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Prepared by: Cynthia Nunez-Ollero
Reviewed by: Kavita Mathur
ICR Review Coordinator: Victoria Alexeeva
Group: IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

According to the Financing Agreement (p. 5) and the Project Appraisal Document (PAD, paragraph 30), the Project Development Objective (PDO) was "to sustainably restore agricultural livelihoods, reconstruct critical public infrastructure to improved standards in the flood-affected districts, and improve the Government of Malawi’s disaster response and recovery capacities."

This review will assess project performance against the following objectives:
To sustainably restore agricultural livelihoods.
To reconstruct critical public infrastructure to improved standards in the flood-affected districts.
To improve the Government of Malawi’s disaster response and recovery capacities.

b. Were the project objectives/key associated outcome targets revised during implementation?
   No

c. Will a split evaluation be undertaken?
   No

d. Components
   1. Livelihoods Restoration and Food Security: (US$29 million at appraisal and actual). This component would finance two sub-components to restore the livelihood supporting and income generating activities. This would enable beneficiaries to meet the food and basic household needs of the mostly agricultural flood-affected households. The first sub-component “Labor-Intensive Community Infrastructure Repair” would finance cash transfers or in-kind assistance in exchange for restoring community infrastructure destroyed by the floods using beneficiary labor. The second sub-component “Restocking of the Strategic Grain Reserve (SGR)” would replenish the country's SGR after releasing the reserves to feed households affected by the flood.
   
   2. Infrastructure Rehabilitation and Reconstruction: (US$43 million at appraisal and actual). This component would finance the reconstruction and restoration of infrastructure in four sectors, using Build Back Better standards and the Flood Risk Management Action Plan funded under the Shire River Basin Management Plan (SRBMP). These four sectors included (i) roads and bridges, (ii) irrigation and rural water supply and sanitation infrastructure, (iii) water resources management, and (iv) education and health facilities. Funds would also replace school learning materials, furniture, medical equipment, and medical supplies.
   
   3. Promoting Disaster Resilience: (US$4 million at appraisal and actual). This component would finance technical assistance for post disaster response and recovery in two sub-components. The first would finance efforts to strengthen the capacity of the Department of Disaster Management Affairs (DODMA) in (i) data preparedness and use of the Post Disaster Needs Assessment (PDNA) methodology; (ii) recovery planning and implementation; (iii) community mapping and land use; and (iv) disaster response. The second would finance efforts for safer housing by (i) reviewing and strengthening guidelines; (ii) developing a strategy to raise awareness in the use of these guidelines; (iii) developing a national building code and standards for private housing; and (iv) a study to assess the viability of railways rehabilitation.
   
   4. Program Management: (US$4 million at appraisal and actual). This component would finance the operating costs for the Project Implementation Unit (PIU); the technical designs for the reconstruction and rehabilitation of infrastructure investments; contract management; and required audits and assessments.

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

  Project Cost. The original and the actual total project cost was US$80 million equivalent.
Financing. The original financing was US$80.0 million. The International Development Association (IDA)'s Crisis Response Window (PAD, paragraph 14) fully financed this project with an equal combination of grant (US$40.0 million) and credit (US$40.0 million). The actual credit disbursed was US$79.4 million. Foreign exchange adjustments accounted for the balance. During implementation, the Malawian kwacha (MWK) depreciated against traded currencies while the US$ appreciated against the SDR (ICR, paragraph 67).

Borrower/Recipient Contribution. There were no planned or actual contribution.

Dates. The project was approved on May 7, 2015 and made effective on August 20, 2015. The Mid Term Review (MTR) was completed on September 4, 2017. The original closing date was December 31, 2019. Two level 2 restructurings extended the closing date by 13 months to January 31, 2021 (ICR, paragraph 17):

- on December 20, 2019, to extend the closing date by 9 months to September 30, 2020 to allow for the completion of critical road works that were delayed following a contract cancellation of a noncompliant contractor and need for continued strengthening of the safeguards system;
- on September 23, 2020 to extend the closing date by another 4 months to January 31, 2021 to allow for completion of road works that had suffered delays due to the COVID-19 lockdown measures, gaps in overseas expert staff, supply chain delays, and material shortages.

3. Relevance of Objectives

Rationale

Country Context: Malawi is a landlocked country, with its population anticipated to reach about 23 million by 2025 from just over 16 million in 2015 (PAD, paragraph 1). Agriculture contributed around a third of the country's Gross Domestic Product (GDP), employing over 80 percent of its labor force. Around 85 percent of its population lived in rural areas, engaged in smallholder, rain-fed subsistence agriculture. These rural areas were marked by poor, unreliable infrastructure. Roads connecting farmers to markets were poorly maintained, with limited resilience against natural hazards. The government established a Strategic Grain Reserve (SGR) in 1981 to address its vulnerability to climate-induced disasters and to economic shocks.

In January 2015, the highest seasonal rainfall caused significant flooding in the poorest southern area of the country. The floods affected 1.15 million people, displaced 336,000 residents, and lost 104 lives (PAD, paragraph 6). Floods washed away livestock, destroyed buildings, houses, assets, damaged roads, bridges, irrigation structures, schools, and health facilities. The government declared a state of disaster for the affected 15 districts. The government, the World Bank, the United Nations Development Program (UNDP), and the European Union (EU), conducted a Post-Disaster Needs Assessment (PDNA). The PDNA informed this emergency project.

Country Plans: The PDOs were relevant to the country's Malawi Growth and Development Strategy III for the period 2017-2022. A key priority area of the strategy aimed at inclusive agricultural transformation, adaptive to climate change (MGSD, p. xvii). An intermediate outcome was "enhanced community resilience to the impact of climate change" addressed by the PDOs (MGSD, Figure on p. 3). The PDOs also adhered
to the vision of Malawi 2063 (launched in January 2021), the basis of all country development plans by contributing to agricultural productivity, one of its three main priorities.

