabling the incorporation of lessons learned into
the decision-making process of both recipients and donors” (OECD, 2002). Evaluation is generally an oversight function but is dependant upon the information and outputs of the monitoring in order to provide an assessment of the overall project or programme (M. Spilsbury, personal communication, September 2010). Evaluations are often conducted for mid-term review purposes and upon the completion of a project. Evaluation can be performed ex-ante, meaning it is performed before the implementation of an intervention, and to assess the potential of a programme or project (OECD, 2002). Ex-poste evaluations – the most common form of evaluation – are undertaken immediately or not long after the completion of a project, programme or intervention to assess results (OECD, 2002).

There are different purposes for evaluation. Within the conservation community, Stem et al. (2005) found that most evaluation is conducted for basic research, accounting and certification, status assessment and effectiveness measurement. Accounting and certification evaluates the fulfillment of deliverable and financial obligations to funders and/or governments. Status assessment is an evaluative measure of ecological conditions with conservation interest, such as species population or ecosystems (Stem et al., 2005). Effectiveness measurement evaluates the outcome of an intervention based on a specific group’s intervention. Stem et al. (2005) split effectiveness measurement into impact assessment and adaptive management.

Evaluations can be done internally and jointly through the participation of multiple donor agencies and/or partners (OECD, 2002). It is considered that external evaluations provide a more objective perspective, but it’s also argued that self-evaluation
provides more value than external evaluations in terms of the contribution it makes to organizational and project learning (Kuby, 2000 as cited in Douthwaite, Kuby, van de Fliert & Schulz, 2003).

**Impact Assessment**

The OECD defines an impact as a “positive and negative, primary and secondary long-term effect produced by an intervention, directly or indirectly, intended or unintended” (OECD, 2002). Impact assessment – also commonly referred to as ‘impact evaluation’ – focuses on assessing the outcomes and impacts of interventions on ecological and livelihood status (Leeuw & Vaessen, 2009). Because it takes time for change to be realized and measurable, assessments are typically completed 1 – 5 years after a project has finished. It is important to note that impact refers to the lasting and sustained changes that have been brought about by a project or programme (Roche, 2000).

Initial approaches to impact assessment began in the early 1950s and were about predicting the probable environmental, social and economic impacts of a project (Roche, 2000). Consequently, the key methods included environmental impact assessment, social impact assessment, cost benefit analysis (Roche, 2000). Shifting focus from inputs and activities to outcomes and impacts increases the complexity of the evaluation because the presence and interaction with external factors increases (Turrall, 2009). Change can be brought about by a combination of the activities of a project or programme intervention
and the continual dynamics of the context or environment where the activities occur (Roche, 2000).

Assessing and establishing the impact(s) of a project provides evidence for organizations to claim attribution. Attribution attempts to determine whether observed impacts are related to the project (protected area, education, etc.) or other external factors that are unrelated or uncontrolled by the project (Schreckenberg et al, 2010).

Quasi-experimental design is an approach used in impact assessment. A control group matching the characteristics of the target group is selected for before and after comparisons to help evaluate impact as a result of the intervention. Quasi-experimental design is quite costly and time consuming; World Bank estimates indicate the cost can range from $50,000 to $1 million, depending on the scale and size of the programme (World Bank, 2004). In addition to the heavy cost, the challenges with this model include dealing with ‘spillover’ effects if the control group and the target group are geographically near each other, and selecting both groups using the same criteria (Turrall, 2009). Withholding the control group from a community-based intervention such as an educational programme or nutritional intervention, for example, also raises some ethical concerns.

The Evolution of Monitoring and Evaluation in Conservation and Development Interventions

The concept of monitoring and evaluation emerged alongside conservation efforts as part of social and environmental impact assessments but has a long history in business project management (Stem et al., 2005). A results-based management (RBM) approach
Improving Monitoring and Evaluation in Conservation and Development Efforts

to M&E was adopted in the mid-1990s, shifting the focus of M&E from outputs to measuring results. Many different approaches for M&E in the conservation and development field have been developed over a short period of time, and organizations have been attempting to build systems from scratch, overlooking key lessons learned in the past (Stem et al., 2005).

Standard M&E frameworks began with the logical framework. Introduced by USAID in the 1970s, the logical framework (logframe) is a tool to plan, implement, and manage projects. It was widely adopted and is still commonly used in one form or another. Logframes help to provide a clear structure for a project’s goals and actions, the activities required to achieve them, and the measures used to track progress towards these goals and objectives (Stem et al., 2005). However, it is widely acknowledged that logframes are limiting and have been criticized for forcing the assumption that change occurs in a linear, logical fashion (Gasper, 1999 as cited in Stem et al., 2005). Logframes have also been criticized for maintaining a structure of control and domination, imposing a rigid reporting format, being unsuitable for policy and advocacy work and for imposing a predominantly western concept (Bose, 2007). The logframe has influenced project monitoring and evaluation to focus on the inputs and outputs of interventions, rather than on outcomes and impacts. M&E methods may focus on the project deliverables and outputs (Sayer et al., 2007), and most organizations struggle to implement appropriate and effective systems for assessing progress (Wilder and Walpole, 2008).

Good M&E provides information that is important for evaluating results and assessing project impact as well as managing and adapting to early and unexpected change. It provides a basis for informed decision-making and allows managers to
demonstrate what conditions will facilitate conservation and/or development (Stem et al., 2005). WWF recently commissioned a report to see how other organizations in the conservation and development sectors are measuring change in order to develop some of their own best practices. They explored efforts under topics such as the purpose of the M&E system, attribution, linking to global indicator sets, downward accountability and coping with resource constraints. Likewise, FFI and BLI commissioned a report to see what lessons and best practices could be learned from impact assessments of livelihood projects amongst international development organizations. The main findings revealed that an organization’s culture will influence the impact assessment methodology and senior management need to help foster a culture of reflection, learning and constructive criticism (Bose, 2007).

Some M&E efforts have begun to incorporate complexity into project design and implementation from the outset, largely as a result of the developmental evaluation work done by Michael Quinn Patton. Environmental and social change interactions are complex, and lessons learned from past assessments of programmes and ICDPs stress that it is unrealistic to attempt to plan for all contingencies in a highly complex social situation (Wright, 2011). In a review of M&E practice, Bose (2007) found that all development organizations reviewed, without exception, are acutely aware of the complexities that go hand in hand with measuring change. Incorporating complexity thinking or complexity theory into policy or programme design has proven to be valuable in some cases (Jones, 2011).

There are different purposes for M&E: accountability, supporting operational management, supporting strategic management, knowledge creation and empowerment
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(IFAD, 2002 as cited in Turrall, 2009). The intent behind M&E will determine who it is serving (donors, the implementing organization, or the intended beneficiaries) and exactly what is being measured in the process. Typically, it is a balancing act between monitoring for accountability purposes (tracking expenditures against budget and inputs) and learning purposes. Guijt (2008) describes the activity of monitoring as one that can be ‘viewed as designing and implementing the feedback loops necessary to ensure that collective learning is fed by ongoing information flows…” (p. 329). These feedback loops, she argues, are the vehicle for learning, and will help identify actions that are expected to be more effective in goal achievement (Guijt, 2008).

Current Issues with M&E

Baseline Data & Indicators

Baseline data serves as a point of comparison, and ideally should be collected at the outset of a project (IFAD, 2002). The baseline or raw data required to gauge progress against indicators is often missing or inaccessible, making it difficult to gauge conservation outcomes (Pullin & Salafsky, 2010). Brooks et al (2007) attempted to evaluate conservation and development projects and learned often the data collected is insufficient to assess if they have indeed had any impact.

Baseline indicators provide information on the relevant aspects of a project’s or programme’s general context, and serve as a reference for measuring progress. The
OECD defines indicators as a “quantitative or qualitative factor or variable that provides a simple and reliable means to measure achievement, to reflect the changes connected to an intervention, or to help assess the performance of a development actor (OECD, 2002). Effective indicators have to be able to provide accurate measurements and be reasonably cost effective to measure. Some (Whitehouse, n.d.) have argued that the use of indicators can be time-consuming and expensive, and shift the influence of the programme design away from what is effective to what is measurable. However, others argue that indicators come natural to human beings and provide a standard tool for planning and monitoring progress (Winderl, n.d.). Linking organization indicators to standard global indicator sets such as the MDGs appeals to some organizations (Turrall, 2009). However, aggregating the data to achieve meaningful results is more than often an ideal, but not very realistic (Turralll, 2009).

Resources

Resource constraints are an ongoing problem. M&E efforts in conservation and development face a recognized shortfall in funding and time allocated specifically for M&E, along with a general reluctance to divert resources from one aspect of the budget to another (Kapos, et al. as cited in Bottrill, Hockings and Possingham, 2011). In her review of development organizations, Bose (2007) identified a lack of skill and training of staff as a challenge to implementing impact assessment frameworks.

