



## 1. Project Data

**Project ID**

P118112

**Project Name**

GH-Skills and Technology Development Pro

**Country**

Ghana

**Practice Area(Lead)**

Education

**L/C/TF Number(s)**

IDA-48750

**Closing Date (Original)**

30-Jun-2016

**Total Project Cost (USD)**

80,000,000.00

**Bank Approval Date**

29-Mar-2011

**Closing Date (Actual)**

31-Dec-2016

**IBRD/IDA (USD)****Grants (USD)**

Original Commitment

70,000,000.00

0.00

Revised Commitment

68,540,774.45

0.00

Actual

63,946,455.38

0.00

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## 2. Project Objectives and Components

### a. Objectives

The Project Development Objectives (PDOs) were "to improve demand-driven skills development and increase adoption of new technologies in selected economic sectors of the Recipient" (Financing Agreement, page 5, Schedule 1).

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

No



**c. Will a split evaluation be undertaken?**

No

**d. Components**

The project had four components:

**Component 1: Institutional Strengthening of Skills Development** (Appraisal: US\$4 million; Revised Allocation: US\$3.45 million; Actual Expenditure: US\$3.42 million)

This component was to support the development of a national skills strategy to strengthen the Government's institutional capacity to manage the sector (in planning, coordination, quality assurance) and to modernize technical and vocational education and training (TVET) service delivery towards improved quality, relevance, accountability and effectiveness in skills development. The component had two sub-components. Sub-component 1.1 was to support the development of the Council of Technical and Vocational Education and Training (COTVET)'s technical capacity. Sub-component 1.2 was to provide targeted support to a select number of TVET providers.

**Component 2: Institutional Strengthening of Science and Technology Development** (Appraisal: US\$4 million, Revised Allocation: US\$3.26 million; Actual: US\$3.19 million)

This component was to strengthen the planning, management, and coordination of national Science, Technology and Innovation (STI) policies and programs in order to make efficient use of resources and complement national economic development. It also aimed to support technology development and diffusion that would be more responsive to needs of the economy by enhancing interactions between selected research institutes, university departments, and their external clients (e.g. private sector), thereby encouraging domestic innovation. This component had two sub-components. Sub-component 2.1 was to improve the planning, management and coordination of policies by stabilizing a well-functioning STI Directorate within the Ministry of Environment, Science and Technology (MEST) capable of supporting evidence-based STI policies and implementing priority activities of the national STI Development Plan (2011-2015). Sub-component 2.2 was to improve the capacities and incentives of selected research institutes, universities, and technology providers to develop, adapt, and diffuse technologies to private sector enterprises on a demand-driven basis.

**Component 3: Financing of Skills and Technology Development Programs through the Skills Development Fund (SDF)** (Appraisal: US\$50 million; Revised Allocation; US\$49.27 million; Actual: US\$47.96 million)

This component was to finance skills and technology development programs in prioritized economic sectors through a demand-driven SDF managed by COTVET. The component had two sub-components. Subcomponent 3.1 was to provide a demand-driven response to the challenges facing productive sectors of the economy by supporting grantees through an SDF with four separate funding windows: formal sector; informal sector; training and technical institutions; and Science and Technology (S&T) training service providers. Sub-component 3.2 was to support SDF outreach and management by funding extensive outreach activities, training and technology needs assessments, partnerships with intermediaries, and the cost of management, administration, and coordination of the SDF.

**Component 4: Project Management and Monitoring and Evaluation (M&E)** (Appraisal: US\$5 million;



Revised Allocation: US\$5.57 million; Actual; US\$ 5.62 million)

This component was to provide effective implementation of the project by establishing a Project Support Unit (PSU) embedded within COTVET and reporting to a Project Steering Committee (PSC). The PSU was to be responsible for overseeing and managing donor-supported activities in the skills sector. This was to ensure harmonization among development partner-supported activities. For M&E, COTVET was to update data to facilitate accurate reporting on the key progress indicators identified in the results framework (RF). Most of the data for monitoring project outcomes was to come from regular project reports, key surveys, and a labor market observatory. These data were to be supplemented by project preparatory studies in key economic sectors and a baseline survey undertaken during the first year of implementation. Under this component, the project was also to contract an independent monitoring company to support M&E activities, including an impact evaluation.