World Bank Partnership Framework: The PDOs were also relevant to the Country Partnership Framework (CPF) for Malawi for FY21-FY25. The CPF had three focus areas. The PDOs contributed to the second focus area: Promoting Private Sector-Led Jobs and Livelihoods. The project would contribute to achieving Objective 2.2. Increasing Resilience in Urban and Rural Hotspots by strengthening early warning disaster preparedness to mitigate the impact of worsening climate shocks. The project was aligned with the CPF by supporting agriculture businesses and expanding access to services and markets. In addition, the PDOs, through its focus on reconstructing disaster resilient infrastructure and increased resilience in rural and urban hotspots, would contribute to regional integration by facilitating trade and access to corridor value chains such as the strategic Nacala corridor linking Malawi to the coast (CPF, paragraph 79).

Prior World Bank Operations in the Country and in the Sector: The Bank's experience in the country and in the sector included: (i) the agricultural livelihood, productivity and transport sector access under the Second Agriculture Sector Wide Approach Support Project (ASWAp-SP) and the Irrigation Rural Livelihoods and Agricultural Development Project (IRLADP); (ii) social protection interventions under the Malawi Social Action Fund (MASAF); (iii) the flood risk management work under the Shire River Basin Management Program (SRBMP); and (iv) improved infrastructure and pedagogical materials, as well as Water, Sanitation and Hygiene (WASH) services provisions under the Education Program and the National Water Development Plan 2 (NWDPII). The Disaster Risk Management (DRM) and Climate Change Technical Assistance (TA) program for Malawi focused on strengthening early warning systems and the institutional capacity of the government to effectively coordinate DRM activities across the country (PAD, paragraph 25). The World Bank also completed the Disaster Risk Management Development Policy Financing with Catastrophe Deferred Drawdown Option (CAT DDO, P165056) to address fiscal constraints (CPF, paragraph 58). This project would contribute to the Bank's integrated programmatic framework for post-flood recovery in Malawi, achieve balance across public sector reconstruction, and sustainable recovery of lives and livelihoods disrupted by disasters (PAD, paragraph 23).

Overall, the relevance of objectives is rated High. The PDOs were aligned with the government's strategy, which addressed the recovery from the floods. Two of the three PDOs were outcome oriented, focused on sustainability of restored agricultural livelihoods and institutional capacity. The second objective was formulated more as an output rather than an outcome expressed as reconstructed infrastructure investments with improved standards, however this formulation responded to the emergency nature of the project. The project was appropriately pitched according to the government's capacity with its experience in previously implemented Input for Asset (IFA) program to support disrupted livelihoods.

Rating
High

4. Achievement of Objectives (Efficacy)
OBJECTIVE 1

Objective
To sustainably restore agricultural livelihoods.

Rationale

Theory of Change: There were two sets of inputs. The first called for support in income generating activities by participating in labor intensive community infrastructure repair (Input for Asset Program or IFA). This would create jobs and restore community infrastructure. Participating beneficiaries would receive income in the form of IFA vouchers. These vouchers would be used for food, basic household needs, and farm inputs for the following season. The second would replenish the Strategic Grain Reserve (SGR) after food assistance to flood-affected people was released. SGR would use available purchasing channels such as the National Food Reserve Agency (NFRA), Agricultural Commodity Exchange for Africa (ACE), and Auction Holdings Ltd Commodity Exchange (AHCX) as well as small and large traders and farmer organizations. The Malawi Vulnerability Assessment Committee (MVAC) would prioritize the release of the food assistance. Sound market analysis would stabilize prices (PAD, paragraph 82). The key expected outcomes were restored agricultural production and livelihoods for the flood affected population. Food security would be enhanced. The number of beneficiaries served as an outcome indicator although the expected results were closer to the output level in the results chain. Outcome was defined to be "sustainable restoration of agricultural production and livelihoods as well as enhanced food security for the flood-affected people (PAD, paragraph 31);" The outcome orientation was not supported by adequate indicators, such as how the restored livelihoods would be sustained over time, or the impact of the SGR replenishment to the food price-based inflation. The target outcome did not sufficiently reflect the development impact of the project. The key assumption was that local productivity (soil, weather) conditions would not change.

OUTPUTS: The following targets were exceeded:

- 208,753 households (original target 180,000) received Input for Asset (IFA) Program vouchers, 54% of the IFA vouchers recipients were female;
- 52,538 metric tons (original target 50,000) of maize were released to flood affected beneficiaries;
- 52,600 metric tons (original target 50,000) of maize were purchased to replenish SGR food assistance for the next emergency use;

The following outputs were achieved at closing with no targets set at appraisal:

- 7,946 metric tons of urea and Nitrogen Phosphorus Potassium (NPK) fertilizer was purchased;
- 50,062 hectares of land planted with maize;
- 1,334 metric tons of hybrid maize seeds purchased;
- 130,184 metric tons of maize produced;
- IFA vouchers worth MWK 1.44 billion (equivalent to US$1.824 million) of cash were disbursed to 208,753 beneficiaries. The Task Team clarified in its October 13, 2021 email to IEG that in some areas where markets were working well, beneficiaries were given cash to buy inputs because this reduced transaction costs.

