

REPUBLIC OF MOZAMBIQUE

NATIONAL INSTITUTE FOR DISASTER AND RISK REDUCTION MANAGEMENT

Mozambique Disaster Risk Management And Resilience Program

(P166437)

**TERMS OF REFERENCE**

**CONTRACTING OF AN INDEPENDENT VERIFYING AGENT FOR THE VALIDATION OF RESULTS FOR THE DISBURSEMENT-LINKED INDICATOR (DLI) 6**

**Maputo, January 2022**

1. **CONTEXT**
2. Mozambique is one of the countries in the world most exposed to natural threats, in particular hydro-meteorological threats and epidemics. The country has an extensive record of droughts, floods, storms and tropical cyclones which have increased in frequency and intensity over the last four decades, putting vulnerable populations, livelihoods, economy and infrastructures at risk.
3. The National Institute for Disaster Management and Risk Reduction (INGD), created in 2020 by Presidential Decree No. 41/2020 of 28 December, is the government institution responsible for the coordinating entity for disaster management and risk reduction in Mozambique. INGD coordinates emergency preparedness and response measures and rapid post-disaster reconstruction at the national level.
4. In 2017, the Council of Ministers approved the Master Plan for Disaster Risk Reduction (2017-2030). The Master Plan aims to reduce disaster risk, the loss of human lives and vital infrastructure, as well as prevent the emergence of new disaster risks by increasing human and infrastructural resilience to extreme or recurrent climatic, natural and anthropogenic events.
5. In order to support the achievement of part of the expected outcomes of the Master Plan, in March 2019, the World Bank approved an amount of US$96 million in funding, for the Disaster Risk Management and Resilience Program, to strengthen the Government of Mozambique's program to finance and prepare for disaster response and increase the resilience of vulnerable education infrastructure located in risk prone areas.
6. The Programme is structured in three Result Areas, and supports the following activities:
* *Results Area 1 -* Improved financial protection against disasters. Supports the operationalization and capitalization of the Disaster Management Fund, the approval of the Disaster Financial Protection Strategy and the contracting of parametric disaster insurance coverage;
* *Results Area 2 -* Strengthening disaster preparedness and response capacity. Supports the creation and/or training of local disaster risk management committees and the improvement of early warning systems against cyclones and floods.
* *Results Area 3 -* Building climate resilience of vulnerable education infrastructure. Supports the adoption of resilient building standards and maintenance arrangements and the strengthening of schools in risk prone areas.
1. This Program is designed as a Program for Results (PforR) and implemented by INGD and the Ministry of Education and Human Development (MINEDH), with the leadership of the Ministry of Economy and Finance (MEF). The Program's funding is focused and based on the achievement of previously agreed results through 6 *Disbursement-Linked Indicators* (DLI's).
2. The DLI's are indicators that reflect pre-agreed targets, to be met annually. The achievement of the targets by part of INGD, MINEDH and MEF, will contribute to the provision of new disbursements to the Government under the Program. These selected indicators and targets are consistent with the priorities of the Master Plan aimed at improving financial protection against disasters, strengthening emergency preparedness and response, and resilience of public infrastructure to climate risks.
3. To trigger the disbursement based on the results achieved, a validation of the degree of achievement of the results of each DLI will be required by an Independent Verification Agent. Each DLI result has a pre-defined annual value or price. When this indicator-result is achieved (and where applicable - based on the degree of its achievement), the Government will be able to request from the World Bank the disbursement of resources linked to this result, as planned and according to the 'DLI result price', to the Single Treasury Account (CUT) or directly to the dedicated account of the Disaster Management Fund.
4. The Program document states that validation of DLI 6, Results Area 3, on building climate resilience of vulnerable education infrastructure, should be carried out by an engineering firm, to be contracted by INGD through the Technical Assistance component. The present Terms of Reference are intended to guide the process of contracting an engineering firm to serve as the Independent Verification Agent (IVA) for the results of DLI 6 of the Disaster Risk Management and Resilience Program. The Terms of Reference establish the objective and scope of work, the profile and expected results of the engineering firm as well as the verification protocol to be used for the verification and validation of the results of DLI 6.
5. **CONSULTANCY OBJECTIVE**
6. Carry out an annual independent evaluation and validation of the achievement of the results of DLI 6, from Results Area 3, based on the Verification Protocol (Annex 1).
7. Program disbursements will be made on the basis of the Independent Verification Agent's (IVA) validated compliance with the deliverables set out in the Financing Agreement and the Program Document (PAD), following the validation protocol described in the PAD and detailed in Annex 1, of these Terms of Reference.
8. **SCOPE OF WORK**
9. Each year, the Independent Verification Agent must carry out the validation of the achievement of the results of DLI 6, under the MINEDH's implementation responsibility, within 90 days of request by INGD. The verification and validation of the results of DLI 6 shall be presented in the form of a report. The report should include all required evidence.
10. The results and detailed methodology for verification and validation of the results of DLI 6 are described in the Technical Note in Annex 1, and summarized in Tables 1 and 2.