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

##### **Project Cost:**

The total project cost at appraisal was US\$70 million equivalent. However, by the end of the project, the US\$ equivalent had become US\$62 million due to exchange losses. Of this amount, US\$1.5 million was undisbursed and thus cancelled. The total actual cost amounted to US\$60.53 million, 86 percent of the appraisal estimate.

##### **Financing and Borrower Contribution:**

The project was to be financed by an IDA Credit of US\$70 million. The actual amount disbursed was US\$60.53 million. The Borrower's contribution was estimated to equal US\$ 5 million; however, Government support was primarily through in-kind contributions like staff time and office space, etc.

##### **Dates:**

The project was appraised on December 7, 2010 and approved on March 29, 2011. It became effective three months after approval, on June 29, 2011. The original mid-term review (MTR) date was February of 2013, and the actual MTR was conducted in December of 2013. A Level II restructuring of the project was approved on June 30, 2016. This restructuring extended the project closing date for six months, from June 30, 2016 to December 31, 2016, and introduced a reallocation of funds between project categories.

### **3. Relevance of Objectives & Design**

#### **a. Relevance of Objectives**

At the time of project appraisal, Ghana faced a number of pressing barriers to increasing labor productivity that continued to limit the performance of firms and enterprises across economic sectors. In addition to these barriers, the TVET and STI sectors were not well aligned with labor market demands, limiting the country's growth prospects. Despite impressive gains in terms of economic growth and poverty reduction over the preceding decade, Ghana's productivity was lower than other African countries with a



similar economic standing, and the majority of employment was in the informal sector. Inadequate and low-quality training, resulting in a lack of labor market-relevant skills, was a pressing issue. In addition to low qualifications of the labor force, employers were struggling with a shortage of skilled workers, resulting in a large number of hard-to-fill vacancies. Most of the training provided by formal Technical Institutes was not demand-driven, as it was not linked to – and therefore not influenced by or responsive to – labor market needs.

There was a need to simultaneously equip the labor force with market-relevant skills while also promoting the development, adoption, and diffusion of new technologies as a way to increase productivity and competitiveness. The Government sought to strengthen the provision of training by strengthening and improving the overall quality of the TVET system and its relevance to the labor market. Further investment was also needed in the development, transfer, and use of new technologies, as limited discretionary resources were available for strengthening the quality and relevance of the STI system. At the time of appraisal, there was no funding instrument or incentive structure specifically devoted to developing and upgrading new technologies and innovations for use in commercial industries.

The project's development objectives were thus highly relevant to needs in Ghana at the time of appraisal. Furthermore, the objectives were well aligned with national policies and priorities, as a draft TVET Policy Framework for Ghana had been developed in 2004 around the same time as a New Education Reform was introduced and a National Education Reform Implementation Committee established. This reform program aimed to address important inefficiencies in the education system, including TVET. Key Government strategies for increasing the efficiency, relevance and quality of skills development programs in Ghana included the Medium-Term Development Framework and Ghana's Growth and Poverty Reduction Strategy II, both of which highlighted the need to build human capital to increase competitiveness, productivity, and economic growth.

Prior to project preparation, the Government had established the COTVET in 2006 and the MEST in 2009. In addition to revising the Education Strategic Plan (ESP, 2010-2020), the Government had finalized a Science, Technology and Innovation Policy (STIP) in 2010 that aimed to harmonize TVET and STI policies. The objectives of this project were further aligned with Ghana's Private Sector Development Strategy II, which aimed to promote innovation and to improve training and business development services. The objectives were also aligned with the World Bank's Country Partnership Strategy (CPS) at the time of appraisal, which also was reflective of the objectives of other development partners in supporting Ghana's TVET and STI sectors.