OUTCOMES: The following targets were exceeded:

- 2,297,846 (original target 500,000) direct project beneficiaries restored their agricultural livelihoods, 52.4 (original target 50) percent of these direct beneficiaries were female. Both the PAD
(paragraph 32) and the ICR (paragraph 34) noted variances in target setting given the post-disaster context and rapid preparation timeframe. The 2015 Post Disaster Needs Assessment noted 1,150,000 flood affected people (ICR, Annex 4). According to the Task Team, the project was not designed to cover all the flood affected areas. The final number of beneficiaries increased because the IFA component/seed distribution, and food distribution for the estimated recovery period was redesigned to reach more people during the first few months of distribution. Due to the challenges of rectifying district level information, the team was unclear about the number beneficiaries at the time of the MTR. With the 2019 and 2020 restructuring focused on gender-based violence (GBV) issues and safeguards compliance, the team did not revise the original target then.

- 563,562 (original target 500,000) flood affected people benefited from the SGR, of which, 51 (original target 50) percent were female.

Overall, the efficacy of the project to achieve this objective is rated **Substantial with moderate shortcomings**. The interventions added a sustainable aspect to the traditional output orientation to the emergency response- maize distribution for emergency livelihood support – by adding the IFA. This IFA work generated farm inputs "to help farmers target the next cropping season", but the evidence is still insufficient to support that sustainable livelihoods were generated. The Bank team added that as an emergency response, this intervention was not intended to test over time the sustainability of livelihoods supported by the IFA. The target indicators with regard to beneficiaries were exceeded.

**Rating**

**Substantial**

### OBJECTIVE 2

**Objective**

To reconstruct critical public infrastructure to improved standards in the flood-affected districts.

**Rationale**

**Theory of Change: Inputs** would include the restoration of roads and bridges; irrigation schemes, such as headworks, flood protection bunds or embankments, canal sections, drains, and in-field infrastructure; water supply and sanitation schemes such as water intake structures, treatment plants, conveyance systems, distribution networks, pumping stations, wells, and bore holes. Inputs would also include the repair and rehabilitation of affected schools and health facilities and flood mitigation works as part of water resources management in line with the Flood Risk Management Action Plan. Design for the reconstruction and rehabilitation of the target infrastructure investments would be guided by flood resistant designs under the Build-Back Better standards (right size, right site), and the Flood Risk Management Action Plan funded under the prior Shire River Basin Management Project.

**Outputs** would include the restored infrastructure in roads, bridges, schools, health facilities, irrigation, water supply and sanitation. The water resources management outputs included river training works, river banks protected, restored storm water drains, riparian forests, and flood protection bunds or embankments.

**Outcomes** were expressed as number of disaster resilient restored schools and health facilities, roads, irrigation, and water supply and sanitation schemes. The expected results could be attributable to the project's interventions. A beneficiary survey was conducted but only for the Inputs for Assets component, which the Bank team validated against the results framework through a desk review (ICR, paragraph 23).
However, the expected results (reconstructed infrastructure) were closer to output level in the results chain rather than outcome level, such as increased volume or value of product access to markets, reduced travel time, or reduced incidence of accidents that the restored roads afforded the beneficiaries, an increase in their incomes, improved productivity or improved health. Some of these outcomes were noted but not necessarily monitored or reported with data. These outcomes may be longer-term but tracking these with appropriate indicators would reinforce the project's contributions to long term development. The key assumption was that resources and structures to maintain investments were in place.

**OUTPUTS:**

- **For the roads sector:**
  - o 97 (original target 90) km of roads reconstructed to improved standards and with services fully restored.
  - o 946 (original target) m of bridges/roads (including drainage structures) reconstructed/rehabilitated to improved standards.

- **For the schools and health sector:**
  - o 42 (original target 82) schools with services fully restored. At the 2017 Mid Term Review, the target of 82 referred to classrooms in 40 schools, but the target value was not changed.
  - o 152 (original target 82) additional classrooms built or rehabilitated at the primary level benefiting 46,037 pupils
  - o 120,000 pupils benefitting from the teaching and learning materials (TLM).
  - o 7 (original target 2) health facilities reconstructed with services fully restored. 5 health centers were rehabilitated and 2 new health centers were constructed in Osiyana and Thuchira).

- **For the irrigation, rural water supply, water resources management, and flood protection:**
  - o 13 irrigation schemes were rehabilitated and 4,460 treadle pumps were distributed benefiting 3,635 ha of irrigable lands and benefiting 21,338 households.
  - o 10 gravity-fed water supply schemes were rehabilitated, benefiting 260,520 residents
  - o 101 boreholes and pumps were rehabilitated, benefiting 25,250 residents
  - o 10 water harvesting structures were constructed, benefiting 87,386 households
  - o 15 hydrological monitoring stations were installed and functional

**OUTCOMES:**

- **For the roads sector:** The roads rehabilitation provided direct employment in civil works and improved access to socio economic services. Travel time was reduced (from four to one hour - no targets were set). The ICR reports that transport costs were reduced (no data provided, ICR paragraph 30), access to markets improved, and the incidence of floods was minimized because river channels were dredged and drainage structures were widened. No data or evidence was provided. The Task Team clarified that the transport costs were reduced because of shortened travel time on rehabilitated roads (without supporting data), and previously impassable areas (due to unreliable bridges or where the road was cut off) were now accessible. The works followed the Build Back Better strategy, which presumably included improved, disaster resilient standards for the rebuilt roads. Durability and resilience of the bridges and drainage structures were achieved.

- **For the schools and health sectors,** other factors that may have contributed to these outcomes were not specified:
Total enrollment increased from 37,157 (18,564 boys and 18,592 girls) in 2016 to 40,868 (20,438 boys and 20,430 girls) by 2019, representing a 9.1 percent increase over a three year period.

School dropouts were reduced by 61.7 percent between 2017/18 to 2019/20 academic years due to increased learning spaces and availability of water and sanitation (WASH) facilities.

The Ministry of Education Science and Technology (MOEST) increased the teacher allocation for the project-supported schools from 447 teachers in academic year 2016/17 to 634 teachers for academic year 2019/20. The Task Team clarified that the additional teacher allocation was not project financed but due to the increase in the number of classrooms, increase in enrollment, and teacher's houses. The MOEST complimented the project results by allocating more teachers.