Table 1. **Expected results of DLI 6 and by year**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***DLI***  | ***Result Indicator***  | ***Indicator Definition*** | ***Baseline (2018)*** | ***Goal 2021*** |  | ***Goal 2022*** | ***Goal 2023*** |  |
| DLI 6 | Number of children with access to resilient education infrastructure under the Program | Number of classrooms in hazard-prone areas strengthened or reconstructed according to climate resilience technical standards under the Program  | No rooms reinforced or rebuilt to technical standards for climate resilience | Building assessment conducted for classrooms located in cyclone-prone areas, and detailed drawings prepared for all classrooms to be strengthened under the Program |  | 1500 classrooms reinforced or rebuilt to climate resilience technical standards  | 1,500 classrooms reinforced or rebuilt to climate resilience technical standards (3,000 cumulative classrooms) |  |

Table 2: **Verification Methods for DLI 6**

|  |  |  |
| --- | --- | --- |
| ***#*** | ***DLI*** | ***Protocol for assessing compliance with the DLI and verification / outcome data*** |
|  ***Definition and Description of DLI*** | ***Verification procedure*** |
| DLI 6 | **Number of classrooms in hazard-prone areas strengthened or reconstructed according to climate resilience technical standards under the Program**  | A building assessment is conducted to evaluate the structural vulnerability of classrooms located in cyclone hazard areas based on an updated threat map. The assessment includes roof and structural assessment, potential and already sustained damage and solutions required for cyclone strengthening, prioritization of schools to be strengthened or reconstructed, and detailed designs for the strengthening or reconstruction of school buildings in accordance with the technical standards for climate resilience officially approved by the Ministry of Education and Human Development (MINEDH) under the Program. | 1. Signed and stamped minutes of the MINEDH Advisory Council session approving the evaluation.
2. Verification that the assessment contains the following elements: assessment of buildings, database of schools, prioritization of schools; and detailed drawings per school prepared based on MINEDH's officially approved climate resilience technical standards.
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| Number of classrooms that at the end of each year have been strengthened or rebuilt to MINEDH-approved climate resilience technical standards, including rehabilitation or construction of administrative blocks, toilets and rainwater collection tanks where they did not exist prior to the start of the Program. | 1. Analysis of Tender Documents, contracts and supervision reports
2. Field verification of the resilience of cyclone-reinforced classrooms based on a representative sample.
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1. The tasks of the Independent Verification Agent for the results of DLI 6, are, but are not limited to the following:
2. Review and understanding of the DLI's Technical Notes and the validation protocols proposed therein. If necessary, the Independent Verification Agent may discuss the details of the assessment procedures and products with INGD and MINEDH.
3. Review and understanding of the Program Document (PAD) and Financing Agreement of the Disaster Risk Management and Resilience Program;
4. Analysis of the technical standards for climate resilience officially approved by the Ministry of Education and Human Development (MINEDH);
5. Analysis and understanding of the Terms of Reference for the Vulnerability Assessment of school infrastructure and preparation of detailed drawings;
6. Critical analysis of the Tender Documents for the contracting of works for the reinforcement and reconstruction of classrooms in areas prone to cyclones and strong winds;
7. Critical evaluation of the contents of the Vulnerability Assessment of school infrastructure and preparation of detailed drawings, in the light of the respective Terms of Reference;
8. Quality assessment of classrooms reinforced (rehabilitated) or reconstructed by MINEDH through the Program, in cyclone and high wind risk zones, based on MINEDH approved technical construction standards and Tender Documents. The total number of classrooms retrofitted at the end of the Program (June 2024) shall be 3,000. The classrooms are located in all the provinces of Mozambique. The target number of classrooms to be retrofitted for each year is shown on tables 1 and 3.

