Document of the Inter-American Development Bank

**Belize**

**STRENGTHENING OF TAX ADMINISTRATION**

**(BL-L1031)**

**MONITORING AND EVALUATION PLAN (M&E)**

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1. Introduction
   1. The main objective of the project is to contribute to strengthening Tax Administration (TA) aimed at increasing revenue collection. The specific objectives are the following: (i) increasing the government’s effectiveness in tax collection; and (ii) increasing the efficiency of TA. These objectives will be achieved by improving TA governance and operational processes, and by modernizing the technological infrastructure.
   2. **Component I.** **Strengthening Tax Administration Governance**. The objective of this component is to develop a new TA business model. This will be done by developing a new business model consolidating ITD and DGST and a new internal control model.
   3. **Component II**. **Improvement of Operational Processes.** The objective of this component is to implement a series of integrated processes and improve staff skills to increase efficiency. Some of the processes to be implemented include a new audit model, the enforcement and compliance management model based on a risk-based model, and an invoicing control model.
   4. **Component III**. **Modernization of Technological Infrastructure**. The objective of this component is to modernize the technological infrastructure to support the operations of the new TA department. This component will finance the development and implementation, including training, of a new Information and Technology strategic plan as well as a new system for the integration of governments systems.
   5. The Borrower is Belize. The Executing Agency (EA) is the Ministry of Finance (MOF), which will be responsible for the administration of the resources and procurement processes of the program. The Project Executing Unit (PEU), established within the PMO, under the MOF, will be responsible for overall project administration, including planning, budgeting, accounting, procurement implementation, and monitoring; and will include a full‑time, dedicated financial and procurement officers, and a financial assistant.
   6. The borrower will present: (i) the annual audited financial reports of the program within a period of 120 days after closing each financial year of the executing agency and during the disbursement period (five years) or any agreed extension, and duly reviewed and certified by a firm of independent auditors eligible for the Bank. The last of these reports will be submitted within a period of 120 days after the date stipulated for the last disbursement of the program. (ii) The intermediate financial report to be delivered within a period of 60 days of each fiscal year. The intermediate reports are part of the contract and no additional budget is required for such a purpose.
   7. Additionally, the executing agency will review and send to the Bank a detailed intermediate evaluation during the first 90 days after 50% of the value of the project has been disbursed or after 40 months of execution (what happens first).
   8. At the end of the program, the executing agency will prepare and send to the Bank a report of the final evaluation that will be used for the Project Completion Report (PCR), which shall be submitted no later than 90 days after 95% of the value of the funds have been disbursed.
2. Monitoring
   1. Throughout the execution of the project, the product indicators established in the results matrix will be continuously monitored. These products are key, given that they coincide with the conditions established in the Policy Matrix. Table 1 describes the output indicators to be followed during the execution of the program, and a final verification in 2024. The Bank and the borrower agreed to use the Result Matrix and the activities defined in the Program Monitoring Report (PMR) to monitor the execution of the program.
   2. The executing agency will present an intermediate report no later than 90 days after 50% of the funds have been disbursed or 40 months after the project started, which occurs first. This report should include the progress in the implementation of the products, the evolution of the results, and a review of the risks as well as a section of lessons learned to improve the quality of the project. The main questions of the monitoring phase are:
3. **Main Monitoring Questions** 
   1. **Coherence monitoring:** Do the activities and processes developed correspond to the goals established in the program?
   2. **Financial monitoring:** Are the funds being executed according to the timetable established in the program?
   3. **Activity monitoring:** Are the projected activities being planned and executed as established in the timetable of the project?
   4. **Product Monitoring:** Are the products (intermediate and final) being developed in a sequential and ordered way?
   5. **Results monitoring:** Is the project fulfilling the required goals established in the impact and outcomes indicators?
   6. **Risk monitoring:** Are there any emerging risks that might jeopardize the correct implementation of the Project? Are the risk mitigation actions been applied?
4. **Indicators**
   1. During the monitoring of this program, the following product indicators that are part of the Result Matrix will be followed up and included in the semi-annual progress report, the intermediate evaluation and the final evaluation, as well as the annual costs (See Table 1 and Table 2)

