OFFICE OF INSPECTOR GENERAL
U.S. Agency for International Development

MCC Economic Rate of Return: More Guidance Would Mitigate Risks That Could Lead to Uninformed Investment Decisions

AUDIT REPORT M-000-22-001-P
NOVEMBER 8, 2021

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MEMORANDUM

DATE: November 8, 2021

TO: Millennium Challenge Corporation, Vice President, Department of Policy and Evaluation, Alicia Phillips Mandaville

Millennium Challenge Corporation, Chief Economist, Economic Analysis Division, Mark Sundberg

FROM: OIG, Audit Director, Millennium Challenge Corporation Performance Audits, Gary Middleton /s/

SUBJECT: MCC Economic Rate of Return: More Guidance Would Mitigate Risks That Could Lead to Uninformed Investment Decisions (M-000-22-001-P)

This memorandum transmits the final report on our audit of MCC's Economic Rate of Return (ERR). In finalizing the report, we considered your comments on the draft and included them in their entirety in Appendix C.

The report contains six recommendations to improve MCC's guidance and procedures to address risks to developing and reviewing ERRs. After reviewing information you provided in response to the draft report, we consider one closed (recommendation 1) and five resolved but open pending completion of planned activities (recommendations 2, 3, 4, 5, and 6).

For recommendations 2, 3, 4, 5, and 6, please provide evidence of final action to OIGAuditTracking@usaid.gov.

We appreciate the assistance you and your staff provided to us during this audit.

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INTRODUCTION

As a data-driven, evidence-based agency, the Millennium Challenge Corporation (MCC) seeks to make foreign assistance investments with high rates of return and broad impact on economic growth. MCC uses Economic Rate of Return (ERR), an estimate produced from cost-benefit analysis (CBA), to measure whether the rate of return of a project's economic benefits exceeds its costs by the agency's required 10 percent threshold over 20 years. For example, in 2007, MCC partnered with Mozambique on four projects, including $17 million for technical support to farmers to increase crop yields; based on estimated benefits to farmers' incomes and the costs of the program, MCC estimated a 25 percent return on investment for this project.[1]

The agency says ERRs also help ensure accountability and transparency in its investment decisions. In 2008, the U.S. Government Accountability Office (GAO) identified challenges in the procedures for developing MCC's ERRs, such as inconsistent approaches, lack of documentation, human error in ERR calculations, and inadequate ongoing review of ERR analyses, and recommended new guidance and improvements to existing guidance.[2] In response to GAO reports and recommendations, MCC revised or established guidance, processes, and procedures for developing and reviewing ERRs. This included a peer review process in which economists review methods and results of ERR analyses with which they were not involved. MCC says that it uses the peer review process to improve the quality and consistency of ERR analyses and to ensure objective and reliable results.

Congress has expressed an interest in the transparency of MCC's ERR analyses and requires the agency to report the economic justification of a proposed compact program. There has not been an audit of MCC's ERR process, including the peer review process, since 2011. According to MCC's 2020 enterprise risk management profile, not mitigating risks to ERR analyses could result in the agency making uninformed or untimely decisions that could compromise operational effectiveness and efficiency.

Our audit objectives were to assess to what extent (1) MCC's guidance and procedures for developing and reviewing ERR analyses address identified risks and (2) MCC used the peer review process to inform investment decisions in select compacts. To conduct our work, we judgmentally selected the four compacts (Senegal II, Cote d'Ivoire, Morocco II, and Niger) with the highest dollar investment for which MCC's Economic Analysis (EA) Division had completed the peer review process since 2014. We reviewed GAO reports and MCC documents including the 2019 and 2020 enterprise risk management profiles, guidance, procedures, project proposals, assessment

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[1] The Farmer Income Support Project aimed to eliminate barriers hindering economic growth among farms and targeted enterprises, while supporting diversification into other crops.

[2] GAO, "Independent Reviews and Consistent Approaches Will Strengthen Projections of Program Impact" (GAO-08-730), June 2008. GAO issued two other reports on ERR in 2011 and in 2007: GAO, "Compacts in Cape Verde and Honduras Achieved Reduced Targets" (GAO-11-728), July 2011 and GAO, "Vanuatu Compact Overstates Projected Program Impact" (GAO-07-909), July 2007. This OIG audit focuses only on challenges to the ERR process identified in the 2008 report.

memorandums, investment memorandums, peer review assessments, and correspondence. We also interviewed officials in MCC's EA Division, Department of Compact Operations (DCO), and Monitoring and Evaluation Division. In addition, we surveyed EA staff and managers to identify potential actions to improve the effectiveness of the ERR peer review process. We conducted our work from February 2020 through September 2021 in accordance with generally accepted government auditing standards. For more information about our scope and methodology, please see Appendix A.