1. Preparation and updating, in the case of years 4 to 5, of the methodology, work plan, timetable and resources (human, technical and material) and budget required for the validation of Year 1 results for DLI 6;
2. Preparation or update, each year, of a representative sample, taking into account the regional distribution of schools and other relevant aspects, including the methodology for the selection of schools located in cyclone and windstorm risk areas, to be covered in the resilience assessment of cyclone-reinforced or reconstructed classrooms
3. Conduct interviews, workshops and information gathering meetings with contractors and inspectors involved in the retrofitting and reconstruction of resilient classrooms under the Program;
4. Organize interviews and meetings to discuss the results with technical teams from MINEDH at central and provincial level and UN-Habitat ,[[1]](#footnote-1)involved in the implementation of DLI 6 activities;
5. Prepare the Preliminary and Final Reports on the validation of the results of the DLI 6, whenever requested by INGD, and in light of the Verification Protocol described in the Technical Note, attached to these Terms of Reference.
6. **DELIVERABLES**
7. A validation report of the results of the DLI 6 to be submitted to INGD each year, by the Independent Verification Agent, within 90 days of the request to verify the results. INGD will submit the report to the World Bank within 10 days of receipt of the Independent Verification Agent's final report.
8. The verification report should confirm the achievement of the annual target of DLI 6, indicate the main findings and if necessary put forward some recommendations. MINEDH and the World Bank may prepare and submit their comments on the report to the Independent Verification Agent. The Independent Verification Agent should provide a response, for the production of subsequent drafting if errors are mutually identified. The final validation report should be made available to all stakeholders.
9. **DURATION**
10. The work described in these Terms of Reference will be performed for an initial period of 2 years and renewable as needed on the basis of satisfactory performance. Performance will be measured annually by the delivery of reports on time and of adequate quality.
11. **ASSISTANCE FROM MINEDH AND INGD**
12. MINEDH and INGD will facilitate the Independent Verification Agent to access the required data and information, including updated school database, updated cyclone and windstorm maps, technical standards for climate resilient construction, tender documents, as well as relevant documents or materials for the smooth execution of the work.
13. It will also be the responsibility of the MINEDH and INGD:
14. Facilitate access to the Independent Verification Agent to all relevant persons for the purpose of the interview;
15. Support in organizing technical meetings to collect information and discuss results.
16. **TIMETABLE FOR THE VERIFICATION OF RESULTS**
17. Verification of results may be requested by INGD at any time during the year, once the results of DLI 6 have been achieved.

1. The verification of the results shall be carried out according to the following schedule:
* **Within 5 days of notification of the Agent by INGD**: The Independent Verification Agent must notify INGD and MINEDH in writing, informing about the composition of the technical team deployed to undertake the verification of the results. INGD will have 5 days to request amendments to the proposal, which must be responded to by the Independent Verification Agent within 2 days.
* Within **15 days of notification to the Agent by INGD:** The Independent Verification Agent must submit or update, in the case of years 4 to 5, the methodology for the assessment of results towards full compliance with the Verification Protocol for the outcome indicated for verification by INGD. MINEDH and INGD will have 5 days to request correction to the proposal, which must be responded to by the Independent Verification Agent within 5 days.
* **Within 70 days of notification of the Agent by INGD:** The Independent Verification Agent must submit the draft assessment report to INGD and MINEDH for comments. MINEDH and INGD will have 10 days to issue their contradictory comments.
* Within **90 days of notification of the Agent by INGD**: The Independent Verification Agent must submit the Final Verification Report on the results of DLI 6 to INGD, taking into account the comments of the Ministry of Education and Human Development and the World Bank, if any. INGD shall submit the Final Verification Report on the results of DLI 6 to the World Bank for approval and disbursement of the amounts corresponding to the results validated by the Independent Verification Agent.
1. **SKILLS AND QUALIFICATIONS OF THE INDEPENDENT VERIFIER**
2. The Independent Verification Agent is expected to possess the following skills and qualifications:
3. Demonstrated international experience of architectural and engineering project design in the field of construction and rehabilitation of public infrastructures, including feasibility studies and/or implementation of architectural solutions adapted to natural and climatic disasters. Experience in the education sector is highly desirable;
4. Demonstrated international experience in the design, implementation or evaluation of resilient construction standards for public infrastructure, including education sector, and Africa in particular;
5. Experience in supervision of construction works and rehabilitation of public infrastructure in particular education in the context of post disasters in the world and Africa in particular;
6. Mastery of the principles of resilient reconstruction, infrastructure disaster risk reduction and management;
7. Experience working in the education infrastructure construction sector in Mozambique.

**MINIMUM TECHNICAL TEAM**

1. The Independent Verification Agent must provide a minimum list of professionals and experts who will be directly involved in developing consultancy for the achievement of the Program objectives, and appropriate to the DLI 6 outputs proposed for each year.

1. The minimum permanent technical team should consist of the following specialists:
2. 1 Team Leader
3. 2 Civil engineers;
4. 1 Architect;
5. 1 Disaster risk management specialist
6. 1 Database analyst;
7. 1 GIS Specialist;
8. 1 Environmental specialist;
9. 1 Social Development Specialist .