The project's objectives were still highly relevant at project closure, well aligned with both national and World Bank priorities. The CPS FY2013-2016 focused on increasing skills development, creating jobs, and promoting the country's economic growth, and these objectives were also highlighted in Ghana's draft National Plan on Education (2016-2030).

**Rating**  
High



## b. Relevance of Design

Relevance of Design is rated Substantial, as the project's planned activities as reflected in the components were relevant and necessary to achieving the project's objectives. The components covered institutional strengthening activities combined with demand-driven grants for both skills development and technology development, and they linked research and technology institutions with the private sector. The project had a clear statement of objectives that was linked to both intermediate and final outcomes. The causal chain between funding and outcomes was clear and convincing. However, the sequencing and linkages between sub-components, particularly for the first and second components, was not articulated clearly in the PAD (ICR, p. 31).

**Rating**  
Substantial

## 4. Achievement of Objectives (Efficacy)

### **Objective 1** **Objective**

Improve demand-driven skills development in selected economic sectors.

### **Rationale**

### **Outputs:**

- The project reported 105,085 direct beneficiaries, of which 31.5% were female, which exceeded the target of 24,000 direct beneficiaries and did not achieve the target of 50% female. The baseline was zero.
- A simple Management Information System (MIS) was established within COTVET. Though not fully developed, the MIS can be used as a data repository for TVET with linkages to 23 institutions, and the Government is working to further strengthen it to make it robust and comprehensive.
- 23 manuals to guide TVET institutions in the development, delivery, and management of TVET programs using Competence-Based Training were developed. Certification processes were established, and Quality Assurance mechanisms were put in place.
- 122 new training courses were established, exceeding the target of 20.

In addition to the achievements listed under the project's formal indicators and targets, the ICR reports that legislation (L.I 2195) was adopted that provides a regulatory framework for the TVET sector. This was an important output contributing to an enabling environment for improved demand-driven skills development.

### **Outcomes:**



The two aspects to be assessed in order to measure the achievement of this objective are: i) to what extent was improved skills development actually demonstrated (was training converted into results in terms of improved skills?); and ii) to what extent was this skills development responsive to demand?

For i), to what extent improved skills development was actually demonstrated, the ICR provides the following data: 98% of the trainees expressed Satisfaction with skills (the target was 70% and exceeded). A caveat here: although self-reporting on developed skills may be an indication of skills development, self-reporting in itself does not measure whether or to what degree the training actually converted into improved skills. However, the ICR also reports a near 100% (97.5%) Satisfaction with skills by participating firms (which exceeded the target of 70%). Assessment by potential employers is, plausibly, a more valid measure of skills development.

Although not directly attributable to skills development alone (technology development will also have contributed), the ICR reports a 462% increase in labor productivity by participating firms (which exceeded the target of 60%). This large increase in labor productivity also suggests that the training likely converted into skills development results (probably in tandem with the successful adoption of new technology). Similarly, the indicator showing a 129% Increase in investment by participating enterprises in skills and technology development (which exceeded the target of 40%) also suggests that training was converted into results, although this result would also not attributable to skills development alone.

Although the achievement of 36 new collaborations between supported technology providers and the private sector for adaptation and diffusion of technology (exceeding the target of 20) is not a direct measure of successful skills development, it is plausible that the training contributed to the establishment of these new collaborations.

For ii) to what extent skills development was responsive to demand, the ICR reports on improved TVET services in terms of their economic and labor market relevance, such as better placement of trainees, improved training programs, guidance systems, practical training solutions, cost-efficiency, and accountability. The selection of the five recipients of the US\$ 500,000 grants for research and technology institutes was demand-driven in that interested research and technology institutes submitted proposals to SDF for funding. The proposals went through a thorough review process to assess to what degree they met the funding criteria.