The addition of specific rooms for health services that were fully equipped, with quality antenatal and postnatal services, as well as enhanced patient privacy, led to an increase in the number of women delivering babies in these facilities (no number reported).

The irrigation schemes increased the frequency of household agricultural production per year (no data, ICR, Annex 5) but did not include other factors that may have contributed to this outcome.

In the flood-affected districts, access to potable water reduced the burden on women who used to travel long distances to fetch water. Based on the beneficiary surveys used for the IFA, and verified by the Task Team (ICR, paragraph 23), women reported that time for productive work replaced the time spent fetching water and remaining at water points. Improved health was reported by way of reduced incidence in waterborne and water related diseases (no data provided).

As a result of the flood protection structures, 13 river banks were protected, and 87,386 households reduced their flood risk and benefited in the use of water for irrigation.

The use of the hydrological monitoring stations transmitted data to the hydro-data center at the Department of Water Resources to inform the flood early warning system.

Overall, the efficacy of the project to achieve this objective is rated **Substantial with moderate shortcomings** because targets were achieved in the flood-affected districts to reconstruct critical public infrastructure using improved standards but the plausible linkages to the claimed outcomes were generally stated, without sufficient explanation of other contributing factors and not supported by specific data. The target value of the indicator associated with the school buildings/classrooms was clarified during the Mid Term Review (MTR) although the value remained unchanged until closing (see Section 8, Assessment of Bank Performance, (b) Quality of Supervision below).

Rating
Substantial

**OBJECTIVE 3**

Objective
To improve the Government of Malawi's disaster response and recovery capacities.

Rationale
**Theory of Change:** The inputs included technical assistance to improve data preparedness, capacity to undertake post disaster needs assessment (PDNA), recovery planning and implementation, community
mapping, land use planning, and enhancing disaster response systems. Additional technical assistance would be directed at agencies to develop and institutionalize disaster and climate resilient standards for infrastructure investments. The outputs included guidelines for safer housing construction, awareness raising strategy for use of these guidelines, national building code and standards for private housing, and a study to assess the viability of railways rehabilitation. This last study was in response to the damage caused by the floods to the railway system. According to the PAD, the key expected outcome was defined as the "institutionalization and adoption of strengthened and improved disaster recovery and response systems (PAD, paragraph 31)." The ICR reported this outcome as the adoption of PDNA to inform disaster recovery and response. The key assumption was that knowledge gained through capacity building was sustained.

OUTPUTS:

- The staff of the Department of Disaster Management Affairs (DODMA) and Civil Protection Committees in the target 15 districts were trained in Emergency Response as targeted.
- Disaster resilient designs for education, health, and roads sectors were developed.
- Construction guidelines for safer schools and safer houses were reviewed and strengthened. An awareness raising strategy in the use of these guidelines was developed.
- The national building codes, regulations, and standards for housing were developed.
- Feasibility study of the railways rehabilitation, including topographic, sedimentation, climate change, and hydrological studies was completed.

OUTCOMES:

- The DODMA adopted the PDNA methodology - including guidelines, templates, standard operating procedures for damage assessment as part of disaster management. A Disaster Recovery Framework (DRF) was installed, highlighting the legal framework and the existing and potential financing instruments for disaster recovery through a risk layering approach to disaster. This framework served as a foundation for disaster risk financing in the country.
- The Malawi Spatial Data Platform (MASDAP), an open source platform to facilitate the sharing of risk and hazard information, is functional.
- Disaster resilient designs were adopted for education, health, and roads sectors. The Minister of Education and the education sector technical working group adopted the safer school construction guidelines and incorporated these into the National Education Sector Plan to guide all stakeholders in the construction of schools. Since its adoption, 83 schools both government and donor financed, were constructed.
- A national building code is planned to be enacted. According to the Task Team, the revised Building Regulations (or the Building Code) has not yet been enacted since the government was still finalizing the Buildings Act and the Buildings Policy. Together, these would form the legal basis for the regulations. The safer housing construction guidelines would be added to guide all construction of public and private buildings, including health facilities. The institutionalization of the national building code was covered by the Malawi Disaster Risk Management Development Policy Financing with Catastrophe Draw Down Option (CAT DDO, P154056).
- The government would finance railway rehabilitation.

Overall, the efficacy of the project to achieve this objective is rated Substantial. Disaster resilient designs of investments in roads, education, and health were adopted and now part of the institutional landscape.
OVERALL EFFICACY

Rationale
The overall efficacy of the project to achieve its objectives is rated Substantial. This was an emergency project, and some outcome indicators were at the output level of the results chain rather than outcome. Inputs and outputs showed valid causal linkages and were properly sequenced. All outputs, except one, were achieved. There were some minor shortcomings, i.e., under PDO1, the evidence was not fully sufficient to claim that agricultural livelihoods were sustainably restored beyond the next cropping season.

Overall Efficacy Rating
Substantial

5. Efficiency

Economic and Financial Analysis: At appraisal, an economic and financial analysis was based only on the benefit and cost streams of the transport and irrigation components. Cost benefit analysis for the irrigation sub-component established a financial rate of return (FRR) of 31 percent and an economic rate of return (ERR) of 24 percent. The analysis replicated the methodology used in the Irrigation, Rural Livelihoods, and Agricultural Development Project (IRLADP) (PAD, Annex 4, footnote 11). At appraisal, several methodologies were used to analyze the efficiency of the roads sub-component, including the use of a 12 percent discount rate. However, the economic and financial analysis was postponed due to limited preparation. Instead, efficiency analysis would be prepared after final design but before procurement (PAD, paragraph 73, footnote 7).