SUMMARY

MCC makes investments—typically known as compacts—in seven sectors: transportation, energy, agriculture, health, education, water and sanitation, and land. We identified incomplete guidance and procedures for conducting cost-benefit analysis in several sectors and maintaining a peer review repository, limiting MCC's ability to address risks. Of the seven sectors in which it operates, MCC has not developed cost-benefit analysis guidance for three sectors (agriculture, health, and education) and has not finalized guidance for one sector (energy). In addition, although MCC created a peer review repository to capture institutional knowledge when reviewing ERRs, the agency does not have guidance for the use of the repository. In three of the four MCC compacts we assessed, peer reviewers and other EA staff had left the agency—turnover which meant that remaining staff could not trace or verify peer reviews performed by their former colleagues or learn from past reviews. This contrasts with Standards for Internal Control in the Federal Government, which require agencies to design responses that reduce the likelihood of a risk occurring or its impact and provide a means to retain organizational knowledge and mitigate the risk of having that knowledge limited to a few personnel.[3] Without complete internal guidance for developing and retaining ERRs, MCC is at greater risk of implementing programs without a high return on investment.

Although peer reviews are not used directly in investment decisions, MCC relies on the peer review process to ensure that ERRs—one of the key factors to justify project selection—are objective and reliable. The agency's Peer Review Guidelines stipulate that staff review methods and verify calculations for the economic models of proposed investments over the course of compact development. None of the four compacts in our study—Senegal II, Cote d'Ivoire, Morocco II, and Niger—had documentary evidence that peer reviewers were assigned or that all ERR models were peer reviewed before investment decision meetings. The lack of consistent documentation, such as the use of templates, hindered the implementation of the peer review process. By not following the Peer Review Guidelines, EA management and staff cannot ensure that ERRs presented to investment decision makers are objective and reliable. As a result, MCC may be at risk of implementing compacts without the desired rates of return and impact

[3] GAO, Standards for Internal Control in the Federal Government (GAO-14-704G), "Control Environment," Principle 3, "Management Should Establish an Organizational Structure, Assign Responsibility, and Delegate Authority to Achieve the Entity's Objectives," September 2014.

on economic growth, as demonstrated in lower ERRs that EA staff discovered in Senegal II and Niger after investment decisions were made.

We made six recommendations to ensure that MCC can address identified risks to developing and reviewing ERRs and to improve the implementation of the peer review process. MCC agreed with all six recommendations.

BACKGROUND

MCC's primary assistance program is a 5-year, large-scale investment in a country-implemented set of projects, known as a compact. Compacts aim to reduce poverty by targeting the principal binding constraints to growth in the country's economy. MCC invests in seven sectors: transportation, energy, agriculture, health, education, water and sanitation, and land. Once selected by MCC's Board of Directors, eligible countries begin developing proposed investments.[4]

MCC is required by its statutory regulations to conduct CBA and to calculate the ERR on projects supported through country compacts. MCC uses ERRs to measure whether the rate of return of a project's economic benefits exceeds its costs by the agency's required 10 percent threshold over 20 years. EA, one of four divisions within MCC's Department of Policy and Evaluation (DPE), is responsible for developing and reviewing cost-benefit models to estimate the ERR of projects. MCC includes the results of the ERR with six other criteria in an investment memorandum to MCC's Investment Management Committee, which reviews and recommends the final composition of each proposed compact before the Chief Executive Officer makes the investment decision and recommends the compact to the Board of Directors.[5]

In its 2008 report, GAO found that MCC ERRs used inconsistent methods to project economic growth and account for the costs of same-sector projects.[6] As a response, EA began to develop sector CBA guidance in 2013 for the energy sector. An EA senior manager stated that the decision to develop sector CBA guidance to provide consistent methodological approaches in developing and reviewing ERRs was made prior to 2013 but was not documented. According to the published guidance for the land and water sanitation sectors, EA is developing a series of reports outlining methodological

[4] Millennium Challenge Act of 2003 as amended by African Growth and Opportunity Act and Millennium Challenge Act Modernization Act, Sec. 607 Eligible Countries (December 2019) states that "Eligible countries are determined each fiscal year based on (a) a country's demonstrated commitment to (i) just and democratic governance, (ii) economic freedom, and (iii) investments in its people, (b) the opportunity to reduce poverty and generate economic growth in the country, and (c) the availability of funds to MCC."

[5] The MCC Investment Criteria require that each project (1) aims to alleviate root causes of a binding constraint, (2) generates high economic returns, (3) allows full implementation within a 5-year compact term, (4) represents country ownership of both the problem and the solution, (5) complies with the MCC Environmental Guidelines and the MCC Gender Policy, (6) includes clear metrics for measuring results, and (7) supports the long-term sustainability of results.

[6] GAO, "Independent Reviews and Consistent Approaches Will Strengthen Projections of Program Impact" (GAO-08-730), June 2008.

approaches for each sector to clarify methodology and improve the consistency in developing ERRs across country compacts.

In addition, in its 2008 report, GAO found that MCC did not conduct a final review of ERRs for accuracy and validity. GAO reported that MCC did not have an established internal control process for developing and maintaining information for the purpose of management decision making. As a result, GAO recommended that MCC adopt and implement written procedures for a secondary independent review of the methods and results of its economic analyses. To address this recommendation, MCC developed an independent process to review ERRs, "Guidelines for Country Team and Peer Review of Cost-Benefit Analysis" (Peer Review Guidelines), in 2012 and updated them in 2014 to increase consistency across peer reviews for all ERR models. GAO closed all recommendations on ERR by 2014. However, in its 2020 enterprise risk management profile, the EA Division identified inadequate ongoing reviews of ERRs and lack of consistent methodologies as a risk to accurate and reliable ERRs.

