Report Number: ICRR0023143

1. Project Data

Project ID	Project Name
P145335	ZM-Health Services Improvement Project
Country	**Practice Area(Lead)**
Zambia	Health, Nutrition & Population

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
IDA-53940,TF-16639	30-Jun-2019	58,478,787.90
Bank Approval Date	**Closing Date (Actual)**	
21-Mar-2014	31-Dec-2020	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	52,000,000.00	15,000,000.00
Revised Commitment	63,339,811.75	13,771,000.00
Actual	58,478,787.90	13,771,000.00

Prepared by	Reviewed by	ICR Review Coordinator	Group
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2. Project Objectives and Components

a. Objectives

The objective of the project was to improve health delivery systems and utilization of maternal, newborn and child health and nutrition services in project areas (Financing Agreement, p. 5).

At a project restructuring on June 28, 2019, at which time disbursement reached 79 percent, one outcome target was revised downward. The original target was substantially achieved and the revised target was fully

achieved. Therefore, this ICR Review did not apply a split rating methodology, as it would serve no purpose in this case.

On June 23, 2020, six months before the closing date, at which time disbursement was at 98.6 percent, a new objective on a contingent emergency response was triggered through an amendment to the financing agreement (p. 1): "to prepare for and provide an immediate and effective response to the EVD emergency" (EVD = Ebola Virus Disease). As achievements among objectives were similar, this ICR Review did not apply a split rating because its benefit is a moot point.

b. Were the project objectives/key associated outcome targets revised during implementation?

Yes

Did the Board approve the revised objectives/key associated outcome targets?

No

c. Will a split evaluation be undertaken?

No

d. Components

I. Strengthening capacity for primary and community level Maternal, Newborn, and Child Health and nutrition services (MNCH&N) (Appraisal: US$27.5 million; Actual: US$22.4 million)

Sub-component 1.1: Enhance training capacity and standards for nursing and midwifery:

The sub-component consisted of carrying out of a program of specific activities aimed at enhancing the training capacity and standards for nursing and midwifery including inter alia, strengthening the capacity of selected nursing training institutions to deliver an integrated and comprehensive pre-service education package on MNCH&N services to nursing students, conducting applied in-service training to nurses and midwifery graduates before commencement of their employment at primary health care facilities in targeted provinces, and supporting the development and roll out of continued professional development training to nurses and midwives working in primary health care facilities in targeted provinces, all through the provision of results-based grants.

Sub-component 1.2: Improve supply chain systems and availability of essential commodities:

The sub-component consisted of carrying out of a program of specific activities aimed at improving supply chain systems and availability of essential commodities, including inter alia, providing essential health and nutrition commodities, supplies and equipment in primary health care facilities; strengthening the capacity for storage and distribution of health and nutrition commodities and supplies from the central level to health service delivery points; and implementing the electronic-based Zambia Inventory Control System to improve stock visibility and accountability, all through the provision of results-based grants.

Sub-component 1.3: Improve referral system and linkages across levels of care:

The sub-component consisted of carrying out of a program of specific activities aimed at improving the referral system and linkages across levels of health care, including delivering a package of high impact

MNCH&N interventions through primary health care facilities; developing guidelines and strengthening linkages among and between community-based service delivery structures, including community development committees, social welfare committees, neighborhood health committees and community health workers; developing and implementing quality checklists for supervision and mentorship across different service delivery levels, including district hospitals, health centers, health posts and communities; and providing equipment and timely maintenance, all through the provision of results-based grants.

II. Strengthening Utilization of Primary and Community Level MNCH&N Services through Results Based Financing (RBF) Approaches (Appraisal: US$24 million; Actual: US$24.6 million)

Sub-component 2.1: Expand results-based financing (RBF) at the primary facility level:

The sub-component aimed at carrying out of a program of specific activities to expand RBF across targeted provinces through health centers, district hospitals, and district medical offices, by delivering packages of MNCH&N services, and to reward key duty bearers for achieving pre-agreed quantity and quality of services. Facilities were to be given considerable autonomy in how they used the funds they earned to cover operational costs and performance bonuses. District medical offices were responsible for supervising facilities, verifying results, and submitting data to the District RBF Steering Committee for further verification and confirmation of the quarterly amounts to be paid to health centers. An independent agency was planned to be contracted to verify results. Provincial RBF committees were to purchase health services at district medical offices and district hospitals and recommend the amounts to be paid.

Sub-component 2.2: Introduce results-based approaches at the community level:

This sub-component aimed at carrying out of a program of specific activities by community-based entities, including neighborhood health committees. Community-based RBF activities would include early registration of women of reproductive age; provision of MNCH&N packages; counseling of women and home-visit follow up; outreach activities to improve management of childhood illness; and mobilization of community members for growth monitoring and promotion, immunization, and nutrition education. Activities would also provide for stronger linkages with traditional and religious leaders for addressing socio-cultural issues affecting maternal health.