Involving Stakeholders
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Conservation and development organizations have recognized the value of including stakeholders or intended beneficiaries in the monitoring and evaluation process and a number of participatory tools, such as Most Significant Change (MSC) and Outcome Mapping (OM), have been developed to help achieve a greater emphasis on downward accountability. In the conservation realm, participatory approaches can be particularly useful in incorporating traditional and local knowledge in conservation (Berkes & Turner, 2005 as cited in Izurieta et al., 2011). For example, FFI used the Most Significant Change (MSC) method in a collaborative project with the Cambodian Elephant Conservation Group (CECG). MSC collects stories of change, broadly related to project objectives, and allows the project team to document evidence of outcomes and impact in the form of ‘significant stories of change’ (Wilder & Walpole, 2008). The CECG focuses on reducing human-elephant conflict with the aim of increasing local farmers’ tolerance towards elephants and helping them to understand the importance of conserving these animals and their habitat (Wilder & Walpole, 2008). Through participatory storytelling, positive and negative changes can be identified. Farmers relayed stories of planting crops that are unpalatable to elephants (such as radishes and peanuts instead of rice), and being able to take them to market. An unexpected outcome was that the elephants did not eat the peanuts but did trample them. Another positive outcome was a farmer who, on advice from CECG, planted cassava. The elephants avoided the cassava and the farmer was able to market the crop and earn enough income to stop producing charcoal (which was destroying elephant habitat). In the short term, this is considered a win-win scenario. Participatory monitoring and evaluation (PME)
can be used to empower local communities to analyze their own problems (Izurieta et al., 2011).

**Conservation and Development Trade-offs**

Another challenge is addressing trade-offs between conservation efforts and improving livelihoods of impoverished local people. Biodiversity conservation and poverty alleviation goals are dynamic in nature and successful integration of both may not be possible (Adams et al., 2004), but others argue that the interconnection of these goals is too strong for either to be attempted in isolation (Sachs et al., (2009) as cited in Sheppard, Moehrenschlager, McPherson & Mason, 2010). A recent assessment of progress towards the MDGs revealed they are synergistic in nature, and advancement towards one goal will often speed progress towards another (UNDP 2010). Acknowledging and dealing with trade-offs is difficult but has been cited as a reason for limited success of interventions (Dahlberg & Burlando, 2009 as cited in Campbell 2010).

**Current Initiatives**

The International Initiative for Impact Evaluation (3IE) arose from the ‘When Will We Ever Learn?’ working group’s recommendation that an entity be created to address the gap in impact assessment and attribution analysis. Increased pressure to show results from funding (both public and private) and the realization that attribution was poorly understood has fuelled the working group (IIIE, 2011). The working group is a partnership among members of the multilateral funding organizations, private foundations, and academic researchers, and is appears quite active in their mission to
increase development effectiveness through the better use of evidence through impact evaluation. In the conservation community, the Conservation Measures Partnership (CMP) is working collaboratively to improve conservation actions through monitoring, evaluation and impact assessment. They are working to provide new tools and practices to improve the effectiveness of conservation efforts by providing standards for project management, a standard taxonomy of terms for conservation agencies and software to help conservation project managers design, manage, monitor and learn from their projects (CMP 2010).

Initiatives to improve M&E are happening within organizations as well. The 2009 review by Turrall was commissioned by WWF to see how other organizations, (for example Oxfam, AWF, DFID, IUCN and CARE) are navigating the challenges of implementing livelihood project and programme-based M&E. The goal was to learn from other conservation actors to inform WWF practice and move it forward, implementing change across the WWF network (Turrall, 2009).

**Framework of the Study and Expectations of my Research**

Biodiversity conservation projects are increasing their attention and focus on livelihood outcomes and conversely, development efforts are taking a second look at environmental sustainability and the relationship between natural resources and livelihoods. As a result, we are seeing the goals of both conservation and development efforts converge as they frequently share objectives by aspiring to both improve local livelihoods and conserve the environment. Measuring the outcomes and impacts of these
interventions is complex in an environment of confounding and external factors. Monitoring, evaluation and assessing the impacts of these projects are considered crucial to meeting objectives (Brooks et al., 2009; Stem et al., 2005), and conservation and development organizations need well-designed methods to assess progress and measure effectively and document change through livelihood improvement and biodiversity conservation interventions.

This thesis examines whether and how conservation organizations and development organizations are converging in their approaches to assess progress and change through their interventions. The purpose of this research is to use practitioner experience to characterize the gaps and opportunities in current practice, and gain insight on what practitioners would like to change, in order to inform the conservation and development field in their efforts to reach a higher standard in M&E and impact assessment practice. Improving the practice of monitoring and evaluation is a significant step in moving towards developing and implementing an overall best practice for monitoring, evaluation and impact assessment. In turn, this can help managers deal with resource constraints, and provide valuable information on what works and what doesn’t to help improve biodiversity and livelihood outcomes in future interventions.

In order to adequately evaluate outcomes and, in some cases, assess impacts, conservation efforts are realizing that they need to also consider the role that people and communities play, and how they interact with the environment. In turn, development efforts are realizing that the environment has a significant role to play and influences the outcome of their work to improve livelihoods and human well-being. Consequently, I expect to see convergence in the approaches used to monitor and evaluate their respective
projects, and how respective organizations are addressing the issues surrounding resources, baseline data, organizational culture, trade-offs, and participatory approaches, in order to improve what they are doing and how they are doing it.

Through a qualitative exploration of a survey and key informant interviews, this research compares practices and experiences at the project and programme level among conservation and development efforts. It presents the results of a practitioner survey and interviews of personal opinions and experiences and identifies common challenges to implementing effective M&E and impact assessment. I expect the results of this research will join the reviews done by Bose (2007) and Turrall (2009), and I make recommendations for improvement that I hope will make a valuable and useful contribution to improved M&E practice. This research will also join other emerging efforts to catalogue the strengths and weaknesses; successes and lessons learned monitoring and evaluating conservation and livelihood improvement efforts.

**Research Question and Objectives**

The following research question forms the basis of this thesis:

Is there convergence in the monitoring, evaluation and impact assessment approaches currently used by leading international conservation and development organizations?

The objectives were to:

a) Survey monitoring and evaluation and impact assessment practitioners to learn about current practices, challenges, success stories, and learning experiences at conservation and development organizations;
b) Investigate common ‘barriers to success’, and draw lessons from findings among conservation and development organizations;

c) Provide a summary of the common approaches, challenges and emerging trends associated with M&E and impact assessment practices in the conservation and development sphere.
Methods

In an effort to reduce bias and achieve triangulation, I chose to use three qualitative research methods to address my research question. Triangulation is a research concept that is applied to reduce the limitations created by pursuing one singular method of answering a qualitative research question (Bryman, n.d.). ‘Data triangulation’ allows the research question to be explored through different data sampling strategies to create a more robust set of data (Denzin, 1970 as cited in Bryman, n.d.).

I used a literature review to learn about M&E state of practice and how it is used specifically in conservation and development interventions. I used an anonymous practitioner survey to get opinions from people doing M&E in the conservation and or development fields. At least one third of all surveys worldwide are online surveys (Evans & Mathur, 2005 as cited in Flick, 2011). They provide an efficient method of gathering and compiling information on opinions, stories and other verbal data, and are appropriate when a large number of participants will be involved in the study (Flick, 2011). In addition, online surveys are low cost, timely, and easy to use. They can reach people all over the world and generally have a lower occurrence of unanswered questions (Flick, 2011). I chose to make the survey respondents anonymous because I wanted participants to respond freely and openly about the current practice of M&E. Finally, I chose to conduct semi-structured interviews with key informants to explore individual views and perspectives in more detail (Flick, 2011). According to Kvale (1996), “The purpose of the qualitative research interview has been depicted as the description and interpretation of themes in the subjects’ ‘lived world’. For my purposes, the subjects’
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‘lived world’ is their professional experiences as M&E personnel, consultants and programme officers.

**Literature Review**

I reviewed the current published and grey literature (including organization reports, websites and blogs) concerning monitoring, evaluation and impact assessment tools and methods used by conservation and development organizations to help me establish a good comprehension of the subject and gain a ‘big picture’ understanding of current practice. I looked at organizational documents, reports, conference proceedings and other summary documents to get a flavour of current practice in the field. I read blogs (such as From Poverty to Power and studentofconservation) and subscribed to active listservs (MandENews, Outcome Mapping Learning Community, ISEALImpactsResearch) to get a sense of new techniques, people’s frustrations and the increased demand for M&E in real time. I focused on organizational reviews and reports (such as IFAD’s M&E guide, Oxfam’s internal evaluation summaries and WWF’s commissioned reports (Turrall, 2009) that provided insight into organizational M&E strategies. I also read reviews and papers that discussed new assessment frameworks, a lack of success (or admitting failure), or discussed other aspects of development and conservation projects that affect the practitioner’s ability to monitor and evaluate interventions effectively. Google search terms included ‘monitoring and evaluation’, ‘biodiversity conservation’, ‘rural livelihoods’, ‘poverty alleviation’, ‘conservation and development’. I targeted the following journals of interest: *Ecology & Society, World Development, Conservation Biology* and *Tropical Conservation Science*. I also collected
unpublished reports, theses, guidebooks through organizations’ websites, listservs and various contacts. Online information libraries such as ‘Advancing the Social Context of Conservation’, ‘ConserveOnline’ and ‘Wageningen University’s Participatory Planning Monitoring and Evaluation Portal’ provided outlets to good information. Through the review, I was able to identify the current issues and new initiatives in M&E and impact assessment.