**Table 1: Product Indicators**

| **Outputs** | **Unit Measure** | **Baseline** | **Baseline Year** | **Year**  **1** | **Year**  **2** | **Year**  **3** | **Year**  **4** | **Year**  **5** | **End of Project** | **Means of Verification** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Component I. Strengthening Tax Administration Governance** | | | | | | | | | | | |
| 1.1 New business model consolidating ITD and DGST | Report | 0 | 2018 | 0 | 0 | 0 | 1 | 0 | 1 | Report of the MOF providing evidence that the new business model has been implemented. | The new model is considered implemented when the MOF publishes it in the web page. The model comprises the following tasks: (i) implementation of new processes and procedures; (ii) implementation of the strategic plan; and (iii) delivery of workshops to disseminate the new business model. |
| Milestone 1 – Processes and procedures defined and implemented | Report | 0 | 2018 | 0 | 0 | 0 | 1 | 0 | 1 | Document of the MOF approving the processes and procedures |  |
| Milestone 2 -Implementation of the strategic plan | Document | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Document of the MOF approving the Strategic Plan |  |
| Milestone 3 – workshops to disseminate: (i) new business model; (ii) strategic plan; and (iii) change management activities | Workshops | 0 | 2018 | 0 | 15 | 20 | 5 | 0 | 40 | Report of the MOF providing evidence that workshops have been delivered |  |
| 1.2 Internal Control Model | Report | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Report of the MOF providing evidence that the new internal control model has been implemented | The model is considered implemented when the first report is prepared based on the new guidelines. The model includes (i) operating manuals; (ii) a system to support the model’s operation; and (iii) training in internal control techniques |
| Milestone 1 – Processes and procedures reviewed and adjusted | Report | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Document of the MOF approving the processes and procedures |  |
| Milestone 2 - Development and implementation of a system to support Internal control processes | System | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Document of the MOF approving the Software[[1]](#footnote-2) |  |
| Milestone 3 - Training on internal control techniques and use of the system (employees)[[2]](#footnote-3) | Personnel | 0 | 2018 | 0 | 10 | 10 | 0 | 0 | 20 | Report of the MOF providing evidence that personnel has been trained |  |
| **Component II. Improvement of Operational Processes** | | | | | | | | | | | |
| 2.1 Integrated taxpayer registration model, common to all tax departments and systems | Report | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Report of the MOF providing evidence that new taxpayer registration model has been implemented. | The model is implemented when at least one user employs the new model and verifies its correct functioning. The model comprises the following tasks: (i) definition of the new processes and procedures; (ii) data cleansing and data migration of existing information to the new system; and (iii) delivery of workshops to disseminate the new registration model. |
| Milestone 1 – Processes and procedures defined | Report | 0 | 2018 | 0 | 1 | 0 | 0 | 0 | 1 | Document of the MOF approving the processes and procedures |  |
| Milestone 2 - data cleansing and data migration to the new ITAS | Document | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Document of the MOF approving the Data Migration |  |
| Milestone 3 - Workshops to discuss and disseminate the new registration model | Workshops | 0 | 2018 | 0 | 4 | 4 | 0 | 0 | 8 | Report of the MOF with the evidence that the Workshops have been delivered |  |
| 2.2 Human resource strengthening plan, based on competence evaluation | Employees trained | 0 | 2018 | 200 | 400 | 400 | 0 | 0 | 1,000 | Report of the MOF providing evidence that the employees have been trained | The human resources plan is considered implemented when the first official is trained based on competence evaluation. The model comprises the following tasks: (i) identification of the skill gaps among TA personnel; (ii) implementation of an on-site training program; (iii) implementation of an e-learning platform; and (iv) delivery of workshops to disseminate the program |
| Milestone 1 - identification of skill gaps of the TA personnel, based on the job profiles prepared by the government program | Report | 0 | 2018 | 0 | 1 | 0 | 0 | 0 | 1 | Document of the MOF approving the Skill gaps identification |  |
| Milestone 2 - designing a permanent training program | Document | 0 | 2018 | 0 | 1 | 0 | 0 | 0 | 1 | Document of the MOF approving the Program |  |
| Milestone 3 – Implementation of an e-learning training platform | Platform | 0 | 2018 | 0 | 1 | 0 | 0 | 0 | 1 | Document of the MOF approving the Platform |  |
| Milestone 4 – Training Program | Personnel | 0 | 2018 | 200 | 400 | 400 | 0 | 0 | 1,000 | Report of the MOF providing evidence that the Personnel has been trained |  |
| 2.3 Taxpayer segmentation and risk-based compliance management model | Report | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Report of the MOF providing evidence that the taxpayer segmentation and compliance management model have been implemented | The model is implemented when the new consolidated tax department adopts the risk model to plan its activities. The model comprises the following tasks: (i) revision and adjustment of existing processes and procedures to identify, prioritize, and mitigate risks of TA operations; and (ii) delivery of workshops to disseminate the new model. |
| Milestone 1 – Processes and procedures reviewed and adjusted, including the customization in the new ITAS | Report | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Document of the MOF approving the processes and procedures |  |
| Milestone 2-Workshops to discuss and disseminate a new audit model making use of wider range of examination and risk base technique | Workshops | 0 | 2018 | 0 | 4 | 4 | 0 | 0 | 8 | Report of the MOF with the evidence that the Workshops have been delivered |  |
| 2.4 New audit model making use of wider range of examination and risk-based techniques | Report | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Report of the MOF providing evidence that the new audit model has been implemented | The model is implemented when the new consolidated tax department adopts the new audit plan based on the audit model. The model comprises the following tasks: (i) revision and adjustment of existing processes and procedures; (ii) implementation of analytic tools for data mining; and (iii) delivery of workshops to disseminate the new model. |
| Milestone 1 - Processes and procedures reviewed and adjusted | Report | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Document of the MOF approving the processes and Procedures |  |
| Milestone 2 - Analytics tools for audit | Document | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Document of the MOF approving the Tools |  |
| Milestone 3 -Workshops to discuss and disseminate a New audit model making use of wider range of examination and risk- based techniques | Workshops | 0 | 2018 | 0 | 4 | 4 | 0 | 0 | 8 | Report of the MOF with the evidence that the Workshops have been delivered |  |
| 2.5 Enforced collection model based on risk criteria | Report | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Report of the MOF providing evidence that the enforced collection model has been implemented | The model is implemented when the first batch of arrears, selected on risk-based criteria, is processed. The model comprises the following tasks: (i) definition of new processes and procedures; and (ii) delivery of workshops to disseminate the new model. |
| Milestone 1 – Processes and procedures reviewed and adjusted | Report | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Document of the MOF approving the processes and procedures |  |
| Milestone 2 - Workshops to discuss internally and disseminate an enforced collection model based on risk criteria | Workshops | 0 | 2018 | 0 | 4 | 4 | 0 | 0 | 8 | Report of the MOF with the evidence that the Workshops have been delivered |  |
| 2.6 Taxpayer account model to provide the TA with a fast taxpayer-centric overview | Report | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Report of the MOF providing evidence that the new taxpayer account model has been implemented | The model is implemented when at least one user executes the processes and procedures and verifies their correct functioning. The model comprises the following tasks: (i) revision and adjustment of existing processes and procedures; and (ii) delivery of workshops to disseminate the new model. |
| Milestone 1 – Processes and procedures reviewed and adjusted | Report | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Document of the MOF approving the processes and procedures |  |
| Milestone 2 - Workshops to discuss internally and disseminate the taxpayer account to allow taxpayer centric overview | Workshops | 0 | 2018 | 0 | 4 | 4 | 0 | 0 | 8 | Report of the MOF with the evidence that workshops have been delivered |  |
| 2.7 Invoicing control model comprising a strategy for further implementation of electronic invoice | Report | Model | 0 | 2018 | 0 | 0 | 0 | 1 | 1 | Report of the MOF providing evidence that the new invoicing control has been implemented | The model is implemented when at least one user executes the processes and procedures and verifies the correct functioning of the model. The model comprises the following tasks: (i) definition of new processes and procedures; and (ii) delivery of workshops to disseminate the new model. |
| Milestone 1 – Processes and procedures defined | Report | 0 | 2018 | 0 | 0 | 0 | 0 | 1 | 1 | Document of the MOF approving the Processes and procedures |  |
| Milestone 2 -Workshops to discuss and disseminate an Invoicing control model comprising a strategy for further electronic invoice implementation | Workshops | 0 | 2018 | 0 | 2 | 2 | 2 | 2 | 8 | Report of the MOF with the evidence that the Workshops have been delivered |  |
| **Component III. Modernization of the Technological Infrastructure** | | | | | | | | | | | |
| 3.1 Information Technology (IT) strategic plan | Report | 0 | 2018 | 0 | 0 | 0 | 1 | 0 | 1 | Report of the MOF providing evidence that the IT strategic plan has been implemented | The Plan is implemented when the recommendations are adopted by IT Directorate.  The plan comprises the following tasks: (i) definition of the activities; (ii) installation of the equipment; (iii) implementation of the contingency environment; and (iv) delivery of workshops to disseminate the plan. |
| Milestone 1 – Activities and timetable defined | Document | 0 | 2018 | 1 | 0 | 0 | 0 | 0 | 1 | Document of the MOF approving the Activities |  |
| Milestone 2 - Equipment to strengthen the datacenter (6 servers, Racks, computers, laptops, telecommunications, 10 Kiosks) | Document | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Document of the MOF approving the Equipment |  |
| Milestone 3 - Contingency solution for the datacenter disaster recover | Document | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Document of the MOF approving the Contingency Solution |  |
| Milestone 4 - Workshops to discuss and disseminate the IT strategic plan | Workshops | 0 | 2018 | 0 | 4 | 4 | 0 | 0 | 8 | Report of the MOF with the evidence that workshops had been performed |  |
| 3.2 Implementation of the new Integrated Tax Administration System (ITAS) | Report | 0 | 2018 | 0 | 0 | 0 | 0 | 1 | 1 | Report of the MOF providing evidence that the ITAS has been implemented | The software is implemented when at least one user employs and verifies its correct functioning. Modules: (i) registration; (ii) declaration processing and filer monitoring; (iii) payments and refunds processing; (iv) taxpayer account and revenue accounting; (v) collection; (vi) audit and case management; (vii) objections and appeals; (viii) taxpayers services; (ix) risk management; and (x) supporting processes, including reporting, statistics and internal audit. The new system will be piloted on large taxpayers before being rolled out to the broader population |
| Milestone 1 - Acquisition of an off-the-shelf TA system | Document | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Document of the MOF approving the system |  |
| Milestone 2 – Data Migration | Document | 0 | 2018 | 0 | 0 | 1 | 0 | 0 | 1 | Document of the MOF approving the Data migration |  |
| Milestone 3 – Implementation | Modules | 0 | 2018 | 0 | 0 | 4 | 3 | 3 | 10 | Document of the MOF approving the Modules |  |