III. Strengthening project management and policy analysis (Appraisal: US$15.5 million; Actual: US$10 million)

Sub-component 3.1: Project management and implementation, monitoring and evaluation (M&E):
This sub-component intended to strengthen project implementation capacity of the Ministry of Health (MOH) and the Ministry of Ministry of Community Development, Mother and Child Health (MCDMCH) with particular attention to provincial and district levels. Support would include: (i) expert technical support for implementation of the Disbursement-linked Indicators (DLIs) and RBF approach; (ii) building of capacity for day-to-day administration of project activities (monitoring resource use, procurement processing activities, administering withdrawal and disbursement procedures, consolidating financial management aspects of implementation, and reporting, as well as coordinating with relevant sector ministries, departments, health professional training institutions and associations, civil society organizations, and the private sector; and (iii)

strengthening the Health Management Information System (HMIS) and roll out and integration of community level MNCH&N information into the District Health Information (DHIS2).

Sub-component 3.2: Support evidence-based policy analysis and health financing innovations:

This sub-component would support the production of evidence-based analytical studies in health and nutrition, including health financing, planning, and budgeting, human resources for health, and drugs and medical supplies.

Sub-component 3.3: Institute independent verification arrangements:

Sub-component 3.3 would support the setting up of verification mechanisms for results-based activities, including the cost of contracting an independent verification agent, and baseline, midline, and endline surveys.

Revised Components:

A fourth component was added in 2019, and its related objective was triggered in 2020:

IV. Contingent Emergency Response to Ebola (Appraised during the 2020 Restructuring US$3.1 million; Actual: US$1.52 million)

The component would be financed through project reallocations and aimed to support EVD preparedness and response in high-risk districts (ICR, p. 13). The component would provide training, goods, materials, sprayers, personal protective equipment, and other items discussed in Section 4.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Costs and financing: At appraisal, the project cost was estimated at US$67 million, consisting of an IDA Credit of US$52 million equivalent and a grant of US$15 million from the Multi-donor Trust Fund for Health Results Innovation. The lending instrument consisted of Investment Project Financing (IPF). No direct financial contributions from the Borrower were planned or provided. The actual cost was US$58.5 million. The difference between the estimated cost and actual cost was explained by exchange rate losses and by the cancellation of US$2.3 million at project closing (ICR, p. 22).

Dates: The project was approved on March 21, 2014 and became effective one year later on March 31, 2015. The delay was due to government changes, including changes in leadership and roles of the two implementing ministries, MOH and MCDMCH (ICR, p. 27). The original closing date was planned for June 30, 2019. A Mid-Term Review was carried out on April 30, 2018. A first restructuring on June 28, 2019 revised the results framework and component costs, and extended the original closing date by one year. A second restructuring on June 23, 2020, added an objective to respond to the EVD emergency, revised the results framework and component costs, and further extended the closing date by six months. The project closed on December 31, 2020.

3. Relevance of Objectives

Rationale

At appraisal, objectives were responsive to human development challenges facing the country, as progress in human development aspects was insufficient to achieve health and nutrition Millennium Development Goals (MDG) by 2015 (PAD, p. 1). Under-5 mortality was 89 deaths per 1,000 live births, higher than the average for lower middle-income countries of 61 deaths and the MDG target of 64 deaths. The maternal mortality ratio was high at 440 deaths per 100,000 live births. An estimated one-third of under-5 mortality and a quarter of maternal mortality were associated with malnutrition. Low coverage and utilization of maternal and child health services were attributed to both demand and supply side constraints (PAD, p. 3).

The Zambia Vision 2030, the revised Sixth National Development Plan (2013-2016), the National Health Policy, the National Health Strategic Plan (2011-2015), and the Roadmap for Accelerating Reduction of Maternal, Newborn and Child Mortality (2013-2016) all specifically identified maternal and child health as a priority. Objectives were aligned with the Country Partnership Strategy FY13–FY16, specifically with Outcome 1.2 on improved access to resources for strengthening household resilience and health.

At closing, development objectives were fully aligned with the Country Partnership Framework (CPF FY19-FY23) through CPF Objective 2.1: “Access to secondary education, health services, nutrition and social protection increases, with attention to girls and women in selected rural areas” under Focus Area 2: Public Services and Social Protection for Job Participation. In terms of health, the CPF noted that the CPF program aims to improve health services delivery particularly in rural areas with emphasis on primary and community MNCH and nutrition services. CPF objective indicators included deliveries attended by skilled health staff, and the CPF supplementary progress indicators included the percentage of primary health facilities with at least one qualified health worker. Both were project indicators.

