



Burkina Faso

MCC Lessons from the

Burkina Faso Agricultural Development Project Evaluation

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MCC's Monitoring and Evaluation (M&E) Division, in consultation with MCC sector experts and economists, has developed the following programmatic and evaluation lessons from the Burkina Faso Agricultural Development Project Evaluation. These lessons are based on the interim evaluation report.

PROGRAMMATIC/SECTOR LESSONS

MCC should engage in institutional reform and capacity development efforts earlier and more substantially. To improve long-term sustainability, MCC should also find opportunities to build on existing institutions when creating water user associations (WUAs). The Water Management and Irrigation Activity is another reminder of the challenges in developing capacity of institutions that are responsible for operating and maintaining MCC's infrastructure investments. Delays in the Di Perimeter construction reduced the time for institutional development. Only one WUA on the Di perimeter had received the planned support and training by the end of the Compact. The Government's post-compact entity took on many implementation responsibilities after the Compact end date until the Government decided it should be dissolved. To support long-term sustainability, MCC should look to partner with existing institutions where possible instead of building new ones. In addition, reform should not wait until the infrastructure is completed. MCC could have supported the entity responsible for maintaining the primary canals and overseeing water user associations before construction began. The institutional reform and capacity development efforts have lower cost and visibility than the infrastructure ones, although they seem to require as much or more staff time due to their complexity. MCC is addressing this lesson by requiring governments to take difficult policy actions as a condition to infrastructure investments. MCC is also engaging more substantively in the compact development process on institutional and regulatory issues. MCC is exploring ways to adapt its development and implementation processes to better engage with countries on institutional reform and development. This includes the use of more complexity-aware and adaptive implementation approaches.

MCC should continue following the IFC Performance Standards (officially adopted in 2012 – after implementation of resettlement activities in Burkina Faso had begun) in order to avoid pitfalls related to the sometimes inconsistent resettlement implementation strategies used before their adoption. The evaluation noted some potential issues with the compensation process, which may have been caused by inadequate communication. Some farmers with larger plot sizes stated they were unsatisfied with the amount of the financial compensation. The evaluator's own analysis suggests these project affected persons (PAPs) may have been disadvantaged by the compensation formula, which was excessively complicated even for resettlement professionals, let alone PAPs. Additionally, farmers rejected the resettlement consultants' use of aerial imagery to determine plot sizes. MCC has addressed this lesson by requiring that (i) all MCC Environmental and Social Performance (ESP) staff and consultants working on resettlement are well-informed about IFC Performance Standard (PS) 5 concerning land acquisition and resettlement; (ii) specialized resettlement consultants are used in all projects that trigger PS 5; (iii) experienced staff or consultants with resettlement expertise prepare and review resettlement documents, such as resettlement policy frameworks and resettlement action plans; and (iv) supervision missions during implementation entail rigorous review of resettlement activities. Furthermore, the ESP division is preparing detailed resettlement guidance specific to MCC needs and operations to supplement the guidance provided for IFC PS 5.

Training, if done right, can be an effective modality for increasing the adoption of improved farming practices and technologies. The farmer training evaluation found that most trained farmers reported applying at least one technique from the training and cited the new practices' usefulness, time savings, and positive effects. They also shifted towards higher value crops that the project targeted, such as onions and corn. Strengths of the training included its flexibility to adapt the content to the most relevant crops and techniques and its use of demonstration plots. However, beneficiaries expressed dissatisfaction with the large class sizes. Overly burdensome implementation procedures also reduced the training's timeliness. It was not delivered when it was needed most. MCC is addressing this lesson by reframing training as a way to achieve long-term outcomes such as farm income growth rather than an end in itself. MCC is also considering ways to enhance the effectiveness of training by connecting it more closely to other functions such as marketing.

Ensuring beneficiaries understand the benefits being provided can affect the project's intended outcomes. Beneficiaries did not fully understand the benefits they were being provided. Some believed they would receive a second compensation for the land they lost. Many PAPs expected to continue receiving the farmer incentive kits on an annual or seasonal basis. Not all PAPs were aware of land transfer rights. To address this concern, MCC needs to communicate with beneficiaries more effectively. One channel may be to work with civil society to ensure messaging will resonate with beneficiaries. Finally, MCC needs to better understand baseline expectations. If farmers are used to certain public sector behaviors, it may be difficult to convince them to expect different outcomes in the future.

An increase in agricultural yields may not necessarily lead to an increase in agricultural profits, because of higher input costs and price decreases. A full price analysis will be included in the final evaluation. However, focus group discussants during the interim evaluation noted low prices for their crops due to the lack of accessible roads to and from the perimeter and associated

lack of traders accessing the perimeter. Additional production may have saturated sales opportunities. Higher input prices, water fees, and other expenses related to their new land also reduced profits. MCC is taking this into account for future compacts by considering the entire value chain from inputs to transport to markets, including transport infrastructure investments. MCC will also design agricultural projects to prevent surges in production from MCC programs that could result in a collapse in agricultural prices.