Anonymous Questionnaire

I surveyed people involved in monitoring, evaluation and impact assessment efforts around the world. The survey was a web-based, anonymous questionnaire delivered through Survey Monkey. The questionnaire was self-administered and designed to be reliable (resulting in consistent information) and valid (producing accurate information) (Fink, 2006, p.7). I gave respondents one month to complete the questionnaire, and sent a reminder via e-mail. The questionnaire was comprised of 25 questions designed to elicit quantitative and qualitative information about current M&E practice and collect opinions and experiences from M&E practitioners, programme managers and consultants. I designed the questionnaire with input from personnel on the project team and reviewed for clarity and relevance by two M&E specialists. It received approval from Royal Roads University’s Ethical Review Board prior to launch.

The questionnaire\(^3\) was structured into three categories:

1. \textit{Organizational Characterization}

\(^{3}\) A complete copy of the questionnaire is provided in Appendix I.
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These questions were designed to elicit quantitative information about the sample of survey participants. Selecting from multiple choice answers, respondents characterized their field of work, the primary focus of their organization and classified which types of projects and programmes they were involved in.

2.) Monitoring and Evaluation

Definitions for common M&E terms (inputs, outputs, outcomes, impact) were based on the OECD Glossary of Key Terms in Evaluation and Results Based Management, and provided in this section of the questionnaire. These questions asked for information about current M&E practice, including common approaches and tools used, how data were collected, what changes were being measured, and if/how M&E was standardized within the organization. Types of questions included multiple choice, rating scale with multiple choice, and open comment.

3.) Sharing Insights

Respondents answered the questions in this category with open comment/essay box. Questions were designed to gain a better understanding of, and collect information on, the current M&E practice at organizations. I asked respondents to tell me about barriers to effective monitoring, barriers to effective evaluation and how current frameworks work to assess project outcomes. Questions were also designed to gain knowledge about opportunities, challenges, innovative practice and experience-based opinion. Example questions include: “In your opinion, how well do the currently available methods work to assess projects impacts on livelihood/conservation goals?” and “What are missing elements for overall effective assessment of a project’s actions?”
One-on-One Interviews

I interviewed 10 M&E personnel who worked at or for (as consultants) primarily conservation and primarily development organizations (5 per field) between October and November 2011. None of the interview participants were involved in integrated conservation and development initiatives. The interview guide was based on trends and emerging issues I found though the literature review and through preliminary analysis of responses to the questionnaire. The interview guide was developed based upon Kvale’s (1996) Seven Stages of Interview Research: thematizing, designing, interviewing, transcribing, analyzing, verifying, and reporting. I followed a standardized open-ended interview process (Gall, Gall and Borg, 2003 as cited in Turner (2010)). An M&E specialist reviewed the interview guide for clarity prior to receiving approval from Royal Roads University’s Ethical Review Board. Key informants discussed information about opportunities, challenges, organizational culture, attribution and impacts during the interviews.

I conducted the interviews using Skype and they lasted between 30 minutes to an hour. I took handwritten notes and if prior permission was obtained, I also audio-recorded the interviews. One interviewee was unable to participate in a Skype interview, and submitted his responses to the interview questions via e-mail.

While analyzing the interview responses, I realized I had missed adding a question to the interview guide. I followed up with key informants via e-mail to ask them...
what drove them or motivated them to become involved in M&E in livelihood or conservation projects.

Participants

Invitations⁵ to participate in the research were sent via e-mail to listserv members of a MandENews, a Yahoo! group; to members of the Poverty and Conservation Learning Group (PCLG, a subset of the International Institute for Environment and Development (IIED)) and to key subject experts solicited on advice of individuals working in the sector and through a literature review.

Interview participants volunteered through the survey or were invited upon recommendation by contacts.

Data Processing and Analysis

I downloaded survey responses from Survey Monkey in .xlsx format and into a Microsoft Excel spreadsheet. I cross-tabulated responses to questions with the primary focus of the organizations’ work: Primarily Conservation, Primarily Development, Integrated Conservation and Development, Education, or Natural Resources Management. Responses from participants who characterized the focus of their organization’s work as Public Health (n=3), Business and Management (n=1) and other (n=11) were not included in the cross-tab comparison. During the analysis, Education respondents were combined in the Primarily Development category, and Natural Resources Management respondents were combined with Primarily Conservation

⁵ A copy of the invitation letter is included in Appendix II.
To establish convergence between primarily conservation, primarily development and integrated conservation and development organizations towards their approaches to M&E and current practices, I calculated percentages and looked at which organization was doing what (for example, baseline data collection, what tools and methods they are using and if and who is using participatory approaches). Survey questions that required a comment-based response were collated and compared between organizations, similar to the analysis used for the interview data.

I manually transcribed the interviews from audio to text into a Word document, which produced 83 pages of single-spaced text. I summarized responses to interview questions in a Microsoft Excel spreadsheet. I then collated the responses for a comparative analysis between conservation and development perspectives, looking for patterns or repetition in responses to both survey and interview questions. I established convergence where a pattern or a theme emerged while I compared responses to interview questions between primarily conservation and primarily development representatives. This occurred within most of the interview questions. The key areas where organizations are converging are presented in the form of a discussion of the prevalent patterns of convergence.

Limitations of the Research

I had difficulty recruiting M&E personnel who worked at development organizations to serve as key informants. As a result, the individuals who I interviewed in the development field were generally independent consultants who work, on a contract basis, with a variety of development organizations conducting various forms of
evaluations and assessments. They are knowledgeable about current initiatives underway in the development community but are not representatives of the development organizations they work with. I also had some concerns about the inconsistent use of common M&E terms between different organizations and the implications of their meanings; I endeavoured to clarify the use of various terms and their meanings in the questionnaire and during the interviews. Finally, I originally intended to look at how M&E practice was evolving by focusing on the project level. However, many key informants are working at the programme level and provided responses to interview questions in the context of the programme.

Some respondents appear to have misinterpreted two questions in the ‘Sharing Insights’ section of the online questionnaire. Definitions for common M&E terms (inputs, outputs, outcomes, impact) were based on the OECD Glossary of Key Terms in Evaluation and Results Based Management, and provided in the ‘Monitoring and Evaluation’ section of the questionnaire. However, responses to questions about ‘impact assessment’ seem directed more towards ‘evaluation’. This could either be a survey flaw or a representation of the ongoing misunderstanding of the difference behind the meaning of the terms ‘evaluation’ and ‘impact assessment’. I explore this further in the discussion.

Finally, a broad range of opinions and experiences were expressed in the questionnaire and during the interviews in this research. However, this study does not present a representative sample of all personnel working in international conservation and development efforts.
Results

Survey and Interview Responses

I collected responses to the online questionnaire between October 6 and November 8, 2010. 82 respondents began the survey and 70 completed it. Most respondents characterized their organization’s focus as integrated conservation and development (ICD), primarily development or primarily conservation. For simplicity, I have elected to use DO to refer to a development organization and CO to refer to a conservation organization. Also, most respondents were generally responsible for project design and implementation, and programme management and evaluation. A few survey respondents were involved in research and training.

The key informant interviews took place between October 21 and November 10, 2011. The emerging trends, key themes and synergies identified in questionnaire and interview results were compared between conservation and development responses. The findings are presented here under the overarching headings of Current Practice, Barriers, Opportunities and Challenges and Impact Assessment. I present and interpret the main results of the survey and the interview responses together, based on the topic, and explore them further in the discussion.

Representation of Sample

The survey sample was approximately balanced, with 31.7% of survey respondents working for or with ICDOs, 31.7% working in the primarily conservation
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field and 36.5% in the primarily development sector. Figure 1 below represents the survey sample.

![Representation of Survey Sample](image)

*Figure 1* Representation of organizations in the anonymous online survey

**Characterizing Respondent’s Roles**

Figure 2 (below) shows respondents involved in project design and implementation (28.6%), programme management (20.6%), project evaluation (14.3%); research (12.7%) and training and development (6.3%). Other respondents characterized their roles as: all of the above; results management advisor; grant director; social development advisor; and, monitoring and evaluation. None of the conservation respondents indicated they were involved in project evaluation, suggesting that evaluations for the conservation organizations represented in the survey are often conducted externally. Also noteworthy was that no ICDO representatives indicated they are involved in training and development. The nature of ICDOs often includes a training
component in community interventions (such as teaching more sustainable agricultural or fishing practices), so I believe that the individuals involved in training and development of ICDPs were simply not part of the distribution lists that I targeted.

![Primary role of respondents at their respective organizations](image)

*Figure 2* Primary role of respondents at their respective organizations

**Current Practice**

**Collecting Baseline Data**

84.5% of all organizations represented are collecting baseline data on ecological, livelihood or species population status. Survey respondents revealed that 70% of development, 100% of conservation and 84.2% of integrated conservation and development organizations are collecting baseline data as part of their monitoring plans.
This is interesting as the trend in the literature indicates that there is often insufficient data to assess outcomes or impact (Brooks et al., 2007; Pullin & Salafsky, 2010). 62.1% of respondents from all organizations reporting they collect baseline data on livelihoods status, followed by baseline data on ecological status (44.8%) and species population status (41.4%). 15.5% of respondents from the total sample and representing DO and ICDOs indicated they are not collecting baseline data.

