Document of the Inter-American Development Bank

**JAMAICA**

**Skills for Development for Global Services**

**(JA-L1079)**

**monitoring and evaluation plan**

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| --- |
| **Abbreviations** |
| ALMPAOPCAPEXGoJ | Active labor market policiesAnnual Operation Plan Capital ExpenditureGovernment of Jamaica |
| GSS | Global Services Sector |
| IDBEA | Inter-American Development BankExecuting Agency |
| M&E | Monitoring and Evaluation |
| MOU | Memorandum of Understanding |
| NTA | National Training Agency |
| PCR | Project Completion Report |
| PEPPEU | Pluri-annual Execution PlanProject Executing Unit |
| PMR  | Progress Monitoring Report |
| PM&E | Project Monitoring and Evaluation Specialist |
| POA | Plan of Activities |
| PO | Project Officer  |
| PODPOMPEU | Proposal for Operation DevelopmentProgramme Operations ManualProgramme Executing Unit |
| RM | Results Matrix |

1. **Introduction**
	1. This operation will promote the growth of the Global Services Sector (GSS) in Jamaica, particularly in higher value-added segments. The Programme will have the following specific objectives: (i) provide the Sector with better skilled workers; and (ii) increase JAMPRO’s institutional capacity to attract FDI and to increase exports. The expected results respond to the specific objectives through the following two components.
	2. The objective of the first component is to improve the skills development system to provide the Sector with better skilled workers. First, it will finance activities that improve the system’s ability to guarantee *relevance* of training, laying out an industry upgrade strategy to increase the share of activities that are higher up the value chain improving the distribution from 60% BPO to 40% KPO by 2020. Second, it will finance activities that can help improve the *quality* of training. Even though the activities will be focused on addressing the skills needs of the GSS, it is expected that there will be positive spillovers into other economic sectors because of improvements in the skills development system. Furthermore, this component will include cross-cutting gender activities to support women’s employment and career development in higher-value added GSS sub-sectors. The objective of the second component is to strengthen the capacity of JAMPRO to attract investment and to increase exports in higher value-added and digital segments. This will be affected by optimizing institutional and regulatory frameworks for the GSS and developing dedicated tools, materials and programmes to support GSS firms. A preliminary activity will eliminate the data gap by undertaking a data collection exercise, preparing a baseline of firms that will benefit from this operation.[[1]](#footnote-1) First, it will optimize investment promotion processes as well as the institutional, regulatory and incentive framework that governs the sector. Second, it will support the development of a strengthened value proposition for GSS firms (foreign and domestic) seeking to invest or reinvest in Jamaica. This value proposition will also serve to improve the attractiveness of the sector with the general public. Third, this component will increase JAMPRO’s capacity to support MSMEs in the GSS through the design of incubator spaces and the delivery of accelerator programmes. Lastly, it will create a digital management system managed by JAMPRO -building on existing one-stop shop platforms- to consolidate trade and business information and to strengthen decision-making based on data analytics.
	3. Section II of this document describes the monitoring process of the loan; it defines the activities, the instruments and the data to be collected in order to feed the instruments required to follow up the implementation of the project. Section III develops the evaluation that will be implemented in order to measure the projects outcomes as indicated in the Results Matrix. Information in both cases will be based in the administrative records from JAMPRO and NTA/HEART, both will also depend on the implementation of a follow-up survey to two types of beneficiaries: individuals participating in the training component and firms benefiting from the investment promotion component.
2. **Monitoring**
	1. This section describes the monitoring process of the loan. The IDB and GoJ are in agreement that the activities specified herein are an integral part of the loan contract. All parties involved agree to adhere to the responsibilities assigned to them as specified in this document. The EA will be responsible for the monitoring process through the PEU and will rely on the: (i) Results Matrix (RM); (ii) Project Execution Plan (PEP); (iii) Monitoring and Evaluation (M&E) Plan; (iv) Detailed Budget; (v) Risks Management Matrix; (vi) Procurement Plan; (vii) Progress Monitoring Report (PMR); and (viii) Project Completion Report (PCR).
	2. **The monitoring for component 1 will be based on the PEU records and complemented through the implementation of surveys integrated in the CMF platform. For component 2 the monitoring will be based on the existing surveys and interviews conducted by JAMPRO, on their administrative data, and from an IMF database**. The monitoring of products will mainly rely on administrative records of the PEU and on the administrative records of JAMPRO. However, due to the limited capacity that the entities have to produce timely measures of the results indicators proposed in this document, the team has identified that the PEU will be required to offer support for strengthening the current mechanisms in place. From the side of the training component, the programme design includes the set-up of a mechanism to manage the application process for the financing of training (the Competitive Management Fund- or CMF). The CMF will establish as a requirement that beneficiaries (individuals and firms) share the required information in order to monitor the results of Component 1 through surveys (electronic and by telephone). For Component 2, JAMPRO currently monitors the information required for 2 out of 3 indicators through surveys and interviews. The monitoring plan requires this follow-up to be systematic and more accurate in order to inform the results matrix, for which resources will be available. Lastly, monitoring will also base on data from the IMF portal. It is required that all records should be stored in digital formats. Paper-based records will not be accepted. This will facilitate the aggregation of information and the integration of data from different sources.
	3. **Indicators**
	4. Indicators that will be monitored and recorded in the PMR. Should include output indicators (goods and services) and, if possible, outcome indicators (direct effect caused by the products).

Table 1. Monitoring Indicators

| **Indicator** | **Formula** | **Goal** | **Frequency of Measurement** | **Source of Verification** |
| --- | --- | --- | --- | --- |
| **Result Indicators** |
| **Component 1:** |
| 1. Share of certified graduates from Finishing Schools (FS) with a formal contract in a GSS firm one year after completing the training

*Tracking indicators:**-Share of Female certified graduates from Finishing Schools (FS) with a formal contract in a GSS firm one year after completing the training**-Share of Male certified graduates from Finishing Schools (FS) with a formal contract in a GSS firm one year after completing the training* | Difference between the share of graduates with a formal contract in a GSS firm one year after completing the training in the treatment group (FS graduates) and the control group (other technical and vocational training graduates), in percentage points. | 2.5 | Annual | A survey to all participants will be implemented at the beginning of the training to capture the baseline and one year after the training completion.  |
| 1. Percentage change in the average wage of GSS workers who obtained a Finishing School (FS) certification one year after completing the training

*Tracking indicators:**-* *Average wage of Female GSS workers who obtained a Finishing School (FS) certification one year after completing the training**- Average wage of Male GSS workers who obtained a Finishing School (FS) certification one year after completing the training* | Average wage of GSS workers in the treatment (GSS workers who graduated from FS) relatively to the one of the control group (other GSS workers) one year after the completion of the training, in percentage. | 6 | Annual | A survey to all participants will be implemented at the beginning of the training to capture the baseline and one year after the training completion.  |
| 1. Percentage change in the average wage of GSS workers who obtained an Apprenticeship Programme (AP) certification one year after completing the training

*Tracking indicators:**-* *Average wage of Female GSS workers who obtained an Apprenticeship Programme (AP) certification one year after completing the training**- Average wage of Male GSS workers who obtained an Apprenticeship Programme (AP) certification one year after completing the training* | Average wage of GSS workers in the treatment (GSS workers who graduated from AP) relatively to the one of the control group (other GSS workers) one year after the completion of the training, in percentage. | 9 | Annual | A survey to all participants will be implemented at the beginning of the training to capture the baseline and one year after the training completion.  |
| **Component 2:** |
| 1. Percentage change in the value of exports of the GSS sector
 | Change in the value of exports of the GSS sector measured as “Other business services” before and after participating in the programme, in percentage. | 1.7 | Every 2 years |  “Other business services” category (IMF BOP and IIP Data).[[2]](#footnote-2) |
| 1. Capital expenditure made in Jamaica by the beneficiary GSS firms
 | Value of capital expenditure made by the GSS beneficiary domestic and foreign firms in Jamaica in a year before and after participating in the programme, in US millions. | 45.9 | Every 2 years | Follow-up from JAMPRO through surveys and interviews. |
| 1. Share of high-level sub-segments (i.e., high value added BPO, Knowledge Process Outsourcing-KPO- and Information and Technology Outsourcing –ITO-) that are offered by the beneficiary GSS firms
 | Share of high-value added BPO, KPO and ITO sub-segments over the total sub-segments that are offered by beneficiary GSS firms before and after participating in the programme, in percentage. | 25 | Every 2 years | Follow-up from JAMPRO through surveys and interviews. |
| **Output Indicators:** |
| **Component I:** |
| **Indicator** | **Unit** | **Goal** | **Frequency of Measurement** | **Source of Verification** |
| 1. Global Services Sector Skills Board (GSSB) established and active
 | # skills sector boards | 1 | Annual | Document signed by Board members including functions of the Board and studies that were performed  |
| 1. Diagnosis for gender imbalances in the industry developed
 | #diagnoses | 1 | Annual | Document with the diagnosis signed by Board members |
| 1. Smart Talent Platform online and functioning
 | # platforms | 1 | Annual | Proof that the platform is online and accessible to beneficiaries |
| 1. Job readiness curriculum developed and approved
 | # curricula | 1 | Annual | Document with the curriculum included and approved by signature of the GSSSB |
| 1. Places for training trainers with the Job readiness curriculum available
 | # places for trainers | 1,000 | Annual | Mid-term and/or final report |
| 1. Apprenticeships places for the GSS available
 | # apprenticeships places | 400 | Annual | Mid-term and/or final report based on data from the Competitive Fund Management |
| 1. Trainees positions in finishing schools available
 | # trainees positions | 12,000 | Annual | Mid-term and/or final report based on data from the Competitive Fund Management |
| 1. Competitive Fund Management set up and active
 | # funds | - | Annual | Mid-term and/or final report with proof that the fund is working and available to employers  |
| 1. Mechanisms for measuring and improving training provider´s performance developed and delivered to the NTA
 | #mechanisms | 1 | Annual | Document with the mechanism received and signed by HEART/NTA |
| 1. Psychometric assessment tool designed and delivered to the NTA
 | # tools | 1 | Annual | Document with assessment tool received and signed by HEART/NTA |
| 1. Mechanisms for collecting feedback employers designed and delivered to the NTA
 | # mechanisms | 1 | Annual | Document with the mechanism received and signed by HEART/NTA |
| **Component II:** |
| 1. Business process re-engineering/change management strategy designed and delivered to JAMPRO
 | # strategies | 1 | Annual | Document with the strategy included, received and signed by JAMPRO |
| 1. Regulatory and incentives framework optimization designed and delivered to JAMPRO
 | # frameworks | 1 | Annual | Document with the framework included, received and signed by JAMPRO |
| 1. Digital Global Services Strategy designed and delivered to JAMPRO
 | # strategies | 1 | Annual | Document with the strategy included, received and signed by JAMPRO |
| 1. Digital GSS Branding campaign implemented
 | # campaigns | 1 | Annual | Document with the description of the campaign included, received and signed by JAMPRO |
| 1. Digital GSS Promotional Activities developed
 | # activities | 12 | Annual | Mid-term and/or final report with description of activities and visual proof included. Possible activities include magazine features. |
| 1. Digital GSS material packages developed
 | # material packages | 5 | Annual | Mid-term and/or final report with a copy and/or description of the material. Possible materials include brochures and radio advertisements |
| 1. Participation in international and regional investment targeting events
 | # events participation | 5 | Annual | Mid-term and/or final report |
| 1. National Awareness campaign activities executed
 | # activities | 4 | Annual | Mid-term and/or final report |
| 1. GSS SME Incubator designed and furnished
 | # furbished incubators | 1 | Annual | Proof that the incubator is open and accessible to beneficiaries |
| 1. Entrepreneurial accelerator programme active
 | # programmes | 1 | Annual | Mid-term and/or final report |
| 1. Awards for entrepreneurial accelerator programme presented
 | # awards | 6 | Annual | Audited proof (by Executing Agency) of participation in the programme by winners |
| 1. Entrepreneurial accelerator programme events (including workshops) delivered
 | # events | 4 | Annual | Mid-term and or/final report |
| 1. Digital management system active
 | # systems | 1 | Annual | Mid-term and/or final report |
| 1. Digital management system licenses acquired
 | #licenses | 3 | Annual | Mid-term and/or final report |

