MILLENNIUM CHALLENGE CORPORATION

PRINCIPLES *into* PRACTICE

Focus on Results

By Sarah T. Lucas, Director

Department of Policy and Evaluation

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MILLENNIUM CHALLENGE CORPORATION

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PRINCIPLES into PRACTICE

MCC was founded with a focused mandate to reduce poverty through economic growth. MCC's model is based on a set of core principles essential for development to take place and for development assistance to be effective – good governance, country ownership, focus on results, and transparency.

The MCC Principles into Practice *series offers a frank look at what it takes to make these principles operational. The experiences captured in this series will inform MCC's ongoing efforts to refine and strengthen its own model. In implementation of the U.S. Global Development Policy, which emphasizes many of the principles at the core of MCC's model, MCC hopes this series will allow others to benefit from and build on MCC's lessons.*

This "Focus on Results" paper is the first policy paper in the Principles into Practice *series.*

In principle: MCC's "focus on results"

All development partners, including both donors and host countries, are interested in achieving results. MCC has set a high standard among the development community for its approach to results. MCC's results framework reflects a commitment to technically rigorous, systematic and transparent methods of projecting, tracking and evaluating the impacts of its programs. Coupled with transparency, this approach is a cornerstone of MCC's commitment to accountability and aid effectiveness. MCC's focus on results is motivated by some of the basic questions of aid effectiveness:

- ★ Do the expected results of this program justify the allocation of scarce aid dollars?
- ★ Has program implementation met predetermined benchmarks for progress?
- ★ Has the investment achieved its goals?
- ★ What can we learn from the experience to inform future programs?

In practice—MCC's "focus on results"

MCC translates this principle into practice in a manner tailored to its focused mandate. MCC has a singular focus: to promote poverty reduction through economic growth. This translates into one central goal – to increase incomes of program beneficiaries. MCC's results framework (see Box 1) is designed to provide the information MCC and partner countries need to reach that goal. There are five basic questions that MCC seeks to answer over the course of program design, implementation and evaluation:

1. **Which investments proposed to MCC will best support economic growth and poverty reduction?** Most poor countries have many development needs, and stakeholders, both local and international, often struggle with setting priorities. MCC uses three tools to help identify investment opportunities that will be cost effective and have the biggest impact in terms of raising local incomes and reducing poverty.
    - MCC asks country partners to conduct a **constraints analysis** that identifies the main barriers to private investment and economic growth. Based on this analysis, and in broad consultation with civil society and the private sector, partner countries submit proposals for projects to overcome these barriers to growth.
    - Country partners and MCC then use **benefit-cost analysis** to estimate the expected increase in local incomes of each proposed project. This helps MCC assess how much "bang for the buck" a certain investment will yield, and helps distinguish between projects with significant potential to spur growth and reduce

poverty, versus those that may be politically popular within a partner country but do not have sufficiently promising returns.

* The benefit-cost analysis describes how the dollars spent on each activity will lead to higher incomes. It generates an **economic rate of return** (ERR) that reflects the fundamental economic viability of each proposed investment—that is, whether the expected results justify the costs.

2. **Who will the investments benefit, and by how much?** To answer these questions, MCC and country partners use a beneficiary analysis (BA) to assess how the total income gains estimated in the ERR analysis will be distributed across different income groups in a country or targeted program region. The ERR and BA, together, inform project design and decisions about which country proposals to support in the MCC Compact.

3. **How do we know investments are on track to reach the intended impact of income gains?** To identify the most important indicators to track during implementation, MCC looks first to the project ERRs. The ERR analysis is built on program designs that link proposed projects activities to the anticipated impact on local incomes. For example, a proposal to provide training to farmers in new cropping practices would link inputs (farmer training) to outputs (number of farmers trained) to outcomes (number of farmers actually adopting new farming practices), and finally to the projected impact (higher local incomes). Project design includes input, output and outcome measures that are built into monitoring and evaluation (M&E) plans. These plans allow MCC and MCAs (entities established by partner country governments to implement MCC Compacts) to track program performance against targets. These M&E plans also track progress against key policy reforms and institutional improvements that are integrated into compact programs to enhance their impact and sustainability. MCC receives data on a quarterly basis from country partners; in an effort to provide performance information in almost real time, MCC aims to have data cleaned, verified and available on its website before the end of the next quarter.

4. **Did investments achieve the projected impact?** Tracking program implementation against projected milestones provides valuable information, but often cannot answer the most important question of aid effectiveness: Did we achieve our projected impact? Farmers might adopt new practices, for example, but observed changes in their incomes—either positive or negative—might be caused by other factors. To better understand the impact of MCC investments on local incomes, MCC uses independent impact evaluations. Many factors can influence changes in income, so impact evaluations are designed to provide rigorous assessments of the extent to which these changes can be attributed to MCC investments. Impact evaluations may also describe how project outcomes translate into increased income: for example, by looking at new or expanded businesses along a rehabilitated road, or new jobs created under an agribusiness project.

5. **What did we learn to help us improve our investments and better achieve our goals?** Information collected in M&E reports and impact evaluations can be used to understand what implementation approaches work best, to make changes to implementation of current projects, and to inform future project design and implementation. MCC makes impact evaluations public to enable the broader development community to learn from the findings as well.[1]

1 These five questions are part of MCC's model largely in response to wide-spread recognition over the last decade that the development community has been insufficiently focusing investments where they are needed most, being accountable for returns, and evaluating impact. These concerns are reflected, for example, in Harvard economists Ricardo Hausmann, Dani Rodrik, and Andres Velasco's 2005 "Growth Diagnostics" paper (*http://www.hks.harvard.edu/fs/drodrik/Research%20papers/barcelonafinalmarch2005.pdf*); the 2006 report of the Center for Global Development's Evaluation Gap Working Group (*http://www.cgdev.org/content/publications/detail/7973*); and the World Bank Independent Evaluation Group's 2010 report, "Cost Benefit Analysis in World Bank Projects," (*http://siteresources.worldbank.org/INTOED/Resources/cba_full_eval.pdf*).