The significant relevance of the objective pertaining to preparedness and response to an EVD emergency was also self-evident, as Zambia was at risk of an EVD outbreak (ICR, p. 21) following the 10th EVD outbreak in the neighboring Democratic Republic of Congo (DRC) which started in August 2018 and resulted in 3,470 cases and 2,287 deaths by the end on June 25, 2020. The 11th EVD outbreak originally declared by DRC on June 1, 2020 ended on November 18, 2020, after causing 130 cases and 55 deaths. While the outbreaks in DRC were contained and declared over, WHO recommended vigilance against flare-ups. The EVD objective is consistent with Bank-supported programs that prioritize capacity building in preventing, detecting, and responding to infectious disease threats. Support to this objective reflects the World Bank’s global commitment to strengthen pandemic preparedness and to support related national plans. The objective and related project investments would contribute to building health system resilience to eventual public health emergencies.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

Improve health delivery systems and utilization of maternal, newborn and child health and nutrition services in project areas

Rationale

This ICR Review addressed both health delivery and utilization improvements under one objective because they are closely interlinked under the same theory of change, including service provision, training, and supplies, and with similar indicators. For example, deliveries attended by skilled staff can reflect availability and readiness of skilled staff to care for a mother during her child's birth, and at the same time, they constitute an important measure of utilization by pregnant women who seek a supervised delivery.

Definition of project areas in the PDO statement: According to the PAD (p. 7), the project involved five of the country's ten provinces: Luapula, Muchinga, Northern, North-Western, and Western provinces. Project provinces were selected based on: (i) high poverty levels; (ii) low human opportunity index; (iii) high under-5 mortality, (iv) low coverage of skilled birth attendance; (v) high prevalence of stunting in under-5 children; and (vi) complementarity with other initiatives supported by Cooperating Partners. The ICR (p. 27) stated that throughout the life of the project, districts were added, but no further information was offered by the ICR. In response to TTL Interview queries, the Task Team clarified on December 6, 2022, that districts were added within the five project-supported provinces. Initially, there were 40 districts. 21 districts were added by dividing existing districts, resulting in an aggregate total of 61 districts. It was understood that those added during the early years of the project benefited from most of the project activities while those created during the latter part of implementation benefited less from project activities.

Theory of change

It was reasonably expected that the provision of packages of MNCH&N services through RBF, training of nurses and midwives, improved supply chain, and support of analytical studies would result in improved coverage, staff competencies, availability of medicines, and improved referrals, all of which would contribute to improved health delivery systems and utilization of MNCH&N services in project areas.

Outputs and intermediate outcomes

Project-supported training benefitted a total of 18,639 nurses and midwives, exceeding the target of 15,000 nurses and midwives. Nine training institutions adopted and implemented an integrated, comprehensive pre-service education package on MNCH&N for nursing students. Newly recruited nursing and midwifery graduates who were previously trained on the old curriculum (that lacked competencies in some emergency obstetric and newborn care and nutrition) underwent a three-month training as part of their deployment, and those already in service were trained though continuing professional development. In addition, the number of

tutors and health care providers trained in essential newborn care competency-based training reached 375 persons, exceeding the target of 200 providers and tutors.

Aiming at improving the supply chain, the project expanded storage and management capacity at the sub-national level. A supply chain strategy with an implementation plan was developed, positively incentivized by DLIs to strengthen procurement, storage, and distribution of drugs and medical supplies. The procurement function for medicines and medical supplies was subsequently transferred from MOH to the Zambia Medicines and Medical Supplies Agency. Also, RBF funds allowed facilities to fill gaps in the availability of essential commodities.

The percentage of primary health facilities with at least one qualified health worker increased from a baseline of 19 percent in 2013 to 98 percent in 2020, exceeding the target of 95 percent.

The percentage of health facilities conducting Growth Monitoring and Promotion based on new standard guidelines increased from a baseline of zero in 2013 to 33 percent in 2020, exceeding the target of 30 percent.

The number of outreach sites conducting Growth Monitoring and Promotion based on new standard guidelines increased from a baseline of zero in 2013 to 2,227 sites in 2020, exceeding the target of 1,000 outreach sites.

Health facilities conducting cervical cancer screening increased from a baseline of zero in 2013 to 7 facilities in 2020, almost attaining the target of 8 facilities.

Structures protected by indoor residual spraying for malaria increased from a baseline of 1 million structures to 2.85 million structures in 2020, exceeding the target of 1.1 million structures.

The project facilitated the execution and dissemination of a Public Expenditure Review, the Zambia National Rational Use of Medicines Study, and a package of high-impact MNCH and nutrition interventions that was developed and deployed, including at the community level. Referrals were further supported through procurement of transport and communication equipment, and refurbishment and renovation of maternal waiting homes. Six protocols and guidelines at community and primary care levels were updated and disseminated.

The number of people who received essential health, nutrition, and population services reached about 3.4 million persons, short of the original target of 4 million people, but exceeding the revised target of 3 million people.

The ICR (p. 28) reported that citizen engagement improved through enhanced collaboration between health facilities and community structures.

The number of health facilities (health centers and district hospitals) implementing the RBF approach in project areas reached 964 facilities, exceeding both the original target of 545 facilities and the revised target of 900 facilities.

Neighborhood health committees implementing the RBF approach in the project areas reached 2,450 committees, short of the target of 3,000 neighborhood committees, but reflecting substantial achievement. Neighborhood health committees utilizing the community health management information system reached

2,091 committees, exceeding the original target of 2,000 committees, but slightly short of the upward revised target of 2,200 committees.