**Rating**  
Substantial

## **Objective 2**

### **Objective**

Increase adoption of new technologies in selected economic sectors.



## Rationale

### Outputs:

- The STI Directorate was established with full complement of staff.
- The information system was made available for STI Directorate use.
- 46 new partnerships were established, against a target of 20.
- 646 grant agreements for SDF sub-projects were signed, against a target of 440.
- 617 sub-projects were satisfactorily completed, against a target of 440.

The ICR reports on the following outputs in addition to the project's formal indicators:

- A national baseline survey was undertaken to establish a benchmark for assessing progress in STI in Ghana, with data collected from eight research institutions.
- Five technology centers received grants of US\$500,000 each to develop, adapt, and diffuse technology, innovations, and related knowledge to the public and private sectors and to support demand-driven, industry-led technology development. Within each of these centers, technology development, innovation, transfer, and marketing centers were established:
  - 50 technologies developed for transfer and commercialization/marketing
  - 200 researchers trained in technology transfer and commercialization/marketing, intellectual property processes, and industry engagement techniques
  - 10 industry-research partnerships established
  - 10 industry-research seminars organized
  - Technology transfer guidelines and strategies developed by three of the centers, and business plans developed by two of the centers. One of the institutions developed a revolving fund to which student researchers could apply for funding.

In addition, the early inclusion of line ministries in the design phase of the project led to increased collaboration among the ministries, and between the ministries and the Project, on skills development and STI transfer and adoption.

### Outcomes:

The PAD (para 33) lists potential sectors for selection, such as information and communications technology, construction/housing, tourism/hospitality, livestock/horticulture, and oil/gas. It also states that other priority sectors would be determined through the completion of sector strategies. The ICR does not report directly on sector strategies, but the project team informed IEG (email received October 5th, 2017) that the tentative sectors identified in the PAD were the same as the sectors for which assessments were carried out during project preparation. To ensure that the skills (and technology) development was demand-driven, the SDF was set up as a demand-driven fund, and all received proposals were reviewed against pre-set criteria (potential for increased investments in skills and technology development, increased productivity and earnings, etc.) to ensure their contribution in achieving the overall project objective. Although the sectors





with the most grantees were transport/storage, tourism/hospitality, and service, there were no specific mechanisms that determined that these sectors would be the "selected" ones. There were grantees from other sectors as well, as the SDF was demand-driven, and applicants who best met the specific criteria set within each funding window were selected.

The ICR reports on one specific indicator that gets to the core of the objective: 70 new technologies were adopted by participating firms, against a target of 120. Other relevant achievements are 46 new partnerships (exceeding the target of 20), and 50 technologies profiled for transfer and commercialization and marketing. Some of the technologies developed under this component, which serve as examples of outcomes, include:

- The use of greenhouse technology for the export-oriented production of chili pepper (Ghana Atomic Energy Commission)
- The use of integrated web-based applications as an efficient and low-cost way of locating individuals in emergency situations and allowing users to store geospatial information of frequently visited places (Ghana Technical University College)
- The development of an efficient fish smoker to smoke large quantities of fish within a comparatively short period of time, under hygienic and safe conditions (Kumasi Polytechnic).

Overall, the ICR documents that the project contributed to restructuring of the science and technology set-up in Ghana, including infrastructure and programs, to make them more responsive to national needs and priorities in various economic sectors. The new national innovation system proved effective in promoting joint research between research and development institutions and industry. Self-financing technology-transfer centers at polytechnics, universities, and research institutions are now supporting the adaptation or diffusion of new technology and research findings.