* 1. **Data Collection and Instruments**
	2. The overall data collection process will be overseen by the Project M&E Specialist (PM&E) with support of an M&E consultant (if needed) and with collaboration of the other members of the PEU. Monitoring will be fed by the institutional information given by the Finance Ministry through the PEU. The PM&E will coordinate the data collection process to ensure that complete and accurate data are gathered, and that all of the data from the various components are compiled into the Progress Monitoring Reports, which indicate the extent to which each of the targets as specified in the Results Matrix and the corresponding disbursements are being met. Furthermore, data collection and M&E aspects will be included in the MOUs to be signed and enforced with participating stakeholders (as described in paragraph 2.12).
	3. The PM&E will also be responsible for consolidating all baseline information required for the indicators identified in the Results Matrix and for maintaining up-to-date statistics on the indicators. The Annual Operations Plan (AOP) should follow the format of the AOP that is prepared for the first 18 months of the programme.
	4. The Competitive Fund Management (CFM) will be a key instrument to collect the information required to monitor the progress in the training by allowing the distribution of questionnaires online (Further details in paragraph 1.31) when participants are registered for the training and one year of the training is completed by using the contact information provided by the trainee at the beginning. It is expected that if the trainees are working with the participating firms, they are encouraged to fill the survey (this will be a requirement to firms as part of the agreement). In addition, follow-ups by telephone can be implemented to augment response rate.
	5. JAMPRO currently implements an “Outsourcing Survey” to collect information from firms. However, for an effective monitoring of the results of the programme, the PEU will offer support for adding questions to accurately collect the information regarding the capital expenditure and the KPO share in a systematic way for all firms that are supported by JAMPRO.
	6. **Identification of firms operating in the GSS.** This activity will establish the baseline for firms participating in the operation, as well as provide the foundation for subcomponents 2, 4 and 5. Firms to be identified will include those delivering BPO services but also non-traditional services such as animation, gaming, IT software and app development, for example. The mapping framework and data collection methodology developed in this activity will strengthen JAMPRO’s capacity to replicate it and create data analytics. Further, disaggregated data will be improved, allowing JAMPRO to create a baseline for which the results of this operation will be measured. This activity will be financed under JA-T1151 and is not included in the budget. However, it is part of the Monitoring and Evaluation framework of this operation.
	7. **For results indicators 1-3** the indicators will be measured through a non-experimental methodology described in Section II; **for results indicators 4-7** a pre and post comparison will take place as described in Section II. **For products of Component 1**: the Global Services Sector Skills Board (GSSB) will develop a document with its functions and with the studies developed under its supervision to be signed by all members; the diagnosis for gender imbalances in the industry will by a study developed under supervision and signed by the GSSB; for the Smart Talent Platform a proof that is online for participants (e.g. a screenshot and access to weblink); the job readiness curriculum will be a document developed and approved by signature of the GSSB; the trainers will be monitored by Heart-Trust/NTA´s administrative data; the apprenticeships and finishing schools positions will be reported by the manager from the Competitive Fund Management; the Competitive Fund Management will report its operational guidelines and number of trained individuals; the mechanisms for measuring and improving training provider´s performance will be a document developed and signed upon receipt by Heart-Trust/NTA; the psychometric assessment tools will be developed and signed upon receipt by Heart-Trust/NTA; and the mechanisms for collecting feedback employers will be a document developed and signed upon receipt by Heart-Trust/NTA. **For products of Component 2**: the Business Process Reengineering (BPR) strategy will be a document developed and signed upon receipt by JAMPRO; the regulatory and incentives framework optimization will be a document developed and signed upon receipt by JAMPRO; the digital global services strategy will be a document developed and signed upon receipt by JAMPRO; the digital GSS branding campaign will be implemented and documented in a report describing the campaign; the Digital GSS Promotional Activities will be implemented and documented in a document describing them and offering visual proof; the Digital GSS material packages will be developed and described in a document –possibly including a copy of such materials; the participation/hosting of international and regional investment events will be documented in a report; the National Awareness campaign will be implemented and documented in a report listing all activities; for the Incubator a visual proof that is open and accessible; for the Awards an audited proof of participation in the programme by winners will be required; the entrepreneurial accelerator programme events will be developed and documented in a report; the digital management system will be developed and documented in a report; the digital management system licenses will be acquired and included in a report.
	8. **Reporting**
	9. The Programme Coordinator will produce the following reports to facilitate monitoring and evaluation of general project progress and the fulfillment of the indicators identified in the Results Matrix: (i) a proposed Annual Operations Plan (AOP) at the beginning of each year of programme execution; (ii) a semi-annual progress report within 60 days after the end of each six-month period during project execution. The semi-annual report will focus on the fulfillment of output indicators and progress towards achieving the outcomes proposed in the Results Framework; they will also analyze the problems encountered and propose corrective measures; and (iii) quarterly reports on evolution of the programme. The Project Executing Unit (PEU) through the Project Officer (PO) will be responsible for collecting and sending the information to the Bank. Reports can be combined with the semiannual reports when relevant.
	10. The semiannual reports in the second half of the year will also contain the annual work plan for the following calendar year, together with a forecast of disbursements and an updated Procurement Plan. Adjustments to the programme arising from the discussion of these reports will be agreed upon with the Bank in the semi-annual meetings with the PEU.
	11. **Monitoring Coordination, Work Plan and Budget**
	12. The monitoring of the programme is fundamentally the responsibility of the PEU at JAMPRO under the Ministry of Industry Commerce, Agriculture and Fisheries. The PEU will be responsible for ensuring the planning and implementation of the yearly operational plans in accordance with the Project Execution Plan (PEP) and this M&E plan. The PEU through its Project Coordinator will report directly to the President of JAMPRO, and it will coordinate actions with the Global Services Executive Board (EB). Data collection, entry and analysis will be conducted by the PEU, in coordination with other implementing partners and outsourced third parties. This data collection support will enable timely monitoring of processes, outputs and outcomes as well as early identification of any barriers to said monitoring (see the detailed coordination work plan and budget in Table 2). The Programme’s Operations Manual will outline the details of the executing mechanisms.
	13. The PEU will coordinate with HEART-Trust/NTA and the BPIAJ[[3]](#footnote-3) with which Memorandums of Understanding (MOUs) will be established. The MOUs will outline the co‑leadership roles each entity will have for the execution of the different activities of the programme, for which they will appoint Focal Points in charge of articulating internally within each organization. Focal Points will conform a Global Services Executive Board (GS-EB), which will report to the Project Steering Committee (PSC). The PEU through its Project Coordinator will report directly to the Chair of JAMPRO and will coordinate actions with the GS-EB. The budget will be assigned to the EA For the carrying out of the programme, the EA will have the support of a Strategic Committee (Global Services Executive Board) composed of representatives from the participating agencies and the private sector, which will have as the objectives of coordination of public and private entities, the provision of a strategic view of the global services export agenda in the medium to long term and the provision of technical advisory services to the PEU. The Programme’s Operations Manual will outline the details of the executing mechanisms.
	14. The GS Executive Board (EB) will be composed of the Focal Point of the participating organizations, chaired by BPIAJ Focal Point, and its main function will be to facilitate the execution of the GS industry supportive activities financed by the Project. The EB will advise the PSC and will approve (prior to the responsible signature of JAMPRO), the periodic reports of the Project, the Plans related to each Line of Action of each component and the Apprenticeships / Firm Specific Finishing Schools proposals. The Project Steering Committee (PSC) will be composed of the authorities of the participating organizations (JAMPRO, Heart-Trust/NTA and BPIAJ) and will be responsible for the strategic direction of the Project and the supervision of the execution. The PSC will meet at least once a year to approve any changes recommended to the Project Operating Manual (POM) and Annual Operating Plan (AOP). The PSC will be presided by JAMPRO whom can call into meeting for special issues.
	15. Project costs are disaggregated by Output and have annual expected amounts. The sum of total planned costs for all Outputs is equal to the total amount of the project (Table 3).