Women attending antenatal care within the first three months of pregnancy increased from a baseline of 9 percent to 33.8 percent, short of the target of 50 percent. The rate had previously exceeded the target by reaching 59 percent, but declined at the final measure, probably reflecting an overall reduction in seeking care due to COVID-19. Similarly, lactating women accessing post-natal care within six days increased from 37 percent to 73.9 percent, short of the target of 85 percent, although 89 percent was achieved and exceeded the target before the COVID-19 pandemic. The ICR (p. 24) noted that the project influenced to a certain extent deeply rooted socio-cultural norms affecting women's health where many women keep their pregnancy secret and fail to benefit from early pregnancy interventions. Engagements with traditional leaders at the community level contributed to alleviating some of these issues with increased numbers in first registration for antenatal care, access, and institutional deliveries across project-supported provinces.

The number of districts with community information systems integrated with DHIS-2 in project areas increased from a baseline of zero in 2013 to 40 districts in 2020, exceeding the original target of 39, but short of the upward revised target of 45 districts.

Outcomes

Deliveries attended by a skilled provider increased from a baseline of 27 percent in 2012 to 63 percent in December 2020, exceeding the original target of 57 percent (under the predominant disbursement weight period), but short of the upward revised target of 80 percent, although overall progress was substantial. Progress toward the increased target was on track prior to COVID-19 pandemic service disruptions in 2020 and 2021 (ICR, p. 15).

Trends in deliveries conducted by skilled personnel between 2013 and 2020 were compared between project provinces and non-project provinces. In non-project provinces, the percentage of attended deliveries increased from 44 percent to only 57 percent, in contrast with a steeper increase in project provinces where attended deliveries reached a peak of 78 percent before the pandemic. A multi-country study by the Global Financing Facility in FY 2020/21, which included Zambia, indicated that most countries experienced significant drops in key health indicators due to COVID-19, especially in the early phase of the pandemic and related lockdowns. The observed progress in project areas can be reasonably explained by the contributions of project investments in scaling up interventions and extensive training, as there were no other major investments that would have significantly favored the observed improvements (ICR, p. 17).

Health facilities (health post, health centers, and district hospitals) offering integrated management of childhood Illnesses based on new standard guidelines in the project areas increased from a zero baseline in 2013 to 67 percent in December 2020, short of the original target of 100 percent, but exceeding the revised target of 65 percent.

Children under-2 who received monthly Growth Monitoring and Promotion based on new standard guidelines in project areas increased from a baseline of zero in 2013 to 45 percent in December 2020, achieving the target of 45 percent.

The percentage of fully immunized children at 12 months of age increased from a baseline of 80 percent in 2013 to 99.8 percent in December 2020, exceeding both the original target of 90 percent and the upward revised target of 95 percent. The ICR (p. 19) noted that such high coverage (99.8 percent) usually reflects inaccurate denominators, but the measurements were consistent over time, indicating a steadily increasing coverage pattern.

Other reliable sources of information helped with the triangulation of data and comparisons with non-project provinces. They supported the conclusion that the project improved utilization of MNCH&N services. While the Zambia Demographic and Health Surveys (DHS) 2013/14 and 2018 showed national-level improvements in first antenatal care visits by the fourth month of pregnancy, delivery with skilled providers, and childhood vaccinations, an analysis of DHS and HMIS over the same period shows that improvements in uptake were higher in project-supported provinces. Trends in first antenatal care attendance at less than four months of pregnancy increased sharply in project provinces between 2014 and 2018, surpassing performance in more affluent provinces. Between 2013 and 2016, the proportion of children under-2 weighed for growth monitoring in project and non-project provinces was at par around 40 percent, followed by a sharp increase in project provinces, reaching a peak of 83 percent in 2019. The rate subsequently declined with the advent of COVID-19 disruptions and the end of RBF incentives. Similar improvement patterns between project and non-project provinces were observed in early post-natal care and new acceptors of family planning (ICR, pp. 20-21 and pp. 78-80).

Project provinces were the least served areas before the project, and no other major investments or reasons in project provinces could be identified to explain differential patterns of improvements (ICR, p. 20). Hence, it was reasonable to assume that the project made a substantial contribution to the observed advancements in project provinces.

Rating
Substantial

OBJECTIVE 2
Objective
Prepare for and provide an immediate and effective response to the EVD emergency
(New objective triggered in 2020)

Rationale
Background: Zambia was at risk of an EVD outbreak following Ebola outbreaks in neighboring DRC. During the final six months of implementation, the project supported activities aimed at strengthening Zambia's capacity to respond to Ebola.

Theory of change

It was reasonably expected that staff training in field epidemiology, provision of materials and equipment, and risk communication would result in strengthened surveillance in high-risk districts and in readiness to provide an effective response to EVD.

The project's focus on surveillance was based on global, regional, and national lessons and experience, including the prior malaria project.