**Rating**  
Substantial

## 5. Efficiency

The PAD estimated the NPV at US\$60.6 million and the ERR at 43 percent. Analogous calculations were undertaken at the ICR with data collected during implementation, using the original reasonable assumptions, which were that grant support would increase efficiency of the beneficiaries and yield economic output double the amount of support provided by the grant. A lag time of one year was used for firm output, with a 12 percent discount rate and a 12-year project horizon. At closure, the NPV was calculated at US\$23.65 million and the ERR at 18.5%, which is a positive result, but significantly lower than the projections calculated at appraisal. □





In addition, the SDF appears to have contributed to increased employment. Based on data collected on employment generation from 2014, 2015, and 2016, firms in both formal and informal sectors who benefited from the SDF hired around 50,000 people from 2013-2016. Although this can not be solely and directly attributed to the project, it is likely that SDF support contributed to this development. The project's direct financial benefit to the Government will be in the form of corporate and income taxes, with the net fiscal benefit of the project to the Government estimated at US\$24 million. It is assumed that on top of the repayment costs, the sustainability of the project will require additional support costs equal to about 5 percent of the project per year for 10 years (2016-2026) following the initial investment phase.

There were moderate implementation inefficiencies. The project experienced initial implementation delays during the first two years of operation, in particular with building the capacity of the PSU, setting up the M&E system to monitor the SDF grants and baseline data collection, contracting technical assistance for COTVET capacity strengthening, and setting up the MIS under Components 1 and 2. There were also initial issues with financial management and procurement, producing inefficiencies and delays (see Section 11b). As a result of these initial delays, the project's closing date was extended by six months. At project closing, approximately US\$1.5 million remained undisbursed and was cancelled.

Despite some of the important sectoral efficiency gains realized under the project as outlined in section 4 above, some implementation efficiency issues were noted. Operating costs for the project, and especially for the PSU, were higher than had been anticipated at appraisal, some project resources remained unspent and were cancelled, and there were initial implementation delays under components 1 and 2.

## Efficiency Rating

Modest

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

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	43.00	0 <input type="checkbox"/> Not Applicable
ICR Estimate	✓	18.00	0 <input type="checkbox"/> Not Applicable

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

## 6. Outcome

Relevance of Objectives is rated High, as the objectives were strongly linked to country conditions and to Bank and Government strategy at the time of project closing. Relevance of Design is rated Substantial, as the project's planned activities were plausibly and logically connected to achievement of the objectives. Efficacy is rated Substantial for both objectives, as the ICR documents progress toward planned outcomes that was plausibly linked to project interventions. Efficiency is rated Modest due to a lower ERR and higher operating



costs than anticipated, as well as initial implementation delays. Taken together, these ratings are indicative of moderate shortcomings in the project's preparation and implementation, and therefore Outcome is rated Moderately Satisfactory.

a. **Outcome Rating**  
Moderately Satisfactory

## 7. Rationale for Risk to Development Outcome Rating

- **Institutional risks:** Institutional risks are rated **Modest**, as institutional capacity has been strengthened as a result of the training provided under the project, specifically with the development of the national TVET strategic plan (2015-2020) and the STIP, which provide a framework for the Government to undertake solid and viable reports within the TVET and STI sectors. At project closure, COTVET had strong leadership, sufficient staff, and a five-year costed strategic plan to achieve a number of its corporate goals, including to ensure quality and sustainable financing of TVET. The STI Directorate is also staffed with personnel with adequate skills to effectively carry out its mandated responsibilities.
- **Risk to Government commitment:** Risk to continued Government commitment is considered to be **Modest**. At the time of project closure, the Government expressed commitment to ensuring that the provision of skills continues to be demand-driven, guided by relevance to the current labor market. Given the participatory nature of preparation and input from diverse stakeholders in project design, the buy-in and support for the project's outcomes within the Government and among a number of partners is reported to be solid moving forward (ICR, p. 27, para 96).
- **Financial and sustainability risks:** Financial and sustainability risks are considered to be **Modest**. The SDF has reaped important gains in productivity, and grantees continue to benefit from the use and transfer of new technologies and stronger partnerships in skills development. The SDF has managed to leverage new funds, as many grantees have provided matching funds, which is an indication of their commitment to sustaining and scaling up the achievements already made. The Danish International Development Agency is currently supporting a follow-up project (SDF II, approved July 2016) in the amount of US\$14 million that continues to build on the achievements made under this project. The African Development Bank is also providing support to the sector.