Box 1.
MCC's Framework for Results

Constraints Analysis

- Identifies the core constraints to economic growth in country
- Conducted by country partners in coordination with MCC economists
- Based on "Growth Diagnostics" developed at Harvard by Hausmann, Rodrik, and Velasco
- Country partners identify, in a public document, the main barriers to economic growth
- Identified constraints help frame the public consultations and inform program design

Project Appraisal

Benefit-Cost Analysis

- Estimates the expected economic rate of return (ERRs) of a project to compare expected benefits to a without-project scenario
- ERRs enable comparison across sectors and allows project design to be refined prior to implementation
- Published on www.mcc.gov

Beneficiary Analysis

- Analyzes demographic characteristics of likely beneficiaries, and the share of project benefits for each group
- Provides structured discussion of a project's likely impact on the poor, women, and others

Compact Implementation

Monitoring & Evaluation

- M&E Plan defines detailed framework for monitoring and evaluation of the program
    - Monitoring section identifies indicators at process, output, outcome levels to track the implementation progress
    - Evaluation section identifies key questions to be addressed and methods to be used
- Continuous data collection and reporting tracks performance against targets and informs portfolio management
- Baseline and ongoing surveys describe economic conditions and feed into monitoring and impact evaluation

Impact Evaluation

- IEs determine actual project impact using quantitative methods –randomized controlled trials where possible
- IEs provide rigorous and independent assessment of MCC project impacts
- IEs provide credible evidence for:
    - Assessing implementation effectiveness
    - Scaling up projects that work
    - Informing future investments
- 48 formal, rigorous evaluations under contract, covering ~50% of MCC's investments
- All other investments subjected to independent, critical reviews.
- Published on www.mcc.gov

Feedback Loops

Monitoring reports and impact evaluations inform compact implementation and future project design and appraisal.

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Ten Lessons: What MCC has learned putting its "focus on results" principle into practice

Lesson 1:
Transparency is a big part of accountability for results.

Transparency is at the heart of accountability. Easy access to financial and program information allows partner governments to plan and budget their own development strategies and allows citizens in those countries and in the United States to hold their governments accountable for good investments and results. For this reason, MCC makes information available along the full cycle of country engagement, from country selection through implementation to results. For all compact programs, the website has five-year compact and project budgets, detailed project descriptions, projected outcomes, quarterly updates on financial and program progress, and results of independent impact evaluations as programs are completed.

This transparency allows stakeholders to review the information that contributed to MCC investment decisions, track program progress against targets and, once programs reach completion, see clearly which programs did or did not achieve their goals. M&E reports and evaluations will likely show that some programs are off track, or did not meet their goals, so being transparent can be risky. By projecting future impacts, and transparently measuring against these targets, MCC opens itself for increased scrutiny. The risk, however, is worth it in terms of accountability, generating meaningful lessons, and achieving better results because implementation plans are continually informed by real-time monitoring data. Knowing which approaches work well and which do not can inform future investments by MCC, other donors, and countries themselves.

Box 2:
The Right Indicators for the Moment

For MCC, "results" refer to a broad category of consequences that are generated directly by MCC's programmatic engagement with partner countries. MCC identifies information that can be collected, measured, and reported throughout the life cycle of MCC-funded investments. For example:

- **Process milestones** measure progress on key implementation steps, especially in early phases of implementation (e.g., value of and disbursements against signed contracts for implementation activities).
- **Output indicators** measure the goods or services produced by the implementation of a program (e.g., kilometers of roads built, farmers trained), which are the drivers of the planned outcomes.
- **Outcome indicators** measure the achieved intermediate or medium-term effects of an intervention (e.g., increased traffic volume on roads, new business investments, farmers adopting new technologies)
- **Impact** refers to the expected increase in local incomes that are attributable to MCC programs, and often measured by impact evaluations.

MCC's results web feature was highlighted as "Putting Results at the Forefront: Where Transparency Meets Smart U.S. Foreign Aid" by the *White House Open Government Innovations Gallery*.

Moreover, this approach to transparency can set a new standard in partner country governments. For example, in El Salvador, the current administration's five-year plan explicitly builds on the example set by FOMILENIO (the El Salvador MCA) for transparency in making investment decisions in agriculture, transportation, water and sanitation, and community infrastructure.

Lesson 2:
"Results" mean different things at different times in the project cycle.

MCC results exist along a continuum—from policy changes countries may make to become compact-eligible, to interim outputs and outcomes as compacts mature, to post-compact increases in incomes. Because of MCC's focus on sustainable growth and poverty reduction, many of its projects represent investments that take years to implement and gradually generate significant new income flows over many years. The results that MCC is most interested in seeing—and being able to attribute to its support—are these increased incomes among beneficiaries of MCC investments. Yet, even before incomes begin to rise, MCC expects that MCC-funded programs will show tangible results. As compacts enter into force, MCA M&E plans begin to track process milestones, such as key contracts signed and program financial progress. As implementation advances, MCAs track output indicators, such as number of farmers trained, hectares planted with high-value crops, miles of road constructed, or land titles granted, because these are the drivers of the income gains its investments aim to achieve.

Over the last six years, the results MCAs and MCC have reported have naturally evolved as the compact portfolio has grown and matured. In its earliest years, MCC's first tasks were to identify good partner countries and work together to develop strong programs. External stakeholders judged MCC's success based on the number of compacts signed. As that first round of compacts entered implementation, next came a focus on project disbursements, which gradually ramp up as programs go from initial setup to implementation. For example, in FY 2005, MCC's compact-related disbursements were roughly $2.5 million; this amount grew to $90 million in FY 2007 and to $1.1 billion in FY 2010. Now that many compacts are fully into implementation, and some are even reaching completion, M&E plans have more data to report in process, output and outcome indicators that help inform whether projects are on track to meeting their ultimate goals.

The Honduras Compact, MCC's first compact to reach completion, ended in September 2010. Long-time MCC observers will have seen the nature of MCC results for Honduras change over time. In the compact's first year, 2005, quarterly reports captured startup milestones such as the establishment of MCA-Honduras, implementation of agreements with government ministries, and key procurements for implementation activities. Over the life of the compact there was a steady climb in project disbursements and program performance indicators. Upon compact close-out, MCC reported 7,460 farmers trained, with over 6,000 harvesting high-value crops and earning at least $2,000 per hectare—which represents on average, according to preliminary analysis, a near doubling of income per hectare on land under cultivation using new techniques. The compact results also include over 4,000 hectares under new drip irrigation; over 10,000 loans disbursed; and over 500 kilometers of highway, secondary and rural roads rehabilitated. Impact evaluations to measure and verify the income gains associated with these rural development and transportation projects are being conducted and will be publicly available in 2011.[2] (See Box 3 for more on what results to expect in program implementation.)