![Graph showing percentage of conservation, development, and ICD organizations collecting baseline data.]

*Figure 4* % of conservation, development and ICD organizations collecting baseline data

**Indicators**

Participants indicated that DOs are primarily linking project indicators to MDGs, whereas COs are not. Aside from MDG 7 (ensuring environmental sustainability), the majority of MDG targets are focused on improving human welfare, and therefore it is not surprising that conservation organization are less focused on meeting MDG targets. 31%
of respondents indicated they were not linking project indicators to any larger global set.

Figure 5 below illustrates the variability among organizations linking indicators to standard global indicator sets.

![Are project indicators linked to global indicators?](image)

**Figure 5** Organizations linking project indicators to global indicators

**Purpose**

COs and DOs are converging on the overall purpose for carrying out M&E activities. 85.9% of survey respondents indicated that the main purpose for conducting monitoring, evaluation and impact assessment was ‘learning to influence future work’ followed closely by ‘accountability’ at 76.9%. Figure 6 (below) illustrates there were marginal differences in responses from conservation and development representatives, but are generally parallel in their purposes for M&E. Key informants also indicated in
their interviews that their organizations are shifting from doing M&E primarily for accountability purposes to primarily for learning purposes.

![Bar chart showing main purposes for monitoring, evaluation, and impact assessment in organizations.](chart)

**Figure 6** Main purpose behind monitoring, evaluation and impact assessment at conservation organizations and development organizations

**Available Methods**

Participants revealed that they are using a variety of different approaches to monitor and/or evaluate their projects, and indicators and logframes remain popular. Organizations often have indicator sets in place for programme areas, and projects that fall within that programme are required to measure progress against those indicators. Key informants revealed that in order to meet funding requirements, they are often required to use a donor’s logframe for project M&E. It is interesting to note that a large
number of respondents indicated they are using participatory methods, including Outcome Mapping. This supports the trend observed in the literature that participatory methods are increasing in popularity because they provide a useful platform for stakeholder participation and can be used in conjunction with more traditional methods.

Theories of change/causal pathways are used by approximately one third of respondents. A project’s theory of change (ToC) helps project managers to articulate the anticipated long term impact of their projects and explore ways to represent change in a dynamic way, as opposed to a linear process.

Figure 7 below illustrates a sample of methods, tools and concepts that are used by respondents.

Figure 7 Tools used to assess progress towards project outcomes and impacts as indicated by respondents
Survey respondents in all fields were divided on how well the available methods worked; some felt they worked very well, others felt they did not work at all. Respondents were asked to qualify their answers based on their experiences. There was a recurring indication that the challenge lies in selecting the most suitable methods for the project. One respondent in the conservation sector commented: “I think that the methods work well and what is missing [are] simple and well-tested frameworks for helping conservation field staff understand which methods are appropriate, useful and effective for helping to answer a given management question.”

Others indicated that resources (staff, time and money) inhibit the selection and implementation of the appropriate method. A respondent in the conservation sector remarked: “In my experience the problem is not the tools, but finding the time to use them effectively.” Another respondent in the development field remarked: “The methods may work but there is rarely enough skills/expertise in an organization to capture both livelihoods and conservation goals adequately.” The challenge of measuring both conservation and livelihood impacts, particularly in ICDOs, is not addressed by currently available methods. Survey participants indicated that few methods integrate both conservation and livelihood impacts, and are either too conservation or livelihood-oriented to provide an accurate assessment.
Participatory Methods

In keeping with the current trends, 67.2% of respondents are using participatory methods in one form or another. Figure 8 below illustrates the various activities where stakeholders are engaged in the M&E process.

![Participants working in organizations using participatory methods](image)

*Figure 8* Participants working in organizations using participatory methods for specific activities

**Missing Elements**

Participants identified a number of factors that they consider to be missing elements for the overall effective assessment of a project’s actions, including increased engagement of senior management; participation of beneficiaries/employment of participatory methods; time and staff capacity.

Budget was often mentioned among respondents from CO, DO and ICD organizations, particularly when linking M&E to actual dollar investment and planning
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(and budgeting), long term evaluation and/or impact assessment. Along those lines, many indicated they felt there needs to be greater emphasis on monitoring outcomes (over activities and outputs) and funds dedicated to training. One respondent in the development field offered: “…implementing organizations are often so much focused on the short term activities related to the implementation process on the ground that not enough attention, time, [and] money is given to ‘distracting’ activities that are important for the longer term, such as thorough monitoring, evaluation and learning.”

Standardization of donor methods and reporting systems was identified as a key missing element. Respondents in the conservation sector felt that valuable M&E resources were spent meeting donor requirements. Donors often require the organizations they’ve funded to use donor M&E method(s) and in light of ongoing resource constraints, coordinating reporting systems among the donor community could help ease the resource burden of M&E personnel in the conservation sector.

Finally, participants working for DOs and ICDOs indicated there needs to be a greater push from within the organization, i.e. senior management, to commit to honest assessments and fully become ‘learning organizations.’

**Barriers to Effective Monitoring and Evaluation**

COs, DOs and ICDOs share common challenges with regards to resources, politics and complexity. Cost, staff resources and time were the most commonly cited barriers to effective M&E among participants involved in conservation, development and ICDO interventions.
Figure 9 Common barriers to effective monitoring and evaluation

Participants working for DO and ICDO organizations chose to add comments on ‘the determination to be seen as successful’ and ‘staff perception of themselves being monitored’ as barriers. Other commonly identified barriers included a lack of baseline data, lack of leadership, and lack of attention to confounding factors/complex environments, poor understanding of the qualitative/quantitative data balance and the organizational culture to pursue M&E.

Resources

The most common complaint among survey and interview participants was lack of resources, referring to all or a variety of staff, funding, time and capacity, as a barrier to effective M&E. 68% of survey respondents indicated that a lack of staff resources are a barrier to effective monitoring and evaluation, followed closely by ‘cost’ at 67%. Third
in line was time at 56%. Acknowledging resource constraints as a challenge with M&E was also prevalent in the M&E literature. One key informant despondently remarked: “We just – we lack resources to do all of the things we need to do.” Interviewees remarked that ‘resource constraints’ is the typical knee-jerk reaction within the organization but all indicate that adequate resources are a limiting factor to the success, continued usefulness and relevance of M&E activities.

**Opportunities and Challenges**

**Opportunities**

Participants in the study are optimistic about the variety of opportunities for improved M&E and informed impact assessment.

M&E personnel in the conservation field are excited about the increasing availability and capacity of certain technologies, including the world-ready availability of remote-sensing technologies. Information and social media technologies such as the use of mobile phones in African landscapes and the use of Twitter to share real-time information are making a difference in collecting information for monitoring purposes.

There was frequent mention of ‘complexity’, and incorporating complexity thinking into project design, implementation and evaluation from survey and interview informants. Informants see complexity both as an opportunity (“…great opportunities to apply complexity thinking” [in M&E practice]) but also as a challenge (“the proper
understanding of complexity…come to terms with what the complex (and simple and complicated) dimensions of their work implies for monitoring and evaluation…”).

There is also an increasing awareness and understanding for the need and value of better M&E practice. Field staff, programme managers, senior management, donors, and researchers have realized they need innovative approaches to M&E. The donor community wants to see better M&E, and informants indicated that donors are increasingly willing to provide the investment required. The Gates Foundation, for example, is seen by informants as a donor who understands complexity. In addition, senior management at these organizations are enlightened about what M&E can do for them, specifically how the information provided through M&E activities can be used strategically to make informed, results-based management decisions and improve performance management.

Key informants across the board identified learning and the opportunities they see for learning and sharing lessons as an opportunity. Organizations in the conservation and development sectors are making a point to learn from successful and unsuccessful experiences, and to contribute to the larger community as well as within the organization and across programmes. For example, two key informants indicated their organizations are building websites specifically to disseminate information and share lessons.

**Challenges**

Participants in the study identified far more challenges than opportunities. Practitioners in COs, DOs and ICDOs feel that a lack of investment in M&E, in terms of the resources and funding necessary to carry out M&E properly and impact assessment
activities, is a major challenge. They all indicated time, resource and capacity limitations. Participants also talked about the need for better investments in baseline data collection, and making logframes relevant for ongoing project implementation, review and planning. Fitting the complexity of a livelihood improvement intervention or conservation efforts into a linear model (such as a logframe) does not provide the flexibility required for many programmes or projects. One key informant in the conservation sector remarked: “We’re finding it very difficult to (in a more traditional way) assign our goals and objectives, assign indicators against that, assign milestones, and then to do so on an annual or a semi-annual basis where we come in and say ‘where are we moving against those indicators?’ because the truth is, almost on a weekly basis, our endpoint moves”.

Key informants reported the culture of M&E within the organization and reporting as an accountability mechanism is ‘incredibly threatening’, and both are viewed as barriers to improving practice. One participant from the development field remarked: “People are suspicious of the purpose. What [is this information] going to be used for? Can I tell you how things are really going, or do I have to protect myself in this exercise?” This is a natural tension in these settings because of the nature of the relationship between the funding and the programme: the funding (or sustained funding) depends on the information delivered in the evaluation report.