a. **Risk to Development Outcome Rating**



Modest

## 8. Assessment of Bank Performance

### a. Quality-at-Entry

The ICR (p. 9) reports that project preparation was highly participatory, with the Bank working closely with the Government, Development Partners, research institutes, and private sector partners to ensure proper alignment and buy-in from various stakeholders. Strong efforts were made to include several ministries (e.g. Ministry of Education, Ministry of Environment, Science and Technology, Ministry of Employment) to ensure that their technical and strategic inputs were incorporated into Project design. These initial efforts may have led to increased collaboration among the ministries, and between the ministries and the Project, on skills development and STI transfer and adoption. Project design was guided by a series of analytical studies and lessons learned from within Ghana and from relevant sectors in other countries. Its strategic relevance and approach were suitable to the context, as were the policy and institutional aspects of Project preparation. The implementation arrangements proved to be adequate, and they were guided by lessons learned from earlier interventions. The risk assessment was thorough and realistic with adequate mitigation measures. Project design and preparation also benefitted from a thorough Quality at Entry Review.

Project design focused on reviewing and revising existing sector strategies and policies as well as providing targeted support to both government institutions and other beneficiaries. While the PAD was thorough, it did have some moderate shortcomings. The linkages between the various components and sub-components could have been made more explicit, and additional performance measures could have been included at the PDO level to enable a more complete assessment of the project's performance under components 1 and 2. The M&E design and M&E arrangements were generally strong; however, additional efforts at appraisal to better develop and finalize the data collection instruments would have been beneficial.

### Quality-at-Entry Rating

Moderately Satisfactory

### b. Quality of supervision

The Bank undertook ten supervision missions during the life of the project. These missions were carried out in a timely manner and benefited from relevant sector experts. Field missions often included visits to SDF beneficiaries. The ICR (p. 28) states that Implementation Status Reports (ISRs) provided a candid overview of key challenges confronted by the project, including difficulties in establishing the PSU; challenges with identifying and hiring technical assistance for the effective implementation of components 1 and 2; and initial delays in establishing a functional M&E system capable of capturing progress across each of the project's components. Despite initial delays, these challenges were eventually addressed by the Bank team during implementation, and effective solutions were agreed and taken on board. Overall, the Bank's support was strong in supporting the Government's reform of the TVET and STI sectors and in the successful implementation of the SDF.



The MTR was thorough, providing a comprehensive overview of both project achievements and of bottlenecks that were hindering timely implementation of some of the key project-supported activities. The Bank provided targeted technical support to strengthen the M&E framework, ensuring that each measure was well defined and that the methods for calculation of indicators were clear. During this process, the Bank also pointed out the need to adjust the project's design to make clearer links between the components and to incorporate PDO-level indicators to capture progress under components 1 and 2. The Government made an effort to follow this up and continued to strengthen the M&E system to allow for a systematic and thorough assessment of project achievements.

The Bank's project team, in addition to the Washington-based Task Team Leader, included a senior education specialist and a fiduciary specialist in Accra. This staffing enabled the Bank to provide ongoing support to the client on a day-to-day basis. The ICR reports that the Bank's performance across all relevant areas (financial management, procurement, safeguards, and M&E) was strong, although the ISRs could have benefited from more consistent reporting on disaggregated data.

### **Quality of Supervision Rating**

Moderately Satisfactory

### **Overall Bank Performance Rating**

Moderately Satisfactory

## **9. Assessment of Borrower Performance**

### **a. Government Performance**

The Government demonstrated consistently high commitment to the project during preparation and throughout implementation. During the preparation phase, the Government established an interdepartmental group to ensure relevance and buy-in from various stakeholders, and relevant staff was appointed to play key roles in project design and implementation. The Government worked with the Bank to define the most beneficial activities for strengthening the capacity of COTVET and MEST, and to equip them with necessary tools to lead the work in the TVET and STI sectors. The Government has shown continued commitment to maintaining project achievements and to scaling up its support to both the skills development agenda and the harnessing of new technologies to improve productivity and growth in Ghana.