Table 2. Monitoring Work Plan

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Key Monitoring Activities/Products per Activity | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | Responsible | Cost(US$) | Funding |
| 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| Results Matrix | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  | X | IDB, EA, PEU: M&E Specialist  | 308,750 | JA-L1079 Project management |
| Pluriannual Execution Plan | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | PEU: M&E Specialist |
| Annual Operating Plans | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | PEU: M&E Specialist |
| Procurement Plans | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | PEU: Procurement Specialist | 237,500 | JA-L1079 Project management |
| Audited financial reports | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | External auditor | 100,000 | JA-L1079 Project management |
| Disbursement plan | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | IDB, PEU: Financial Specialist | 237,500 | JA-L1079 Project management |
| Inspection visits |  | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  | X |  |  | X | IDB | 10,000 | Transactional Budget (IDB) |
| **Total cost: US$ 893,750** |
| **Financing source: JA-L1079 Project Management (PEU)** |
| *IDB transactional budget:* 10,000 |
| *Programme funds:* 883,750  |

Table 3. Annual Costs per Output (US$)

| **Outputs** | **2019** | **2020** | **2021** | **2022** | **2023** | **Total** |
| --- | --- | --- | --- | --- | --- | --- |
| **Component I** | **Yr 1** | **Yr 2** | **Yr 3** | **Yr 4** | **Yr 5** | **Total** |
| 1. Global Services Sector Skills Board (GSSB) established and active
 | 125,000 | 180,000 | 158,000 | 175,000 | 75,000 | 713,000 |
| 1. Diagnosis for gender imbalances in the industry developed
 | - | 62,000 | - | - | - | 62,000 |
| 1. Smart Talent Platform online and functioning
 | 183,400 | 303,400 | 206,400 | 156,400 | 106,400 | 956,000 |
| 1. Job readiness curriculum developed and approved
 | 62,000 | - | 32,000 | - | - | 94,000 |
| 1. Places for training trainers with the Job readiness curriculum available
 |  | 488,000 |  | 478,000 | - | 966,000 |
| 1. Apprenticeships places for the GSS available
 | - | 360,000 | 360,000 | 180,000 | 180,000 | 1,080,000 |
| 1. Trainees positions in finishing schools available
 | - | 798,000 | 798,000 | 798,000 | 806,000 | 3,200,000 |
| 1. Competitive Fund Management set up and active
 | 88,400 | 88,400 | 88,400 | 88,400 | 96,400 | 450,000 |
| 1. Mechanisms for measuring and improving training provider´s performance developed and delivered to the NTA
 | - | 200,000 | - | - | - | 200,000 |
| 1. Psychometric assessment tool designed and delivered to the NTA
 | - | 125,000 | - | - | - | 125,000 |
| 1. Mechanisms for collecting feedback employers designed and delivered to the NTA
 | - | 94,000 | - | - | - | 94,000 |
| **Total Component 1** | **458,800** | **2,718,800** | **1,672,800** | **2,055,800** | **1,083,800** | **7,940,000** |
| **Component II** | **Yr 1** | **Yr 2** | **Yr 3** | **Yr 4** | **Yr 5** | **Total** |
| 1. Business process re-engineering/change management strategy designed and delivered to JAMPRO
 | 50,000 | 310,000 | - | - | - | 360,000 |
| 1. Regulatory and incentives framework optimization designed and delivered to JAMPRO
 | - | 20,000 | 180,000 |  | - | 200,000 |
| 1. Digital Global Services Strategy designed and delivered to JAMPRO
 | 20,000 | 155,000 | - | - | - | 175,000 |
| 1. Digital GSS Branding campaign implemented
 | 90,000 | 295,000 | 75,000 | 75,000 | 75,000 | 610,000 |
| 1. Digital GSS Promotional Activities (e.g. magazine features) developed
 | 25,000 | 400,000 | 500,000 | 500,000 | 25,000 | 1,450,000 |
| 1. Digital GSS material packages developed
 | 10,000 | 50,000 | 50,000 | 25,000 | - | 135,000 |
| 1. Participation in international and regional investment targeting events
 | 15,000 | 500,000 | 15,000 | 15,000 | 15,000 | 560,000 |
| 1. National Awareness campaign activities executed
 | - | 50,000 | 75,000 | 25,000 | - | 150,000 |
| 1. GSS SME Incubator designed and furnished
 | 25,000 | 250,000 | 175,000 | 25,000 | 25,000 | 500,000 |
| 1. Entrepreneurial accelerator programme active
 | - | 195,000 | - | - | - | 195,000 |
| 1. Awards for entrepreneurial accelerator programme presented
 | - | 100,000 | 105,000 | - | - | 205,000 |
| 1. Entrepreneurial accelerator programme events (including workshops) delivered
 | - | 50,000 | 50,000 | - | - | 100,000 |
| 1. Digital management system active
 | 50,000 | 310,000 | 60,000 | 60,000 | 60,000 | 540,000 |
| 1. Digital management system licenses acquired
 | - | - | 20,000 | 20,000 | 20,000 | 60,000 |
| **Total Component 2** | **285,000** | **2,685,000** | **1,305,000** | **795,000** | **220,000** | **5,240,000** |
| **Audits** | 20,000 | 20,000 | 20,000 | 20,000 | 20,000 | 100,000 |
| **Contingencies** | - | - | - | - | 20,000 | 20,000 |
| Project Management[[4]](#footnote-4) | 290,300 | 315,300 | 315,300 | 315,300 | 260,800 | 1,500,000 |
| Monitoring and Evaluation | 52,000 | 39,000 | 38,000 | 32,000 | 39,000 | 200,000 |
|  |  |  |  |  |  |  |
| **TOTAL** | **1,109,100** | **5,753,100** | **3,326,100** | **3,013,100** | **1,798,600** | **15,000,000** |

* 1. **Evaluation**
	2. The programme will evaluate the results of the training (Component 1) following a non-experimental design and the results of the activities under Component 2 following a before and after comparison.
		1. **Existing Knowledge (previous evaluations, ex ante economic analysis)**
	3. The IDB has supported other countries in promoting growth of their Global Services Sector[[5]](#footnote-5), as well as it has been supporting the GoJ to promote employability and human capital accumulation[[6]](#footnote-6). Evaluations of these projects are not available as they are still under implementation. However, the present document is aligned with the Monitoring and Evaluation Arrangements of the aforementioned programmes, and the best practices from the literature. Relevance of this evaluation lays on three facts: (i) the programme has an innovative approach by tackling the offer and demand at the same time; (ii) the programme intends to implement systematic mechanisms to align the skills development system and the industry in Jamaica for the first time; and (iii) evidence on the impact of finishing schools is extremely limited.
	4. Evidence about the effects of training programmes is extensive. The latest review of the international literature of training evaluations has shown that, in terms of employment, average effects are generally not significantly different from zero within the first year after graduation of the programme. The average medium-sized effect (one-two years after the training) is 0.12 standard deviation units, while in the long run (after two years), there is a higher average effect of 0.19 standard deviation units (Card, Kluve, & Weber, 2017). In the case of LAC, Kluve (2016) highlights that training impact training does not become more positive over time. In fact, he shows the programmes with a short duration are significantly less likely to produce positive estimates. On the other hand, evidence from IDB-funded operations (Ibarrarán & Rosas, 2009) show that training programmes can have employment effects ranging from 0 to 5 percentage points and effects in terms of earnings –although these results can be less reliable.[[7]](#footnote-7) APs, according to the review done by Novella and Perez-Davila (2017), can have positive outcomes on the labour market. The maximum effect found in a quasi-experimental evaluation estimates that the probability for young people to have formal and non-temporary employment increased by 7 percentage points (pp) after the introduction of the apprenticeship law in Brazil (Corseuil, Foguel, Gonzaga, & Pontual Ribeiro, 2014).[[8]](#footnote-8) This result is corroborated by the case of Italy (Albanese, Cappellari, & Leonardi, 2017) where an impact of 6 pp was found on employment. There is also evidence that APs might improve wages. In Brazil, the impact of the law on the hourly wage was 62% (Corseuil, Foguel, Gonzaga, & Pontual Ribeiro, 2014); in Germany the estimates range from 3-20% (Clark & Fahr, 2001; Werwatz, 1997); and, in the UK the impact depend on the type of certificate, ranging between 2-29% (McIntosh & Morris, 2016; McIntosh, 2007; Greenwood, Jenkins, & Vignoles, 2007). Finishing Schools (FS) have been extensively implemented in countries such as India and the Philippines due to the need of a skilled workforce in a rapidly growing industry as Global Services (Garcia & Bafundo, 2014). The only available evaluation of FS is for the Philippines, and it fails to find any significant impact on the graduates “marketability” (Ali, Ismail, Hock Eam, & Abdul Rahim, 2014). However, FS have been found effective to train a large number of individuals with tailored made training programmes that combine the soft skills and technical skills required by the industry (Ferrari, 2017). Additionally, employment of graduates seems to be high. In India, 3Edge Solutions Finishing School trained 5,000 people between 2006 and 2012, with a 95% job placement. In the Philippines, the BPO Training Academy had a 100% job-placement rate after training 6,308 trainees between 2006 and 2012 (Garcia & Bafundo, 2014).
	5. Available evaluations of investment promotion programmes in Peru, Colombia and Chile show positive impacts on firms’ exports. In Chile (Volpe Martincus & Carballo, 2010), estimations using a propensity score matching methodology show that firms that were assisted experienced a 6.8% higher annual growth rate in total exports; heterogeneous effects were found as smaller and relatively inexperienced firm benefit the most from promotion actions. A similar methodology was also applied in the case of Colombia, and a significant impact in firms´ intensive and extensive margins of exports was found (Volpe Martincus & Carballo, 2008).Finally, in Peru, the rate of growth in exports of assisted firms was 17% higher than in non-assisted ones (Volpe Martincus & Carballo, 2010)
	6. An ex-ante Cost-Benefit Analysis of the main elements of the programme was conducted, demonstrating its economic feasibility. The Net Present Value (NPV), calculated with a 12 percent discount rate for seven years, amounts to US$1.8 million dollars, delivering a positive return rate of 15 percent. A sensitivity analysis was conducted allowing variation in all assumptions and parameters and rendering positive returns even in the most pessimistic scenario. The analysis also detailed the minimum expected impact for the programme to break even. Details can be found in the [Economic Analysis](http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-734778097-15).