Policy reforms are an important part of the results story in every MCC Compact. MCC's investments aim to address fundamental barriers to growth and poverty reduction, and to generate significant new income for beneficiaries long after MCC Compact programs end. To ensure their full impact today and for years to come, MCC's investments cannot happen in isolation. For this reason, MCC and partner countries look closely at surrounding conditions in which an investment will be made, and partner countries plan reforms in areas that would otherwise limit the impact and sustainability of MCC-funded investments. These can be changes to national policies, laws, regulations, or even the traditional ways of doing business used by government institutions. In most cases, these reforms not only help unlock the full potential of MCC programs, they help improve the broader conditions for continued growth and investment in partner countries.

For example, the Honduras Compact supported legal reforms to expand access to credit. The new law allows credit seekers to use an entirely new set of property—such as equipment, shop inventory, future crops, tractors, supply contracts, and sewing machines and more—as collateral, and also established a registry system to monitor the property. As with many MCC Compacts, the transport project in Honduras supported reforms for better administration and funding of road maintenance, and also funded the design of a weight-control system that will help reduce wear and tear on roads. In the Cape Verde Compact, MCC supported the government's transparency-enhancing "e-procurement" system, as well as reforms to expand access to credit by incorporating microfinance institutions into the formal banking sector and reforms to enable borrowers to build credit histories that can be shared across financial institutions.

2 For more on the results and lessons learned from the Honduras Compact, please visit: www.mcc.gov/pages/countries/program/honduras-compact

Box 3.
What to Expect When in Terms of MCC Program Results

This box includes the common indicators that MCC tracks across all agriculture and roads projects, structured in a way that reflects the fundamental program logic for MCC projects in these sectors (that is, how investments go from initial inputs through to impacts). These diagrams do not include all indicators along the full continuum of results, or those tailored specifically to each country's project design and tracked at the project level.

Tracking Results of MCC Investments in Agriculture and Irrigation:

MCC investments in agriculture aim to raise incomes by increasing program participants' capacity, productivity, and access to markets and credit; strengthening management capabilities; and creating jobs in the agricultural sector. MCC tracks progress toward these goals with the following indicators:

	Feasibility and/or Detailed Design Includes EIAs, EMPs, and RAPs, as applicable MONTHS 0 TO 24	**Construction/Capacity Building/Other Support to Farmers and Enterprises** MONTHS 12 TO 48		**Increasing Capacity and Resources Use** MONTHS 24 TO 60	**Growth in the Agricultural Sector** MONTHS 48+
INDICATOR TYPE	PROCESS	PROCESS	OUTPUT	OUTCOME	OBJECTIVE
PROGRESS INDICATORS	• Value of Irrigation Feasibility and/or Detailed Design Contracts Signed • Percent of Irrigation Feasibility and/or Detailed Design Contracts disbursed	• Value of Irrigation Construction Contracts Signed • Percent of Irrigation Construction Contracts Disbursed	• Number of Farmers Trained • Number of Enterprises Assisted • Hectares under Improved or New Irrigation	• Hectares Under Production • Value of Agricultural and Rural Loans • Number of Farmers that Have Applied Improved Techniques • Number of Enterprises that Have Applied Improved Techniques	Increase in Agricultural Value-Added or Income

Tracking MCC's Road Project Results

MCC-funded roads projects are expected to reduce transportation costs, increase farm to market access, increase income, and/or reduce transportation time. MCC tracks progress toward these goals with the following indicators:

	Feasibility and/or Detailed Design	**Procurement for Construction Contractors**	**Construction**		**Expected Outcomes**	**Expected Objectives**
INDICATOR TYPE	PROCESS			OUTPUT		OBJECTIVE
PROGRESS INDICATORS	Percent disbursed for contracted studies Kilometers (km) of roads under design	Kilometers (km) of roads under works contracts	Percent of contracted roads works disbursed	Kilometers (km) of roads completed	Increased traffic, reduced travel times	Increase in income from reduced travel time and vehicle operating costs and increased regional and international trade

MCC Compact programs also include specific efforts to strengthen institutions – both large and small – to support effective and sustainable implementation of development investments. For example, in association with the irrigation project in the Armenia Compact, MCC supported improved management and technical capacity of the 44 Water User Associations (WUAs) whose principle function is to collect water user fees and provide operation and maintenance to the irrigation infrastructure. This enhanced capacity within these associations will improve irrigation service for *all* WUA members, even those not receiving training or improved infrastructure under the compact.

In Georgia, MCC elected to work with Georgian Oil and Gas Corporation (GOGC) as the Implementing Entity for the Energy Rehabilitation Project. GOGC, a young domestic institution at the time, was responsible for designing and managing all pipeline repairs under the compact. GOGC is now the party responsible for the operation and long-term sustainability of the MCC investment. MCC supported operational and financial improvements at GOGC before and during construction, and other donors are now relying on it for implementation of their programs.

Lesson 3:
"Beneficiaries" mean different things for different investments.

Beneficiaries vary based on types of investments. They can include specific population groups, such as farmers targeted by rural development programs, or wider populations benefiting from broad regional or national investments, like rehabilitated roads or reforms in the financial sector. For targeted programs, such as farmer training or land titling programs, MCC can easily track and report numbers of program participants. Tracking these outputs against program targets helps MCC know if projects are on track to succeed. Not all program *participants*, however, are necessarily program *beneficiaries*. MCC considers beneficiaries of projects to be those people who experience better standards of living through higher real incomes as a result of the project. For example, MCC investments in agriculture aim to raise incomes by increasing program participants' capacity, productivity, and access to markets and credit; strengthening management capabilities; and creating jobs in the agricultural sector. Not all participants may experience income gains, as some who receive training may choose to continue using traditional practices. In such contexts, MCC considers only those participants whose incomes actually rise as a result of the MCC program to be beneficiaries.