As part of the peer review process, the managing director of EA assigns an independent peer reviewer (economist) who has not been regularly involved with the compact's development. Peer reviewers are selected based on their experience constructing and reviewing CBA in the specific project sector and their knowledge of the country and related data sources. According to the Peer Review Guidelines, the EA managing director is expected to communicate issues identified during the peer review process to the DPE vice president, who sits on the Investment Management Committee. Figure 1 shows the steps in MCC's peer review process.

Figure 1. Steps in the MCC Peer Review Process

- **Step 1:** Managing director for Economic Analysis (EA) assigns peer reviewer.
- **Step 2:** Peer reviewer documents review of program logic and preliminary models before projects are selected.

- **Step 3:** Country team economist formally requests peer review.
- **Step 4:** When project proposals are approved, peer reviewer documents assessments of ERR analyses.

- **Step 5:** Country team economist works with peer reviewer to conduct final review of ERR analyses.
- **Step 6:** EA includes summary of critical risks to ERRs in investment memorandum to investment management committee.

Source: OIG analysis of MCC's "Guidelines for Country Team and Peer Review of Cost-Benefit Analysis."

INCOMPLETE GUIDANCE AND PROCEDURES FOR CONDUCTING SECTOR COST-BENEFIT ANALYSES AND MAINTAINING A PEER REVIEW REPOSITORY LIMITED MCC'S ABILITY TO ADDRESS ERR RISKS

Of the seven sectors in which it operates, MCC has not developed CBA guidance for developing ERRs for three sectors and has not completed guidance for one sector, according to the chief economist. In addition, although EA created a peer review repository to capture institutional knowledge when reviewing ERRs, the agency does not have guidance requiring use of the repository. Without complete internal guidance for developing and reviewing ERRs, MCC is at greater risk of compromising operational effectiveness and efficiency.

MCC Has Not Completed Sector Cost-Benefit Analysis Guidance for Four of Seven Sectors to Address the Risk of Inconsistent Approaches for Developing ERRs

Sector-specific guidance clarifies CBA methodology and seeks to improve the consistency of ERRs for compacts across the sectors in which the agency operates. An EA manager stated that the guidance is helpful in distilling sector-specific methods and data sources useful to country economists and staff. MCC has not developed guidance for the agriculture, education, and health sectors. The guidance for the energy sector was in its final review stage at the time of our audit. MCC has completed guidance for three sectors: land, water and sanitation, and transportation (see Figure 2). MCC officials stated that developing consistent methods for measuring beneficiaries is more complex for the agriculture, education, and health sectors.

Figure 2. Status of MCC Cost-Benefit Analysis Guidance by Investment Sector, as of April 2021

COMPLETED	IN PROGRESS	NOT DEVELOPED
• Land	• Energy	• Agriculture
• Water and Sanitation		• Education
• Transportation		• Health

Source: OIG analysis of MCC Sector Cost-Benefit Analysis Guidance.

Federal standards for internal control require agencies to design responses that reduce the likelihood of a risk occurring or its impact.[7] Without completed guidance for the

[7] GAO, Federal Standards for Internal Control, "Risk Assessment," Principle 7, "Identify, Analyze, and Respond to Risks," September 2014.

four remaining investment sectors, MCC may not be able to mitigate the risk of inconsistent approaches to developing ERRs identified in MCC's risk register to ensure consistency in calculating the most accurate and reliable ERRs.[8]

Lack of Guidance for Maintaining a Peer Review Repository Limited MCC's Ability to Retain Knowledge That Could Address the Risk of Inadequate Ongoing Review of ERRs

In January 2020, EA Division staff started developing a peer review repository to capture institutional knowledge on current and past peer reviews. The repository, an internally shared electronic file, includes peer review documentation and lists the economist responsible for the review. The EA Division was expected to backfill peer reviews of past compacts to retain documentation; however, as of March 2020, there were six compacts with ongoing peer reviews that were not documented in the peer review repository.

Multiple agency stakeholders cited the potential benefits of a peer review repository. MCC's chief economist said a repository would help capture documentation of peer reviews if the assigned economist were no longer affiliated with MCC and would formalize decisions taken, especially for controversial ERRs. Further, according to EA staff, economists stated that without documentation, the agency is left with a knowledge gap and is challenged to learn from past peer reviews. This contrasts with Federal standards for internal control, which state that management should document the internal control system to provide a means to retain organizational knowledge and mitigate the risk of having that knowledge limited to a few personnel.[9]

For example, in three of four compacts (Cote d'Ivoire, Morocco II, and Niger), peer reviewers and other EA staff had left the agency, making it difficult to retain institutional knowledge. Specifically, in the Niger compact, after the peer reviewer left the agency and the country team economist rotated to a different position, EA staff could not determine what peer review actions were taken to review ERRs and could not provide evidence to us that all ERRs were reviewed.

EA developed the peer review repository to retain peer review documentation and track CBA decisions, but EA does not have guidance that states EA economists should use the repository to ensure information is available after staff leave the agency. Without guidance for EA staff to document and include peer reviews in the repository, MCC may not retain or have ready access to reviews supporting ERR analyses, which may present challenges for new peer reviewers or economists assigned to a compact to develop and review ERRs.