**Table 2: Annual product costs (US$)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | |
| **Component I. Strengthening Tax Administration Governance** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **TOTAL** |
| **136,390** | **136,390** | **217,631** | **55,150** | **0** | **545,562** |
| **Product 1.1** New business model consolidating ITD and DGST | 55,150 | 55,150 | 55,150 | 55,150 | 0 | 220,600 |
| **Product 1.2** Internal Control Model | 81,240 | 81,240 | 162,481 | 0 | 0 | 324,962 |
|  | | | | | | |
| **Component II. Improvement of Operational Processes** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **TOTAL** |
| **413,003** | **506,420** | **781,297** | **24,354** | **24,354** | **1,749,428** |
| **Product 2.1** Integrated taxpayer registration model, common to all tax departments and systems. | 65,063 | 65,063 | 130,126 | 0 | 0 | 260,252 |
| **Product 2.2**  Human resource strengthening plan, based on competence evaluation | 98,750 | 98,750 | 197,500 | 0 | 0 | 395,000 |
| **Product 2.3**  Taxpayer segmentation and risk-based compliance management model | 65,063 | 65,063 | 130,126 | 0 | 0 | 260,253 |
| **Product 2.4** New audit model making use of wider range of examination and risk- based techniques | 115,063 | 115,063 | 230,126 | 0 | 0 | 460,253 |
| **Product 2.5** Enforced collection model based on risk criteria | 34,532 | 34,532 | 69,063 | 0 | 0 | 138,126 |
| **Product 2.6** Taxpayer account to provide the TA with a fast taxpayer-centric overview | 34,532 | 103,595 | 0 | 0 | 0 | 138,126 |
| **Product 2.7**  Invoicing control model comprising a strategy for further implementation of electronic invoice | 0 | 24,354 | 24,354 | 24,354 | 24,354 | 97,418 |
|  | | | | | | |
| **Component III. Modernization of Technological Infrastructure** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **TOTAL** |
| **344,000** | **344,000** | **2,938,000** | **3,600,000** | **3,150,000** | **10,376,000** |
| **Product 3.1**  Information Technology (IT) strategic plan | 344,000 | 344,000 | 688,000 | 0 | 0 | 1,376,000 |
| **Product 3.2**  Implementation of the new Integrated Tax Administration System (ITAS) | 0 | 0 | 2,250,000 | 3,600,000 | 3,150,000 | 9,000,000 |
| **TOTAL COST OF PRODUCTS** | **893,393** | **986,811** | **3,936,928** | **3,624,354** | **3,154,354** | **12,670,990** |