Output and intermediate results

The ICR reported that the project trained all rapid response teams in 12 high-risk districts, facilitated the operationalization of the National International Health Regulations (IHR) Focal Point Technical working group, and helped in updating the EVD contingency plan, developing vaccination plans, and holding provincial and District Health Office steering committee meetings (ICR, p. 21). However, the ICR (p. 22) also reported that there was not sufficient time to conduct the originally planned field epidemiology training. The inconsistency was not explained by the ICR to clarify the nature of the training that was reported. Per clarifications provided by the Task Team on December 6. 2022, trainers were mobilized from MOH and other agencies to provide training to front line workers from health facilities, and who formed part of the Rapid Response Teams in target districts. Training encompassed contact tracing, case identification, case management, sample collection, risk communication, infection prevention and control, and safe burials.

Outputs included the provision of 2,000 bicycles to Community Health Worker for surveillance and contact tracing; personal protective equipment; sanitation equipment and knapsack sprayers for fumigating ports of entry; printers and laptops for use at ports of entry; thermal scanners; mobile toilets for use at isolation facilities; rehabilitation of a district isolation facility; and procurement of water transport for surveillance on Lake Tanganyika, also to be used as a marine ambulance for EVD cases.

284 personnel and community volunteers were trained in risk communication, exceeding the target of 150 personnel.

According to the ICR, high-risk districts with fully functional event-based surveillance systems in place increased from a baseline of 10 districts in December 2018 to 40 districts in December 2020, attaining the target of 40 districts.

Outcomes

The ICR reported that the proportion of high-risk districts with strengthened surveillance for rapid detection and isolation of EVD cases reached 100 percent in December 2020, exceeding the target of 50 percent. This meant that all 12 high-risk districts located near the DRC border had strengthened surveillance capacities. Nevertheless, in view of insufficient ICR information on enhanced skills and overall system readiness to provide an immediate and effective response to EVD, the objective is assessed as almost fully achieved.

Rating

Substantial

OVERALL EFFICACY

Rationale

The two project objectives -- to improve health delivery systems and utilization of maternal, newborn and child health and nutrition services in project areas, and to prepare for and provide an immediate and effective response to the EVD emergency -- were almost fully achieved, consistent with a substantial rating for overall efficacy. The operation served underprivileged populations, and, as noted under Objective 1, also triangulated evidence and compared results between project and non-project provinces to confirm the improvements generated by the project.

Overall Efficacy Rating

Substantial

5. Efficiency

The PAD's economic analysis carried out a cost-benefit analysis that focused on selected benefits resulting from averted under-5 and maternal mortality, discounted at 3 percent. It made reasonable assumptions and simplified the calculations by assuming that the average age of each saved child cohort was two years old, and that their life years would only be counted as benefit after 13 years when they become active in the labor force. It also assumed that the average age of delivering women who were saved was 20 years. The PAD's economic analysis assumed that if the project's interventions were fully implemented, 30 percent of maternal deaths and 70 percent of child deaths could be averted. The net present value of benefits was estimated to be US$89.6 million with a benefit-cost ratio estimated at 2.42. This implied that for every US$1 invested through the project, there would be a yield of US$2.42. The analysis carried out a sensitivity analysis that suggested that the benefit-cost ratio remained high at 1.7 even if the project only achieved 70 percent of the expected impact (PAD, p. 88).

The ICR revisited the cost-benefit analysis conducted at appraisal and estimated the productive life years saved given the project's actual results. It estimated a cost-benefit ratio at US$1.74 for every US$1 spent.

The ICR appropriately addressed equity aspects under the project, reporting that the focus on improving utilization by the neediest populations supported equity aims and could be presumed to make a greater marginal impact on poor households.

Nevertheless, negative aspects of implementation significantly reduced efficiency. The ICR highlighted lengthy delays in implementation, delays in the procurement of critical inputs, and persistent implementation struggles (ICR, p. 23).

It took 12 months for the project to become effective and about 2.5 years for implementation to fully launch. The delays were partly attributable to changes in roles and leadership of the two ministries (MOH and MCDMCH), political changes, and the government's reconsideration of borrowing for the health sector (ICR, p. 27). In

September 2015, six months after effectiveness, the new President decided to reintegrate MCH functions from MCDMCH to MOH, causing further operational delays and affecting overall ownership and stewardship of the project. The Joint Management Team, which was the main project oversight committee composed of the Permanent Secretaries of MOH and MCDMCH and other stakeholders on the Inter-Agency Coordinating Committee, failed to meet regularly and to provide adequate oversight and guidance during the first three years of the project when such guidance was most needed. The transfer of all project functions to MOH was only fully institutionalized in 2019, near the end of the project implementation period.

Financial management challenges related to DLIs led to delays in disbursements. There was inadequate understanding of the guidelines on the use of DLIs in IPFs. There were misunderstandings on the requirements for using DLI proceeds and on how and when to submit DLI achievement reports. There were also difficulties in verifying results given the lack of an Independent Verification Agency (IVA) over an extended period of time. There were challenges in fund flows from the Treasury to the accounts of implementing entities. The use of DLIs required the government to frontload DLI disbursements in a timely manner, in advance, but this was increasingly difficult as there was limited fiscal space to frontload disbursements for agreed activities.