A final challenge mentioned by conservation informants was mandated monitoring. Mandated monitoring, (monitoring for legal purposes or funder-driven monitoring) doesn’t always answer the questions that managers need answered, and yet is necessary to complete. In an environment already coping with resource and capacity
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limitations, additional monitoring for stakeholder purposes amplifies the challenges created by resource constraints.

**Impact Assessment Practices**

The term ‘impact’ and questions surrounding impact assessments elicited interesting responses from survey and interview participants. ‘Impact’ has different meaning for people working in conservation, development and ICDP sectors and there does not appear to be a common understanding of definition of the word. Almost all key informants asked for further clarification, i.e. how the interviewer defined ‘impact’.

Survey participants were asked to respond on how well the available methods assessed project impacts, using the OECD’s definition (which was provided). However, most responded to evaluating outcomes, rather than impacts. It may be that this was a flaw in the survey (discussed previously), an illustration of the issues stemming from a lack of a common vocabulary, or a reflection that impact assessments are not often undertaken.

Almost all survey respondents felt it was important to conduct M&E to measure impact over inputs and outputs, and just marginally under outcomes. However, key informant interviews revealed that impact assessments, particularly those that measure long term intended and unintended effects, are not often undertaken in either conservation, development, or ICDPs. It is interesting to note the general consensus that impact assessments are important, but appear to be rarely completed. Respondents did not indicate that there were standardized practices or protocols for assessing or evaluating impacts from interventions. I speculate reasons for this include cost, capacity, a lack of proper methods, and the dynamic nature of impact. One key informant in the
conservation sector offered: “We don't even measure impact because we feel like we are not able to decide whether our attribution is actually ours…. As you can imagine the investment to come back later to measure its impact is difficult.”

Study participants understand that impact assessments are complex and require a thorough evaluation of social and environmental factors, and acknowledge their limitation to measure impact. “[if that’s what you mean]…by impact assessment, I would say we’re weak in that area.” A survey respondent in the conservation sector remarked: “[the methods] for impacts – [do not work] well at all. Most available methods are based on a set of untested assumptions.” A few key informants suggested the term ‘impact’ is a buzzword within the donor community, and as a result project outcomes – which are valuable – are overlooked. One key informant in the development field offered: “It’s being able to measure what you really do, as opposed to what your goals have to be in order to get your funding… your donor wants a report on impact; you know you don’t do it, but you know the stuff you DO do is important and good and valuable, but it doesn’t have the big [appeal]…so, that’s the challenge people have.”

Another key informant indicated that the nature of an impact assessment is better suited to a research activity, rather than an evaluation of long term effect, because of impact, in its strict definition, cannot be brought about by a single intervention orchestrated by a single organization. “…impact is what happens downstream and in the bigger pictures. So, using that definition, then impact assessment is kind of like research on ecological [and human] well-being. It’s not so much tied to monitoring and evaluation, because monitoring definitely seems to be tied to an intervention of some kind. But if you want to take on this idea that impact is bigger that any of us can achieve
alone, then impact goes beyond an intervention.” Nevertheless, most questionnaire and interview participants regard impact assessment as a worthy exercise, despite the complications associated with complexity, a lack of appropriate methods and funding.
Discussion

Conservation organizations and development organizations are converging in their approach to monitoring, evaluation and impact assessment. Specifically, they are converging in their efforts to change and improve standard M&E practice within their organization and in the challenges and barriers they face implementing M&E in their programmes and project-based interventions. Impact assessment remains difficult to achieve in both conservation and development efforts, largely due to the complex nature of measuring cause and effect in an environment as dynamic as human and environmental interactions.

I begin this section by demonstrating how conservation and development efforts are converging on change in M&E practice, and discuss what is driving that change and the various initiatives that are inspiring and/or supporting it. Then I discuss convergence on the common challenges and barriers to implementing effective M&E as indicated by participants, and show how these barriers are impeding progressive change. Third, I explore some of the reasons that are inhibiting efforts to overcome these challenges, such as fear of failure and lack of investments. Lastly, I discuss impact assessment as an exercise separate from M&E, examining the various factors that contribute to the complexity of impact assessment as a practice and identify what participants in the study have suggested for donors and organizations to do to help overcome some of these complexities.
Converging on Change

Organizational Culture: Shifting the Focus from Accountability to Learning

Conservation organizations and development organizations are both working to improve M&E practice, driven by motivated individuals within organizations and by an emerging understanding of the complexities with measuring change within an environment fraught with social and environmental dynamics. Conventional M&E practice has typically focused on accountability for project management and outputs, and rarely addresses outcomes, short and long term impacts and trade-offs (Endamana et al., 2010; Sayer et al., 2007). The culture of an organization can also dictate how M&E information is used. For example, in an evaluation of Oxfam International’s response to the 2004 Indian Ocean Tsunami, the evaluation management review reports “There were concerns that, although the evaluation exercise might identify the lessons that could be drawn from Oxfam’s tsunami response experience, its organizational culture mitigated against these lessons actually being learned or translated in effective changes in policy and practice (Oxfam, 2009, p. 46). In an organization where accountability comes first, the lessons that can be learned from through M&E can often be overlooked.

However, the perspective surrounding the purpose and rationale behind M&E is shifting within conservation and development organizations, resulting in an increased emphasis on M&E for learning purposes as much as, or more than, accountability purposes. 85% of survey participants indicated that M&E for learning purposes is a higher priority within their organizations. Key informants also revealed that attitudes towards M&E have begun to shift within the last 3-4 years, resulting in an increased
emphasis in M&E practice altogether. The individuals I interviewed recognize the value of learning and reflection and are mounting efforts within their respective organizations to foster a culture more sympathetic and supportive to M&E. Key informants reported on new initiatives in conservation organizations to use information and data obtained through M&E to make strategic, informed decisions at the programme level. There is growing recognition that agencies have past lessons and experiences to share and learn from. Organizations are creating outlets to do so, both in programmes across countries within their organization and among other like-minded groups. This growing recognition among decision-makers, senior management, and donors that M&E provides an opportunity to collect information and track progress against more than simply inputs, outputs and expenditure tracking against budget, could have the potential to improve M&E practices and standards across conservation and development efforts.

**Complexity Thinking**

Conservation organizations and development organizations are converging in their view that incorporating complexity in project planning and design presents an opportunity to improve M&E and impact assessment. ‘Complexity thinking’, a term often used by practitioners, represents the growing recognition that traditional, linear-thinking project and programme design does not provide room for emerging properties nor does it accurately reflect the reality of social and ecological interventions. Complexity thinking applies a ‘whole systems’ lens to an intervention and acknowledges that there are emergent properties and feedback processes within any system. Half of the key informants discussed complexity during their interviews and almost all at least mentioned
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it. Survey respondents referred to complexity while explaining that the currently available methods don’t provide the flexibility they need. M&E personnel are excited that complexity thinking is becoming more widely accepted, even among donors, and there is opportunity to incorporate it into project and programme planning and design.

**Individuals Motivating Change**

Through my interviews with M&E practitioners working at the programme and project level at or for conservation organizations or development organizations, I have learned that individuals are the driving force in the organizations that are shifting M&E activities towards primarily learning purposes. In some cases, they are the people who participated in the study or were mentioned by participants. These individuals are aware, through past experience, or simply through a desire to achieve better outcomes, of the limitations of standard, results-chain driven M&E and have a desire to truly realize the conservation or development objectives of their interventions. They are strategically placed to influence organizational policy and are doing so. As one key informant remarked: “We’re starting to see some enlightened top managers. For me personally, I have a major opportunity because the [senior administrator] actually listens to me.” Another key element in fostering the shifting culture around M&E practice is building trust within the organization, and among partner organizations.

Finally, these individuals are motivated to make a difference. Many have been involved in conservation or livelihood improvement interventions for some time, and have amassed a great deal of experience over the years. One participant shared what drove them to become involved in M&E: “Working long hours and not being sure if the
things that I was working towards were having the impact I predicted. And also starting to work much more with issues that had a very high development, as well as conservation component, and realizing that if I didn't pay proper attention I could be having an impact on development with unintended consequences…. Other interview participants revealed the same or similar reasons or experiences that motivated them to influence change in their organizations for better M&E.

**Convergence on Challenges and Barriers**

As I expected to learn, conservation and development organizations are each facing widespread, common challenges to implementing effective monitoring and evaluation practices. This common set of challenges includes enduring resource constraints, a lack of a shared understanding of common M&E vocabulary and lingering traditional views and rationale for M&E practices within the organizational culture.