**Providing GSS with skilled workers**

1. **Evaluation Questions and Key Outcome Indicators**
	1. As indicated in the results matrix, the objective of component 1 is to increase the supply of skilled workers in the GSS. This objective is expected to be met by improving human capital to reduce the skills mismatch in the sector. This component will target unemployed individuals seeking a job in the GSS with secondary and tertiary education completed and active workers of the GSS who require upgrading their skills (to perform higher added value tasks or access managerial-level positions) by offering short-term training (through finishing schools) and long-term training (through apprenticeships and available only for active workers). The following table describes the type of intervention for each beneficiary:

Table 4. Relation between beneficiaries and types of training

|  |  |  |
| --- | --- | --- |
| **Beneficiary** | **Type of training** | **Objective of the training** |
| Active workers in GSS firms | Shorter term (Finishing schools - FS) under 12 months duration | Upskilling of workers, especially for high added-value tasks |
| Longer term (Apprenticeships) minimum duration of 12 months | Upskilling of workers, especially for high added-value tasks with a special emphasis of managerial positions |
| Job seekers (unemployed) with secondary and tertiary education | Finishing schools (FS) -under 12 months duration | Offer trainees the required skills by employers |

* 1. The following research questions are particularly important in this component and will therefore guide the evaluation:
	2. Does FS training improve employability?[[9]](#footnote-9) The employment rate of the population with 9-13 years of education was 59.74% in 2014 (SIMS, 2018). And according to a survey conducted to graduates from the vocational education,[[10]](#footnote-10) approximately 57.9% of training graduates are employed in a full-time job after programme completion. The project will improve the skills development system. This is expected to translate in an offer of quality and pertinent training and certification that will be validated and recognized by the industry, and that at the same time is expected to increase participants´ employability.[[11]](#footnote-11)
	3. Does FS training improve wages of beneficiaries? The average monthly wage of full-time workers at entry level in a BPO firm was JMD$58,798.08 was in 2017 (JAMPRO, 2017).[[12]](#footnote-12) By performing higher added-value tasks, participants are expected to have increased wages. There is evidence that job training programs in LAC can have an impact on job quality measured by wages, social security and formality. In the Dominican Republic the impact was 17% (Card, Ibarrarán, Regalia, Rosas, & Soares, 2007), in Colombia 22% for women and 10% for men (Attanasio, Kugler, & Meghir, 2011), in Peru from 12-30% (Diaz & Jaramillo, 2006) and in Chile from 22-25% (Aedo & Pizarro Valdivia, 2004).[[13]](#footnote-13)
	4. Does AP training improve wages of beneficiaries? Moreover, the programme will support the implementation of apprenticeships, which differ from FS because this type of training is developed within a legal framework that defines the apprentice as an employee of the firm where he/she works and is trained (Fazio, Fernández-Coto, & Ripani, 2016).[[14]](#footnote-14) The average monthly wage of business unit/account managers in a BPO firm was JMD$218,382.08 in 2017 (JAMPRO, 2017). Evidence shows that AP might improve wages. Results are heterogeneous. In Brazil the impact in wage was 62% after two years and 50% after five years (Corseuil, Foguel, Gonzaga, & Pontual Ribeiro, 2014); in Germany –where the AP system is integrated in the education national system - the lifelong return of being an apprentice has been estimated at 14% (Adda, Dustmann, Meghir, & Robin, 2006); and in the UK –where APs are part of a wide range of alternatives for vocational training - the average wage return of apprenticeships in general is 9%.[[15]](#footnote-15) . Based on the same rationale as above (with the finishing schools), beneficiaries that achieve managerial positions with higher technical skills may expect a higher compensation as well. [[16]](#footnote-16)
	5. Considering these questions, the following table summarizes the main results indicators from Component 1 that will be measured in the evaluation. It is worth highlighting that heterogeneous effect by gender will be estimated for each indicator and will be part of the tracking indicators.

Table 5. Key Results Indicators – Component 1

| **Indicator** | **Formula** | **Frequency of Measurement** | **Source of verification** |
| --- | --- | --- | --- |
| 1. Share of certified graduates from Finishing Schools (FS) with a formal contract in a GSS firm one year after completing the training

*Tracking indicators:**-Share of Female certified graduates from Finishing Schools (FS) with a formal contract in a GSS firm one year after completing the training**-Share of Male certified graduates from Finishing Schools (FS) with a formal contract in a GSS firm one year after completing the training* | Difference between the share of graduates with a formal contract in a GSS firm one year after completing the training in the treatment group (FS graduates) and the control group (other technical and vocational training graduates), in percentage points. | Annual | Baseline and follow-up surveys |
| 1. Percentage change in the average wage of GSS workers who obtained a Finishing School (FS) certification one year after completing the training

*Tracking indicators:**-* *Percentage change in the average wage of Female GSS workers who obtained a Finishing School (FS) certification one year after completing the training**-Percentage change in the average wage of Male GSS workers who obtained a Finishing School (FS) certification one year after completing the training* | Average wage of GSS workers in the treatment (GSS workers who graduated from FS) relatively to the one of the control group (other GSS workers) one year after the completion of the training, in percentage. | Annual | Baseline and follow-up surveys |
| 1. Percentage change in the average wage of GSS workers who obtained an Apprenticeship Programme (AP) certification one year after completing the training

*Tracking indicators:**-* *Percentage change in the average wage of Female GSS workers who obtained an Apprenticeship Programme (AP) certification one year after completing the training**-Percentage change in the average wage of Male GSS workers who obtained an Apprenticeship Programme (AP) certification one year after completing the training* | Average wage of GSS workers in the treatment (GSS workers who graduated from AP) relatively to the one of the control group (other GSS workers) one year after the completion of the training, in percentage. | Annual | Baseline and follow-up surveys |

1. **Evaluation Methodology**
	1. For the purpose of the evaluation, we can divide the training component in three interventions defined by the combination of the type of beneficiary and intervention, as described in Table 4). Therefore, the impact of the programme will be evaluated by measuring of the effect that each intervention has on the intended beneficiary group (see further detail in paragraph 1.25). For that, the evaluation will be based on non-experimental design (a combination of a Difference in Differences [[17]](#footnote-17) and Propensity Score Matching[[18]](#footnote-18)). Under such a design, we will base on certain assumptions to identify the effects of the programme on the cited indicators.
	2. In concrete, estimations of the average treatment effect (ATE) one year after completion of the programme will be provided for each intervention. The match between the each set of control and treatment group will be performed based on a score composed by observable characteristics.
	3. Notice that in terms of internal validity, the evaluation will report the programme's impact on the eligible population that decides to apply to the programme.
2. **Technical Aspects of Selected Methodology**
	1. Treatment and Comparison/Control Groups. The treatment groups will be formed by those trainees (unemployed with at least secondary education and active GSS workers) that are beneficiaries of the programme. The control group, on the contrary, will be formed by workers in a GSS that met the eligibility criteria, but were not offered a spot due to availability of resources and by graduates from training programmes in areas related to the industry at the NTA[[19]](#footnote-19) or at other institutions that will not be part from the intervention depending on the intervention[[20]](#footnote-20).Following this methodology, the control and treatment groups will be matched according to a propensity score of being part of the programme and based on the intervention and beneficiary. See Table X. This score will be based on a set of observable characteristics including if previously employed in a GSS firm, age, gender, education, residence area, employment history, and other commonly unobserved characteristics, such as socioemotional skills[[21]](#footnote-21). Two analyses of the heterogeneous effects by gender and by the previous employment status (if previously employed or not) in the case of the Finishing Schools will be estimated.[[22]](#footnote-22)

| **Indicator** | **Treatment group** | **Control group** |
| --- | --- | --- |
| 1. Share of certified graduates from Finishing Schools (FS) with a formal contract in a GSS firm one year after completing the training
 | Graduates from Finishing Schools | Graduates from other training programmes at the NTA or at other institutions (training programmes comparable) |
| 1. Percentage change in the average wage of GSS workers who obtained a Finishing School (FS) certification one year after completing the training
 | GSS workers who obtained a FS certification | Other GSS workers that were not part of the programme |
| Percentage change in the average wage of GSS workers who obtained an Apprenticeship Programme (AP) certification one year after completing the training. | GSS workers who obtained an AP certification | Other GSS workers that were not part of the programme |

* 1. Sample size.It is estimated that around 3,100 individuals will be participating from the training component each year for a total of 12,400 for the entire training programme. Out of those, 100 are for apprenticeships (long-term training) and 3,000 for Finishing Schools (short-term training). We assume that our treatment group will include all participants. The proportion of the FS positions for active GSS workers and graduates will be determined based on the demand. However, for the evaluation we assume that positions will be divided equally. Regarding the control group, HEART-Trust/NTA admitted 6,223 individuals certified for 2016-2017, and GSS employed around 22,000 individuals in 2016. Therefore, we expect to have enough observations for forming the comparison group in each case. The following table indicates the minimum detectable effect for each set of control and treatment groups.[[23]](#footnote-23)

Table 6. Minimum Detectable Effects for estimating the impact of employment rate and average wage for FS and AP graduates

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variables** | **Prevalence/Average** | **Standard Deviation** | **Treatment Group Sample Size** | **Control Group Sample Size** | **Minimum Detectable Difference (in standard deviations)** |
| Employment rate (FS) | 57.9% (NTA) | 49.4% | 1,500 | 1,500 | 5% |
| Average (yearly) wage (FS) | US$ 4,692 (JAMPRO) | US$ 297.16 | 1,500 | 1,500 | US$ 30.40 |
| Average (monthly) wage (AP) | US$ 21,118.42 (JAMPRO) | US$14,295.99 | 100 | 100 | US$ 5,664.13 |

Note: Estimations were done based on information available for groups that are most comparable to the potential beneficiaries. The employment rate information refers to the one for NTA graduates of the customer service program; for FS the average full-time workers at entry level in a BPO firm; and for AP the average monthly wage of business unit/account managers in a BPO firm (see paragraph 1.25). See [Power Calculations](http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-734778097-32)

* 1. Data Collection
	+ Data regarding the **treatment groups** will be collected in the following moments:
		1. **Baseline**. First, every trainee (both job seekers and GSS active workers) accepted in the training will be registered in the Competitive Fund Management (CFM). The required baseline information for the labor market indicators will be included in an online questionnaire to be administered online through the CFM.[[24]](#footnote-24)
		2. **Follow-up**. One year after completing the training, the CFM will send a follow-up survey that will include measures to estimate the employability and the wages of the beneficiaries. If response rate is low, telephone interviews questionnaires will be conducted and incentive mechanisms to increase the response rate will be explored.