1. C. Data collection and Instruments
   1. The required data for the financial and the physical goals of the products will be collected periodically and consolidated by the executing agency in an excel file, with a format suited for the Project´s Acquisition Plan.
   2. The information will be consolidated on a quarterly basis. This will allow a timely revision of the project execution, comparing the goals of the Result Matrix and its progress.
   3. Additionally, every semester the executing agency will conduct interviews with the different entities and the beneficiaries of this operation to evaluate and identify the objectives that are not being attained in a timely manner (Table 3).

**Table 3. Data collection activities**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Monitoring activities** | **Year 1** | | | | **Year 2** | | | | **Year 3** | | | | **Year 4** | | | | **Year 5** | | | | **Responsible entity/Total cost** |
| 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 1. Identification of sources, systems, and individuals who should store and deliver the required information |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Executing Agency |
| 2. Data collection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Executing Agency |
| 3. Data consolidation for the evaluation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Executing Agency |
| 4. Interviews to individuals who are responsible of the data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Executing Agency |
| 5. Progress reports every six months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Executing Agency |
| **Budget\*\*** | 30,000 | | | | 30,000 | | | | 30,000 | | | | 30,000 | | | | 30,000 | | | | 150,000 |
| \*\*This Budget is equivalent to the amount to recognize to the specialist in monitoring and evaluation from the executing agency. | | | | | | | | | | | | | | | | | | | | | |

1. D. Report Presentation
   1. The executing agency will present the monitoring reports. These reports will be used as an input for the PMR. The cost of each product is described in the Pluriannual Execution Plan (PEP).
   2. The borrower will present the audited financial statements in the first 120 days of each fiscal year in addition to reports every six months detailing the progress of the project execution. The auditing entity presenting in charge of auditing these reports should be an independent firm.
2. E. Coordination, Work Plan and Monitoring Budget
   1. The executing agency will have a monitoring and follow-up specialist responsible for coordinating the program´ monitoring activities, which will include: i) developing, maintaining and updating the data in a control form, especially with regard to the indicators of results and execution; (ii) coordinate with the component and subcomponent supervisors related to the collection and processing of information on program, actions and the preparation of the semiannual progress reports; (iii) identify deviations, delays, and external factors that affect the program, proposing, when necessary, corrective measures; y (iv) support the internal meetings for monitoring and evaluation of the program and the supervision and evaluation missions of the Bank.
   2. The Bank and the Executing Agency will hold meetings every six months to jointly monitor the progress of execution of the operation. In addition, the Executing Agency will conduct, jointly with the Bank, inspection visits at least twice a year to evaluate the progress of the program.
   3. When inspection visits identify delays in the physical and/or financial execution, an Accelerated Implementation Plan (AIP) to explain: (i) the main difficulties in the implementation, (ii) a set of actions to overcome the difficulties; and (iii) the term and costs related to the actions proposed. The AIP will also include a selection of the priority acquisitions for the program, with their estimated terms and values.
   4. Tables 4 and 5 summarize the work plan and budget for the operation of the monitoring system.

**Table 4. Monitoring Work Plan**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activities** | **Year 1** | | | | **Year 2** | | | | **Year 3** | | | | **Year 4** | | | | **Year 5** | | | | **Fund sources and costs** |
| **1** | **2** | **3** | **4** | **1** | **2** | **3** | **4** | **1** | **2** | **3** | **4** | **1** | **2** | **3** | **4** | **1** | **2** | **3** | **4** |
| Monitoring and evaluation specialist in the executing agency |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | BL-L1031  US$150.000 |
| Kick-off workshop |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Supervision Plans  US$15.000 |
| Technical visits to executors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Supervision Plans  US$50.000 |
| Consolidated reports of technical visits and meetings with executors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Semi-annual progress report |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Audit reports |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | BL-L1031  Audit  US$100.000 |
| Intermediate evaluation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | BL-L1031  Consultancy  US$20.000 |
| Final evaluation (before and after) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | BL-L1031  Consultancy  US$20.000 |
| *Project Completion Report* (PCR) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | BL-L1031  Consultancy  US$20.000 |