At closing, the economic analysis expanded the benefits to include those from (i) restored and reconstructed irrigation infrastructure; (ii) rehabilitated water supply schemes; (iii) restored and improved road transportation networks; and (iv) reconstructed education facilities. Using only the cost associated with the measured benefits resulted in an ERR of 32 percent for roads, 17 percent for irrigation, 20 percent for water supply and sanitation, and 39 percent for education investments, achieving an overall ERR of 31 percent with an NPV of USD 148 million. The analysis assumed a standard discount rate of 12 percent for roads, bridges, and irrigation infrastructure, 6 percent for education and water supply services, and a 20-year longevity of assets (ICR, paragraph 45). The economic analysis used at appraisal and at closing was not comparable.

Administrative and Operational Efficiency: The project was partially suspended due to the gravity of the safeguards noncompliance (see Section 10 (a) Other Issues and (b) Fiduciary Compliance below). The sector specialists changed for some of the longer-term recovery interventions in health, water supply, and transport. This led to additional delays and expenditures to reconfirm priorities and approaches and contributed to additional field time and costs at the sector level (ICR, paragraph 63). The project experienced weaknesses in
contract management that led to contract extensions, cost overruns, and suspension of contracts (see Section 10, Other Issues below), contributing to implementation delays and affecting overall efficiency. The project closing date was extended by 13 months to implement corrective measures and the impact from COVID 19. The additional time allowed for additional outcomes to be achieved and improved the cost-efficiency of the livelihood and food security restoration component by 13 percent. The unit cost reduced from US$22.14 to US$19.30 per capita to benefit a total 0.8 million persons (ICR, paragraph 46).

Overall, the project efficiency is rated **Substantial**. The project team justified that the project's economic efficiency at closing was substantial at 31 percent even after the acknowledged operational and administrative inefficiencies. The significant qualitative gains such as strengthening the country’s GBV and safeguard management systems overcame the inefficiencies reflected in the additional time needed to complete the project due to the unforeseen impact of the pandemic, weather related, and early procurement delays.

**Efficiency Rating**

**Substantial**

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:

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

6. **Outcome**

The relevance of objective is rated High. The efficacy of the project to achieve Objective 1 is rated Substantial, with moderate shortcomings because of lack of evidence to support sustainably restored agricultural livelihoods beyond the next cropping season, even as the target output indicators were exceeded. The efficacy of the project to achieve Objective 2 is rated Substantial, with moderate shortcomings; the target indicators were achieved or exceeded. The team did an effort to show the project's contribution to a range of development outcomes, however the plausible linkages were not sufficiently explained and supported by the data. The efficacy of the project to achieve Objective 3 is rated Substantial because of the adoption of disaster resilient designs and strengthened capacities. On balance, the overall efficacy of this emergency project to achieve its objectives is rated Substantial. Efficiency is rated Substantial due to the satisfactory economic efficiency at closing and the strengthening of the GBV and safeguards management systems to overcome early administrative and operational inefficiencies. The overall outcome is Satisfactory.

a. **Outcome Rating**
Satisfactory

7. Risk to Development Outcome

The following pose risks to development outcome:

- **Economic**: The COVID 19 pandemic poses a risk to the country's economic recovery. Competing priorities will remain for the immediate term. Requirements of the project to move beyond livelihood support under the Input for Asset (IFA) program, and operations and maintenance (O&M) needs of completed infrastructure investments were not specified (although noted in the Theory of Change as an assumption). The following projects in the current World Bank CPF for Malawi may mitigate the economic risks: (i) the US$95 million Malawi Agricultural Commercialization Project (AGCOM, P158434); and (ii) the US$160 million Shire Valley Transformation Program – Phase 1 (SVTP-1, P158805). A series of projects from 2017, beginning with SVTP-1 would scale up commercial agriculture. SVTP-1 would establish core irrigation infrastructure through a PPP structure, integrate smallholder farmers into newly established commercial value chains, and strengthen land tenure. At the national level, the AGCOM Project would support commercialization by establishing 200 “productive alliances” of smallholder groups that diversify into high-value commercial crops and off-takers production (CPF, paragraph 73).

- **Environmental and Exposure to Natural Disasters**: Climate shocks continue to threaten the region. The project’s technical assistance activities were designed to feed into institutionalized operating procedures and structures for recovery needs assessment, policy making, standard setting, implementation management, and financing in the future. Despite the project’s success in capacity building to manage climate shocks and strengthen preparedness at the national (Department of Disaster Management Affairs or DODMA) and district levels, further support is needed for continued advancement of a holistic DRM program in Malawi that designs, plans, and delivers effective activities to safeguard livelihoods and appropriately respond and recover, post disaster. On the policy side, the Malawi Disaster Risk Management Policy Financing with Catastrophic Draw Down Option (MDRMPF CAT DDO or P165056), included building regulations, construction guidelines and policies as well as DRM financing strategies and legislation.

8. Assessment of Bank Performance

a. Quality-at-Entry

The project objective was broadly stated. The country's plans, the Word Bank's strategy, and the Post Disaster Needs Assessment (PDNA) carried out after the devastating 2015 floods informed the recovery needs of the target districts. Lessons from prior Bank operations (Malawi Social Action Fund (MASAF) Irrigation Rural Livelihoods and Agricultural Development Project (IRLADP), the Integrated Flood Risk Management Plan (IFRMP) of the Shire River Basin Management Program (SRBMP), and the Rapid Response Program in 2012 were incorporated into project design. These included the use of the Input for
Assets (IFA) program and aspects of the cash-for-work schemes to restore livelihood sources using labor intensive public works program. Critical infrastructure, in turn, would be quickly restored. These design aspects would enhance food security, mitigate floods, and rapidly disburse funds. Design also adopted a build back better strategy in disaster resilient design of infrastructure (PAD, paragraphs 22, 24, and footnote 5). The design balanced early recovery and longer-term resilience intervention.