This approach to distinguishing between "participants" and "beneficiaries," a practice uncommon among donors, was adopted as a result of MCC's early implementation experiences and was not in place in its first compacts. Prior to April 2009, the number of expected beneficiaries was calculated using approaches that varied across compacts, projects, and activities. The absence of a systematic approach limited MCC's ability to aggregate and report on the projected impacts expected from its portfolio of programs. In April 2009, MCC released an updated version of its *Guidelines for Economic and Beneficiary Analysis* that included a definition of a "beneficiary" now applied across all MCC Compacts.[3] This change not only aligned practices across country compacts, it also brought MCC's definition of "beneficiary" more in line with MCC's overall objective of reducing poverty though economic growth.[4]

As a part of this change, MCC has revised all beneficiary counts associated with compacts to ensure that they comply with the standardized definition. This brought consistency and increased rigor to MCC's consideration of its impact, but also created a number of new challenges. For example, in some countries, this change in definition may result in what appears to be a reduction in the number of "beneficiaries" compared to what was initially projected in earlier estimates. For country partners that have adopted MCC's commitment to transparency and widely publicized and "owned" expected program impacts, these changes that appear to reduce the number of actual program beneficiaries can present a politically challenging message.

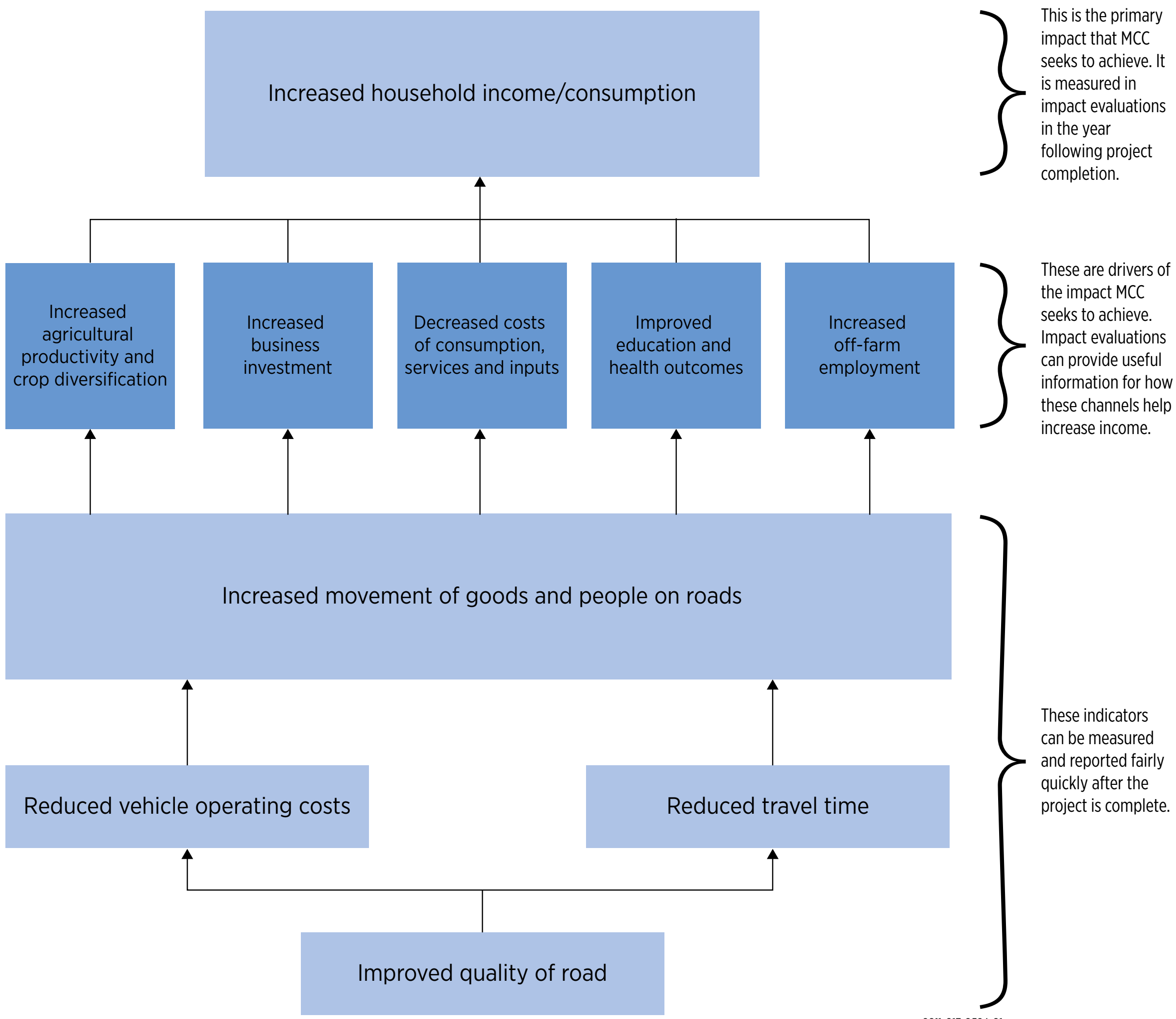
For programs that are regional (for example, roads) or national (a seaport, or federal policy reform) in scope, it is not possible to track "participants" as an interim measure of progress on specific indicators. Instead, MCC and partner countries track a series of process milestones such as key procurements and progress against contracts. Again, these indicators help program managers know if they are on track relative to targets, but they are not the ultimate program results. For example, MCC-funded roads projects are expected to reduce transportation costs, increase farm-to-market access, increase business startups or increase activity for existing businesses, improve access to essential services, and/or reduce transportation time. These are all important results in their own right, and are important steps toward increased incomes. (See Box 4 for a sample road program logic that maps from project outcomes to impact.)

3 This document can be found on MCC's website at: *http://www.mcc.gov/documents/guidance/guidance-economicandbeneficiary-analysis.pdf*.

4 Consistent with standard poverty measurement practices, MCC considers all members of a household to be beneficiaries when household income rises. Thus, a farmer whose new practices yields higher total household income benefits not only the farmer, but the rest of the household, as well.

Box 4.
From A Rehabilitated Road to Increased Incomes

This diagram illustrates the logic by which an investment to rehabilitate a road can translate into increased household incomes.



Lesson 4
Impact evaluations allow MCC to keep its eyes on the "results" prize...

MCC funds independent impact evaluations to answer the fundamental question of whether an investment achieved its intended impact—to raise incomes for program beneficiaries in a cost-effective manner. An agriculture program, for example, might report large income increases among the farmers who received training, meeting the targets set in the M&E plan. An outside observer, however, would not know if these gains were *caused* by the program or by some other unrelated factor, such as early and ample rains or changes in agricultural prices that benefited *all* farmers. By measuring changes in incomes for both program farmers and farmers who received no training but were otherwise subject to the same influences, the results of an impact evaluation can determine whether gains were the result of the program (only program farmers experienced higher incomes) or the weather (all farmers experienced higher incomes).[5] The type of evaluation that MCC conducts varies by project, as described below, but nearly all MCC-funded projects are covered by independent evaluations.