Data from the **control groups** will be collected using two administrative sources. On the one hand, a MOU signed with HEART-Trust/NTA will include a specific clause requiring the entity to share the information of graduates from other types of training programmes. Additionally, Component 1 will finance the design and implementation of instruments to measure the trainees’ level of job readiness and their labour market outcomes (See paragraph 1.33 of the POD). The objective is that this instrument is used by the TVET institutions[[25]](#footnote-25) in order to improve their quality assurance mechanisms; however, it will also contribute to quality data for the evaluation. As part of the eligibility criteria, the programme will require that participating training providers implement such instruments (probably in the form of online tests) in the rest of their training programmes. On the other, the Competitive Fund Management operations manual will require that participating firms allow the distribution of a survey to workers that do not participate of the training programme in order to collect the required information. This can be done electronically or mixed (for example, an interviewer with a tablet visits the participating firms) to reduce costs. By asking the firm to commit on supporting the data collection (instead of incentivizing workers that are not benefitted by the program) as a condition of participating in the programme, we expect to have a high compliance rate. Furthermore, the participating firms that present proposals to the CFM, will submit proposal under a standard format (part of MOU annexes) where a clause describes their commitment to share data and information for M&E purposes.

* 1. **Other Evaluations**

**Promoting investment in the GSS**

1. **Evaluation Questions and Key Outcome Indicators**
	1. The objective of Component 2 is to strengthen the capacity of JAMPRO to attract investment and to increase exports in higher value-added and digital segments. This component targets firms (small, medium and large) interested in locating their operations to Jamaica incorporating new projects as well as existing firms in the country offering GSS services that may also incorporate new projects or expand their capital (CAPEX) investment in the country. Currently, there are 55 companies registered in BPIAJ mostly performing BPO activities; however, there is no information regarding other firms doing GSS-related activities, e.g. MSMEs and entrepreneurs exporting global services. A data collection exercise will be undertaken prior to the implementation of the programme in order to understand better the profile of the potential beneficiaries of this component.[[26]](#footnote-26) Even if the programme does not include an impact evaluation, it does include a set of variables that will measure JAMPRO and the overall sector performance through a before and after comparison. It is worth highlighting that these indicators are based on the following research questions and that there is evidence of similar exports and investment promotion activities.
	2. Effect of export promotion activities in the exports value of GSS in Jamaica. Jamaica currently exports “Other business services” with a value of US$223 million, which is equivalent to 17% of total services exports.[[27]](#footnote-27) However, evidence from Chile, Peru and Colombia indicates that firms can increase their marginal exports by participating in promotion programmes (Volpe Martincus & Carballo, 2010; Volpe Martincus & Carballo, 2010; Volpe Martincus & Carballo, 2008). Additionally, JAMPRO implemented a pilot programme in 2011 called Export Max: Enterprise Development for Export Growth Programme aimed at enhancing the competitiveness of existing exporters and export ready firm in Jamaica. The programme initially targeted 15 companies from a group of 54 applicants. According to the results, export sales for the beneficiaries grew from J$1.067 billion to J$1.396 billion (31% growth), with a total of 33 new markets accessed by 11 companies.[[28]](#footnote-28)
	3. Effect of investment promotion activities in the capital expenditure of GSS firms in Jamaica. According to JAMPRO, in 2017 there was US$33.4 million dollars in GSS investments measured as the capital expenditure of a firm in the first year of operation or in the case of local firms, in the first year of operation in a new business line. Surveys confirm that firms value a strong business environment when selecting a location to base their outsourcing operations.[[29]](#footnote-29) Critical selection criteria include the availability of incentives and overall operating environment (regulations, quality of institutions, transparency and timeliness of accessing government approvals, and Investment Promotion Agencies “IPAs”).[[30]](#footnote-30) Evidence show that sectors promoted by IPAs in developing countries tend to receive 155% higher FDI inflows (Harding & Javorcik, 2010). Therefore, we expect an increase in the value of investments (CAPEX)[[31]](#footnote-31) made in the country due to the improved value proposition and business environment (regulations, incentives) to investors.[[32]](#footnote-32)
	4. Increase in higher value added BPO, KPO and ITO activities. Currently, there are approximately 55 companies offering BPO services in Jamaica,[[33]](#footnote-33) 80 percent of which are focused solely on the low-value activities (2017). Given that there has been an increase in higher-value BPO and KPO activities since 2017 (as reported by Fernandez-Stark and Couto, 2017), and there is evidence that by 2025 the global market for KPO will reach $124.2 billion,[[34]](#footnote-34) and that of ITO, $481 billion, we expect that with support of the programme the firms will also increase their activity in higher-value BPO, KPO and ITO.
	5. The following table summarizes the main results indicators from Component 2 and how attribution will be justified.

Table 7. Key Results Indicators – Component

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Indicator** | **Formula**  | **Frequency of Measurement** | **Source of verification** | **Attribution** |
| 1. Percentage change in the value of the GSS exports
 | Change in the value of exports of the GSS beneficiary firms before and after participating in the programme, in percentage. | Every two years  | IMF database | Although no attribution can be justified for this indicator, we will follow up using the IMF database. This will allow us to measure the change in exports of the sector expected from the support of a stronger IPA.  |
| 1. Capital expenditure made in Jamaica by the beneficiary GSS firms
 | Value of capital expenditure made by the GSS beneficiary domestic and foreign firms in Jamaica in a year before and after participating in the programme, in US millions. | Every two years  | Follow-up from JAMPRO through surveys and interviews. | Same as above. This indicator will measure the expected amount of CAPEX in beneficiary firms from the support of a stronger IPA.  |
| 1. Share of high-level sub-segments (i.e., Higher value BPO, KPO and ITO) that are offered by the beneficiary GSS firms
 | Share of higher-value BPO, KPO and ITO sub-segments over the total sub-segments that are offered by beneficiary GSS firms before and after participating in the programme, in percentage. | Every two years  | Follow-up from JAMPRO through surveys and interviews. | Same as above. This indicator will measure the expected amount of KPO share in beneficiary firms from the support of a stronger IPA. |

1. Identification of the potential beneficiaries
	1. A study to capture information regarding the number and the characteristics of the potential beneficiaries will be financed before the start of the programme by the Technical Cooperation JA-T1151. Currently, JAMPRO has limited capacity to collect this information[[35]](#footnote-35) and it is expected that these tools will not only allow for an accurate monitoring of the results indicators but will also contribute to usage of more data analytics (complemented by the Digital Management System) to capture the sector’s performance. Additionally, the programme under Component II will also finance promotion activities for the Accelerator Programme with the objective of increasing the demand by creating awareness between eligible SMEs and entrepreneurs.
	2. Mapping of GSS related firms. The study will be performed through a consultancy starting the third quarter of 2018. The expected products of this consultancy include:
		* + A mapping of the firms that are currently performing GSS-related firms, and those that could potentially expand their activities. Examples of potential beneficiaries are those firms in the areas of gaming and professional services.
			+ Suggestions to strengthen the mechanism that JAMPRO utilizes to collect the information regarding CAPEX. For example, one of the activities could be the improvements and automatization of the Outsourcing Survey. This will help to monitor the progress of the indicators in the results matrix.
			+ Additionally, for the SMEs, this mechanism is also expected to inform about the likeliness of participating in the Accelerator Programme and the major obstacles for the SMEs to grow (and that could potentially orientate the Accelerator focus).
	3. Promotion of the Accelerator Programme for SME´s and entrepreneurs. As part of the promotion activities, component 2 includes activities in universities and social media in order to increase the demand for the Accelerator Programme.
2. Data Collection
	* Data will be collected in the following moments:
		1. After the first contact performed through the consultancy, those firms that are interested in receiving JAMPRO support will be required to provide the required information for an effective follow-up from JAMPRO upon condition of receiving the benefits of the programme.
		2. Upon completion of the programme, JAMPRO will collect the required information through online surveys, telephone interviews, between others.
		3. **Reporting Results**
	1. The results of the evaluation will be communicated to the Government of Jamaica as soon as they become available in the form of an Evaluation Report, presentations, policy notes or infographics, and other available means of dissemination that show to be pertinent, such as videos. Also, academic articles are expected to be produced along the following year of the end of the evaluation.
		1. **Evaluation Coordination, Work Plan and Budget**
	2. The evaluation will be conducted by a team from the IADB, the Government of Jamaica and external consultants. The evaluation team should work in close relationship during the course of the evaluation, conducting regular meetings and checking on the correct implementation of the evaluation plan.
	3. Evaluation timeframe, budget allocated for each main activity and source of funding (See Table 6).