[8] MCC's Enterprise Risk Management risk register includes additional, possible risks that are not included in the agency's risk profile. The Office of Management and Budget Circular No. A-123 requires that each Federal government agency maintain a risk profile.
[9] GAO, Federal Standards for Internal Control, Principle 3, "Establish Structure, Responsibility, and Authority," September 2014.

SELECT COMPACTS POINT TO WEAKNESSES IN HOW MCC IMPLEMENTED THE PEER REVIEW PROCESS TO INFORM INVESTMENT DECISIONS

Although the peer review process is not used directly in investment decisions, MCC relies on the peer review process to ensure that ERRs—one of the key factors to justify project selection—are objective and reliable. Our review found inconsistent documentation, which shows that EA did not follow steps in the Peer Review Guidelines to review methods and verify calculations for the economic models of proposed investments over the course of compact development. By not following the Peer Review Guidelines, EA management and staff cannot ensure ERRs presented to investment decision makers are objective and reliable. As a result, MCC may be at risk of implementing compacts without the desired rates of return and impact on economic growth. According to MCC, inadequate implementation of the Peer Review Guidelines may be one factor contributing to less accurate ERRs.

Economic Analysis Division Staff Did Not Consistently Document Peer Reviews of ERRs for Select Compacts, Highlighting Weaknesses in Peer Review Guidelines

To determine how EA implemented the peer review in select compacts, we judgmentally selected four case study compacts: Senegal II, Cote d'Ivoire, Morocco II, and Niger. MCC updated its peer review guidance in February 2014. From February 2014 to April 2020, MCC had eight compacts that had undergone peer review. We selected four of the eight compacts that were the highest dollar investment (57 percent of the eight compacts' investments) and that reflect the four sectors in which most of MCC's work is concentrated (see Table 1).[10]

Table 1. Amount of Investment and Sectors of Four Selected MCC Compacts

Country	Investment (in millions)	Sector(s)
Senegal II	$550	Energy
Cote d'Ivoire	$525	Transportation, Education
Morocco II	$450	Land, Education
Niger	$409	Agriculture

Source: OIG analysis of MCC documents.

For the compacts in our case study, the peer reviews were not consistently documented. As a result, we had to rely on interviews to determine the extent to which peer reviews were conducted and reconstruct MCC's peer review actions. We compared the steps in the Peer Review Guidelines with the actions that EA staff took to determine the extent to which the Peer Review Guidelines were used. We found all

[10] The total investment for the eight compacts that had undergone a peer review from February 2014 to April 2020 was $3.4 billion.

four compacts lacked documentary evidence that all ERR models were peer reviewed before investment decision meetings. Table 2 shows the comparison of the Peer Review Guidelines and the steps the agency took for the compacts in our case study.

Table 2. Comparison of MCC Peer Review Guidelines and Steps Taken in Selected Compacts

Peer Review Guidelines	**Senegal II**	**Cote d'Ivoire**	**Morocco II**	**Niger**
Step 1: Managing director for EA assigns peer reviewer.	No documentation	No documentation	No documentation	No documentation
Step 2: Peer reviewer documents review of program logic and preliminary models before projects are selected.	No documentation	No documentation	No documentation	No documentation
Step 3: Country team economist formally requests peer review.	No documentation	No documentation	No documentation	No documentation
Step 4: When project proposals are approved, peer reviewer documents its assessments of ERR analyses.	3 of 7 ERR models reviewed and documented	4 of 7 ERR models reviewed and documented[a]	1 of 4 ERR models reviewed and documented	5 of 9 ERR models reviewed and documented
Step 5: Country team economist works with peer reviewer to conduct final review of ERR analyses presented in Investment Memorandum.	Spreadsheets indicated peer reviewer conducted final verification for 3 of 7 ERR models.	No documentation	No documentation	No documentation
Step 6: EA includes summary of critical risks to ERRs in Investment Memorandum.[b]	Did not include risk to indicate one model was not reviewed	Did not include risk to indicate one model was not reviewed	Included risks to indicate 3 of 4 ERR models could not be reviewed	Did not include risk to indicate 4 models were not reviewed

[a] According to EA staff, two of the ERR models for Cote d'Ivoire were peer reviewed but MCC could not provide documentation to show a review was done.

[b] According to an EA official, the summary of critical risks to ERRs should include ERR models not reviewed during the peer review process.

Source: OIG analysis of MCC documents and interviews.

We found the following gaps in EA's implementation of the peer review process as outlined in the Peer Review Guidelines.

Step 1: Managing director for Economic Analysis assigns peer reviewer.

In all four compacts, EA could not provide documentation that EA management assigned a peer reviewer prior to project selection to review the program logic and preliminary models of proposed projects.[11] In two compacts (Morocco II and Niger), the former EA managing director left the agency, so we could not determine why the peer review process did not start at Step 1. For the other two compacts, according to EA economists, the EA managing director also served as vice president for DPE at the time and did not have the capacity to fulfill peer review responsibilities. By not following the Peer Review Guidelines and assigning a peer reviewer, EA cannot complete an initial peer review of the program logic and preliminary models of proposed projects.

Step 2: Peer reviewer documents review of program logic and preliminary models before projects are selected.