**Note: Estimated input of Key Experts’ time-input: 27 person-months.**

1. **Team Leader:** Must have minimum Masters qualification in Architecture, Civil Engineering, Project Management or similar areas. Must have at least 15 years of experience in project management and in leading research teams, including work in Africa. Must have demonstrated experience in developing and implementing resilient construction, with particular focus on emergency recovery and infrastructure reconstruction. Must also have experience in construction project management and project design and possess mastery of resilient reconstruction principles*.* Must be fluent in spoken and written Portuguese.
2. **Civil Engineers:** Must have minimum undergraduate qualifications in civil engineering. They should have at least 10 years of relevant professional experience in the implementation and management of infrastructure projects and in the design of technical solutions for disaster risk reduction, including experience of working in Africa. They must also have mastery of resilient reconstruction principles and extensive experience in the preparation of civil construction executive projects and construction management, with particular emphasis on the education sector. They must be fluent in spoken and written Portuguese.
3. **Architect:** Must have minimum qualifications of a Bachelor's degree in Architecture. Must have at least 10 years of relevant professional experience in implementing and managing construction projects and designing technical solutions for disaster risk reduction, including experience working in Africa. Must possess mastery of resilient reconstruction principles. They must also have extensive experience in the preparation of civil construction executive projects and construction management, with particular emphasis on the education sector. They must be fluent in spoken and written Portuguese.
4. **Disaster Risk Management Specialist:** Have a degree in Civil Engineering, Architecture, Environmental Engineering or similar fields with specialization in Disaster Risk Management, with at least 10 years of proven professional work experience in the development and implementation of disaster risk management solutions, with particular focus on post-disaster recovery and resilient infrastructure reconstruction. Must have experience working in Africa and demonstrate mastery of resilient reconstruction principles*.* Must be fluent in spoken and written Portuguese.
5. **Systems and Database Specialist:** Must have a degree in Computer Engineering or similar field with specialization in database analytics. Must have at least 10 years proven experience in database design, development, programming, security and management, including working in Africa. Must also have experience in analysis, design and implementation of network systems (servers and network interfaces) and maintenance of database structures. Must be fluent in spoken and written Portuguese.
6. **Geographic Information Systems Specialist (GIS):** Must have a minimum of a degree in Geographic Information Systems or Spatial Data Analysis and have at least 10 years of experience in spatial data analysis and mapping using Geographic Information Systems (GIS), including working in Africa. Have demonstrated experience in the design, updating and conversion of spatial databases. Must also have experience in collecting, handling and processing geo-referenced spatial data and in developing spatial analysis applied to infrastructure projects. Must have demonstrated knowledge in the use of spatial analysis computer systems: Arc GIS, Arc Info, MapInfo, Arcview. Must be fluent in spoken and written Portuguese.
7. **Environmental Specialist:** Must have a minimum of a Bachelor's degree in Environmental Engineering or Environmental Management, with a minimum of 7 years of relevant work experience in implementing environmental impact assessment and management plans, including work in Africa. Mus have demonstrated experience in designing and analyzing implementation of education sector development policies in crisis and disaster management contexts. Must be thoroughly familiar with World Bank Environmental and Social Safeguards Policies and other legal provisions in force in the Country. Must be fluent in spoken and written Portuguese.
8. **Social Development Specialist:** Must have a minimum of Bachelor's degree in Anthropology and Sociology with specialization in Social and Community Development, with a minimum of 7 years of relevant professional experience in the area of institutional and community development including work in Africa. Must have experience in designing, implementing and evaluating institutional and capacity development plans and strategies of community-based organizations in the education sector, as well as demonstrated experience in designing and analyzing implementation of education sector development policies in crisis and disaster management contexts and minimum 7 years relevant professional experience in the area of gender equality and/or women and development, with particular emphasis to the education sector, including work in Africa. Must be thoroughly familiar with World Bank Environmental and Social Safeguards Policies and other legal provisions in force in the country. Must be fluent in spoken and written Portuguese.
9. **REPORTS**
10. On a day-to-day basis, the Independent Verification Agent will report to the Coordinator of the School Retrofitting Component of the Program, based at the Directorate for School Infrastructure and Equipment (DIEE) at the Ministry of Education and Human Development (MINEDH) and, whenever requested, to the Program Management Secretariat (PMS), based at INGD.
11. The Independent Verification Agent shall work in continuous consultation with the specialized technical teams of the DIEE, UN-Habitat, the Contractors and the Inspector of works for the strengthening and reconstruction of vulnerable education infrastructure.
12. **RESPONSIBILITIES OF THE INDEPENDENT VERIFIER**
13. The Independent Verification Agent has the following responsibilities:
14. Ensure that the assessment and validation of the results of DLI 6 is carried out in full compliance with the Technical Note and verification protocol provided;
15. Execute the work within the planned deadlines and scrupulously comply with the approved work schedule;
16. Provide all the necessary means for carrying out the work, namely, the minimum appropriate technical team, means of transport for the team to travel to the sites and equipment for carrying out the assessment;
17. To inform MINEDH and INGD in due time, about possible changes in the minimum technical team, deviations or events beyond their control that may have a direct impact on the performance of the consultancy as well as the measures proposed to mitigate them.
18. The Independent Verification Agent shall provide the services set forth in these Terms of Reference, with maximum diligence, efficiency and economy, in accordance with the general techniques and practices acceptable for the Consulting activity and assuming responsibility for the execution in light of such standards.
19. The Independent Verification Agent shall treat all information with due confidentiality, respect and consideration for the individual privacy of the employees in charge of providing the information required to perform the work described in these Terms of Reference.
20. **SELECTION METHOD**
21. This consultancy is funded by the Technical Assistance Component of the Disaster Risk and Resilience Management Programme (IDA Grant No. D436-MZ), coordinated by INGD.
22. The Independent Verification Agent will be selected on a competitive basis in accordance with the World Bank - "*World Bank Procurement Regulations for IPF Borrowers*", July 2016, revised in August 2018. The contract for this consultancy will be of the lump-sum type, with an agreed value per outcome verification report. The selection method shall be QCBS (Quality and Cost Based Selection).