...to a greater extent than the development community has done in the past...

MCC contracts independent evaluation firms to assess the cost-effective impact of almost every activity that is funded. Of these, about 50 percent use methods that include a control group, or counterfactual, to enhance the rigor with which MCC can make claims of impact and attribution. This proportion of the program portfolio under rigorous evaluation is far greater than that of any other large bilateral or multilateral donor. For example, a recent review of evaluations of agriculture extension services, looking back over years of agriculture investments (and hundreds of programs), found many evaluations but only 14 rigorous impact evaluations that allow for *attribution of outcomes* to provision of extension and advisory services.[6]

In contrast, MCC has in place rigorous impact evaluations with experimental or quasi-experimental designs (generally with control and treatment groups) for roughly half of its agriculture activities. These evaluations help decipher what the outcomes would have been without the interventions, and therefore identify which outcomes are attributable to the program. MCC has other impact evaluation methodologies for almost all others. Similarly, there have been relatively few impact evaluations conducted on highway and secondary roads. MCC has launched evaluations that will assess the impacts of road investments on transport costs, local prices, and household and business incomes in seven countries. These evaluations will not only provide information about which

5 For a summary of planned MCC impact evaluations by country or by sector, please visit http://www.mcc.gov/pages/activities/activity/impact-evaluation

6 International Initiative for Impact Evaluation, "The Impact of Agriculture Extension Services," Section 4.1, January 2010.

investments yield the expected outcomes; the diversity of evaluation methods will yield lessons about impact evaluation approaches, as well. As part of the administration's Evaluation Initiative, President Obama's budget request for MCC for FY 2011 included $2 million in funding to further improve MCC's evaluation methodologies, data collection and sector-specific cross-country evaluations.

…but the best impact evaluation approach depends on the type of program evaluated…

The term "impact evaluation" commonly refers to program assessments that are designed to compare changes in the desired impact (income) among program participants to changes experienced by a similar population group that is not included in the program (often referred to as the "control" population). In this way, an impact evaluation measures what would have happened without the program. Not all programs lend themselves to this kind of comparison, however. Several factors inform MCC's decision on what kind of evaluation to use for a given project:

- ★ Can a counterfactual, or control group, that accurately represents what would happen without the program be identified? This is easier to do for investments that target individual communities or participants, like agriculture training, education or land titling projects. In these cases, MCC might be able to identify comparison groups that either do not receive program interventions or that receive them at a later date than a first group. For projects that are national in scope, such as international port improvements or major policy reform, there may be no easily identified control group. In these cases, MCC asks independent evaluators to use alternative methods of evaluation. These may estimate benefits based on changes in specific indicators that are identified in the ERRs and the program design as the key links between program activities and intended outcomes.
- ★ Can M&E data provide sufficient information to assess impact? If, for example, MCC is rehabilitating a major road that already serves as a backbone for transport of goods to markets, a key way to raise incomes will be to make travel along this road more reliable and inexpensive. This can be sufficiently measured by tracking indicators such as vehicle counts, travel times, and using road quality measures to estimate vehicle operating costs before and after the upgrades.
- ★ Can the evaluation approach be worked into program implementation? Some impact evaluation methodologies (especially randomized control trials) must be built into implementation design. For some programs, this would require implementation modifications that are just too complicated, time consuming, or infeasible.
- ★ Are resources available? Some evaluation methodologies are quite costly. A rigorous study of a five-year agricultural training program might cost several million dollars. MCC's average impact evaluation for road projects costs about $1.5 million. MCC is committed to evaluating its programs, but also recognizes that resources are scarce,

and the value of the information has to be considered with regard to the cost of the evaluation.

Based on these factors, over 50 percent of MCC's project investments are covered by impact evaluations that use experimental or quasi-experimental designs (like randomized control trials) to enhance the rigor with which claims of impact and attribution can be made. For the rest, MCC uses the most rigorous methods feasible based on the factors described above.

…and impact evaluations don't always answer all the questions.

In some cases, impact evaluations aim to answer fairly straightforward questions: "Did rehabilitation of this road reduce transport costs and time, and lead to increased incomes in the area served by the road?" But in other cases, especially where a program provides an integrated package of interventions, it is harder to tease out the details even with a rigorous evaluation.

For example, MCC funded an independent impact evaluation of the Burkina Faso Threshold Program BRIGHT School project, which focused on girls' primary education outcomes. The project provided a package of interventions, including construction of 132 schools for first through third grades, separate latrines for girls, dry food rations, and "soft" interventions, such as literacy training for mothers. The impact evaluation found that this package had significant positive impacts on school enrollment and test scores. But if someone asked whether the newly-constructed schools or the dry food rations were the most critical to project success, this evaluation could not provide an answer. An evaluation methodology could be designed to isolate each component's impact, but this would make it much harder, longer and more complicated to implement.

Box 5.

Refining the Tools of the Trade

MCC has always been interested in asking the same fundamental questions about its investments, but over time it has refined its tools for answering these questions. For example:

- **Constraints Analysis:** In early compacts, both MCC and partner countries spent too much time exploring project proposals that ultimately did not prove to have sufficient potential for growth and poverty reduction. In response, MCC formalized the Constraints Analysis (CA) in late 2006 to systematically and transparently identify key barriers to growth up front. MCC applied the CA for the first time in compact development for Moldova, and has since applied it in seven additional countries. The CA serves to structure and focus the range of possible proposals. In the spirit of continued learning, MCC is conducting a review of the Constraints Analysis in terms of how well it has helped MCC and partner countries focus on the sectors and specific investments that will yield the best impact for poverty reduction and economic growth. Lessons based on this review will help revise the tool going forward.

- **Beneficiary Analysis:** MCC has always asked the question, "How will proposed projects affect poor people?" But its approach to answering this question has evolved over time. In the early years, MCC looked primarily to country-wide information about how national poverty rates respond to growth, and how poverty rates change over time. However, this approach did not provide project-specific information that could be used to compare the potential poverty impact of different project designs. In response, MCC developed the Beneficiary Analysis (BA) methodology that more formally assesses the likely distribution of impacts. The BA is used to estimate the impact of projects on the poor, and on populations of particular interest, such as women, the aged, children, and regional or ethnic sub-populations.