In all four compacts, there was no documentation reviewing program logic and preliminary models, because a peer reviewer was not assigned. By not following the Peer Review Guidelines, EA cannot retain initial documentation that may identify issues earlier in compact development. Without reviewing initial economic analyses, MCC risks investing time and resources on proposed projects that might not generate sufficient economic benefits. The former deputy chief economist and current economists stated that earlier discussions would be beneficial in assessing whether a proposed project would be a worthwhile investment.

Step 3: Country team economist formally requests peer review.

EA staff stated that the managing director assigned peer reviewers in all four compacts after projects were selected, but there was no documentation of a formal request for a peer reviewer by the country team economist. As a result, we could not determine when the peer reviews started. During our audit, the EA Division drafted a template to formalize the request for a peer reviewer.

Step 4: After project proposals are approved, peer reviewer documents its assessments of ERR analyses.

In all four compacts, peer reviewers did not consistently document their review of ERR analyses. Because the documentation for each peer review was inconsistent, we asked for additional supporting information through interviews and obtained spreadsheets and emails to determine the number of models reviewed.

For the Senegal II compact, EA did not have documentation that ERR analyses were reviewed for the transmission project, which included three activities, each with an ERR. The peer reviewer examined the three ERR models developed by consultants, including one that generated an ERR of 17 percent, but did not document its review of ERRs before EA submitted the Investment Memo. The peer reviewer later found after the investment decision that the consultants used inaccurate data; upon receiving updated data from Senegal, recalculations showed an ERR of -7.8 percent.

[11] The Peer Review Guidelines define program logic as the proposed solutions that are (1) relevant and effective in addressing the problems identified through initial country analysis and (2) consistent with preliminary models used in MCC's preliminary assessment of the potential economic returns to a proposed project.

Step 5: Country team economist works with peer reviewer to conduct final review of ERR analyses presented in Investment Memorandum.

In three of four compacts (Cote d'Ivoire, Morocco II, Niger), there was no documentation that peer reviewers conducted final verification of ERRs presented in the Investment Memo. We relied on interviews with EA staff to determine the extent to which final calculations were verified.

During the Niger compact, an economist discovered that a project ERR documented at about 9 percent in the Investment Memorandum was closer to 2 percent. This economist said the calculation error should have been caught prior to the investment decision, but EA staff could not provide documentation to show whether the peer reviewer verified the calculations.

Step 6: EA includes summary of critical risks to ERRs in Investment Memorandum.

According to the EA managing director, when a peer review for ERRs cannot be done, EA should notify the Investment Management Committee through the summary of critical risks to ERRs in the Investment Memorandum. In three of four compacts (Senegal II, Cote d'Ivoire, Niger), there was no documentation that EA included a summary of risks to ERRs in the Investment Memorandum. By not completing peer review steps to review ERRs, EA cannot use the peer review process as an internal control to ensure that ERRs used to inform the Investment Management Committee are objective, accurate, and reliable.

MCC Staff Cited the Potential Benefits of More Consistent Documentation and Use of Templates to Help Implement the Peer Review Process

In interviews and responses to our survey, EA staff said that the peer review could benefit from more consistent documentation and use of templates. For example, an economist stated that inconsistent documentation made it difficult to update ERR models due to the variability of how peer reviewers documented their assessments. Another economist stated that having the peer review better documented or formalized earlier in the process would ensure that economists are consulting the peer reviewer earlier in the project. The chief economist also said that some degree of documentation would be helpful, especially when there are controversial ERRs that need to be resolved. The managing director noted that EA should revise its guidance to create documentation and process guidance.

In addition, EA staff identified in interviews five potential processes that could improve the effectiveness of the peer review process:

- Templates to aid completion of the peer review
- Scheduling aids to ensure sufficient time for the peer review
- Development of guidelines better integrating peer review into the compact development process

- Formal sign-off of economic models by the peer reviewer prior to submission of the Investment Memorandum
- Development of a peer review repository of completed peer review assessments

We surveyed all 21 EA staff and asked them to rank order the potential processes from most (1) to least (5) effective (see Appendix B for the complete survey). Fourteen economists responded, 10 of whom ranked templates as most or second most effective (see Figure 3).

Figure 3. Ranked Order of Potential Processes to Improve MCC's Peer Review Process

#	Templates to aid completion of the peer review	Scheduling aids to ensure sufficient time for the peer review	Development of guidelines better integrating peer review into the compact development process	Formal sign-off of economic models by the peer reviewer prior to submission of the Investment Memorandum	Development of a peer review repository of completed peer review assessments
1	5	1	2	3	4
2	1	2	5	4	3
3	1	2	5	4	3
4	2	3	1	5	4
5	1	3	2	4	5
6	5	2	1	3	4
7	2	1	4	3	5
8	5	4	2	1	3
9	1	5	2	3	4
10	2	5	1	4	3
11	2	1	5	4	3
12	5	1	4	2	3
13	1	4	2	3	5
14	1	4	3	5	2

Source: Survey responses from 14 of 21 EA staff.

MCC's Peer Review Guidelines lack procedures for the peer reviewer to document peer review actions such as the use of templates to help complete the peer review of ERR analyses. This contradicts Federal standards for internal control, which call for management to design control activities to help fulfill responsibilities such as appropriate documentation of an internal control.[12] Formal templates could improve the peer review process by aiding the EA Division in completing peer review steps to ensure that

[12] GAO, Federal Standards for Internal Control, Principle 10, "Design Control Activities," Section 10.03, September 2014.