**Annex 1: DLI Technical Note 6**

## **DLI 6: Number of classrooms in risk-prone areas strengthened or rebuilt to climate resilience technical standards under the Program**

## **Background**

Education is the social sector most affected by disasters in Mozambique and the most advanced sector with respect to integrating disaster risk reduction into infrastructure provision. The annual loss of classrooms due to cyclones and strong winds, particularly in coastal provinces, contributes to the widening deficit of school infrastructure currently estimated at 34,000 classrooms to meet the current needs of the education system. The loss of classrooms in the education sector, directly affects the quality of education, particularly in primary education. Without further losses, at the rate of 700 to 1,000 classrooms being built per year, mainly financed by development partners through the Education Sector Support Fund (FASE), Mozambique would take at least 34 years to fill the existing deficit.

Each year, more than 540 classrooms and 57,000 students are affected by floods, cyclones and earthquakes, with an economic toll of $2 million. In 2015 alone, flooding in central and northern Mozambique damaged or destroyed 2,363 classrooms. In 2017, Cyclone Dineo destroyed 2,222 classrooms in Inhambane Province, affecting 166,650 students and 5,000 teachers. In 2019, cyclones Idai and Kenneth that hit the Central and Northern regions of Mozambique, damaged an estimated 4,441 classrooms, and affected an estimated 332,301 pupils and 9,616 teachers the provinces of Sofala, Manica, Zambézia, Inhambane, Tete, Nampula and Cabo Delgado. The coastal provinces of Maputo, Gaza, Inhambane, Sofala, Zambézia, Nampula and Cabo Delgado are particularly affected. Around 5,000 classrooms constructed between 2005 and 2009 under FASE have been identified as being most at risk and requiring urgent refurbishment. In addition, all classrooms affected by Cyclones Idai and Kenneth are to be rebuilt using resilience standards for future extreme events.

In order to reduce the vulnerability of school infrastructure, since 2014 the Ministry of Education and Human Development (MINEDH) has started to apply technical standards for cyclone and earthquake resilient construction to the construction of new classrooms funded by FASE. However, as FASE interventions do not address the rehabilitation of existing classrooms, in 2015 MINEDH started testing new approaches to rehabilitate and repair existing classrooms vulnerable to cyclones and strong winds in Zambézia, Nampula and Niassa provinces with technical assistance from UN-Habitat through the Emergency Resilient Recovery Project (ERRP) with funding from the World Bank. MINEDH intends to expand the experience of the ERRP Project to the whole country for the strengthening of classrooms vulnerable to cyclones and strong winds, as well as for the reconstruction of classrooms destroyed or damaged by cyclones Idai and Kenneth.

### **DLI 6: Definition and Measurement**

DLI 6 reports the reinforcement (*retrofitting*) or reconstruction of vulnerable conventional classrooms in areas prone to the risk of cyclones and strong winds, using new construction techniques approved by the Ministry of Education and Human Development (MINEDH). Reinforcement will focus on existing vulnerable classrooms. Reconstruction will focus on classrooms affected or destroyed by cyclones Idai and Kenneth, which need to be fully constructed. A building assessment will be carried out by an engineering firm focusing on the vulnerability of the roof and structure of classrooms located in areas prone to cyclones and high winds, and in areas affected by Cyclones Idai and Kenneth. The assessment will take the updated cyclone and high wind map as its basis. The assessment includes a database of schools assessed, prioritization of schools to be strengthened or rebuilt, and the detailed designs prepared based on the officially approved MINEDH climate resilience technical standards covering all schools to be intervened. This assessment will inform the preparation of Tender Documents for the reinforcement (*retrofitting*) or reconstruction of classrooms so that they are resilient to cyclones and strong winds.