**Table 5. Annual Budget for the operation of the Monitoring and Evaluation System of the Program (US$)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Activities** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Source BL-L1031** |
| **Monitoring** | **30,000** | **30,000** | **30,000** | **30,000** | **30,000** | **150,000** |
| *Monitoring specialist in the executing agency* | *30,000* | *30,000* | *30,000* | *30,000* | *30,000* | *150,000* |
| **Audit reports** | **20,000** | **20,000** | **20,000** | **20,000** | **20,000** | **100,000** |
| **Evaluations** | **37,000** | **42,000** | **72,000** | **42,000** | **52,000** | **220,000** |
| *Intermediate evaluation* | *0* | *0* | *20,000* | *0* | *0* | *20,000* |
| *Final evaluation (before-after)* | *0* | *0* | *0* | *0* | *20,000* | *20,000* |
| *Impact Evaluation (RCT – Specific Objective: Tax Effectiveness)* | *0* | *30,000* | *30,000* | *25,000* | *0* | *85,000* |
| *Technical Visit Executors/ Kick off* | *15,000* | *0* | *0* | *0* | *0* | *15,000* |
| *Project Completion Report (PCR)* | *0* | *0* | *0* | *0* | *20,000* | *20,000* |
| *Others in Evaluation* | *12,000* | *12,000* | *12,000* | *12,000* | *12,000* | *60,000* |
| **TOTAL MONITORING & EVALUATION BUDGET** | **77,000** | **92,000** | **112,000** | **87,000** | **102,000** | **470,000** |

1. Evaluation Plan
   1. The intermediate and final evaluation will report the evolution of the impact and outcome indicators of the program (Table 6). For all indicators, those reports will include a before and after comparison of the evaluation. Additionally, the project contemplates a robust impact evaluation to justify the attribution of the program on outcome indicator #1.1.
   2. The impact evaluation aims to assess the effectiveness of the new audit model (product 2.4) and the integrated tax administration system (product 3.2 at an early stage) on the TA ability to collect taxes on time and expanding the set of firms to report positive income. The intuition is that a tax authority with a greater capacity to audit and with more information to detect evasion will encourage firms to file their ITAS tax forms accurately and on time[[3]](#footnote-4). It proposes a randomized control trial in which the treatment group receive messages to increase their awareness of the new TA capacity. We expect to evaluate the impact of these new tools on the probability that a firm file its tax form on time and without inconsistencies. This analysis will contribute to the attribution of outcome indicator #1.1. On the following sections, we describe the impact evaluation proposal. Section A introduces the empirical setting and motivation behind the proposed intervention. Section B summarizes previous relevant literature. Section C presents the most relevant questions to be answered with this evaluation. Sections D describes the methodology. Section E describes the schedule of activities to be performed during the evaluation, the coordination agreements and budget of the evaluation.
2. A. Motivation and Impact Evaluation Objectives
   1. Belize is going through a process of fiscal consolidation with the final objective to stop accumulation of public debt. In fact, the government aims to maintain a primary surplus of at least 2.0% of GDP in the subsequent three years. Consequently, a government priority is to increase revenues.
   2. A key objective of this program is to increase tax administration effectiveness. For such a purpose, it is crucial to increase tax compliance rate in the country. In 2018, 53% of Income Business Tax returns which were expected to be filed[[4]](#footnote-5) on time[[5]](#footnote-6). The corresponding figure for the General Sales Tax was 76%.

Table 6: Expected impact and outcome indicators of the program

| **Expected Impact** | | | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Indicator** | **Unit Measure** | **Baseline** | **Baseline**  **Year** | **Year**  **1** | **Year**  **2** | **Year**  **3** | **Year**  **4** | **Year**  **5** | **End of Project** | **Means of Verification** | **Evaluation Methodology** |
| **Impact: The expected impact is to increase tax revenue as a percentage of GDP.** | | | | | | | | | | | |
| Tax Revenue / GDP | % | 26.1 | 2018 | 26.1 | 26.1 | 26.4 | 26.7 | 27.0 | 27.0 | IMF Article IV | **Calculation:**  **Baseline (2018):** 26.1%  Tax Revenue = BZ$ 1,013 million  GDP = BZ$3,887million  Before and after comparison |

Expected Results (Cumulative)