ERRs are consistently documented, objective, and reliable when presented to investment decision makers.

CONCLUSION

Economic Rate of Return is a key factor informing MCC's decisions about whether to make investments in certain countries. MCC has acknowledged that not mitigating risks to ERR analyses could result in the agency making uninformed or untimely decisions that could compromise operational effectiveness and efficiency. Yet MCC has not fully established and implemented key controls—guidance for all its investment sectors and a peer review process—that would enable it to have greater assurance that objective and reliable ERRs provided to the investment committee will result in better informed decisions. By addressing these issues, MCC would be in a better position to ensure it makes informed, data-driven decisions that protect the investment of taxpayer dollars, advance U.S. development interests abroad through its compacts, and support operational effectiveness and efficiency.

RECOMMENDATIONS

We recommend that the MCC Economic Analysis Division take the following actions:

1. Complete "Sector Cost-Benefit Analysis Guidance" for the energy sector.
2. Develop and complete "Sector Cost-Benefit Analysis Guidance" for the agriculture sector.
3. Develop and complete "Sector Cost-Benefit Analysis Guidance" for the education sector.
4. Develop and complete "Sector Cost-Benefit Analysis Guidance" for the health sector.
5. Develop guidance to include peer reviews in the Economic Analysis Division's peer review repository.
6. Update "Guidelines for Country Team and Peer Review of Cost-Benefit Analysis" to create and include documentation such as templates to aid in implementing the peer review guidance.

OIG RESPONSE TO AGENCY COMMENTS

We provided our draft report to MCC on September 23, 2021. On October 22, 2021, we received the agency's response, which is included as Appendix C of this report. We also received MCC's technical comments, which we considered and incorporated as appropriate.

The draft report included seven recommendations. We acknowledge management decisions on six recommendations.

We consider one of them closed (recommendation 1), five resolved but open pending completion of planned activities (recommendations 2, 3, 4, 5, and 6), and we are removing one recommendation (recommendation 7) for the reasons below.

Regarding recommendation 7, we developed this recommendation based on input from managers of MCC's Economic Analysis Division on our preliminary findings discussed at the May 2021 exit conference. At that time, these managers discussed the need to align the peer review process with the greater compact development process, which would require coordination with and clearance from other MCC departments. We identified MCC's "Compact Development Guidance" as a reasonable location to promote needed interagency coordination, as the 2012 version referenced internal and external peer reviews.

In addition, MCC's current peer review guidelines referenced the 2012 "Compact Development Guidance." However, MCC updated its "Compact Development Guidance" in 2017 to remove references to internal peer reviews and focus on external processes with MCC's partner countries. Because of this discrepancy in MCC guidelines, we recommended that MCC revise the "Compact Development Guidance" to incorporate the peer review process so that the guidelines align to ensure interagency coordination when developing objective and reliable ERRs.

Given that the "Compact Development Guidance" is now externally facing, MCC affirmed that it is not a suitable location for the clarified internal peer review guidelines. We agreed with MCC, and upon further review, we removed the recommendation and adjusted the report language as appropriate. Nevertheless, we encourage the Department of Policy and Evaluation, Economic Analysis Division, and Department of Compact Operations to continue to work with each other to promote coordination and transparency to improve the quality and consistency of economic analyses used to inform compact investment decisions.

APPENDIX A. SCOPE AND METHODOLOGY

We conducted our work from February 2020 through September 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We conducted this audit to assess to what extent (1) MCC's guidance and procedures for developing and reviewing ERR analyses address identified risks and (2) MCC used the peer review process to inform investment decisions in select compacts.

In planning and performing the audit, we gained an understanding and assessed internal controls that were significant to the audit objectives. Specifically, we designed and conducted procedures related to five internal control principles under four of the five components of internal control as defined by GAO.[13] These included the Control Environment (Principle 3), Risk Assessment (Principle 7), Control Activities (Principle 10), and Information and Communication (Principles 13 and 14).

To determine the extent to which MCC's guidance and procedures for developing and reviewing ERR analyses address identified risks, we reviewed GAO reports to identify challenges from past audits related to MCC's process to develop and review ERRs and verified actions MCC staff took to address these issues. We also reviewed MCC's 2019 and 2020 enterprise risk management profiles as well as two MCC Economic Advisory Council meeting minutes and EA's discussion of the 2020 EA risk profile for cost-benefit analysis. In addition, we examined MCC's guidance and procedures and assessed the status of actions taken to address identified challenges. Finally, we interviewed seven EA division officials, a Department of Compact Operations official, and two Department of Policy and Evaluation officials to confirm actions MCC staff took to address previously identified challenges.