Table 8. Evaluation Work Plan

| **Key Evaluation Activities/Products per Activity** | Year 0 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Responsible | Cost(US$) | Funding |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |  |  |  |
| 1. **Evaluation**
 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Identification of potential beneficiaries of Component 2  | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | JAMPRO; External Consultant | 50,000 | JA-T1151 |
| Evaluation and survey design for Component 1; monitoring and analysis for all the programme |  | X | X |  |  |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | X | PEU: M&E specialist | n.a. | JA-L1079 PEU budget[[36]](#footnote-36)  |
| Surveys implementation (baseline, follow-ups and final) to trainees through CMF and telephone |  |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | X |  |  |  | X | PEU | 100,000 | JA-L1079 (M&E) |
| Follow-up to firms by JAMPRO (online and telephone) |  |  |  |  | X |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  | X | JAMPRO | 100,000 | JA-L1079 (M&E) |
| Dissemination |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | PEU |  |  |
| Travels |  | X |  | X |  |  |  |  | X |  |  | X |  |  |  | X |  |  | X |  |  | NA |  |  |
| Contingencies |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | NA |  |  |
| **TOTAL (financed by JA-L1079):** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 200,000 |  |

**Annex I: Results Matrix**

|  |  |
| --- | --- |
| **Project Objective:** | The main objective of the project is to promote the growth of the Global Services Sector in Jamaica, particularly in higher value-added segments. Specifically, it intends to: (i) provide the Sector with better skilled workers; and (ii) increase JAMPRO´s institutional capacity to attract FDI and to increase its exports.  |

**Expected Impact**

| **Indicators** | **Unit**  | **Baseline** | **Goals** | **Means of verification** | **Observations** |
| --- | --- | --- | --- | --- | --- |
| **Value** | **Year** | **Value** | **Year** |
| **Expected Impact:** Increased growth of the Global Services Sector (GSS) in Jamaica, particularly in higher value-added segments |
| 1. Value of exports of Global Services
 | US millions (in 2016 US$) | 178 | 2016 | 191 | 2026 | IMF Statistics | **Baseline:**  Due to the lack of specific information for the GSS in Jamaica, we estimate the baseline base on 80% of the value of services exports under the classification “Other business services” for 2016 (IMF BOP and IIP Data).[[37]](#footnote-37)**Goal:** Projected value of exports by 2026 in the GSS in Jamaica due to the project. See [Economic Analysis](http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-734778097-15).  |
| 1. Number of employed individuals in the GSS
 | Employed individuals  | 22,000 | 2016 | 50,000 | 2023 | Heart-Trust/NTA | **Baseline:** Heart-Trust/NTA (2017b).**Goal:** JAMPRO´s Corporate Strategic Plan (2018). |
| 1. AT Kearney Global Services Location Index
 | 2017 value (in points) | 5.00 | 2017 | 5.06 | 2023 | AT Kearney Global Indicators | **Baseline:** AT Kearney Global Indicators.**Goal:** Projected in line with the index of Trinidad and Tobago (5.07) –one of Jamaica´s main competitors-.**Note**: Currently, Jamaica ranks 43rd out of 55 countries in this index.[[38]](#footnote-38) |

**Expected Results**

| **Expected Results** | **Unit**  | **Baseline** | **Intermediate** | **Goals** | **Means of verification** | **Observations** |
| --- | --- | --- | --- | --- | --- | --- |
| **Value** | **Year** | **Value** | **Year** | **Value** | **Year** |
| **Expected Result 1:** **Increased supply of skilled workers in the GSS** |
| 1. Share of certified graduates from Finishing Schools (FS) with a formal contract in a GSS firm one year after completing the training

*Tracking indicators:**-Share of Female certified graduates from Finishing Schools (FS) with a formal contract in a GSS firm one year after completing the training**-Share of Male certified graduates from Finishing Schools (FS) with a formal contract in a GSS firm one year after completing the training* | Percentage points (pp)  | 0 | 2019 | 2.5 | 2021 | 2.5 | 2023 | Mid-term and final reports based on follow-up survey | **Definition:** This indicator measures formal employment for unemployed beneficiaries. **Formula**: Difference between the share of graduates with a formal contract in a GSS firm one year after completing the training in the treatment group (FS graduates) and the control group (other technical and vocational training graduates), in pp.**Baseline**: The employment rate of NTA graduates for customer service was 57.9% in 2017 (HEART, 2017), and the employment rate of the population with 9-13 years of education was 59.74% in 2014 (SIMS, 2018). Given the absence of evidence of employment rate for FS graduates in Jamaica, we approximate the baseline value as the difference between these two populations that are similar to the graduates from FS and other programs. Given the rough estimate, we use a baseline of 0 instead of -1.8 pp to show that, at baseline, differences are non-existent. **Goal**: There is evidence that training programs in LAC can bring positive although modest results in the short-run ranging from 0 to 5 pp.[[39]](#footnote-39) Although, there is no current evidence of the effect of FS, we assume that its effect could reach the mean point of the estimated effects (2.5 pp). See [Economic Analysis](http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-734778097-15). This indicator will be calculated through a non-experimental evaluation. A survey to all participants will be implemented at the beginning of the training to capture the baseline and one year after the training completion. See Monitoring and Evaluation Arrangements.  |
| 1. Percentage change in the average wage of GSS workers who obtained a Finishing School (FS) certification one year after completing the training

*Tracking indicators:**-* *Average wage of Female GSS workers who obtained a Finishing School (FS) certification one year after completing the training**- Average wage of Male GSS workers who obtained a Finishing School (FS) certification one year after completing the training* | Percentage (%)  | 0 | 2019 | 6 | 2021 | 6 | 2023 | Mid-term and final reports based on follow-up survey | **Definition:** This indicator measures improvement in wages for active GSS workers.**Formula:** Average wage of GSS workers in the treatment (GSS workers who graduated from FS) relatively to the one of the control group (other GSS workers) one year after the completion of the training, in percentage.**Baseline**: The average weekly wage of NTA graduates of customer service was JDM$12,000 in 2017 (HEART, 2017) and the average weekly wage of full-time workers at entry level in a BPO firm was JMD$13,363 was in 2017 (JAMPRO, 2017).[[40]](#footnote-40) Given the absence of evidence of labour returns for FS graduates in Jamaica, we approximate the baseline value as the difference between these two populations that are similar to the working graduates from FS and non-graduates. Given the rough estimate, we used a baseline of 0 instead of -11.4%, assuming that, at baseline, differences are non-existent.**Goal**: There is evidence that job training programs in LAC can have an impact on job quality measured by wages, social security and formality. In the Dominican Republic the impact was 17%, in Colombia 22% for women and 10% for men, in Peru from 12-30% and in Chile from 22-25%.[[41]](#footnote-41) Although, there is no current evidence of the effect of FS or on the job training in general in Jamaica, we assume that this intervention could reach the mean point of the estimated effects in the most conservative case, Peru (6 pp). See [Economic Analysis](http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-734778097-15).This indicator will be calculated through a non-experimental evaluation. A survey to all participants will be implemented at the beginning of the training to capture the baseline and one year after the training. See Monitoring and Evaluation Arrangements.  |
| 1. Percentage change in the average wage of GSS workers who obtained an Apprenticeship Programme (AP) certification one year after completing the training