| **Indicator** | **Unit Measure** | **Baseline** | **Baseline Year** | **Year**  **1** | **Year**  **2** | **Year**  **3** | **Year**  **4** | **Year**  **5** | **End of Project** | **Means of Verification** | **Comments** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **RESULT #1: Increase Tax Collection Effectiveness[[6]](#footnote-7)** | | | | | | | | | | | |
| Number of business tax taxpayers filing on time[[7]](#footnote-8) / Total number of business tax taxpayers expected to file[[8]](#footnote-9) | % | 52.7 | 2018 | 52.7 | 52.7 | 55 | 60 | 70 | 70 | Information provided by the Government of Belize through the MOF annual monitoring report | **Calculation:**  **Baseline (2018)**: 16.6%  Number of business tax taxpayers filling on time = 53,450  Total of taxpayers expected to file=101,301  **(ITD)**  Randomized control trial + before and after comparison |
| Number of payments made electronically[[9]](#footnote-10) / Total number of payments made through any type of method[[10]](#footnote-11) | % | 15 | 2018 | 15 | 15 | 20 | 40 | 50 | 50 | Information provided by the Government of Belize through the MOF annual monitoring report | **Calculation:**  **Baseline (2018)**: 15%  Number of payments made electronically through banks =20,711  Total number of payments made through any payment method available[[11]](#footnote-12) = 136,026  (ITD and DGST)  Before and after comparison |
| RESULT #2: Increase Tax Collection Efficiency | | | | | | | | | | | |
| Tax Administration Administrative Cost (Internal Tax Department - ITD and Department of General Sales Tax - DGST)[[12]](#footnote-13) / Tax Revenue collected (ITD and DGST)[[13]](#footnote-14) | % | 2.05 | 2018 | 2.05 | 2.05 | 2.03 | 2.01 | 1.98 | 1.98 | Information provided by the Government of Belize through the MOF annual monitoring report | **Calculation:**  **Baseline (2018)**: 2.05  Administrative Cost = BZ$9,664,199 million (ITD and DGST)  Tax Revenue collected = BZ$471,399,355 (ITD and DGST)  (Customs was not considered)  Before and after comparison |
| Number of audits carried out [[14]](#footnote-15)/ number of existing auditors[[15]](#footnote-16) | Ratio | 5.9 | 2018 | 5.9 | 5.9 | 7.0 | 8.00 | 10 | 10 | Information provided by the Government of Belize through the MOF annual monitoring report | **Calculation:**  **Baseline (2018)**: 5.9%  Number of audits = 394  Number of auditors = 66  Before and after comparison |
| Amount collected from audits[[16]](#footnote-17) / Cost to audit[[17]](#footnote-18) | Ratio | 0.83 | 2018 | 0.83 | 0.83 | 1.0 | 3.0 | 5 | 5 | Information provided by the Government of Belize through the MOF annual monitoring report | **Calculation:**  **Baseline (2018)**: 0.83%  Cost to audit =BL$2,741,054  Amount collected from audits = Bl$ 2,291,129  Before and after comparison |

* 1. Belize does not have an integrated taxpayer account, which represents a barrier to identify tax compliance. The information for the General Sales Tax, the Income Tax and the Customs Taxes are stored independently from each other and it is not possible to cross any information for the same firm across different taxes. In 2018, 8,232 firms were expected to file a Business Tax form in contrast to 4.464[[18]](#footnote-19)expected to file the general sales tax.
  2. As part of this program, the government will implement a new audit model that will be based on a wider range of examination. In a first stage, it will guarantee a unique ID for taxpayers and it will cross-check information from different tax forms (ITD, DGST among others) to detect inconsistencies. Under this model, tax auditors will inform firms about their estimated minimum income according to their monthly sales records before they fill the annual income tax form.[[19]](#footnote-20) Those communication will take place trough mails, phone calls or physical letters. As part of this model, the tax authority will classify firms according to its evasion risk level and will also commit to an audit strategy.
  3. The objective of the proposed evaluation is to estimate the impact of this new model (phase 1) on the percentage of firms that do not fill their corporate income (ITD) tax form on time and the percentage of firms that present inconsistencies in the information provided in those forms.
  4. In case both rates decrease as a consequence of this program, it will allow auditors to efficiently administer their time at moment of choosing which firms to audit intensively.

1. B. Current Knowledge
   1. As it is reflected in the seminal theoretical work of Alligham and Sandmo (1972), firms evaded income depends inversely on the probability of being punished. This probability increases with the amount of information the government has as well as with the likelihood of being subject to an intensive audit. Kuchumova (2017) highlights the role of both, information reporting and audit as complementary enforcement tools. It also shows that whenever the number of audits is limited, the returns of additional information that signal firms’ income are large.
   2. Gathering more information on firm’s performance is key as an enforcement tool. Pomeranz (2015) provides evidence that paper trail generated by the Value-Added Tax is effective to deter tax evasion. Empirically, the author shows that audit announcements are more effective among those firms selling to final consumers, for which paper trail is not generated. In a different study, Naritomi (2018) shows that a program to keep more accurate paper records of sales to final consumers is effective to increase firm’s reported returns. Similarly, Kleven et al. (2011) find that taxpayers who are not subject to third-party verification are more responsive to audit announcements from tax authorities.
   3. For firms to respond to the communications these communications, the corresponding actions to be taken from the tax authorities must constitute a credible threat. The literature has provided some examples where, in a context of low law enforcement, such communications do not deter taxpayers from evading taxes. In the case of US, Slemrod et al (2001) find that a letter from the IRS can increase the reported taxable income up to 12%. In the case of Ecuador, Carrillo et al (2017) show that when firms are notified about inconsistencies their reported revenue, firms simply increase their corresponding costs so that their tax liability remains unchanged.
   4. Brockmeyer et al. (2018) show how the amount of information revealed to a taxpayer regarding their inconsistencies can be used as a deterrence tool. In an experiment in Costa Rica, the authors find that the messages from the tax authorities were more effective when they provided more details regarding the inconsistencies found in the tax declaration. The authors find that the effect persists for two years and argue that revealing more information increases the credibility of the threat perceived from the tax authority.
   5. However, more information does not necessarily constitute a useful information if the government cannot commit to an enforcement strategy, as shown by Andreoni et al (1998) shows theoretically that an optimal audit strategy depends on the tax authorities’ power to commit to it. This result is consistent with the findings of Carrillo et al (2017) in Ecuador. For such communications to be effective, it must be the case that the perceived probability of being audited increases altogether with the probability of receiving a punishment as a consequence of such detection. Some of these messages only serve the purpose of changing the subjective perceived probability of being audited without affecting the credibility of a threat (Bergolo et al. 2018).
   6. One important effect to keep in mind when increasing enforcement in tax obligations is the backfiring effect. This occurs when taxpayers, rather than complying according with the message sent by tax authorities, decide to decrease the amount of information sent to the authorities to decrease the probability of being detected as a tax evader. Carrillo et al. (2017) find evidence consistent with this effect in Ecuador, whereas, Gerardino et al. (2017) do so for the case of procurement in Chile.
   7. As part of the tax reform, the tax authority in Belize will have more information to infer firms’ returns. In addition, it will define and commit to a credible tax enforcement strategy. We propose a study to evaluate the impact of two treatments: (i) communicating firms a credible tax enforcement strategy by the authority (treatment 1), and (ii) communicating the strategy plus giving them examples of how government can cross-check different sources of information to infer their tax liability (treatment 2). We will look to the impact on the probability of filling the income tax form (ITD), the amount of income and return provided as well as future sales and income reporting behavior. Unlike Brockmeyer et al (2018), we will be able to disentangle the total effect as a result of an increase in the perceived probability due to information from multiple taxes, and an increase in the perceived threat in a context of low state capacity. This is the first study to implement such a strategy in a context with a high rate firms that do not fill tax forms. Less than one in four firms fill their income tax form when they are expected to do so.