- **Common Indicators:** MCC's ownership principle is applied to the creation of MCA M&E plans. This means that country partners select indicators based on specific country and project conditions. This approach works for using M&E indicators to track program progress and make implementation adjustments in a single country, but does not lend itself to comparing or aggregating progress across countries. MCC is continually looking for ways to increase collection of information that reflects interim progress toward program goals. In 2008, MCC started to develop a handful of common indicators in each of its largest program sectors and applied these to all M&E plans in addition to the indicators already in the plans developed by country partners. MCC reports on country-specific and portfolio-wide progress on these common indicators on a quarterly basis on its website (see Box 6). Going forward, MCC is looking into additional common indicators, such as temporary employment in roads construction projects. Such changes can come with a cost, including additional MCA time and resources to retrofit M&E plans and change requirements for data collection by implementers. This kind of change, in moderation, is an important part of MCC being a learning institution, but must always be weighed against the operational implications of change—especially in the field.

Box 6.
MCC Common Indicator Performance as of September 2010

Agriculture and Irrigation

- 148,157 Farmers Trained
- $65.99 Million in Agricultural and Rural Loans
- 82,510.1 Hectares Under Production
- $260 Million in Irrigation Works Contracted
- 32.52% of Contracted Irrigation System Works Disbursed

Roads

- 2,424.07 Kilometers of Roads Under Contracts
- 43.13% of Contracted Road Works Disbursed
- 895.63 Kilometers of Roads Completed

Water and Sanitation

- 28% of Contracted Feasibility and/or Design Studies Disbursed
- 32% of Contracted Construction Works Disbursed

Property Rights and Land Policy

- 182,743 Land Stakeholders Reached
- 1,054,966 Rural Hectares Mapped
- 33,524.69 Rural Hectares Formalized
- 2,454 Urban Parcels Formalized

Education

- 201 Facilities Built
- 59,611 Students Participating
- 22.7% of Contracted Construction Education Facilities Disbursed

For more detail on common indicator performance by sector and by country, please visit *http://www.mcc.gov/pages/activities/activity/monitoring-and-evaluation*

Lesson 5:
Detailed project design in the early years produces better results in the long-term.

MCC and its partner country governments and citizens are eager for results. Having something to show for the allocation of scarce development resources is a fundamental part of accountability. However, there can be tradeoffs associated with moving too quickly, and expectations to show early progress can make it more difficult to achieve the desired result of significant long-term impact.

This was especially true in MCC's start-up years, when it did not yet have a portfolio of investments and needed to establish itself fairly quickly with the first cohort of compacts. Much of the detailed project preparation work, including establishing key implementation structures, staffing, feasibility and design studies, and environmental and social impact assessment, was pushed to after compact signing. As a result, the first years of implementation in the early compacts often were dedicated to program startup and completing detailed program planning rather than to the implementation of activities that would show significant disbursements and tangible outputs. The Center for Global Development, in a field report from MCC's first partner country Madagascar, referred to this startup lag as the "invisible year."[7] MCC learned this lesson after the first few compacts and responded by better utilizing the time between compact signing and entry into force (when the five-year clock starts) to work with country partners to establish key implementation systems, get key staff on board, and set up procurement and fiscal agents. This gives MCAs a much better chance of hitting the ground running once compact implementation begins.

Similarly, the more information available at compact signing (in terms of detailed, technical, project design), the easier it is to develop project budgets precisely. There will always be some uncertainties at compact signing because exact project costs that reflect current market conditions are never known until contracts are signed during implementation. Project budget revisions are a natural part of any five-year project cycle, no matter how detailed the up-front planning, because of changing external factors like input costs. But, for the earliest compacts, project budgets had to be set especially early in project design to accommodate compact signing timelines. These projects were therefore particularly susceptible to revision as detailed design progressed, and/or with fluctuations in input prices. In many countries this has been a contributing factor (but definitely not the only factor) to tight budgets, project re-scoping (often reducing scope), and revisions to projected beneficiaries and impacts. MCC and partner countries have faced these challenges head-on, making tough decisions where necessary to reduce project scope. (MCC has never submitted a congressional request for additional funds to top up tight compact budgets.)

These decisions are often quite difficult, and inevitably cause debate both within MCC and between MCC and country counterparts. Given MCC's and MCAs' emphasis on transparency and country ownership, there can be widespread awareness and high expectations about MCC Compact programs to which country partners feel accountable. It can be very challenging to manage these expectations in the face of project changes.

MCC has learned from these experiences and is adjusting accordingly, for example, by making efforts to conduct more technical project design before compact signing, design projects that are scale-able as budgets allow, and employ innovative mechanisms like facilities that evaluate and support viable investments identified during implementation. Even with these efforts, there will always be a natural tension between technical project development and timely signing of compacts to launch important investments and be accountable for efficient mobilization of scare development dollars. The right balance between these factors will vary by compact, depending on country conditions, program specifications, and the broader budget environment.

7 Center for Global Development, MCA Monitor, *Madagascar Field Report*, December 2006.

Lesson 6:
Planning for results goes hand-in-hand with program design...

MCC economists and sector specialists work closely together from the earliest phase of compact development to assess the potential costs and benefits of a project, conduct ERR and beneficiary analysis, and shape program design for maximum impact. This work then informs indicators and targets for M&E plans used to track progress toward intended outcomes during implementation. Early economic analysis and program design also inform impact evaluation methodologies that are often built into program implementation from the outset. These methodologies are ideally specified in contracts for program implementers to clarify the implementation approach necessary to adhere to evaluation plans.

This level of coordination between economic analysis, program design, and implementation planning is essential but can be challenging to manage. For example, during compact development there is a constant balancing act: project design must be sufficiently advanced to conduct meaningful economic analysis, but economic analysis is important to inform project design. The best approach to impact evaluations requires striking a balance between a methodology that is sufficiently rigorous to assess attributable impact (sometimes with randomized trials) and a design approach that can be feasibly and politically managed in the field. While impact evaluation concepts are generally developed before compacts are signed, the final evaluation design is usually agreed during the first compact year once implementation strategies are better defined. The final design is often completed in the first year of the compact so that baseline data can be collected before program interventions begin. However, implementation plans change throughout all five years of the compact, as discussed below, which can create challenges for adhering to evaluation methodologies. All of these factors speak to the great importance and challenges of integrating results planning with implementation planning.