The project experienced prolonged procurement delays and inadequacies in procurement execution due to insufficient capacity arising from the failure to recruit a procurement specialist. Key procurements were delayed, with some completed only near the very end of the project (ICR, p. 28). There were disagreements between the Bank and counterparts on procurement decisions and expenditures arising from actions such as the purchase of uniforms for nurses instead of personal protective equipment as was originally agreed, and vehicles intended for service delivery that were instead allocated for administrative activities. Approvals of procurement plans both within the government and the Bank were often significantly delayed. The impact of institutional reorganizations significantly reduced the effectiveness of efforts to address procurement challenges.

While DLIs increased the focus on results, the approach proved costly given the delayed release of funds, the Bank and Project Implementation Unit (PIU) staff time that was consumed to resolve unacceptable expenditures, the extended efforts to contract out a verification agency, and the Bank and government staff time required for verification as an alternative in the absence of an IVA (ICR, p. 23). The ICR noted that the project faltered in many ways and could have accomplished more if issues in fund flows, use of DLIs, and procurement had been resolved in a timely fashion or had been more effectively mitigated during project preparation. In addition, there were long delays in undertaking the required restructurings.

Efficiency Rating

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 ☐ Not Applicable
ICR Estimate		0	0 ☐ Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance of objectives is rated high, as there was full alignment between development objectives and the Country Partnership Framework at project closing, and alignment with sector strategies. Efficacy is rated substantial, as objectives were almost fully achieved. Efficiency is rated modest in view of negative aspects of implementation that significantly reduced overall efficiency. The aggregation of these ratings is consistent with a moderately satisfactory overall outcome, indicating moderate shortcomings in the project's preparation, implementation, and achievement.

a. Outcome Rating

Moderately Satisfactory

7. Risk to Development Outcome

There are threats to maintaining the outcomes that were achieved. Policy changes influencing the project were described as “three steps forward, two steps back," and some of these appear to be due to mixed government commitment in health financing (ICR, p. 35). Mainstreaming RBF was extensively discussed in 2018 and 2019, but it was not financed. This pattern of ambivalence may continue in the near future.

At the same time, the government expressed a desire to harmonize the RBF approaches being supported by development partners such as Sweden, the United Kingdom, and the United States. RBF principles have been adopted in implementing some government initiatives such as the National Social Health Insurance that uses strategic purchasing in delivering health services, and influenced the government decision to move from activity-based budgeting to output-based budgeting in 2020.

Regardless of financing levels and modalities, there appears to be an overall dedication to pursue improvements in MNCH&N. The project has generated substantial capacity building that can facilitate further advancements. The ICR noted that quality products were developed, including protocols and guidelines that had a positive influence on healthcare practices. Examples of new products included standard guidelines for growth monitoring, pregnancy, child health, postpartum and newborn care: Agenda for Essential Practices in Zambia, 2016; Neighborhood Health Committee Guidelines, 2018; revised antenatal care guidelines for a positive pregnancy experience for pregnant women and adolescents; and National Maternal and Neonatal Referral Guidelines. Other studies such as the National Health Accounts and Public Expenditure Review informed both national agencies and World Bank programs. The ICR reported that the recent decision of the government to increase the budget for medicines may reflect an appreciation of related analytical findings.

8. Assessment of Bank Performance

a. Quality-at-Entry

The overall strategic approach of the project was sound as it sought to scale up familiar interventions that are known to be cost-effective to make direct contributions that would accelerate improvements in maternal and child health. The project incorporated lessons learned from the Africa Region and globally, including for implementing a rural pipeline approach to train health workers and for utilizing and supervising Community Health Workers. The design considered operational lessons from various RBF operations and from the malaria booster project for empowering decentralized levels and enhancing community engagement (PAD, pp. 16-17).

The project was to be implemented by two ministries, MOH and MCDMCH, with specified activities for each, notably with MCDMCH primary focus on basic services at the community level, but with a recognition that assignments would be modified as needed during implementation (PAD, p. 18). A Joint Management Team co-chaired by the Permanent Secretaries of MOH and MCDMCH was planned to oversee project implementation. Concurrently, the project would support the two ministries to strengthen their own capacities in overall administrative aspects and M&E.

There were notable shortcomings in overall readiness. The ICR (p. 32) reported that the project would have benefited from more time for effective preparation, including a Project Preparation Facility, initiation of early steps to initiate procurement processes and engagement of the IVA, and better Borrower understanding of the processes involved. DLIs were only introduced for consideration at the time of the Quality at Entry Review, and DLIs were discussed with the Client shortly before negotiations. DLI processes were not sufficiently understood, and, according to the ICR, the Client assumed that funds triggered by the attainment of a DLI would provide funds more akin to budget support to the Ministry. According to the ICR, more upfront preparation was needed to ensure that both counterparts and the Task Team fully understood the DLI mechanism and its implications, including budgetary aspects and financial flows.