*Tracking indicators:**-* *Average wage of Female GSS workers who obtained an Apprenticeship Programme (AP) certification one year after completing the training**- Average wage of Male GSS workers who obtained an Apprenticeship Programme (AP) certification one year after completing the training* | Percentage (%)  | 0 | 2019 | 9 | 2021 | 9 | 2023 | Mid-term and final reports based on follow-up survey | **Definition:** This indicator measures improvement in wages for active GSS workers.**Formula**: Average wage of GSS workers in the treatment (GSS workers who graduated from AP) relatively to the one of the control group (other GSS workers) one year after the completion of the training, in percentage. **Baseline**: The average weekly wage of NTA graduates of customer service was JDM$12,000 in 2017 (HEART, 2017) and the average weekly wage of full-time workers at entry level in a BPO firm was JMD$13,363 was in 2017 (JAMPRO, 2017).[[42]](#footnote-42) Given the absence of evidence of employment rate for AP graduates in Jamaica, we approximate the baseline value as the difference between these two populations that are similar to the working graduates from AP and non-graduates. Given the rough estimate, we used a baseline of 0 instead of -11.4%, assuming that, at baseline, differences are non-existent. **Goal**: Evidence shows that AP might improve wages. [[43]](#footnote-43)In Brazil, the Apprenticeship Law showed returns of 62% after two years and in Germany, AP is integrated in the education system and the lifelong return has been estimated at 14%. However, we base our projections on the evidence for the UK where the average wage return is 9% for keeping a conservative scenario and because is expected that the Aps in Jamaica will have a structure more similar to this country.[[44]](#footnote-44) See [Economic Analysis](http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-734778097-15).This indicator will be calculated through a non-experimental evaluation. A survey to all participants will be implemented at the beginning of the training to capture the baseline and one year after the training. For further details, See Monitoring and Evaluation Arrangements. |
| **Expected Result 2: Increased export values and capacity of the sector to attract FDI**  |
| 1. Percentage change in the value of exports of the GSS sector
 | Percentage (%)  | 0 | 2016 | - | - | 1.7 | 2023 | IMF database | **Definition:** This indicator measures the value of exports of the GSS sector.**Formula:** Change in thevalue of exports of the GSS sector before and after participating in the programme, in percentage.**Baseline:** Due to the lack of specific information for the GSS in Jamaica, we use the value of services exports under the classification “Other business services” for 2016 (IMF BOP and IIP Data).[[45]](#footnote-45) Given that the only criterion to be part programme is the availability of resources, we assume that at baseline differences between firms are non-existent. **Goal**: Evidence shows that similar programs might increase exports; in Chile the impact was 6.8% and in Peru 17%.[[46]](#footnote-46) Due to difference in the countries sizes, we assume that the effect for Jamaica could reach the mean point of the estimated effects in the most modest scenario (1.7 %). See [Economic Analysis](http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-734778097-15).This indicator will be calculated through a before and after comparison. Follow-up from JAMPRO will be implemented at the beginning of the intervention to capture the baseline, and at the end. See Monitoring and Evaluation Arrangements. |
| 1. Capital expenditure made in Jamaica by the beneficiary GSS firms
 | US millions | 33.4 | 2017 | - | - | 45.9 | 2023 | Final report based on JAMPRO´s follow up | **Definition:** This indicator measures the value of investments based on the capital expenditure made by domestic and foreign GSS firms in Jamaica in a particular year. **Formula**: Value of capital expenditure made by the GSS beneficiary domestic and foreign firms in Jamaica in a year in US millions.**Baseline**: CAPEX in GSS was US$33.4 million dollars in 2017 (JAMPRO, 2018).**Goal:** Evidence show that sectors promoted by IPAs in developing countries tend to receive 155% higher FDI inflows. We assume a modest scenario with at impact of 30%. See [Economic Analysis](http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=EZSHARE-734778097-15). This indicator will be calculated through a before and after comparison. Follow-up from JAMPRO will be implemented at the beginning of the intervention to capture the baseline, and at the end. See Monitoring and Evaluation Arrangements. |
| 1. Share of high-level sub-segments (i.e., Higher value BPO, Knowledge Process Outsourcing-KPO- and Information and Technology Outsourcing –ITO-) that are offered by the beneficiary GSS firms
 | Percentage (%)  | 0 | 2017 | - | - | 25 | 2023 | Final report based on JAMPRO´s follow up | **Definition**: This indicator measures the share of high-level sub-segments in GSS firms. High-level sub-segments are divided in high-value BPO, KPO and ITO. First, higher value BPO goes beyond traditional call center services including finance and accounting and other industry specific services. Second, KPO sub-segments are defined as the outsourcing to providers with high skilled and specialized professionals to deliver at a strategic rather than operational level, including services such as market intelligence, business analytics, and legal services. Third, ITO sub-segments focus on the production and use of software, including services such as network management, applications development, IT consulting, and software research and development. [[47]](#footnote-47)**Formula**: Share (%) of KPO sub-segments over the total sub-segments that are offered by the beneficiary GSS firms before and after participating in the programme.**Baseline**: GSS firms had a share of high-level sub-segments of 20% in 2017, according to JAMPRO’s 2017 Outsourcing Survey. **Goal**: We expect an increase of 5pp in order to reach the same share of high-level sub-segments that GSS firms in Costa Rica - a country in the LAC region with similar strengths and opportunities as Jamaica – present (25%).[[48]](#footnote-48) This indicator will be calculated through a before and after comparison. Follow-up from JAMPRO will be implemented at the beginning of the intervention to capture the baseline, and at the end. See Monitoring and Evaluation Arrangements. |

**Products**

| **Products**  | **Estimated Cost (US$)** | **Unit**  | **Baseline** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Final Goal** | **Means of verification** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Component I:** **Skills Development for the Global Services Industry and Strengthening of the Skills Development System** |
| 1. Global Services Sector Skills Board (GSSB) established and active
 | 713,000 | # skills sector | 0 | - | - | - | - | 1 | 1 | Document signed by Board members including functions of the Board and studies that were performed  |
| 1. Diagnosis for gender imbalances in the industry developed
 | 62,000 | #diagnoses  | 0 | - | 1 | - | - | - | 1 | Document with the diagnosis signed by Board members |
| 1. Smart Talent Platform online and functioning
 | 956,000 | # platforms | 0 | - | 1 | - | - | - | 1 | Proof that the platform is online and accessible to beneficiaries |
| 1. Job readiness curriculum developed and approved
 | 94,000 | # curricula | 0 | 1 | - | 1 | - | - | 1 | Document with the curriculum included and approved by signature of the GSSSB |
| 1. Places for training trainers with the Job readiness curriculum available
 | 966,000 | # places for trainers  | 0 | 1,000 | - | 1,000 | - | - | 1,000 | Mid-term and/or final report |
| 1. Apprenticeships places for the GSS available
 | 1,080,000 | # apprenticeships places  | 0 | - | 100 | 100 | 100 | 100 | 400 | Mid-term and/or final report based on data from the Competitive Fund Management |
| 1. Trainees positions in finishing schools available
 | 3,200,000 | # trainees positions  | 0 | - | 3,000 | 3,000 | 3,000 | 3,000 | 12,000 | Mid-term and/or final report based on data from the Competitive Fund Management |
| 1. Competitive Fund Management set up and active
 | 450,000 | # set-ups | 0 | 1 | - | - | - | - | 1 | Mid-term and/or final report with proof that the fund is working and available to employers  |
| 1. Mechanisms for measuring and improving training provider´s performance developed and delivered to the NTA
 | 200,000 | #mechanisms | 0 | - | 1 | - | - | - | 1 | Document with the mechanism received and signed by HEART/NTA |
| 1. Psychometric assessment tool designed and delivered to the NTA
 | 125,000 | # tools | 0 | - | 1 | - | - | - | 1 | Document with assessment tool received and signed by HEART/NTA |
| 1. Mechanisms for collecting feedback from employers designed and delivered to the NTA
 | 94,000 | # mechanisms | 0 | - | 1 | - | - | - | 1 | Document with the mechanism received and signed by HEART/NTA |
| **Component II: Strengthening JAMPRO’s institutional capacity to increase investment and promote exports in the GSS** |
| 1. Business process re-engineering/change management strategy designed and delivered to JAMPRO
 | 360,000 | # strategies | 0 | - | 1 | - | - | - | 1 | Document with the strategy included, received and signed by JAMPRO |
| 1. Regulatory and incentives framework optimization designed and delivered to JAMPRO
 | 200,000 | # frameworks | 0 | - | - | 1 | - | - | 1 | Document with the framework included, received and signed by JAMPRO |
| 1. Digital Global Services Strategy designed and delivered to JAMPRO
 | 175,000 | # strategies | 0 | - | 1 | - | - | - | 1 | Document with the strategy included, received and signed by JAMPRO |
| 1. Digital GSS Branding campaign implemented
 | 235,000 | # campaigns | 0 | - | 1 | - | - | - | 1 | Document with the description of the campaign included, received and signed by JAMPRO |
| 1. Digital GSS Promotional Activities developed
 | 1,450,000 | # activities | 0 | - | 4 | 4 | 4 | - | 12 | Mid-term and/or final report with description of activities and visual proof included. Possible activities include magazine features.  |
| 1. Digital GSS material packages developed
 | 135,000 | # material packages | 0 | 1 | 1 | 2 | 1 | - | 5 | Mid-term and/or final report with a copy and/or description of the material. Possible materials include brochures and radio advertisements |
| 1. Participation in international and regional investment targeting events
 | 560,000 | # events participation | 0 | 1 | 1 | 1 | 1 | 1 | 5 | Mid-term and/or final report |
| 1. National Awareness campaign activities executed
 | 150,000 | # activities | 0 | - | 1 | 2 | 1 | - | 4 | Mid-term and/or final report |
| 1. GSS SME Incubator designed and furnished
 | 500,000 | # furbished incubators | 0 | - | 1 | - | - | - | 1 | Proof that the incubator is open and accessible to beneficiaries |
| 1. Entrepreneurial accelerator programme active
 | 195,000 | # programmes | 0 | - | 1 | - | - | - | 1 | Mid-term and/or final report |
| 1. Awards for entrepreneurial accelerator programme presented
 | 205,000 | # awards | 0 | - | 6 | - | - | - | 6 | Audited proof (by Executing Agency) of participation in the programme by winners |
| 1. Entrepreneurial accelerator programme events (including workshops) delivered
 | 100,000 | # events | 0 | - | 2 | 2 | - | - | 4 | Mid-term and or/final report |
| 1. Digital management system active
 | 540,000 | # systems | 0 | - | 1 | - | - | - | 1 | Mid-term and/or final report |
| 1. Digital management system licenses acquired
 | 60,000 | #licenses | 0 | - | - | 1 | 1 | 1 | 3 | Mid-term and/or final report |