...but even the best-laid plans can change.

MCC, with its country partners, invests considerable time and financial resources in the preparatory stages to develop a program with sound economic logic and feasible implementation schedules. In practice, MCC has learned that, despite these efforts, there are countless ways in which plans can change during compact implementation. M&E data can help signal when and how implementation approaches should be revised. For example, after two years of implementing a farmer training program in Armenia, project indicators suggested that training in high-value agriculture (HVA) was more useful to farmers than training in on-farm water management. MCA-Armenia proposed to increase HVA training and decrease water management training relative to initial compact targets. Before agreeing to this change, MCC requested that the MCA update the project economic rate of return (ERR) with data from M&E adoption surveys to reflect the proposed training re-allocation. The analysis reflected a positive impact on the ERR, and MCC approved the change.

Sometimes changes triggered by M&E information can pose challenges for impact evaluations. In Honduras, for example, the implementer of the rural development program was required to meet annual targets in regard to number of farmers receiving training and other interventions. When reaching this many farmers in the planned area proved difficult, the implementer was motivated to seek farmers in other areas—some of whom were part of the control group for the impact evaluation. This situation created tradeoffs between the goals of responding to and reaching M&E targets, for which the implementer had significant incentives in the contract, and adhering to an evaluation methodology, about which his contract was silent. Experiences like this have helped MCC learn the value of incorporating impact evaluation approaches into implementation plans and implementer contracts, and the necessity of anticipating and planning for managing these tradeoffs.

In Nicaragua, decisions to modify program implementation approaches also had implications for evaluation methodology. The compact's Rural Business Development Project aims to increase profits and wages in farms and non-farm businesses that help develop higher-profit agriculture and agribusiness enterprises. In their work with bean producers, the program implementers and MCA-Nicaragua decided to change the implementation approach after the first rounds of assistance, primarily to increase the sustainability of the interventions. In the first rounds, the implementer delivered a package of inputs and technical assistance directly to each farmer. In the later rounds, the inputs were delivered to a cooperative, which in turn gave these inputs to farmers on credit, repayable upon delivery of farmers' harvest. This approach allowed the cooperative to maintain some revolving funds – one step towards improving sustainability of the approach. This change, however, actually made it more difficult to evaluate impact. In the impact evaluation, MCC not only wants to compare results of those that receive the assistance program to those that do not (which it can still do); it also wants to assess the difference in impacts between those receiving assistance for different periods of time. This calls for a comparison between the early and later rounds of farmers, but since the implementation approach changed, it's more difficult to accurately make this kind of comparison.

In additional to changes to improve implementation approaches, projects can change in response to external factors inherent in a five-year program period. For example, MCC sets five-year program budgets at the time compacts are signed. Project costs can change significantly in the period between when compacts are signed and when contracts are let for construction. This can require MCC and MCAs to make adjustments to project scope based on constrained resources. This phenomenon is most common in the infrastructure sector, where input costs vary greatly depending on oil prices, currency fluctuation, changes to technical design, and demand for construction services. In some cases where costs increase, scope decreases such that projects may generate fewer beneficiaries than initially intended, or yield lower returns in terms of income gains. This raises a fundamental question – how do the increased cost and reduced scope affect the potential rate of return of the project?

Based on experiences grappling with this question in early compacts, MCC has formalized a *Policy on the Approval of Modifications to MCC Compact Programs*. The policy guides decision-making about project changes that have implications for costs, scope, and estimated changes in ERRs or number of beneficiaries. It also provides greater clarity for when MCC and partner countries must recalculate ERRs based on newly estimated costs and scope. This revised economic analysis helps inform MCC and MCA management decisions in prioritizing among the initially planned activities given the new cost structures or program designs and available resources.

In some cases, MCC supports partner countries in finding additional financing to complete projects and meet initial objectives. For example, under the transportation project in the Honduras Compact, MCC and the MCA identified a potential budget shortfall that was due in part to increasing costs for petroleum and construction inputs and to revised technical plans. MCC and the Government of Honduras leveraged MCC's investment to access additional resources from the Central American Bank for Economic Integration (CABEI). With help from MCC, and supported by technical designs funded by MCC, the Government of Honduras and CABEI reached an agreement to cover the shortfalls and allow Honduras to fully implement the program. This situation is not unique: MCC's focus on projects with high returns on investments has allowed MCC and country partners to attract additional financing to help manage similar challenges in a number of compacts.[8]

Lesson 7:
Robust economic analysis, M&E and impact evaluation take resources.

Conducting economic analysis, planning, ongoing monitoring and impact evaluations of MCC programs requires dedication of significant resources in terms of time, staff and financial resources.

- ★ **Time:** Time is an essential resource. The compact development process must build in time for the constraints analysis to inform project proposals, and for benefit-cost and beneficiary analyses of proposed projects. A full beneficiary analysis can take up to a month of an economist's time, especially if a proposed compact includes multiple projects that are in various stages of preparation. During compact implementation, there is a time lag of one to two quarters between when implementation data is

8 Even this type of program challenge brings an opportunity for learning. The relatively large number of MCC road improvement evaluations and the caliber and diversity in their approaches offers a unique opportunity to compare these evaluations in terms of their flexibility under ever-changing implementation plans; see "Comparing Evaluations of Road Improvements: An Organizational View." MCC, Ariel BenYishay and Rebecca Tunstall (forthcoming).

collected in the field and when it is released publicly by MCC. This time allows for M&E staff to vet the data for accuracy.

When compact programs reach completion, the results of impact evaluations will often not be available until the following year (or later). While MCC will have significant results to report upon compact closeout, it is important to wait for impact evaluations to make final statements about the degree to which investments achieve their intended impacts—in terms of increased income—and if these changes can be attributed to the programs themselves. It is tempting (and fairly common across donors) to publish program participants' self-reported income gains, especially for targeted programs like agriculture development. While these stories can be quite compelling, they can also be misleading. Many factors can influence changes in income. Impact evaluations are used to determine whether the changes are attributable to the project interventions rather than other factors. Individual producers are likely to think differently about their incomes than their neighbors think about theirs, and maybe differently than they did five years prior. To increase the consistency of data across beneficiaries and over time, it can be useful to use baseline and endline surveys with consistent methodologies, data from which feed in to impact evaluations. This, of course, takes time.