**C. Impact evaluation questions and outcomes indicators**

* 1. This evaluation aims to learn whether different type of messages (e-mails/mails/text messages) are effective to increase the percentage of firms that fill their tax forms in a context where tax compliance is really low.
  2. The evaluation will consider two types of messages. The first message 1 refers to the tax authority commitment to credibly enforce tax compliance under new model. The second message is related to the tax authority commitment to credibly enforce tax compliance under new model showing how tax authority can estimate firm’s expected returns from different information sources (phase 1: other tax forms).
  3. Among other we aim to answer the following questions: ¿What is the impact of receiving a message (mail or e-mail) from tax authority with message x on:
  4. The probability a firm fills ITD & GST forms on time at year t and t+1.
  5. The income / cost / return reported by firm on ITD forms at year t and t+1.
  6. The probability of presenting an income inconsistent with information from other sources (GST tax forms) at year t and t+1.
  7. Firm’s belief related to the subjective probability of punishment in case of tax evasion detected by authority.
  8. Table 7 list the evaluation indicators, its definitions, measurement frequency and source of information.

**Table 7: Relevant indicator for impact evaluation**

|  |  |  |  |
| --- | --- | --- | --- |
| **Indicator** | **Definition** | **Measurement frequency** | **Source** |
| 1. Amount of payments made on time/Amount collected in the year | Percentage of firms that are registered as active with the tax authorities and that file their ITD and GST forms in time. | Annual for ITD and monthly for GST forms | MOF Administrative data |
| 2. Increase in the taxable income reported by firms on ITD forms. |  | Annual | MOF Administrative data |
| 3. The probability of presenting an income inconsistent with information from other sources (GST tax forms) | Percentage of taxpayers that present inconsistencies in their tax returns with various sources of data. | Annual | MOF Administrative data |

**D. Evaluation methodology**

* 1. Our target sample in the study are the firms registered to pay income tax. All in all, there are7.149[[20]](#footnote-21) active firms registered to pay income tax (ITD).
  2. In this project, we propose a randomized control trial evaluation methodology. We take the pool of firms in the targeted sample and we randomly assign them to one of three groups: control (C), treatment (T1) or treatment 2 (T2) (Table 8). For big enough samples, random allocations guarantee that on average the three groups have the same characteristics. We can test this is the case using observed variables from administrative sources, as well as, from the baseline survey. This test provides statistical confidence that group C is a good counterfactual for groups T1 and T2. Then, in the absence of the messages, these three groups should have the same outcome indicators at year t and t+1.

**Table 8: Control and Treatment groups**

|  |  |  |
| --- | --- | --- |
| **Control group (C)** | **Treatment Group 1 (T1)** | **Treatment Group 2 (T2)** |
| Firms are not contacted by the tax authorities. | Firms are informed that tax authority is seriously committed to credibly enforce tax compliance under the new model | Firms are informed that tax authority is seriously committed to credibly enforce tax compliance under the new model + firms are shown how tax authority can estimate firm’s expected returns from other information sources |

* Hypotheses: State VAT compliance T > C1 > C2; stronger effect for firms upstream the audited firm?
  1. Given the design, a difference of the average outcome indicators ex-post between each treatment and the control group is a good estimator for the impact of the messages communicating the new tax audit model and the information used to detect reported return inconsistencies. We can estimate that difference using the following linear equation:

+

* 1. Where y is the ex-post outcome indicator (Table 7) for firm i in strata s (large, middle and small size firms), are fixed effects by strata, T is an indicator variable for belonging to either treatment 1 or 2 and is an error term. Under this specification, our hypothesis is that .
  2. Power Calculations. To estimate the sample size required if we were to evaluate only one treatment, we will assume a minimum detectable effect of 1%[[21]](#footnote-22) corresponding to the increase in the tax base. We use the fact that our estimator follows asymptotically a normal distribution:
  3. Using a power of 0.8, a significance level of 0.05 and =0.19[[22]](#footnote-23), the required sample size can be found as a solution to the following equation:
  4. Where is the cumulative distribution function of a standard normal distribution. In principle, we would require a sample size of at least 2,429.