To determine the extent to which MCC used the peer review process to inform investment decisions in select compacts, we developed a sampling plan and judgmentally selected a sample of MCC compacts. Our initial selection factor focused on compacts that implemented the 2014 Peer Review Guidelines. We identified a population of eight MCC compacts that fit our initial selection factor. We judgmentally selected four compacts (Senegal II, Cote d'Ivoire, Morocco II, Niger), because they had completed the peer review process since 2014 and were the highest dollar investment compacts. We also reviewed MCC's Peer Review Guidelines to understand how MCC implements its peer review process. For each selected compact, we reviewed compact development documents such as the Project Proposal Assessment Memorandums, Investment Memos, peer review assessments, spreadsheets, and correspondence between the peer reviewer and country team economists. Then we compared the steps in the Peer Review Guidelines with the actions that EA staff took to determine the extent to which

[13] GAO, Federal Standards for Internal Control, September 2014.

peer review objectives were met. We had to rely on interviews to determine the extent to which peer reviews were implemented and used. We interviewed 15 officials from the EA Division, including 4 who no longer work at MCC. We interviewed four officials from the Department of Compact Operations and one official from the Department of Policy and Evaluation to understand their roles in the peer review process.

In addition, we surveyed all 21 EA staff and managers, including contractors, to identify potential actions to improve the effectiveness of the peer review process. We received responses from 14 economists. We interviewed the seven who did not respond, and three of the seven were asked the survey questions during their interviews. We assessed the rank-ordered potential actions to improve the effectiveness of the ERR peer review process from most (1) effective to least (5) effective.

APPENDIX B. OIG SURVEY OF MCC ECONOMIC ANALYSIS DIVISION

In October 2020, OIG administered an email survey to all 21 Economic Analysis (EA) Division staff to help us understand MCC's risks and challenges that contribute to uncertainty in achieving the best estimate of the Economic Rate of Return (ERR). We received 14 responses out of 21 (a response rate of 67 percent). The survey included two parts, each with two questions. The first part was on the risks to ERR that EA identified in MCC's Enterprise Risk Management. The second part focused on actions the staff mentioned in multiple interviews that could help improve the effectiveness of MCC's peer review process for ERR analysis.

Enterprise Risk Management-ERR Process

1. As part of MCC's enterprise risk management process, the agency identified eight risks and/or challenges that contribute to uncertainty over the best estimate of the ERR. (*Note: The enterprise risk management process identified two additional risks and/or challenges—exogenous shocks and evolving methodology in ERR calculations across programs—which are outside of the scope of our audit.*) Please rank order from 1 to 6 which risks—in your view—*most (1)* contribute to uncertainty over the best estimate of ERR to those that contribute *least (6)*.

These risks and challenges include:
__ Unanticipated changes in costs and benefits
__ Inaccurate and unstable data
__ Lags in timely communication and coordination between MCC departments about ERR calculations
__ Inadequate ongoing review of ERR calculations
__ Human error
__ Inadequate resources

2. Are there other risk and/or challenges—in your view—that are not captured in this list? Please list in the space below and explain why you think this risk is more significant than the eight MCC identified.

Peer Review Process for ERR Analysis

3. Please rank order the following actions that help improve the effectiveness of MCC's peer review process for ERR analysis from those which—in your view—would be most (1) effective to least (5) effective

__ Templates to aid completion of the peer review
__ Scheduling aids to ensure sufficient time for the peer review
__ Development of a peer review repository of completed peer review assessments
__ Formal sign-off of economic models by the peer reviewer prior to submission of the Investment Memorandum

__ Development of guidelines better integrating peer review into the compact development process

4. Are there other actions that you believe would help improve the effectiveness of MCC's peer review process for ERR? Please list in the space below.

APPENDIX C. AGENCY COMMENTS

MILLENNIUM
CHALLENGE CORPORATION
UNITED STATES OF AMERICA

DATE:	October 22, 2021
TO:	Gary Middleton Director, Millennium Challenge Corporation Performance Audits Office of Inspector General United States Agency for International Development
FROM:	Alicia Phillips Mandaville /s/ Vice President Department of Policy and Evaluation Millennium Challenge Corporation
	Mark Sundberg /s/ Deputy Vice President and Chief Economist Department of Policy and Evaluation Millennium Challenge Corporation
SUBJECT:	Management Response to the Draft Audit Report, "MCC Economic Rate of Return: More Guidance Would Mitigate Risks That Could Lead to Uninformed Investment Decisions," dated September 23, 2021

The Millennium Challenge Corporation (MCC) appreciates the opportunity to review and comment on the draft audit report by the Office of Inspector General (OIG), "MCC Economic Rate of Return: More Guidance Would Mitigate Risks That Could Lead to Uninformed Investment Decisions," dated September 23, 2021. To place the auditors' findings in the appropriate perspective, MCC would point out that the corporation's commitment to rigorous standards of cost-benefit analysis underlying its investment portfolio is unique among international development donors, as the auditors learned during their interviews with officials with experience in MCC and other organizations. Notwithstanding MCC's leadership in the field, the corporation recognizes the opportunities for expanding sector-specific guidance on cost-benefit analysis and improving the documentation of peer reviews conducted to enhance the reliability of the economic rate of return (ERR) estimates that serve as a key pillar for MCC's investment decisions. MCC will act to address the opportunities noted by OIG within the overall framework of the compact development process and MCC's goals to launch investments that will deliver benefits in a timely manner for the intended beneficiaries. Finally, MCC expresses its disappointment in OIG's choice to incorporate in the draft audit report a new finding with inaccuracies, in an otherwise positive engagement and could have been avoided had the finding been discussed with MCC managers prior to the issuance of the draft audit report. Additional comments have been provided in an Annex to this response.