**Only classrooms reinforced or rebuilt under the Program that fully (100%) meet the technical standards for climate resilience officially approved by MINEDH are considered cyclone and wind resilient classrooms.**

For each year, and starting in Year 4, the resilience of vulnerable classrooms strengthened or rebuilt in areas prone to cyclone and high wind risk will be measured as follows:

***Total resilient classrooms = (Total classrooms meeting technical standards /Total classrooms assessed) X Total classrooms reinforced or rebuilt***

* ***Total resilient classrooms***: is the total number of conventional classrooms strengthened or reconstructed by MINEDH according to the technical standards of climate resilience officially approved by MINEDH under the Program that have resilience to withstand the maximum intensity of cyclones and strong winds recorded in the respective locality, noting the updated cyclone and strong wind map.
* ***Total*** number of ***classrooms meeting technical standards***: is the total number of conventional classrooms strengthened or reconstructed by MINEDH in a given year under the Program, randomly selected and assessed by the Independent Verification Agent, that during the assessment met the full (100%) technical standards of climate resilience approved by MINEDH, for the maximum intensity of cyclones and strong winds observed in the respective locality.
* ***Total classrooms assessed***: is the number of conventional classrooms randomly selected in a given year by the Independent Verification Agent from the total number of classrooms reinforced or reconstructed under the Program, and subjected to assessment based on technical standards of climate resilience officially approved by MINEDH, and observing the updated cyclone and strong wind map for the respective locality.
* ***Total classrooms strengthened or rebuilt***: is the total number of classrooms strengthened or rebuilt by MINEDH throughout the Country under the Program in areas prone to cyclone and windstorm risk in a given year, and starting from Year 4.

Table 3: **DLI 6: Definition and Goals**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***Result Indicator***  | ***Indicator Definition*** | ***Baseline (2018)*** | ***Goal 2021*** |  | ***Goal 2022*** | ***Goal 2023*** |  |
| Number of children with access to resilient education infrastructure under the Programme | Number of classrooms in hazard-prone areas strengthened or reconstructed according to climate resilience technical standards under the Program  | No rooms reinforced or rebuilt to technical standards for climate resilience | Building assessment conducted for classrooms located in cyclone-prone areas, and detailed drawings prepared for all classrooms to be strengthened under the Program |  | 1500 classrooms reinforced or rebuilt to climate resilience technical standards | 1,500 classrooms reinforced or rebuilt to climate resilience technical standards (3,000 cumulative classrooms) | ) |

### **Data Sources, Collection and Verification**

Data and information for the measurement of DLI 6 will be produced by the Directorate of School Infrastructure and Equipment (DIEE) of MINEDH, and systematized in the respective database, and collected by the Program Management Secretariat (PMS), and the Independent Verification Agent through field verification during the evaluation, based on a random sample. The verification will be conducted by an engineering firm, acting as Independent Verification Agent of the results reported by MINEDH.

Table 4: **Data Source, Collection and Validation of DLI 6**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Result Indicator***  | ***Source of data*** | ***Data Collection Periodicity*** | ***Responsibility for data collection / aggregation*** | ***Responsibility for Data Validation*** |
| ***Baseline (2018):***No rooms reinforced or rebuilt to technical standards for climate resilience | MINEDH database | Existing data | DIEE-MINEDH/PMS-INGD | Independent Verification Agent  |
| ***Target 2021:*** Building assessment conducted for classrooms located in cyclone-prone areas, and drawings per school detailed and prepared for all classrooms to be strengthened under the Program | Minutes of the Consultative Council of MINEDH | Annually | DIEE-MINEDH/PMS-INGD | Independent Verification Agent  |
|  |  |  |  |  |
| ***Target 2022:*** 1500 classrooms reinforced or rebuilt to climate resilience technical standards  | Database of DIEE/MINEDHFiscal Reports  | Annually | DIEE-MINEDH/PMS-INGD | Independent Verification Agent  |
| ***Target 2023: 1,500*** classrooms reinforced or rebuilt to climate resilience technical standards (3,000 cumulative classrooms) | Database of DIEE/MINEDHFiscal Reports  | Annually | DIEE-MINEDH/PMS-INGD | Independent Verification Agent  |
|  |  |  |  |  |

### **Programme of Activities for the fulfilment of the DLI**

To achieve the objectives of DLI 6, the Government, through MINEDH, should implement profound changes in the following areas:

1. **Strengthening the capacity of MINEDH and DPEDH**: At the central level, the implementation of the Program will require MINEDH to strengthen technical capacity for coordination, procurement management, financial management, and management of social and environmental safeguards, so that coordination between MINEDH, MEF, the Contractors, the Program Management Secretariat (PMS), and the World Bank is effective; procurement processes are instructed and processed properly and without delay, and resource flows from MEF to MINEDH and payments to service providers occur smoothly. To this end, increased staffing and resources, and specialized capacity building should be allocated or administered to the various technical teams within MINEDH responsible for implementing the Program. At the local level, MINEDH should strengthen the operational capacity of the School Construction and Equipment Units (UCEE's) for the regular exercise of supervision of the works, providing means and resources to strengthen the mobility of technicians of the UCEE's to the various locations where the works of strengthening or reconstruction of classrooms under the Program are taking place.
2. **Dissemination and adoption of the climate resilience technical standards:** MINEDH, through the DIEE, should ensure an involvement of all stakeholders, in the preparation and dissemination of the climate resilience technical standards, in order to ensure their ownership and adoption by all actors of the education sector involved in the construction of school infrastructure, with emphasis on consulting companies, projects and supervision, Contractors, the Order of Engineers, NGOs and Development Partners present in the country. MINEDH should ensure the participation of these segments in the consultation sessions during the preparation of the technical standards, as well as in the dissemination and capacity building sessions aimed at greater knowledge, adoption and comprehensive implementation of the technical standards by all stakeholders in all education sector works under and outside the Program.
3. **Coordination between MINEDH and MEF:** MINEDH, through DIEE and DIPLAC, should work with the National Directorates of Planning and Budget (DNPO) and Treasury (DNT) in the Ministry of Economy and Finance (MEF) to ensure the timely allocation and availability to MINEDH, of resources transferred by the World Bank (including advances) to the account dedicated to the Program at CUT for the financing of Program activities.
4. **Supervision, oversight and ongoing monitoring of contractors' activities.** MINEDH, through the DIEE should ensure that all works are carried out with proper supervision from the beginning. DIEE shall also ensure that the Provincial Directorates of Education and Human Development, through their respective UCEE's, carry out regular and effective supervision and monitoring of all works under the Programme, so that together with UN-Habitat technical assistance and supervision ensure that all contractors scrupulously comply with the provisions of the technical standards of climate resilience approved by MINEDH, the provisions of the Tender Documents and the respective contract. MINEDH shall train and equip the UCEE's to strengthen their capacity to monitor the works in the respective province.

### **Disbursements based on results**

The outcome-based disbursements for DLI 6 are scalable from Year 4 to Year 5, i.e. resources for DLI 6 will be disbursed in full for the amount established for Year 1, and in proportion to the outcomes achieved in Years 4 to 5, as follows:

1. **For Year 1:**

**Target**: **Building assessment conducted for classrooms located in cyclone prone areas, and detailed drawings per school and prepared for all classrooms to be strengthened under the Program.**

The disbursement of the total resources for Year 1 will be made to the Single Treasury Account. The disbursement of the resources will only take place after they have been cumulatively confirmed:

1. The approval of the assessment by the MINEDH Advisory Council; and
2. The inclusion in the assessment, of *i)* assessment of all school buildings in cyclone-prone areas; *ii)* a database of assessed schools; iii*)* prioritization of schools to be strengthened or rebuilt, and *iv)* detailed designs per school of classrooms to be strengthened or rebuilt, based on MINEDH's officially approved climate resilience technical standards.

The resources disbursed by the Program under DLI 6 are to be allocated to MINEDH, and used to strengthen the capacity of MINEDH and the ECHEUs (UCEEs), as well as increase MINEDH investment in the areas supported by the Program, in general, and to support the dissemination, adoption and implementation of climate resilience technical standards in all education infrastructure rehabilitation or reconstruction works in cyclone-prone areas.

1. **For Years 4 to 5**

**Target: Number of classrooms in risk-prone areas reinforced or rebuilt to climate resilience technical standards**

Disbursements from this DLI will be scalable, i.e., proportional to the number of classrooms strengthened or rebuilt in a given year in areas that are prone to cyclones and strong winds, and that are effectively resilient, in light of the technical standards for climate resilience officially approved by MINEDH.

The amount to be disbursed in each year, and starting with Year 4, shall be determined by the following formula:

**Amount to be disbursed = Number of resilient classrooms X (24,000,000/3,000)**, where:

* **Amount to be disbursed**: is the amount to be disbursed in US dollars per year, up to a maximum of US$ 24 million, corresponding to the target number of classrooms strengthened or rebuilt nationwide in a given year under the Programme in areas prone to cyclones and strong winds
* **Number of resilient classrooms:** is the total number of conventional classrooms strengthened or reconstructed by MINEDH according to the technical standards of climate resilience officially approved by MINEDH, under the Program that have resilience to withstand the maximum intensity of cyclones and strong winds recorded in the respective locality, noting the updated cyclone and strong wind map.
* **24,000,000:** is the total amount in US dollars available to be disbursed for achieving the target of 3,000 classrooms strengthened or rebuilt under the Program in areas prone to cyclone strong events, using the technical standards of climate resilience officially approved by MINEDH under the Program.
* **3,000**: is the total number of classrooms to be strengthened or rebuilt in cyclone and strong event prone areas using MINEDH approved climate resilience technical standards under the Program.
* The resources disbursed by the Program for this DLI are to be allocated to MINEDH to reinforce the respective operating and investment expenses in the areas supported by the Program, in general, and for the strengthening of vulnerable classrooms and reconstruction of classrooms affected by Cyclones Idai and Kenneth, in particular.