**Resources**

Information from the survey and key informant interviews, supplemented by the literature review, strongly and consistently points to resource constraints as a key ongoing barrier to effective M&E. At 68% and 67% (respectively), staff resources and cost are seen as the most common barriers to effective M&E by respondents working in conservation and/or development. One key informant remarked: “We need to work with people who understand that good evaluation costs money.” Despite the pragmatic view that resource limitations will likely be present in any endeavour and managers will need to adapt accordingly, it is still worth exploring the concerns of practitioners in
conservation and development efforts. Funding constraints are typically present in project implementation but create a significant barrier for effective M&E. Practitioners and programme managers report that they are consistently under budgeted and therefore under-resourced, a challenge shared between those in the conservation and development communities. 40% of survey respondents felt lack of capacity and support for training among staff further inhibits good practice. Another key informant felt the increased demand for M&E in the absence of increased support for adequate training is exacerbating the problem. “I've got friends in the development sector as well who tell me that we suffer from a lack of M&E expertise globally …and because there are so few practitioners in this, it also means there's a lot of pretenders in the field. There's a lot of shoddy M&E happening out there.” Another serious issue to consider is M&E that doesn't happen as a result of a lack of resources. One key informant working in development experienced an interesting situation upon their arrival at an organization: “…there literally was no M&E done, period, before I started. It was amazing…because they produced reports. Very, very convincing reports with no data.”

Resource limitations contribute to another problem underlying M&E practices. Continually under-resourcing M&E in programmes and interventions reflects a common reality that the information and data through M&E is undervalued. Staff at all levels within the agency are failing to see this information incorporated through feedback loops and used to make informed, results-based decisions regarding strategic direction and future programming. Another key informant offered: “…we built this system to learn from it, we built it for accountability purposes but we also built it for performance
management - getting senior management to pay attention to data when it shows good and bad performance. And that's a cultural thing and they're often co-related, because if management makes decisions based on evidence, then demand for evidence goes up and the need to invest in that demand also goes up.” M&E practitioners need resources (human and financial) and capacity to estimate current status and change within these interventions at different points along the impact pathway (Turrall, 2009). Unchecked, poor investment and support for M&E will continue to limit improvement in M&E practice within conservation and development organizations.

Recognizing that there is no short-term solution to resource constraints, there is some current effort to develop tools and strategies to help M&E practitioners manage adaptively and use their existing resources to their full extent. One survey respondent commented: “We are working on a tool to help project managers decide how much to invest in monitoring and evaluation, for instance a high risk project might need to invest much more in outcome and impact monitoring than a low risk project.” Others (see: Salzer & Salafsy, 2010) have developed decision trees to help conservation managers make better decisions under similar circumstances. A better understanding by senior management and the donor community of the ongoing challenges and limitations caused by resource constraints could play a part in addressing this issue, thereby fostering an environment supportive of a more complete shift to learning-oriented M&E.

**Speaking the same language: lack of a common M&E vocabulary**

In 2005, Stem et al. identified ‘common terms’ as a barrier to monitoring and evaluation success. Organizations and researchers in the conservation and development
sectors are making the effort to compile and synthesize agency specific meanings for words common to M&E. IFAD has created a ‘Rosetta Stone’ of Logical Frameworks (Rugh, 2001) among various development organizations, and this is widely available through the web and referenced in a number of commonly well-known M&E information sharing sites. In the conservation sector, the Conservation Measures Partnership (CMP) has also created a Rosetta Stone of Project Management Systems in order to help conservationists, particularly those working in partnership with other conservation organizations, communicate effectively and translate from one agency’s system to another (CMP, 2011).

Despite the acknowledgement of the challenges associated with agency specific terminology and efforts to create a comprehensive summary of them, ambiguous language remains a significant problem to effective M&E. Key informants discussed the ongoing challenges with M&E vocabulary and the complications that arise from not sharing the same vocabulary: “I would say the biggest challenge I have encountered is getting people to have a common vocabulary. People appear to be very invested in whichever vocabulary they’re comfortable using, but the more we’re working in larger scale, whole systems conservation efforts, the more different actors are involved and there isn’t that shared vocabulary…so we have to boil things down to very basic words so that they’re not loaded with any particular agency’s jargon, or any baggage from previous administration…” The inherent difficulty with using a vocabulary that has different meanings to different actors, including partners and donors, is a tension that individuals working in M&E understand to be a part of the job. As one key informant remarked: “If you ask the Dutch what an output is, they’ll tell you it’s an outcome.” Despite recent
efforts to synthesize and disseminate a compilation of specific agency terms, it is clear that a lack of a common M&E vocabulary is still posing as an obstacle.

Stumbling Blocks to Embracing Change

There are roadblocks impeding progress to drive change to M&E practice within both conservation and development organizations. Donor expectations and requirements cause problems for employees who are already faced with making the most of limited funding, time and staff resources, but more importantly, donor expectations foster an environment where acknowledgement of setbacks or failure threatens funding. As a result, personnel can be unmotivated to report results or even engage in monitoring or evaluation.

Donors

Donor funding often depends on donor satisfaction, and ultimately personnel will work to meet donor expectations in order to have job security. The nature of the funding model creates a conflict between ‘learning’ and ‘accountability’. M&E has traditionally been a donor-driven practice within conservation and development interventions, and as a result, donor expectations influence a number of the current challenges in M&E practice. Donors often mandate M&E within the programmes they’ve funded, often directing the use of donor-specific logical frameworks and use of a prescribed set of standard indicators. Essential M&E functions are built into the budget, and (programme) evaluations meet donor expectations by focusing on the delivery of outputs. A key informant remarked: “Most of what the donors want by way of project evaluation is a
very superficial examination of whether the goal was achieved as it was written down.” This approach to M&E, reinforced by funding and staffing limitations, has restricted the focus and use of M&E information and often overlooked the opportunity to learn from the experience. In a lessons and recommendations review of past programmes addressing livelihoods and biodiversity, Wright (2011) argues that the donor perspective towards interventions – one whereby the project is managed by “detailed blueprints and accounting for everything to eliminate risk and uncertainty” (p. 7), results in a project design with no room for adjustments and where all activities must be quantifiable. This drives the measurement and assessment away from project activities that are not quantifiable, but that experience has shown really matter. Bose (2007) argues that the assessment framework used by the organization is responsible for creating the culture of M&E within the organization, and tends to influence the attitudes of staff towards intended beneficiaries, how the organization reflects upon the work, and the overall commitment to impact. Additionally, the perception among M&E staff is that this often creates an increase in workload among organizations and for project partners who are collecting monitoring data on the ground.

**The Reluctance to Monitor**

The key informant interviews revealed a pattern of reluctance or avoidance of monitoring activities in both the conservation and development communities. Key informants speculated a reason for this is a simple lack of understanding or appreciation of the value for information obtained through monitoring activities. This is quite understandable; the literature and practitioners in this study acknowledge that monitoring
activities are under-funded, under-resourced and lack capacity (Hyman, 1985; Salzer & Salafsky, 2006). The desire to avoid being criticized can be a strong motivator to avoid M&E (Hyman, 1985), and some project managers are reluctant to report project failures because of job security implications, and instead focus on upward accountability to funders over accountability to intended beneficiaries (Bose, 2007). Key informants also noted that staff responsible for monitoring activities, or project partners responsible for monitoring, are suspicious of the purpose, and that the information can be used against them. “Most humans need to assume they are doing their best at all times, and it may be a real loss of face to accept and even ‘embrace’ errors” (Michael, 1993 as cited in Schein, 1996, p. 29). In addition, there is a sense that if the information isn’t incorporated into strategic decision-making, and the report to the donor will outline the success of the project, then why monitor for anything other than the use of resources and tracking expenditures? One survey respondent working in the conservation field offered: “Staff generally are poorly train[ed] in monitoring and because the results of past assessments are not often used, they don’t see the purpose of doing more assessment.” It is not surprising that the subsequent outcome is that monitoring is underappreciated and undervalued, particularly when monitoring information fails to be incorporated into strategic management decisions.

Managers can play a key role in fostering trust within an organization, and reassuring M&E staff about the objectivity and fairness of the individuals carrying out the analyses (Hyman, 1985). As one key informant remarked: “The trust issue within an organization is really, really important. If people feel like you’re going to do something good, they’ll come to you and it’s not just creating utilization-focused evaluation, it’s
also linking into planning, using common sense and just generally working with people as opposed to against them.” A change in staff attitude, with the support of managers and senior administration, will help to complete the transition of M&E from accountability to learning and strategic, adaptive management.

In IFAD’s (2002) review of its own projects, few of them were found to have monitoring systems that could provide timely, relevant and quality information on the project’s reach. A deeper investigation into staff perceptions revealed that there was a lack of understanding, attention and commitment to monitoring by project staff (IFAD, 2002). In addition, monitoring was seen by staff as an obligation imposed upon them, with project staff completing paperwork for managers and the managers viewing monitoring as an exercise to collect data for donor reporting (IFAD, 2002).

Converging on Impact Assessment Uncertainty and Struggles

Impact assessment – or impact evaluation – and the nature of ‘impact’ poses a considerable challenge in both conservation and development efforts. Personnel in both communities acknowledge that measuring impact is extremely difficult, mainly due to the complex nature of impact and ambiguous understanding of the definition, limited methods and investment to assess impact effectively and to deal with attribution.