Risks were identified but were not effectively mitigated, including through sufficient technical assistance and hands-on support. There were delays in PIU staffing and in contracting consultants required to launch the project. The ICR (p. 32) questioned whether technical counterparts were fully committed and prepared to implement the project, and whether project ownership extended beyond a few key counterparts. The direct engagement of the Minister of Health in the details of project preparation reflected commitment, but the technical-level staff was not fully engaged in the design and preparation of activities. Some of the subsequent challenges faced during implementation might have been mitigated by wider ownership at all levels and by greater engagement efforts to facilitate a broader and deeper level of commitment to project objectives and approaches (ICR, p. 26). Other stakeholders' engagement during preparation included provinces, districts, general Nursing Council, Medical Stores, and training institutions, although the ICR reported that their engagement was related to defining implementation details, and less on project content and strategies.

Quality-at-Entry Rating

Moderately Unsatisfactory

b. Quality of supervision

Well-staffed supervision and implementation support missions were undertaken regularly, twice every year. Reporting was adequate, and Aides-Memoire reflected findings of field visits, technical dialogue, and review of fiduciary and safeguard issues aspects. Many missions included workshops. Each Aide-Memoire reportedly reflected a review of project implementation status, endeavors to assess progress against indicators, and specific next steps. To enhance sector dialogue, the Task Team used analytical work supported by the Bank, such as the National Health Accounts, Public Expenditure Review, Equity Analysis, Rational Drug Use Study, Assessment of Ante-Natal Care Services, and Factors Affecting Attendance for Postnatal Services. Development partners were engaged, and mission wrap-up meetings were undertaken under government leadership. Follow up Management Letters reflected an appropriate summation of issues and highlighted actions requiring attention.

However, there were important shortcomings attributable to the Bank, including extended delays in carrying out project restructurings. The need to restructure the project to accommodate the decision to reintegrate MCH functions into MOH was tabled in the Aide-Memoire of October 2015, but was not undertaken until four years later in 2019. The Mid-Term Review was conducted in May 2018, one year before the scheduled original closing date. The ICR (p. 34) noted that and earlier review might have focused more attention on the reasons for the lack of progress. The need for a second restructuring was recognized two months after the first restructuring, but was completed only a year later, six months before the revised closing date, and that restructuring dropped Disbursement-Linked Results that were recently added under the preceding restructuring. The approval of the terms of reference of the IVA was also late. A training on DLIs was only proposed in the April/May 2018 supervision mission.

The ICR (p. 34) noted that there was tolerance for persistent implementation shortcomings. It noted that extended delays, including for staffing, IVA recruitment, baseline surveys, and restructurings should have raised higher concerns and more pro-active responses.

Quality of Supervision Rating
Moderately Unsatisfactory

Overall Bank Performance Rating
Moderately Unsatisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design
The objectives were clearly stated and generally reflected by the indicators. The DLIs were aligned with the objectives. A comprehensive Results Framework was developed. Many lacking baselines were to be measured during the early implementation period.

At the outset, the project considered using other sources of data, as the PAD (p. 19) stated that two Demographic and Health Surveys (DHS) were scheduled to be undertaken during the project implementation period, and that findings would be analyzed, including to recalibrate the results framework.

The design planned to engage an independent third party for verification activities. Independent surveys at the beginning, mid-term, and project end were planned (PAD, p. 19).

b. M&E Implementation

During the first three years, M&E implementation was delayed, resulting in insufficient information to assess progress. Some of the M&E implementation challenges were attributed to the delayed recruitment of an IVA (ICR, p. 30). During its absence, the project carried out joint verification of DLI achievements through a technical team from the World Bank and MOH.

However, performance improved significantly during the second half of the project period, including for information sharing with stakeholders (ICR, p. 30). The IVA was recruited in the third year. The baseline, mid-term, and end-line reviews were completed, and the project supported key studies discussed below in Section 9c.

The Project End-Line Review Report concluded that data management skills that were acquired, and the ability of districts and health facilities to plan and implement their own programs, improved under the project (ICR, p. 31).

c. M&E Utilization

The ICR (p. 31) stated that the conclusions on efficacy were informed by substantial information provided in the Mid-Term and End-Line reports and by triangulation with other data sources. Triangulation of evidence was undertaken, notably by utilizing the Zambia Demographic and Health Surveys 2013-14 and 2018, and by comparisons between project and non-project areas that showed higher service utilization in project provinces against non-project areas, as discussed in Section 4.

The ICR (p. 18) reported that the demonstrated impact of RBF under the project influenced the government's decision to move from activity-based budgeting to output-based budgeting in 2020, and informed the design of the National Health Financing Strategy.

The ICR (p. 31) also reported that the evidence accrued from project implementation and key project-supported studies, such as the National Health Accounts, Public Expenditure Review, Public Expenditure Tracking and Quantitative Service Delivery Survey, Equity Analysis, and Zambia National Rational Use of Medicines were instrumental in (i) informing the establishment of the National Health Insurance Management Authority, and (ii) consolidation of the national essential medicines procurement and supply systems under the Zambia Medicines and Medical Supplies Agency. Project-supported studies contributed to the design of the Zambia Emergency Health Service Delivery Project - under preparation – that would provide emergency support to enable the continued delivery of public health services in Zambia. The project provided information through other studies such as the “Assessment of ANC Services and Factors Affecting Attendance for Postnatal Services."