As an emergency loan, preparation time was shortened to just over 3 months (ICR, paragraph 53). The following risks were assessed as substantial: institutional capacity, fiduciary, implementation, and safeguards. As an emergency project, fraud and corruption risks due to simplified procurement were noted. Gender Based Violence (GBV) was not identified as a risk. Technical assistance, targeted training, regular monitoring, as well as support during supervision were designed to mitigate these risks. Implementation arrangements rested on a well-established Project Implementation Unit (PIU) familiar with Bank operations. However, size and composition of the established PIU was not adjusted to match project needs.

There were shortcomings in M&E (see Section 9 M&E below). Some indicators under the second objective were not designed to capture all infrastructure rehabilitation interventions at the outcome level (e.g., irrigation, water and sanitation). The outcome indicators for the third objective were more output than outcome focused. At implementation, an error in the unit of an intermediate indicator was not corrected (from schools to classrooms, ICR, paragraph 68).

Overall, the performance of the Bank at entry is rated Satisfactory. Design addressed the country's emergency needs and complemented the Bank's strategy. Design responded to the emergency nature of the operation using the PDNA and existing arrangements. Substantial risks were adequately identified although there were overlooked risks due to the limited preparation. The team relied on mitigating these risks during implementation (See below).

Quality-at-Entry Rating
Satisfactory

b. Quality of supervision
The World Bank team conducted 12 supervision mission over the 5-year implementation period. Targeted missions that included the locally based task team leader and specialists supplemented these. The Bank team on the ground allowed for continuous dialogue with country counterparts. The PIU consisted of 3 offices - a primary one in Lilongwe, with field offices in Zomba and Blantyre, to facilitate the implementation of the first component. Project management expenditures were initially high, reaching 90 percent by the time of the Mid Term Review. Vehicles were purchased, project offices constructed and rehabilitated, livelihood support component required intensive management costs, and the high salaries and benefits of a large, inherited PIU all contributed to the rapid use of project management funds. When the livelihood component was completed, the size of the PIU was adjusted and made leaner and the 2016 Malawi Drought Recovery and Resilience Project (P161392) supplemented project management costs when this project was added to the PIU for implementation. The composition of the team was strengthened. Efficiency in project management improved. At MTR, the team overlooked a target value of
an indicator (schools vs. classrooms). Outcome indicators were not adjusted to better reflect outcomes (see Section 9 M&E Design below). This was a shortcoming in the quality of supervision.

According to the ICR, Bank supervision matched the capacity needs of the districts implementing the project activities. Districts with more complex interventions and specific fiduciary or technical gaps were prioritized. Presence on the ground and open lines of communication with national and local authorities allowed the team to raise issues with government counterparts for timely resolution. The Bank team uncovered Gender Based Violence issues in the implementation of the Thabwa Road site. More grave incidents led to suspending disbursements for a period of 6 months until after corrective measures were implemented. Intensive safeguards and technical support followed. The Bank team established monthly supervision. These efforts completed the road, although the COVID-19 challenges added delays. Safeguards compliance improved. At closing, compliance was satisfactory as reported (ICR, paragraph 81, see also Section 10 Other Issues below). Following the MTR, Bank supervision did not take advantage of the formal restructuring process to adjust target outcome indicator (ICR, paragraph 79). There was no evidence to address the issues surrounding the weak implementation of the M&E system (see Section 9 below). Challenges surrounding procurement and weak contract management, which reduced project efficiency were later addressed by introducing the use of the World Bank Systematic Tracking for Exchanges in Procurement.

The World Bank team's quality of supervision is rated Satisfactory. The Bank team clarified that earlier procurement and contracting challenges were adequately addressed that led to intensified capacity building and enhanced supervision support for the last third of project implementation. This allowed for exceeding outputs and achieving outcomes.

Overall, the World Bank performance is rated Satisfactory. The quality at entry was responsive to the emergency needs of the project. There were minor shortcomings but these were attributable to the rapid preparation needs. The satisfactory performance in the last two years of Bank supervision resulted in achieving the objectives after the Bank team provided adequate response to the earlier procurement and contracting challenges.

**Quality of Supervision Rating**
Satisfactory

**Overall Bank Performance Rating**
Satisfactory

### 9. M&E Design, Implementation, & Utilization

#### a. M&E Design

The objectives were clearly stated but broadly defined. M&E design was reflected in the Results Framework, which showed a valid causal link between inputs and outputs to achieve the project objectives. Baselines were provided through the PDNA. The target values of the indicators were appropriate for 2 outcome and 7 intermediate outcome indicators. Outcome indicators reflected expected outcomes of the project and the contributions of the components to achieve these. However, not all outcome
indicators sufficiently provided a picture of achieving improved lives and livelihoods, with regard to the extent of livelihoods restored and infrastructures improved. For example, some intermediate results indicators tracked infrastructure rehabilitation but not at the outcome level (irrigation, water and sanitation). The restored livelihoods were only expressed as the number of beneficiaries, without reference to the nature or extent of restored, sustainable livelihood. The outcome indicators for the third objective — improvement of disaster response and recovery capacity—were reflected in the reported measures adopting the PDNA methodology. Assessment of efficiency (ICR, Annex 4) provided some evidence of the impact of the outcomes. One intermediate outcome target indicator —82 schools rather than classrooms — was found to be incorrect at the Mid Term Review. This error was overlooked in the second level 2 restructurings that extended the project. The output indicators were specific measurable, and achievable. The indicators were relevant and time bound, although some indicators were missed, such as the number of jobs created, the levels of restored incomes through livelihood support and income generating activities, or the contribution to stabilizing food price based inflation as part of SGR replenishment.