There is also a recognized gap in impact evaluations in the development community as a result of too few impact assessments being carried out (Centre for Global Development, 2006). This gap has emerged because governments, donors, and other funders do not demand or produce enough impact evaluations and because those that are conducted are often methodologically flawed (CGD, 2006). For example; impact
Assessment has not been institutionalized at the project or corporate level in IFAD (IFAD, 2002). As a result of the current climate, there appear to be few incentives and many obstacles for implementing standardized impact assessment. Conversations with both conservation and development key informants surrounding impact assessment yielded the same results, for example the ambiguity around the term ‘impact’, admitting impact assessments are rarely undertaken and indicating there are no standardized practices or protocols for assessing or evaluating impact. The resources (time and funding) necessary to carry out rigorous impact assessment are not always available, and in many cases both conservation and development organizations are not looking to measure impact.

**When is an impact an ‘impact’?**

There is an understanding that impact, as defined by the OECD, is difficult to measure and constantly evolving. It is different from an outcome, is measured in the long-term and can be either a positive or a negative consequence. It could also be intended or unintended, and there is a notion of sustainable change as well. An impact that may be considered a success five years following an intervention could transform and be considered a failure in 10 years. How conservation organizations and development organizations define ‘impact’ varies considerably. One key informant explained it quite well: “How different people define impact vs. outcome, or outcome vs. impact, and which is farther downstream is all quite confusing. In a project, you're only going to be able to see short-term impact - or outcomes, whichever one you pick - and in
the longer term impact - it's like a ripple in the water when you throw a rock - quite often incredibly difficult to capture, certainly within a specific project”.

An additional challenge with impact assessments, particularly for conservationists, is the social factors that can influence an impact. The qualitative and subjective variables of a social impact assessment are a challenging task that not all conservationists are equipped to do (Wilder & Walpole, 2008). It is not restricted to conservation efforts, however; practitioners in the development sector struggle with the same challenges. Social change, or changes in an open system environment, can be complex. There are unexpected, emergent results and a confluence of actors and factors (Smutylo, 2011). In addition, change can be multidirectional, uncontrollable and incremental, and interventions (through projects or programmes) are typically planned and implemented in a linear fashion, with little room for flexibility or to account for emergent properties.

The growing awareness of what is commonly referred to as ‘complexity thinking’, accompanied by an increasing range of methods and tools that offer a more flexible assessment of progress, provide opportunities for organizations to address the uncertainty and struggles they are facing with impact assessment.

Methods and Investment for Assessing Impact

Through my research, I learned that opinions on the availability of appropriate tools and methods for M&E in general are divided among practitioners. Some felt the tools were there and worked well, others did not. There is a general consensus that the methods for impact assessment or impact evaluation exercises, are not available or do not
work well. One survey respondent offered: “for impacts – not well at all. Most available methods are based on a set of untested assumptions.” Survey respondents and key informants in all three areas were united in their opinions that the methods aren’t available because the primary focus has been on programme evaluation at the outcome level, and the general methodology is simplified and too linear to properly assess impact.

**The Contribution / Attribution Conundrum**

Attribution is important to organizations. It is linked to organizational profile among the public, other organizations, governments, and donors, both new and old. However, it is very difficult to establish cause and effect accurately in an open system (Smutylo, 2010). The inherent challenge with attributing change to a single intervention, through an impact assessment or impact evaluation, is that it is difficult to discern changes as a result of a programme or project activities, and not through other factors (Mayne, 2008). Some suggest that an impact evaluation be defined as an attribution analysis; meaning that the assessment should look at to what extent an intervention altered the state of the world (White & Phillips, 2011).

Individuals tasked with M&E in both conservation and development efforts struggle to strike a balance between contribution and attribution. They understand the multi-faceted nature of change, and yet, because of the need or desire of a donor or organization to take responsibility for positive change, they are required to provide evidence of attribution. Key informants acknowledged that they work in partnership with other agencies, or are implementing projects in areas where other agencies are also
working. As one key informant remarked: “Attribution is very important, and we struggle with the whole balance with attribution and contribution, especially with [some] projects…. we’re only one of 14 major partners and it may not be impossible, but it’s going to be very challenging to tease out what exact thing we did or how we moved on it, but we’re very sensitive to the attribution.” Those outside the organization are encouraging organizations to acknowledge the limitations with claiming attribution and instead explore cause and effect by laying claim to their contributions.

There is a great deal of time, money and energy invested in interventions designed to improve livelihoods, conserve biodiversity or improve livelihoods while conserving biodiversity. The people who are involved in these efforts have amassed years of experience and are invested in the success of their endeavours. And success depends upon knowing what works. Organizations, donors, and governments need to take a step back and resist the tendency to measure progress and change in a linear fashion, and acknowledge that change within the domain of human and environmental interactions is complex. The methods, culture and a better understanding of how to improve M&E practice to inform success is emerging in conservation and development communities, and there are opportunities for pursuing success and achieving positive impact in livelihood and biodiversity interventions.
Conclusions and Recommendations

Improving M&E practice has been ongoing over the past decade, and the past five years have seen a real push to learn how and what other organizations are doing (see Bose (2007) and Turrall (2009)). In this study, I used an anonymous survey and confidential interviews with key informants working in various positions in conservation, development or integrated conservation and development organizations to determine if there was convergence in their approach to monitoring, evaluation and impact assessment. Participants were candid in their survey responses and during the interviews and offered a great deal of insight through their experience and opinion.

As I expected to learn, conservation, development and integrated conservation and development organizations are converging in their efforts to monitor, evaluate and assess impact of their interventions. They are facing the same challenges and barriers to better M&E. The ongoing problems associated with day-to-day M&E, particularly resource constraints, continue to pose a challenge to M&E practice. Problems with training and capacity, and subsequently an understanding and selection of appropriate methodology are also felt by M&E practitioners.

Baseline data collection is a part of good M&E practice, but practitioners in the development and integrated conservation and development fields are not collecting as much baseline data as their counterparts in conservation. Baseline data collection is costly, but it provides an important benchmark for evaluation and measuring long term impact. I was interested to see that 67% of respondents working for CO, DO and ICPDs
are using participatory methods. Outcome Mapping, a participatory method that is
designed to work with complexity and can be integrated with a logical frame, is used by
33% of all survey respondents.

Impact assessment – in the sense of a long term, rigorous measurement of impact – is seen as an important exercise but is fraught with problems, and as a result there is a
general sense of hesitation around doing impact assessment and subsequently claiming attribution. A lack of ‘tried and true’ methods and the investment of time and money into impact evaluation are the major hurdles to overcome before rigorous impact assessment takes place. M&E practitioners are pushing for better investment in impact assessments and improved methods to measure and assess the long-term impacts.

Efforts to develop a standard and globally understood set of M&E terms for practitioners working primarily in the conservation field and those working in the development field do not appear to be meeting the target need. Practitioners are still dealing with challenges associated with a misunderstanding of common terms. This is likely having an unintended impact on lesson sharing throughout networks as well.

Conservation, development and integrated conservation and development organizations are also converging on change, as key individuals within organizations are aiming to put M&E for learning ahead of accountability purposes and acknowledging that natural resource management and livelihood improvement interventions, of varying scale and scope, cannot be attributed to the single efforts or programme of an individual organization. This study revealed an interesting link between the organizational culture
and the underlying reluctance to monitor, largely because of fear of failure. I believe this study makes a good contribution to the M&E field by shedding light on this relationship.

Based on what I have learned through this research, I provide the following recommendations:

**Recommendation: Embrace a culture of learning and push for organizational change.**

Doppelt (2003) lists “insufficient mechanisms for learning” as one of his seven blunders to organizational sustainability. Although the context of sustainability is separate from organizational M&E, his observation is that organizations rarely institute mechanisms that allow employees to test new ideas, expand their knowledge base and learn to overcome barriers to change. There are good opportunities for both conservation and development organizations to institutionalize learning within the culture of the organization and install mechanisms to support this effort. The M&E personnel I spoke to have indicated they are motivated to make a difference. Initiatives to emphasize impact evaluation (through the International Initiative for Impact Evaluation, for example) and learn from failure (sponsored by Engineers Without Borders Canada website ‘Admitting Failure’) are influencing governments, donors and other organizations to acknowledge setbacks or failures and to resist using evaluation reports for punitive reasons.

Understanding the forces that are beneath the resistance to change is necessary in order to shift the equilibrium in organizations committed to maintaining the status quo in
M&E practice. The restraining forces are often more difficult to understand because ‘they are often personal psychological defenses or group norms that are embedded in the organizational or community culture’ (Schein, 1996, p. 28). Reinforcing the group norm is often more comfortable for people because, Schein (1996) argues, that acknowledging change is necessary creates a sense of anxiety that he calls ‘Learning Anxiety’; “a feeling that if people allow themselves to enter a learning or change process, they admit to themselves and others around them that something is wrong and imperfect” (p. 29). At well-known, international conservation and development organizations that receive and invest millions of dollars towards conservation and development, it is easy to understand the perceived fear behind acknowledging current M&E systems may be imperfect, and therefore not providing the information they need about outcomes and impact. Learning anxiety among the forces resistant to change maintains the status quo, often through defensive avoidance or ignoring information. Therefore, building the psychological safety of the organization, i.e. building trust within the leader-follower relationships, is fundamental to strengthening the driving forces and motivating change.