EVALUATION LESSONS

Lottery-based randomized control trials (RCT) are feasible and effective ways of rigorously measuring the impacts of large-scale irrigation infrastructure on agricultural outcomes. Significance and balance tests demonstrated that control and treatment groups were similar along observable characteristics. The process was transparent and exceeded the target for female winners. However, this approach alone cannot be used to estimate the project's economic rate of return, which is more difficult to measure. This approach also does not allow to separate effects of the project's different land and agriculture components of the project. Lastly, establishing the lottery takes time and requires considerable and early engagement among staff. MCC is using this learning by considering lottery approaches in other RCTs.

Evaluating multiple distinct sub-activities complicates evaluation designs and reduces the depth with which evaluation questions are addressed. As a part of the evaluation design process, the evaluator and MCC assessed the priority of evaluating almost ten sub-activities. These varied in project cost and in availability of baseline data. The evaluation provided a very light touch on some sub-activities (e.g. Rural Markets) and did not evaluate others (e.g. animal husbandry). There were also areas where additional qualitative information would have enhanced the evaluation's interpretations of findings. MCC is addressing this lesson by ensuring sub-activities work cohesively together to achieve a common objective for a shared set of targeted beneficiaries. This work begins during project development and continues through implementation. For projects with multiple sub-activities requiring differentiated evaluation approaches, MCC is working with independent evaluators to assess evaluability along pre-defined criteria, such as learning potential for MCC and the host country, and data availability.

Evaluations should use remote sensing and geospatial analysis to provide more credible and precise estimates of changes in land use and agricultural production. This evaluation provided further evidence of the limitations in measuring agricultural production at two points in time. The rainfall when baseline data collection was completed in 2012 was considerably higher than in 2017 when the interim was collected. This reduced the meaningfulness of pre-post comparisons. This is especially the case with the farmer training evaluation where farmers adopted improved practices and techniques, but yields decreased. This also hinders evaluation-based cost-benefit analyses to provide precise estimates of the project's economic rate of return. MCC is addressing this lesson by convening a panel of experts to assess MCC's recent evaluation results and propose new methods, potentially such as using remote imagery, to enhance MCC's ability to reliably estimate the economic effects of irrigation and other agricultural investments on income growth and poverty alleviation. One possible approach could be to measure a three-year average production before intervention and compare with a similar average after. MCC is increasingly requesting evaluation teams include geospatial experts as key personnel so that geospatial analysis and remote sensing

are considered early on in the evaluation and can make use of best practice in measuring land use changes.

MCC should ensure that the evaluation team include the appropriate sector expertise to assess the key aspects of the project logic. The absence of a land tenure expert resulted in insufficient assessment of land tenure outcomes, which were clearly included in the project logic and evaluation design. First, the initial draft of the survey questionnaire omitted land tenure and governance questions. After consultations with MCC, the evaluator revised the questionnaire to include those questions, but those were not asked to the Di Control Group due to a programming error. As a result, the evaluation lacked a valid counterfactual on land tenure, transfers and land based investments. It's likely that a land tenure expert involved in the survey design and implementation and data analysis would have prevented such omissions. MCC is addressing this lesson by requiring land tenure and agricultural experts as key personnel in any evaluations with land or agricultural benefit streams. MCC has also asked for quality control plans related to computer-assisted personal interviewing testing and programming as part of the evaluation design report.

Organizational capacity and relationships influence project sustainability and therefore should be more deliberately assessed before, during, and after project implementation. Quantitative performance indicators that tend to define MCC's monitoring approach are not well-suited for understanding the policy and institutional environment that influence a project's results. Sector and M&E experts should deepen their collaboration to ensure contextual information is systematically collected to inform project design and implementation and to assess the progress of institutional reform and capacity development support.

MCC divisions should coordinate baseline data collection activities to ensure the resulting data meets each division's needs and to prevent duplicative data collection. This is especially the case when there is significant overlap between PAPs and beneficiaries, such as in the Water Management and Irrigation Activity. The ESP division collected data for the resettlement action plan. It was hoped that this data would be integrated into the independent evaluation. However, this data missed critical information that is needed for evaluation purposes. The evaluator's baseline report documents those survey's limitations. The survey was designed as a stratified representative sample, but there were no sampling weights to make it representative. The baseline report lacked detail needed to replicate sampling. Substantial survey non-response and insufficient information on sampling process prevented the evaluator from addressing attrition appropriately.