b. M&E Implementation

The project M&E was implemented, as designed, by the Project Implementation Unit in the Ministry of Finance and Economic Development. The M&E tracked Implementation progress across the 15 districts on a quarterly basis. Data collection and analysis of results was done manually during the first year. An automated database system was deployed in the second year. 195 district M&E officers (13 per district) were trained in M&E and 80 officers were fully equipped to enter quarterly data. However, the PIU had inadequate systems to verify and validate submitted information. These challenges led to issues of timeliness, consistency, and quality of reports. M&E implementation had to be adjusted and resolved through site visits, district council visits, and active engagement with sectors. At project completion, the team had to verify and validate some results information within individual ministries and sectors (ICR, paragraphs 23 and 69). No changes were introduced to clarify outcome indicators of the project interventions. A beneficiary assessment, only of the Input for Assets program was carried out and verified at closing by the Task Team (ICR, paragraph 23).

c. M&E Utilization

Data from the M&E system informed project progress, the Mid Term Review and project outcomes. Although the database system was established, the M&E system did not have tools to analyze the information. The PIU prepared reports manually using the M&E data. At the project management level, the quality and periodicity of information flows compromised the ability of the project to fully use the M&E data to make day-to-day project level decisions during implementation. The government continued to use the limited information for decision-making. M&E generated information on the post-disaster recovery and informed coordination across sectors.

Overall, the quality of the M&E is rated Modest (ICR, paragraph 70). The system, as designed, and its implementation were weak and were not sufficient to assess the achievement of the objectives and test the links in the result chain to substantiate the project outcomes. However, shortcomings during implementation were reported in the periodic updating and verification of results. This affected the ability of the M&E system to inform project-level decision-making. There were also moderate shortcomings in the choices and definitions of certain indicators (ICR, paragraph 71).
M&E Quality Rating
Modest

10. Other Issues

a. Safeguards

**Environmental Safeguards:** This Emergency Recovery Loan (ERL) project was classified as Category "B" and followed the condensed procedures in "Preparation of Investment Project Financing - Situations of Urgent Need of Assistance or Capacity Constraints." The Bank's Regional Vice President approved Project Safeguards Requirements under OP 10.00 paragraph 12 on April 6, 2015. The Environmental and Social Management Framework (ESMF) and Integrated Pest Management Plan were completed and disclosed in-country and on the World Bank’s external website on September 2015 after project approval but before activity implementation (ICR, paragraph 72).

The following four environmental safeguard policies were triggered: Environmental Assessment (OP/BP 4.01), Natural Habitats (OP/BP 4.04), Pest Management (OP 4.09), and Forests (OP/BP 4.36). Malawi, Tanzania, and Mozambique were co-riparian countries of the Shire River. Namibia, Angola, Zimbabwe, Botswana, and Zambia were co-riparian countries above the confluence of the Shire and Zambezi Rivers in the greater Zambezi Basin. However, the project would only rehabilitate existing infrastructure. The Regional Vice President issued an exception under paragraph 7(a) for Projects on International Waterways (OP/BP 7.50) on April 6, 2015 (PAD, paragraph 96).

By the time of the Mid Term Review (MTR), the project was in full compliance, of environmental safeguards (ICR, paragraph 73). However, there were instances that sub-projects were started without the necessary World Bank approvals; confusion during implementation on the application, timing, and roles of various actors (sectors, PIU, Environmental Affairs Department, the World Bank) in safeguard compliance procedures (ICR, paragraph 73). The government adopted measures provided in World Bank supervision missions to address issues of noncompliance during implementation. In September 2019, compliance was downgraded to Unsatisfactory due to serious safeguards noncompliance in the Thabwa-Chitseko-Seven Road. Noncompliance was reflected in the following incidents. A fatality in 2018 due to inadequate safety measures at the work site led to a partial suspension of the work for a month. In July 2019, lack of occupational health and safety measures, unfair labor practices, nonfunctioning Grievance Redress Mechanism (GRM), and Gender Based Violence (GBV) incidents led to suspending disbursements for six months. In July 2020, the Roads Authority investigated and resolved GBV reports implementing the improved processes and GRM that were adopted in response to the earlier incidents (ICR, Annex 6).

Intensive World Bank support, such as frequent review of the progress in implementing the Safeguards Action Plan, confirming its veracity through frequent site visits, and undertaking numerous intensive support missions, returned the project to full compliance by closing (ICR, paragraph 73, and Annex 6, paragraph 9). The Task Team added that they worked closely with the government in defining and implementing the 27 point Safeguards Action Plan; conducted monthly in-country site missions and supervision of progress on the action plan; improved the flow of information from the GBV service provider, third party monitor, and other entities; and was granted exception to conduct 2 in-country missions during the COVID 19. The Task
Team also worked to ensure that contractors had personnel for safeguards management, signed Codes of Conduct were up-to-date, complied with requirements, in local languages and visible on sites.

**Social Safeguards**: The project also triggered following social safeguard policies: Physical Cultural Resources (OP/BP 4.11) and Involuntary Resettlement (OP/BP 4.12). A Resettlement Policy Framework was prepared and disclosed in-country and on the World Bank’s external website in May 2015 before project implementation (ICR, paragraph 74). A project Grievance Redress Mechanism was in place (ICR, paragraph 75). Training was directed to improve PIU capacity in managing safeguards and enforcing contractual compliance on site because of (i) several instances of irregular reporting to the World Bank on the status of safeguard instruments and associated challenges; (ii) construction was started on one health center before the safeguard instruments were fully approved, (iii) site clearance at the Thabwa-Chitseko-Seven Road began before the necessary instruments were fully approved; (iv) a road fatality at the Thabwa construction site; and (v) the more serious noncompliance issues at the Thabwa construction site noted above that led to suspending disbursements.