According to the ICR (p. 18), other partners, namely the Swedish International Development Cooperation Agency and United States Agency for International Development, adapted and implemented the RBF approach within their health projects in Zambia, as has the Southern Africa

Tuberculosis and Health Systems Support Project (2016-2023, US$122 million), which includes activities in Zambia, and the Zambia Education Enhancement Project (2018-2025, US$60 million).

M&E Quality Rating

Substantial

10. Other Issues

a. Safeguards

The project was classified under Environmental Category B for Partial Assessment in view of health care waste risks. The project used a Health Care Waste Management Plan that was previously used by two other projects, Zambia National Response to HIV/AIDS Project (2003-2008, US$42 million) and Zambia Malaria Booster Project (2006-2013, US$20 million). The waste management plan was updated during implementation. Progress was made in incorporating waste management into MOH annual planning, although concerns remained about adequate budget allocations for training and for proper disposal of biomedical waste (ICR, p. 31). No other information was provided by the ICR. The overall safeguards rating recorded in the Operations Portal was satisfactory.

b. Fiduciary Compliance

At appraisal, the World Bank conducted financial management (FM) assessments of both MOH and MCDMCH (PAD, p. 25). The assessments concluded that FM arrangements met the World Bank's minimum requirements under OP/BP10.00 (PAD, p. 26), and that the rating for the overall FM residual risk for both MOH and MCDMCH was substantial. Capacity constraints were identified, and measures to address these constraints, including audit functions and training of accountants, were agreed upon at negotiations.

During implementation, and as noted in Section 5, there were significant shortcomings in fund flows and procurement. In numerous instances, the government had to revise or refund expenditures when there was inappropriate allocation of funds or items were procured outside agreed plans. Procurement of key inputs was significantly delayed, according to the ICR (p. 32), although in each instance, the issue was ultimately resolved. At times, audits were delayed, but they were all acceptable.

c. Unintended impacts (Positive or Negative)

None reported.

d. Other

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11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	
Bank Performance	Moderately Unsatisfactory	Moderately Unsatisfactory	
Quality of M&E	Modest	Substantial	This ICR Review rated the Quality of M&E as substantial because early implementation deficiencies significantly improved during the last three years of the project, and M&E provided, as also reported by the ICR, sufficient evidence to assess intended outcomes, supported by independent baseline, mid-line and end-line surveys, by the triangulation of evidence using Zambia Demographic and Health Surveys, and by comparing achievements between project and non-project provinces. Utilization of project findings and project-supported studies benefited other development activities and projects, including for informing the establishment of the National Health Insurance Management Authority, the National Health Financing strategy, Zambia Medicines and Medical Supplies Agency, and other lending operations.
Quality of ICR	---	Substantial	

12. Lessons

The ICR (pp. 35-36) offered several lessons and recommendations, including the following lessons re-stated by IEG Review:

Thorough preparation facilitates the introduction of new DLI approaches and optimization of their benefits. While incentivizing results through DLIs was lauded, the actual use of DLI mechanisms was unclear to the Client's representatives during the early years of the project. This lesson generated an ICR recommendation for a phased approach by introducing only a small number of DLIs and developing a well-funded and robust action plan embedding heightened management focus that may help in building capacity for subsequent scale-up and institutionalization of the new mechanisms.

Working with community-based influencers is essential to addressing cultural obstacles that interfere with the goals of improving maternal, neonatal, and child health and nutrition. Many human development operations have been previously hampered by the lack of appreciation of effective strategies to address socio-cultural issues affecting care-seeking behavior, particularly for maternal services. The project sought to alleviate such issues at the community level by tackling cultural norms that might undermine routine child health services, early antenatal care, and attended deliveries, and by strengthening linkages with traditional and religious leaders for addressing socio-cultural issues affecting maternal health.

Broad ownership by the Client, extending beyond individual counterparts, facilitates sustained commitment and effective implementation. At entry, it was assumed that the enthusiastic engagement of key individual sector leaders was a sufficient reflection of country ownership. However, technical leadership was not as engaged, contributing to implementation inertia. Propagating the fact that the project supported Vision 2030 and the Sixth National Development Plan may have helped in engaging many additional stakeholders to develop sufficiently wide stakeholder ownership within and beyond the sector.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provided a comprehensive overview of the project experience. It was results-oriented and its narrative was aligned to development objectives. The narrative supported overall ICR ratings. The ICR illustrated a clear theory of change with logical pathway links toward intended outcomes. The discussion of efficacy was especially robust, with clear data presentation and triangulation of evidence. Its analysis was thorough and insightful. It offered specific lessons that were directly derived from project experience. The ICR was internally consistent overall. It followed guidelines, although it was lengthy and had clarity lapses in some important areas, including its lack of explaining an expanded project scope through the inclusion of additional districts. Related information gaps were adequately addressed by the Task Team through the TTL Interview.

a. Quality of ICR Rating
Substantial