### **Implementation and Communication Mechanisms**

Institutions involved in the implementation of DLI 6 include:

* **MINEDH:** Directorate of School Infrastructure and Equipment (DIEE), Directorate of Planning and Cooperation (DIPLAC), Department of Procurement (DAQUI) and Department of Administration and Finance (DAF) and School Construction and Equipment Units (UCEE).
* **MEF** - National Directorate of Planning and Budget (DNPO) and National Directorate of Treasury (DNT).

### **Facilitation, Technical Assistance and Capacity Building**

DLI 6 will be supported through direct technical assistance to be provided by UN-Habitat to be contracted by INGD through the Technical Assistance component of the Program. The UN-Habitat technical assistance is intended to advise the MINEDH in the preparation and implementation of the Resilient Classrooms Strengthening Program, including technical aspects, safeguards, monitoring and evaluation, multi-stakeholder engagement and communication, training to engineers and contractors on climate resilient construction techniques. It also includes UN-Habitat's support in supervising the implementation of technical standards by contractors involved in the reinforcement or reconstruction of classrooms under the Program. Experts on Financial Management, Procurement and Environmental and Social Safeguards based at the Program Management Secretariat (PMS), and on Gender-based Violence will be mobilized to assist MINEDH, in their respective areas of expertise. In-country and out-of-country training packages will be administered to MINEDH staff involved in education infrastructure construction activities.

Table 5. **Financial availability (***in Meticais***) for Technical Assistance to DLI 6**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Financial availability**  | ***000’*** | ***000’*** | ***000’*** | ***000’*** | ***000’*** |
| Technical Assistance to advise MINEDH on the preparation and implementation of the new Resilient Classrooms Strengthening Programme, including technical aspects, safeguards, monitoring and evaluation, engagement and communication with the various stakeholders, training to engineers and contractors | **25,600** | **25,600** | **25,600** | **25,600** | **25,600** |
| Technical assistance to advise INGD and MINEDH on procedures and management of environmental and social issues, including integration of considerations related to Gender Based Violence (GBV)/SEA, and persons with special needs and other vulnerable groups, monitoring and evaluation aspects, and engagement/communication with various stakeholders | **6,400** | **6,400** | **6,400** | **6,400** | **6,400** |
| Financial Management Specialist and Procurement Specialist to implement the Technical Assistance component (IPF) and provide technical advice/training in their respective areas of expertise to INGD and MINEDH staff involved in the implementation of the Programme | **10,240** | **10,240** | **10,240** | **10,240** | **10,240** |
| Environmental and Social Safeguards Specialist to support the Program Management Secretariat and provide technical advice/training in their respective areas of expertise to INGD and MINEDH staff involved in the implementation of the Program | **2,560** | **2,560** | **2,560** | **2,560** | **2,560** |
| Capacity building at national and international levels and exchange of experiences on disaster risk management financing (MEF), early warning systems (INGD, INAM, DNGRH) and school strengthening (MINEDH) | **3,200** | **3,200** | **3,200** | **3,200** | **3,200** |
| **Total** | **48,000** | **48,000** | **48,000** | **48,000** | **48,000** |

### **Links with Other DLI's and Program Objectives**

DLI 6 is directly linked to DLI 5. The Program disbursements to DLI 6 will ensure that MINEDH will finance the strengthening of its human and material capacity for the dissemination, adoption and supervision of the implementation by contractors involved in the strengthening and reconstruction of classrooms under the Program, of the technical standards for climate resilience to be approved by MINEDH under DLI 5. On the other hand, the DLI 6 allocations will allow MINEDH to finance the reinforcement works of classrooms vulnerable to cyclones and strong winds and the reconstruction of part of the classrooms damaged or destroyed by cyclones Idai and Kenneth in the center and north of the country. Finally, the allocation of DLI 6 will serve as a framework, above all, for the appropriate allocation of resources from the General State Budget to the MINEDH, for the strengthening or reconstruction of classrooms not covered by the Program, as well as for the maintenance of classrooms intervened by the Program. The same allocation will also ensure that MINEDH negotiates with MEF, in the Post-Program period, the allocation of adequate resources for maintaining the proper functioning of the UCEE's to ensure the supervision of the activities of contractors and NGOs involved in the strengthening, rehabilitation and reconstruction of classrooms throughout the country, under Government and partner funding, in light of the new technical standards of climate resilience approved by MINEDH.

1. UN Habitat is responsible for providing Technical Assistance to the MINEDH under the Program. [↑](#footnote-ref-1)