**b. Fiduciary Compliance**

**Financial Management**: According to the ICR, the project complied with the World Bank’s financial reporting requirements (ICR, paragraph 76). However, staffing recruitment delays at the district level were noted. Project audits reported control and accountability issues in most districts The World Bank reviews and an internal audit in August 2018 - determined US$106,000 in questionable expenses from the district councils at Thyolo, Mulanje, Chiradzulu, Blantyre, Karonga, Zomba, Rumphi, and Mangochi. The councils, with support of the Ministry of Finance, refunded these to the PIU.

**Procurement**: According to the ICR, the project followed the procurement procedures (ICR, paragraph 77). No mis-procurement was declared. The Ministry of Finance, Economic Planning and Development (MoFEPD) Internal Procurement and Disposal Committee assisted in fast-tracking procurement processes. A procurement specialist and two assistants staffed a dedicated procurement team. During implementation, weaknesses in contract management were identified and addressed by installing and closely monitoring compliance using an online platform, Systematic Tracking for Exchanges in Procurement (STEP). Among the weaknesses included (i) weak enforcement of environmental, social, health, and safety risks (sexual exploitation and abuse/sexual harassment or SES/SH, rape, and assault); (ii) poor documentation, record keeping, and monitoring, (iii) lack of due diligence in the terms of reference for some of the consultancies; (iv) inadequate communication of contract progress between the PIU and implementing departments; (v) awarding of some contract works packages prior to the completion of safeguards instruments; and (vi) scheduling equipment delivery prior to completing construction. These led to extending contracts, contracts lapsing, payments delayed, cost overruns, and contracts suspended.

c. Unintended impacts (Positive or Negative)

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d. Other

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11. Ratings

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<thead>
<tr>
<th>Ratings</th>
<th>ICR</th>
<th>IEG</th>
<th>Reason for Disagreements/Comment</th>
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<tr>
<td>Quality of ICR</td>
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12. Lessons

The ICR (paragraphs 85-99) provides a number of lessons learned from the project's experience. The following lessons are emphasized with some adaptation of language:

- **Design of emergency operations may benefit from being informed by a Post Disaster Needs Assessment (PDNA).** In this project, the PDNA provided a sound technical basis for priorities that focused on livelihood support and the medium- and longer-term recovery needs. In addition, project design incorporated time-bound aspects in implementing the livelihood support activities (Input for Asset (IFA) program), and other immediate/short term interventions to facilitate the management of supervision resources, better structure delivery mechanisms, and minimize the risk that resources may not reach its intended beneficiaries on time.

- **An inherited Project Implementation Unit (PIU) may benefit from a reassessment of needs of an emergency project.** While an established PIU is beneficial during early implementation, it is critical to conduct capacity assessment of the PIU to ensure efficiency in implementation. This includes: (i) assessing needs against available staff and resources to identify gaps or excess capacity; (ii) developing staff performance evaluation protocols; and (iii) establishing a system of competitive rehiring after a year of implementation similar to establishing a new PIU.

- **Establishing a safeguards steering committee may be useful to oversee large sector or high risk projects to strengthen safeguards compliance.** A safeguards steering committee could provide oversight, establish accountability and mechanisms for redress, bolster ownership, and facilitate adequate resourcing of corrective measures, when needed.

- **Specific lessons to address Gender Based Violence (GBV) in labor-intensive construction works:**
  - *In designing livelihood programs (such as Input for Assets (IFA) used in this project) using economic and entrepreneurial interventions that empower women and communities may be useful.* Targeting female participation may reduce exploitative relationships that tend to develop when there is an influx of both men and women in labor intensive construction works. In this project, GBV service providers engaged and trained mothers in the community on GBV issues to build trust. Empowered communities may better understand rights and opportunities for services and redress.
Use of technology may support confidentiality and reduce the stigma of reporting GBV incidents. In this project, survivors showed more confidence and appreciated the convenience of reporting incidents using cell phones publicized by GBV providers or virtual meetings. Technology may reduce the risk from "double-punishment" faced by women who report incidents. Women who reported GBV incidents were ostracized for causing work stoppages, loss of income for workers (both men and women). The Grievance Redress Mechanism was not trusted. Greater vulnerability and risk for GBV incidents prevailed. Other measures may need to address GBV reporting and safeguards compliance to avoid an incentive to remain silent, individually and as a community.

Fostering community engagement and GBV awareness early and often. In this project, reported GBV incidents were corrected through measures directed at contractors (e.g., translated and disseminated improved codes of conduct). Engaging the community at project preparation may provide a good understanding of the rights of individuals and the community in preventing GBV in the work place by identifying tools and services available to victims and the community, and effective use of the grievance redress mechanism. Periodic reminding of rights, services, and options to communities may foster trust in these tools and services such as assigning female volunteers and leaders to signal that women have a role in the community not only in participating in livelihood interventions, but also in monitoring, and resolving incidents.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provides a good overview of the project implementation and experience, and the assessment is in line with the guidelines. The measures associated with ensuring that safeguards compliance were adequately addressed (Annex 6). The salient points of the operation were summarized and clearly linked with the evidence (particularly with regard to the extensive discussion on the safeguards issues). Annex 4 was sufficiently detailed on efficiency. Lessons were based on the project experience, with specific recommendations for teams to consider in designing safeguards compliance and mitigating risk of Gender Based Violence in the workplace. The report highlighted how activities informed outcomes although the results framework did not have appropriate indicators to strengthen outcome reporting. The discussions under the section on Efficacy provided additional information indicating outcomes although the M&E system did not track these (see Sections 4 for Efficacy and 9 M&E above).

a. Quality of ICR Rating

Substantial