- ★ **Staff:** Managing economic analysis, monitoring and evaluation requires qualified staff, both for MCC and its country partners. MCC's Department of Policy and Evaluation includes staff with expertise in economics, M&E and impact evaluations that are engaged in country programs from compact development through implementation and during impact evaluations after programs complete. The core teams established by MCC partner countries to manage compact development on behalf of country governments are required to have economic expertise, and all MCAs include at least one M&E staff member during compact implementation.
- ★ **Money:** On average, about 2 percent of compact funds are dedicated to M&E activities during implementation. This includes funding for data collection (surveys for both monitoring and impact evaluation purposes), data quality reviews, qualitative information gathering (such as focus groups), specialized studies, and capacity building for M&E. Of MCC's current $7.8 billion compact portfolio, $141 million is explicitly dedicated to M&E in compact budgets. In addition to these compact funds, MCC funds the contractors that execute independent impact evaluations, which MCC anticipates will be an additional one to two percent of project budgets over time.

Lesson 8:
Data quality is the cornerstone of robust focus on results.

At its core, reporting on results is about data—capturing it, vetting it, reporting it publicly, and putting it into context to tell a story about MCC investments. This puts a high premium on data quality. Factors that affect data quality are varied, and include capacity of local survey firms collecting baseline and follow-up data; the degree to which household and targeted beneficiaries are accustomed to formally tracking key indicators like annual income or crop yields; timeliness of data collection (especially to track progress over time, or compare progress across countries in the same time period); MCA staff previous experience with M&E techniques; and MCA staff ability to manage a growing number of indicators to meet program monitoring and external reporting needs. Ultimately, data quality depends on a lot of individual people collecting or reporting data under demanding conditions, often in countries that do not have extensive experience in this area.

MCC takes a number of measures to help ensure data quality. MCC builds data quality audit requirements into compact M&E plans, asks firms conducting independent impact evaluation to train local survey firms, and conducts data quality reviews. MCC M&E staff help MCAs review draft survey questionnaires prepared by local survey firms, and baseline and follow-up surveys are conducted with the same households whenever possible. When reporting program data (especially quantifiable program achievements) MCC has developed standards to ensure that all published data are sourced through quarterly reports that are formally vetted by MCC M&E staff (rather than raw data directly from project implementers, for example). This helps ensure consistency across countries and over time, as well as accuracy of data, but also takes time—often causing a quarter or two lag between the time data is gathered and when it is published.

Lesson 9:
MCC is helping to change the evaluation culture in partner countries.

MCC's approach to robust and transparent monitoring and evaluation is helping change mindsets among some country partners. In countries where decisions about who participates in development programs can be opaque or driven by politics, it can be refreshing to see transparent, random selection of program participants. For example, the impact evaluation methodology for the Benin Compact land project included a lottery system for random, transparent selection of 300 villages to participate in developing plans documenting household rural property rights, to be compared against villages that were not selected to participate. Even in the villages not selected, people reported being very pleased with the first-ever completely transparent selection process.

In some countries, this cultural change takes time and a lot of outreach. Under the El Salvador Compact's Productive Development Project (PDP), MCC funding aims to provide technical assistance to farmers and business development services, support capital investment to selected applicants for commercial activities, and provide credit guarantees and technical assistance to financial institutions in El Salvador's Northern Zone. The impact evaluation for this project will estimate the impact of training, technical assistance and provision of in-kind goods on producers in dairy, handicrafts, and horticulture. Because all PDP beneficiaries cannot be served in one year, but will be served over the course of four years, the evaluation design is a randomized rollout. Under this design, all eligible participants identified by the implementer will be offered the intervention; however, the timing of service delivery will be randomized. As farmers see their neighbors in nearby municipalities benefiting from program interventions now, it takes significant and targeted outreach to quell rumors and misunderstandings. This outreach is intended to help participants understand when they will be able to participate, and why there is a delay.

There are other challenges in implementing impact evaluation methodologies in partner countries. For example, MCAs and MCA Boards of Directors (which include members of the national government, civil society and private sector) have explicit accountability for meeting program targets within the five-year compact time frame. In almost all cases, however, impact evaluations begin once projects are complete, very near the end of the compact. Credible results of impact evaluations *after* a compact depend on adherence to their methodologies *during* the five-year program implementation period. It can be challenging to define and create incentives for accountability to evaluation methodologies, especially given the day-to-day demands of implementing large, complex programs in a fixed time frame.

Lesson 10:
Back to transparency—results are not always good news.

A commitment to impact evaluations means that MCC wants to know whether or not investments achieve their intended aims; a commitment to transparency means that MCC will make it public even when they do not. This practice is an important part of accountability, and also of learning. For example, MCC's impact evaluation of the schools project under the Burkina Faso Threshold Program indicated that the package of interventions raised enrollment rates and test scores for both girls and boys, as described above. Impact evaluations for Threshold Programs in Malawi, Tanzania and Zambia tell a more mixed story. Initial findings point to overall achievement of output-level goals (for example, establishment of a financial intelligence unit or creation of a tax fraud investigation unit), but less success on meeting outcome-level goals (e.g. reduction of corruption in the customs sector or increased efficiency in land administration). Lessons learned from these evaluations will help inform future MCC Threshold Programs, and can be applied to governance programs by other donors, as well.

During compact implementation MCC will make public major changes to project scope or projected impacts that are the result of projects being re-scoped, program adjustments made based on lessons from monitoring data, or refinements to MCC's own approach to measuring impact. MCC will be transparent about these changes and the reasoning behind them, even when they imply politically uncomfortable messaging for MCC or its country partners. As MCC's first five-year compacts come to a close, MCC is committed to comprehensive and transparent coverage of program achievements, challenges and lessons learned. This approach helps MCC's learning contribute to global development efforts, and it is at the heart of how MCC holds itself accountable to its goal to reduce poverty and support economic growth in partner countries. Indeed, MCC's management of learning, transparency, and revising its own approach in the face of challenges and mixed results will be an important part of its success.

Further reading:

This paper draws on other MCC resources such as:

- "*Aid Effectiveness: Putting results at the Forefront*, MCC's "New Institutional Approach" by Franck S. Wiebe, Ph.D, MCC, October 2008.
- MCC website *Results* feature, including summary of MCC program *impact evaluations*
- *Honduras* and *Cape Verde* compact closeout features
- BenYishay/Tunstall "Comparing Evaluations of Road Improvements: An Organizational View" (forthcoming).

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