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1. This activity will be financed under TC JA-T1151, see paragraph 1.10 of the Proposal for Operation Development (POD). [↑](#footnote-ref-1)
2. Retrieved from: <http://data.imf.org/?sk=b4a9517a-a080-4d8a-b1dd-d1bba58213b7&sId=1414507696896> [↑](#footnote-ref-2)
3. Will be key in establishing GSSB under subcomponent 1.1 and leading the initial engagements with industry stakeholders for the implementation of subcomponent 1.3. [↑](#footnote-ref-3)
4. Project Management team (PEU) includes a M&E Specialist for duration of project. [↑](#footnote-ref-4)
5. For instance, the Programme to Support Global Export Services in Uruguay (UR-L1060), the Programme to Support Chile’s Global Services Sector (CH-L1138), and the Global Services Promotion Programme in Trinidad and Tobago (TT-L1038). [↑](#footnote-ref-5)
6. Through the Citizen Security and Justice Programme (3191/OC-JA), seeking to increase labour market attachment and employability of at-risk youth, and the Integrated Support to Jamaica Social Protection Strategy (3565/OC-JA), seeking to promote the human capital accumulation of the beneficiaries of the Programme of Advancement Through Health and Education (PATH). [↑](#footnote-ref-6)
7. For example, the authors highlight that the impact on earning found in the programme *Juventud y Empleo* in the Dominican Republic is imprecisely estimated reflecting the small sample sized and the underlying variability in earning. [↑](#footnote-ref-7)
8. For more information on the impact evaluation results of apprenticeships see (Novella & Pérez-Dávila, 2017). [↑](#footnote-ref-8)
9. One of the most common effects of ALMP is to increase participants employability (their probability to find a job); which can also refer to the job ladder effect under which workers remain in employment after their training by having proved their productivity to the firm (Kluve, 2016). [↑](#footnote-ref-9)
10. Heart Trust Tracer Study 2018. [↑](#footnote-ref-10)
11. Countries in the Region are facing the challenge of having to build stronger and more responsive skills systems. At the extent to which they can have efficient and effective education and training systems that offer high quality (and pertinent), this will lead to better outcomes in the individuals learning labor paths (Amaral, Fieldsend, Prada, & Rucci, 2017). [↑](#footnote-ref-11)
12. Estimations based on an average hourly rate of JMD$334.08. 22 days considered for a month. JAMPRO (2017). Outsourcing Survey Results. [↑](#footnote-ref-12)
13. These programs target youth specially. In the case of Peru, authors highlight the imprecision of estimates. For further details see Ibarraran and Rosas, 2009. [↑](#footnote-ref-13)
14. For a more comprehensive review of the apprenticeship´s economic evidence, refer to (Novella & Pérez-Dávila, Are Apprenticeships Programs Effective? Lessons for Latin American and the Caribbean, 2017) [↑](#footnote-ref-14)
15. McIntosh and Morris, 2016 [↑](#footnote-ref-15)
16. For a more comprehensive review of the apprenticeship´s economic evidence, refer to Novella & Pérez-Dávila, 2017. [↑](#footnote-ref-16)
17. This methodology consists on comparing the changes in outcomes between a treatment and a control group controlling for factors that are constant over time in both groups. [↑](#footnote-ref-17)
18. Under this design, a comparison group is contracted using observed characteristics. When using alone, a strong assumption of no-unobserved differences between groups is required. [↑](#footnote-ref-18)
19. The NTA/HEART will continue to offer other type of certifications that will not be part of the intervention in areas of interest to the Global Services Sector. [↑](#footnote-ref-19)
20. For example, courses from institutions such as the UTEC, the UWI and the community colleagues that will not implement the curriculum developed under this programme. [↑](#footnote-ref-20)
21. Evidence shows that labor outcomes are not only influenced by cognitive but also by non-cognitive skills (Heckman, Stixrud, & Urzua, 2006). However, it is common that researchers face challenges when it comes to applying the adequate instruments to capture non-cognitive skills. (Kautz, Heckman, Diris, Weel, & Borghans, 2014) This results in evaluations that omit the inclusion of these variables and, therefore, are more prone to measurement errors. (Heckman & Rubinstein, The Importance of Noncognitive Skills: Lessons from the GED Testing Program, 2001) This evaluation intends to include the advances made by economists and psychologists and develop measures of non-cognitive skills such as self-control, self-esteem, grit, between others. [↑](#footnote-ref-21)
22. A second alternative is to base the evaluation in a Discontinuous Regression Design (RDD) using the score of an assessment test as a cut-off point to determine the eligibility to participate in the programme. The disadvantage of this methodology is that firms might not accept to use the test as criteria for giving training to their workers. Such methodology can be observed in the Monitoring and Evaluation Arrangements of UR‑L1060. [↑](#footnote-ref-22)
23. EMDsd has been estimated according the following formula: where EMDsd is the Minimum Detectable Effect measured in standard deviations, t(1-k) and t (α/2) are the power and the significance level respectively and are set at 80% and 0.5%, T is the amount of units in the treatment group being 3,100 and C is the amount of units in the control group being 3,100. Estimated using the Power Calculations Spreadsheet available at: <https://www.iadb.org/en/topics-effectiveness-improving-lives/effectiveness-improving-lives> [↑](#footnote-ref-23)
24. This functionality will be described in the terms of reference for the CFM. [↑](#footnote-ref-24)
25. In Jamaica, there are currently 156 post-secondary TVET institutions, of which 125 are funded by HEART-Trust/NTA. The remaining 31 are private providers. Ferrari (2017). [↑](#footnote-ref-25)
26. This analysis will be carried out under TC JA-T1151 executed by JAMPRO in Q3 of 2018. [↑](#footnote-ref-26)
27. IMF, Balance of Payments (Millions of U.S. Dollars). “Other business services” (1-digit level) category. <http://data.imf.org/?sk=b4a9517a-a080-4d8a-b1dd-d1bba58213b7&sId=1390030109571>. This dataset most closely approximates the GSS and is used as a proxy to measure results. [↑](#footnote-ref-27)
28. JAMPRO (2014), Final Summary Report: Export Max Enterprise Development for Export Growth Programme 2011-2013. Unpublished. [↑](#footnote-ref-28)
29. A.T. Kearney Global Services Location Index (2017) and Deloitte (2017) Global Outsourcing Survey. [https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/operations/deloitte-nl-s&o-global-outsourcing-survey.pdf](https://www2.deloitte.com/content/dam/Deloitte/nl/Documents/operations/deloitte-nl-s%26o-global-outsourcing-survey.pdf) . [↑](#footnote-ref-29)
30. Deloitte (2016). Choosing the right Global Business Services location. https://www2.deloitte.com/content/dam/Deloitte/be/Documents/realestate/Deloitte\_GLS\_Choosing\_the\_rightGlobal\_Business\_Service\_Location.pdf [↑](#footnote-ref-30)
31. For example, evidence has suggested that a 1 percentage point increase in regulatory quality as measured by the Doing Business distance to frontier scores is associated with a difference in annual FDI inflows of $250-500 million. The World Bank (2013). Doing Business 2013: does doing business matter for foreign direct investment? Retrieved from:<http://documents.worldbank.org/curated/en/369151468157176227/pdf/806470BRI0Doin0Box0379812B00PUBLIC0.pdf> [↑](#footnote-ref-31)
32. This relationship was also proved in the case of the Chilean firms for the Economic Analysis of Project CH-L1138 (Valenzuela, 2017). Retrieved from: <https://www.iadb.org/Document.cfm?id=EZSHARE-1363920165-23> [↑](#footnote-ref-32)
33. BPIAJ (2017). [↑](#footnote-ref-33)
34. Grand View Research, Inc. (2017). Available at <https://www.prnewswire.com/news-releases/knowledge-process-outsourcing-kpo-market---expected-to-reach-1242-billion-by-2025-300575735.html> [↑](#footnote-ref-34)
35. JAMPRO conducts the Outsourcing Survey for BPOs; however, this is not systematic and does not cover the targeted population by this programme. [↑](#footnote-ref-35)
36. Project Management (PEU) for JA-L1079 entails a M&E Specialist and has an allocation of US$308,750 for 5 years of project implementation. This allocation is separate from the M&E allocation for Surveys in project budget. [↑](#footnote-ref-36)
37. This indicator is the best approximation for the GSS exports as it covers a wide range of services that are expected to be covered by the programme such as: research and development services; professional and management consulting services; technical, trade-related, and other business services; trade-related services; and other business services can also be called as “outsourcing”. Services under this category that would not be related to the GSS are: waste treatment and depollution, agricultural, and mining services; and operating leasing. Retrieved from: <http://data.imf.org/?sk=b4a9517a-a080-4d8a-b1dd-d1bba58213b7&sId=1414507696896> [↑](#footnote-ref-37)
38. Available at: [https://www.atkearney.com/documents/20152/793366/The+Widening+Impact+of+Automation.pdf/42b06cf4-e5f9-d8ec-a30c-a82dd26d4953](https://www.atkearney.com/documents/20152/793366/The%2BWidening%2BImpact%2Bof%2BAutomation.pdf/42b06cf4-e5f9-d8ec-a30c-a82dd26d4953) [↑](#footnote-ref-38)
39. Kluve (2016) finds significant positive results in 55% of a sample of short-term LAC training evaluations. Along the line, Ibarrarán and Rosas (2009) show that effects on employment may range between 0 to 5 percentage points. [↑](#footnote-ref-39)
40. Estimations based on an average hourly rate of JMD$334.08. JAMPRO (2017). Outsourcing Survey Results. [↑](#footnote-ref-40)
41. For further details see Ibarraran and Rosas, 2009. In the case of Peru, authors highlight the imprecision of estimates. [↑](#footnote-ref-41)
42. Estimations based on an average hourly rate of JMD$334.08. JAMPRO (2017). Outsourcing Survey Results. [↑](#footnote-ref-42)
43. In their review of 40 Apprenticeships´ evaluations Novella and Pérez-Dávila find overall positive results in the apprentices´ labour market returns. However, they also find that results vary according to factors such as the methodology used in the evaluation (experimental versus non-experimental). [↑](#footnote-ref-43)
44. For Brazil see (Corseuil, Foguel, Gonzaga, & Pontual Ribeiro, 2014); for Germany (Adda, Dustmann, Meghir, & Robin, 2006); for the UK (McIntosh and Morris, 2016). The AP system in the UK is less centralized as in Germany and involves a series of certification levels and training providers. [↑](#footnote-ref-44)
45. This indicator is the best approximation for the GSS exports as it covers a wide range of services that are expected to be covered by the programme such as: research and development services; professional and management consulting services; technical, trade-related, and other business services; trade-related services; and other business services can also be called as “outsourcing”. Services under this category that would not be related to the GSS are: waste treatment and depollution, agricultural, and mining services; and operating leasing. Retrieved from: <http://data.imf.org/?sk=b4a9517a-a080-4d8a-b1dd-d1bba58213b7&sId=1414507696896> [↑](#footnote-ref-45)
46. Firms that were assisted in promotion programs experienced a higher annual growth rate of total exports of 6.8% in Chile (Volpe Martincus & Carballo, 2010) and of 17% in Peru (Volpe Martincus & Carballo, 2010). In the case of Colombia, the study found a significant impact on firms´ intensive and extensive margins of exports (Volpe Martincus & Carballo, 2008). [↑](#footnote-ref-46)
47. Gereffi and Fernandez-Stark et al. (2010) [↑](#footnote-ref-47)
48. Tholons (2015). Retrieved from: <http://www.camscat.org/wp-content/uploads/Shared%20Services%20LatAm%202015/Dia%201%20-%2025%20Junio/1_General_Tholons.pdf> [↑](#footnote-ref-48)