**Recommendation: Double efforts to synthesize a common M&E vocabulary within the conservation and development community.**

Bose (2007) review of M&E practices within the development community suggests that the development community is converging on practices and could successfully foster efforts at collaboration. The work of the CMP to create standards for project management, data exchange standards and a common taxonomy show that the conservation community is also working to create a common platform to support
conservation efforts. I encourage linking initiatives within both communities to develop and share a common vocabulary. In turn, this will help personnel working in partnerships with other organizations communicate more effectively and facilitate knowledge sharing of various M&E and IA tools and approaches and lessons learned.
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Appendix 1

Online Anonymous Questionnaire

Please respond to the following questions by answering on behalf of your organization.

Organizational Characterization

1.) What is the primary focus of your organization’s work?
Conservation;
Economic Development;
Integrated Conservation and Development;
Education;
Public Health;
Natural Resource Management;
Business and Management;
Other (please specify)

2.) What type of organization do you represent?
International NGO;
National NGO;
Independent Consultant;
Bilateral aid organization;
Multilateral aid organization;
Other (please specify)

3.) Please indicate your primary function in the organization.
Project design and implementation (including project monitoring);
Project Evaluation;
Programme management;
Research;
Training and Development;
Other (please specify)

4.) What are the main purposes for conducting monitoring, evaluation and impact assessment in your organization? Please select all that apply.
accountability;
operational improvement;
resource mobilization;
public relations and fundraising;
donor reporting;
learning to influence future work;
Other (comment box)
5.) Please characterize the focus on your organization/projects’ interventions. Select all that apply.
- Microcredit/lending;
- Research;
- Support for conservation;
- Alternative income generation;
- Technical support;
- Policy support;
- Infrastructure development;
- Community organization and capacity development
Other [comment box]

6.) Does your organization use a standardized approach for assessing progress in projects?
- All projects are monitored/evaluated using a standardized approach;
- A sample of projects are monitored/evaluated using a standardized approach;
- All projects are monitored/evaluated using different approaches and methods;
- A sample of projects are monitored using different approaches and methods;
- No projects are monitored/evaluated;
other (comment box)

Monitoring and Evaluation
The aim of this survey is to understand whether and in what way conservation and development organizations assess how objectives are met in their programmes and projects. Please respond to the following questions with respect to assessing project OUTCOMES (‘The achieved short-term and medium-term effects of an intervention’s outputs’ (OECD, 2010)) and IMPACTS (‘Positive and negative, primary and secondary long-term effects produced by a development intervention, directly or indirectly, intended or unintended’ (OECD, 2010)).

7.) What kinds of changes are being assessed/measured? Please select all that apply.
- Project or program outputs (delivery and/or quality of products from project)
- Livelihoods outcomes (changes expected to lead to livelihood impacts)
- Livelihood impacts (actual changes in well-being)
- Conservation outcomes (changes expected to lead to conservation impacts)
- Conservation impacts (actual changes in environmental quality)
- None of the above

8.) Do you collect baseline data?
- Yes; on ecological status;
- Yes; on species status;
- Yes; on livelihoods status;
- both;
- neither
9.) Do you use explicit models/theories of change (notion to understand how change may happen and how it could be influenced through intervention)\(^6\) to plan for project outcomes and impacts?

Always;  
Sometimes  
Never;  
Don’t know

10.) Do you use quantitative measures of change? Please select all that apply.

Yes, of ecological variables;  
Yes, of species variables;  
Yes, of livelihoods variables;  
None

11.) Do you use qualitative descriptors of change? Please select all that apply.

Yes, of ecological variables;  
Yes, of livelihoods variables;  
Both;  
Neither

12.) Do you use indicators\(^7\) as proxies of change?

Yes, of ecological variables;  
Yes, of livelihoods variables;  
Both;  
Neither

13.) Are projects indicators linked to global indicators?

Yes, Millennium Development Goals  
Yes, Convention on Biological Diversity Targets  
Yes, other (please specify)  
No

14.) Do you use participatory\(^8\) methods?

Yes, for developing models of change  
Yes, for developing indicators  
Yes, for collecting impact assessment data  
Yes, for participatory monitoring  
Yes, for a combination of the above  
No  
Other (comment box)

\(^6\) Or ‘Theory of change’: a set of ideas describing what the change should be, how the process of change should occur; what drives the process of change; the resources needed; who are the stakeholders; what is the resulting outcome and what the process to reach the outcome looks like  
\(^7\) measurable units of information for the outcome/milestone/output  
\(^8\) stakeholder/actor involvement
15.) Which of the following do you use to assess progress towards project outcomes and impacts?\(^9\)? Please select all that apply.

- performance monitoring indicators;
- Project Logical Framework;
- theories of change/causal pathways;
- formal surveys;
- rapid appraisal methods;
- outcome mapping;
- report or scorecards;
- participatory methods;
- adaptive management;
- other (comment box)

16.) What are common barriers to effective monitoring in your projects? Please select all that apply.

- cost;
- staff resources;
- time;
- conflict;
- lack of proper training to conduct the assessment;
- lack of appropriate methodology and tools;
- other [comment box]

17.) What are common barriers to effective evaluation in your projects? Please select all that apply.

- cost;
- staff resources;
- time;
- conflict;
- lack of proper training to conduct the assessment;
- lack of appropriate methodology and tools;
- other [comment box]

18.) In your opinion, how important is it to conduct M&E for the following? (Matrix of choice question\(^\ast\))

- a. Project inputs\(^{10}\)
- b. Project outputs\(^{11}\)
- c. Outcomes\(^{12}\)
- d. Impacts\(^{13}\)

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\(^9\) (milestones/targets/outcomes/impacts/project targets)

\(^{10}\) Resources needed to carry out the project (financial, human, material)

\(^{11}\) Deliverables or ‘tangible products’ from the project work

\(^{12}\) Results achieved at the project purpose level
19.) Does the evaluation framework allow staff to identify the following as a result of a project’s actions? (Please select all that apply)
- Short term intended effects;
- Long term intended effects;
- Short term unintended effects;
- Long term unintended effects;
- None

20.) Are you piloting any new method(s) for monitoring and/or impact assessment in your programme/project?
- Yes;
- No;
- intend to

21.) If so, please provide a brief description and tell us the incentive for doing so.
   [comment box]

Sharing Insights

22.) In your opinion, how well do currently available methods work to assess project impacts on livelihood/conservation goals? Please answer based upon your experiences.

23.) In your opinion, what are missing elements for overall effective assessment of a project’s actions? Please list and provide comments below.

24.) Are progress reports, evaluation reports and the results of impact assessments shared?

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13 Changes arising from the combined effects of project activities, including any unintended positive or negative changes resulting from the project.
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No;
Yes, within the organization;
Yes, among other like-minded organizations;
Yes, studies are published;
other [comment box]

Are you willing to follow up with us in more detail via email correspondence or a brief telephone interview in the future? Please send your contact information to Jenny Sigalet.
Appendix 2

The Centre for International Forestry Research (CIFOR) and the Centre for Livelihoods and Ecology (CLE) at Royal Roads University are collaborating on a research project to help develop more effective approaches for assessing outcomes and impacts in conservation and development projects. As a part of this work we are reviewing current theory and practice with a review of the literature and a survey of practitioners. Contemporary evaluation theory has evolved dramatically from the former emphasis on transparency and accountability, toward a much stronger emphasis on measuring and monitoring outcomes and impacts as a way to inform learning and decision making. We are interested to learn whether and how conservation and development organizations are doing this in practice. This survey poses a series of questions intended to help characterize the responding organizations and their monitoring, evaluation and impact assessment practices.

You are invited to participate in a brief, online questionnaire. The purpose of the questionnaire is to learn about assessment practices used by conservation and development organizations. We aim to characterize the current “state of practice” in assessment approaches and methods and we hope to learn about new and promising tools that may be under development or that have been tested in the field. This insight is not otherwise available through published or grey literature and will help synthesize best practices and lessons learned - including what works and what doesn’t - and learn what practitioners feel is needed to more effectively monitor and assess project and program effectiveness.

Please add your experience and opinion; the survey is anonymous and should only take 15 - 20 minutes of your time. The questionnaire will be available until October 31, 2010. Please follow this link: http://www.surveymonkey.com/s/CIFOR. If you are interested but unable to access the questionnaire online, please reply to receive a word document version.

Your insights are highly valued and will help to shed light on some key areas of interest in this field.

Please feel free to share this message with colleagues who may be interested.

Sincerely,

Ms. Jenny Sigalet
Appendix 3

Interview Guide

Could you tell me a little bit about the work you do?

**Main Questions**

1.) What is the main purpose monitoring and impact assessment (at your organization)?

2.) Are monitoring activities (including impact assessments) planned from the beginning of the project?

3.) What are the main challenges with regards to monitoring and impact assessments?
   - The main opportunities?

4.) What approach and method(s) does your organization use to assess impact?

5.) How are they/you doing it?

6.) What works well

7.) What doesn’t work well?

8.) Have you experienced avoidance/evasion to monitoring?

9.) How important is attribution to your organization?

10.) Is there an explicit effort to assess tradeoffs between conservation and development?

11.) Does your organization use monitoring and impact assessment to fostering a culture of learning and reflection?

12.) Has there been a shift in organizational policy regarding monitoring and impact assessment efforts?

Do you have any other insights you would like to share or discuss?