The audit report sets forth seven recommendations. MCC provides our response and corrective action plan for each recommendation below.

OIG's Recommendation #1

Complete "Sector Cost-Benefit Analysis Guidance" for the energy sector.

MCC's Response

MCC concurs with the recommendation. Indeed, MCC completed the sector cost-benefit analysis guidance for the energy sector in September 2021. It has been already made available to all MCC staff through the corporation's intranet. The document is going through the publication process and will be posted on the MCC website by the end of October 2021.

OIG's Recommendation #2

Develop and complete "Sector Cost-Benefit Analysis Guidance" for the agriculture sector.

MCC's Response

MCC concurs with the recommendation and agrees that "Sector Cost-Benefit Analysis Guidance" for the agriculture sector will benefit MCC's process; the main challenge is to set a timeframe for production of the guidance that (1) allows for work of sufficient quality and utility, and (2) that balances this effort with commitments in the overall portfolio for EA staff. Past such efforts have taken several years to bring to fruition. In our view, under current staffing and resource levels, a slightly under two-year timeline for the agricultural sector guidance would be realistic. MCC will plan to complete the "Sector Cost-Benefit Analysis Guidance" for the agriculture sector no later than June 30, 2023.

OIG's Recommendation #3

Develop and complete "Sector Cost-Benefit Analysis Guidance" for the education sector.

MCC's Response

MCC concurs with the recommendation and agrees that "Sector Cost-Benefit Analysis Guidance" for the education sector will benefit MCC's process. Similar to the agricultural sector guidance, the main challenge is to set a timeframe for production of the guidance that (1) allows for work of sufficient quality and utility, and (2) that balances this effort with commitments in the overall portfolio for EA staff. Past such efforts have taken several years to bring to fruition. In our view, under current staffing and resource levels, an 18-month timeline for the education sector guidance would be realistic. MCC will plan to complete the "Sector Cost-Benefit Analysis Guidance" for the education sector no later than March 31, 2023.

OIG's Recommendation #4

Develop and complete "Sector Cost-Benefit Analysis Guidance" for the health sector.

<u>MCC's Response</u>

MCC concurs with the recommendation and agrees that "Sector Cost-Benefit Analysis Guidance" for the health sector will benefit MCC's process. In addition to the challenges cited above with respect to the guidance for the agriculture and education sectors, MCC will need to engage external experts to assist in developing the health sector guidance and anticipates a longer timeframe for completion. MCC will plan to complete the "Sector Cost-Benefit Analysis Guidance" for the health sector no later than September 30, 2023.

OIG's Recommendation #5

Develop guidance to include peer reviews in the Economic Analysis Division's peer review repository

<u>MCC's Response</u>

MCC concurs with the recommendation. MCC will plan to develop guidance to include peer reviews in the Economic Analysis Division's peer review repository no later than March 31, 2022.

OIG's Recommendation #6

Update "Guidelines for Country Team and Peer Review of Cost-Benefit Analysis" to create and include documentation such as templates to aid in implementing the peer review guidance.

<u>MCC's Response</u>

MCC concurs with the recommendation and agrees that EA's peer review guidance can be improved by adding templates to aid in implementing the guidance. At the same time, in addition to including templates for documentation to the existing guidance, MCC is carefully reconsidering the entire approach to peer review in order to gain the most benefit from addressing the recommendation. The new peer review guidance for cost-benefit analysis will present an approach, including appropriate documentation procedures and templates, to focus the time of economists and peer reviewers on assuring reliable ERRs to support sound MCC investment decisions while meeting the demanding timeframes of the compact development process. MCC has initiated this reconsideration of the peer review process in the months following the audit exit conference and plans to complete the new peer review guidance and templates, including required coordination with and clearance from other MCC Departments, by May 31, 2022.

OIG's Recommendation #7

Revise the 2017 "Compact Development Guidance," in coordination with the MCC Department of Compact Operations, to incorporate the peer review process so that it aligns with the current compact development process.

MCC's Response

This finding, newly presented in the draft audit report without prior discussion with MCC management, is inaccurate and mischaracterizes the compact development process. The Compact Development Guidance is intended to serve as a reference for MCC's counterparts in partner countries and the last version, completed in 2017, was streamlined to focus more directly on activities involving MCC's partners. Consistent with this sound objective for revising the guidance, MCC removed the reference to its overarching peer review process that does not specifically address the ERR peer review. It is MCC's understanding that, based on discussions following the issuance of the draft audit report, OIG is reconsidering this recommendation and the related finding in the draft audit report. Therefore, MCC will not address the recommendation at this time.

MCC appreciates OIG's commitment to improving MCC's programs and shares OIG's interest in mitigating risks for the prudent use of public resources. MCC looks forward to working closely with the OIG on future engagements to achieve timely and quality audits to enhance the investment decision making process and mitigate risks throughout the agency. MCC urges OIG to ensure that in the future all findings and recommendations are identified and communicated to MCC management by no later than the audit exit conference, to allow full and open discussion of issues and promote inter-organizational trust that can maximize the benefits of OIG's audit program.

If you have any questions, please contact Alicia Phillips Mandaville at 202-772-6608 at mandavilleap@mcc.gov, or Mark Sundberg at sundbergm@mcc.gov or 202-521-3580.

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