**Table 9: Sample size required for various effects and standard deviations.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Size of the effect | | | |
| Standard Deviation |  | **0.001** | **0.01** | **0.02** | **0.05** |
| **0.19** | 242,859 | 2,429 | 607 | 97 |
| **0.39** | 971,437 | 9,714 | 2,429 | 389 |
| **0.79** | 3,885,749 | 38,857 | 9,714 | 1,554 |

* 1. The assignment to treatment and control should follow a random protocol to guarantee that observable and non-observable variables are balanced across groups. This will allow us to interpret the coefficients from the corresponding regression as causal estimate.

1. **Coordination, Work Plan and Impact evaluation Budget**
   1. The evaluations should take place from the second semester of year 2 to the second semester of year 4. A report will be prepared for the Project Completion Report. The IDB team will elaborate a middle and final report of the evaluation at the third trimester of year 3 and 4. The evaluation plan will be executed by the IDB team coordinated with the Ministry of Finance team. The IDB team has expressed interest in supporting data analysis. The Ministry of Finance will be responsible to provide information to the evaluators. The Ministry of Finance is responsible for designating a focal point to coordinate the evaluation and data collection. The IDB and the MOF evaluation teams should hold bimonthly meetings starting at the implementation of the program and during its execution. The evaluation timing, budget and responsible entities are specified on table 10.

**Table 10: Main evaluation activities, Schedule and Budget**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Activity | Year 2 | | | Year 3 | | | | Year 4 | | | | Responsible entity | Cost |
| 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 1. Administrative data collection | x | x | x | x | x | x | x | x | x |  |  | Ministry of Finance | US$10,000 |
| 2. Listing of targeted sample and baseline survey data collection | x | x |  |  |  |  |  |  |  |  |  | Ministry of Finance / IDB | US$10,000 |
| 3. Preparation of messages for firms in treatment groups 1 and 2 | x | x |  |  |  |  |  |  |  |  |  | IDB | US$10,000 |
| 4. Implementation of treatment – Messages sent to T1 and T2 |  |  | x | x |  |  |  |  |  |  |  | Ministry of Finance / IDB | US$5,000 |
| 5. Monitoring evaluation | x | x | x | x | x | x | x | x | x |  |  | Ministry of Finance / IDB | US$20,000 |
| 6. Endline survey data collection |  |  |  |  |  | x | x |  |  |  |  | Ministry of Finance / IDB | US$15,000 |
| 7. Data analysis |  |  | x | x | x | x | x | x | x | x |  | IDB | US$10,000 |
| 8. Final report |  |  |  |  |  |  |  |  |  | x | x | IDB | US$5,000 |
| Total Cost | | | | | | | | | | | | | US$85,000 |

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1. For all products, a Software or system contemplates many modules corresponding to the business model’s macro processes. For its development, it is necessary to previously review and adjust the business processes/procedures and to define the business rules for the IT experts to program the software. [↑](#footnote-ref-2)
2. The training includes the trainer. [↑](#footnote-ref-3)
3. When a tax return is filled on-time, there is no need for audits or to open an administrate tax infraction case. [↑](#footnote-ref-4)
4. Returns expected to be filed are those from registered taxpayers who have filed at least one return during the last 3 years. If the total of registered taxpayers is considered, the rate of expected returns will be 17% for Business Tax and 58% for GST. [↑](#footnote-ref-5)
5. Income Tax Department – Government of Belize, 2018 report. [↑](#footnote-ref-6)
6. The information of the numerators and denominators of all the indicators is from same year. [↑](#footnote-ref-7)
7. Total number of Taxpayers filing business tax in a specific year. [↑](#footnote-ref-8)
8. Total number of Taxpayers expected to file business tax are those who has at least 1 filing within the last 3 years. [↑](#footnote-ref-9)
9. Total number of Payments made through an electronic method in a specific year. [↑](#footnote-ref-10)
10. Total number of payments made using any payment method available (Electronically, Bank, Government cashier) in a specific year. [↑](#footnote-ref-11)
11. Payments made in person at tax office or through banks [↑](#footnote-ref-12)
12. Recurrent expenditure incurred by ITD and DGST in 2018(emoluments, travelling &subsistence, materials & supplies, operating cost, maintenance). [↑](#footnote-ref-13)
13. Total tax revenues collected by the government in a specific year. [↑](#footnote-ref-14)
14. Total number of audits carried out in a specific year. [↑](#footnote-ref-15)
15. Total number of auditors who participated in audits in a specific year [↑](#footnote-ref-16)
16. Total amount collected from assessments issued in a specific year. [↑](#footnote-ref-17)
17. Total cost of the auditor’ salaries in a specific year. [↑](#footnote-ref-18)
18. Data provided by DGST and ITD regarding active taxpayers in 2017. [↑](#footnote-ref-19)
19. In a later phase, the new model will allow auditors to also use some third-party information sources: buying-selling records from the bill records, firms’ payroll among others. [↑](#footnote-ref-20)
20. Data provided by ITD department regarding the total of active taxpayers in 2017. Active firms are those taxpayers who have filed returns at least one return in the last 3 years. [↑](#footnote-ref-21)
21. Casto & Scartascini (2015) find an effect of 5%, Pomeranz (2015) of 3.2% and Kleven et al. of 1.6%. [↑](#footnote-ref-22)
22. Taken from Kleven et al. (2011). [↑](#footnote-ref-23)