The ICR (p. 30) reports that, while important progress was made during preparation, in large part as a result of the Government's commitment, the project only became effective eight months after approval by the Bank because the Government's legal opinion had not been issued and the Project Implementation Manual had not been finalized.

### **Government Performance Rating**

Moderately Satisfactory



## **b. Implementing Agency Performance**

The **PSU** managed core aspects of project implementation effectively. While there were initial challenges and delays in recruiting relevant staff for financial management and procurement (see Section 11b), the PSU was fully staffed by mid-term. The PSU managed other donor-supported projects alongside management of this project. The PSU developed and revised an intricate system to manage all aspects of SDF implementation, including launch for proposals, technical support to proposal development, transparent processes for the selection of grantees, ongoing support to sub-projects, and the establishment and management of a robust M&E system (see section 10 below for details). According to the ICR (p. 30), these systems played a vital role in the project's achievements.

**COTVET** worked closely with the Bank to support key aspects related to project implementation, including audits and Interim Financial Reports, etc. With some delay, it carried out planned activities under the project, including producing manuals, providing relevant training (for quality assurance and recognition of prior learning), supporting selected institutes in drafting institutional development plans, and establishing and managing an MIS. At project closure, COTVET functioned as a guide and coordinating body within the TVET sector, through having established inter-ministerial TVET working groups, developed a corporate strategy, made tools and guides readily available to interested parties, and encouraged TVET institutes to register within the MIS.

### **Implementing Agency Performance Rating**

Moderately Satisfactory

### **Overall Borrower Performance Rating**

Moderately Satisfactory

## **10. M&E Design, Implementation, & Utilization**

### **a. M&E Design**

M&E design was generally sound. Institutional arrangements and responsibilities were clear. The RF contained intermediate results indicators that were well aligned with Project-supported activities and that measured implementation progress. The PDO-level indicators were, in general, also relevant and well suited to capture outcomes. □

### **b. M&E Implementation**

A number of staff were hired to oversee data collection, monitoring, and reporting, including one M&E specialist, two M&E officers, and one M&E assistant in the PSU. The M&E related to the SDF had six M&E staff and 22 field monitors. In addition to regular data collection and monthly monitoring, there were random site visits and spot checks, which could report to the PSU on any implementation bottlenecks. Despite this support and refresher training courses for M&E staff, M&E required significantly more time and more field presence than had been anticipated at appraisal. While the Bank and Government considered the RF to be



strong, they agreed that the M&E system needed further strengthening, especially in light of the large number of indicators and the recognized importance of tracking Project progress. Therefore, during a technical mission in 2013, support was provided to specify the method of calculation for each indicator, to develop relevant M&E templates for data collection, and to solidify accurate and timely reporting.

The PSU developed an M&E manual that provided a detailed and comprehensive overview of the framework, data sources, and data collection methods, roles and responsibilities of those involved in M&E at different levels. It also laid out the monitoring strategy, data verification processes and approaches to be used for data analysis while including a number of additional indicators that the Government determined would be useful in assessing the Project's overall impact (e.g. number of productive partnerships). Although a labor market observatory was not established as had been anticipated in the PAD, the M&E system did capture productivity, earnings and investment as well as the number of jobs that were created as a result of funding under SDF.

### **c. M&E Utilization**

The M&E system enabled the Project to systematically document – with necessary evidence – both implementation progress and progress towards achieving the PDO. M&E data was also used to adjust and strengthen Project implementation. For example, the M&E data showed that the majority of SDF grantees were concentrated in the Greater Accra region, and outreach efforts were therefore adapted to focus more on the Northern areas.

### **M&E Quality Rating**

Substantial

## **11. Other Issues**

### **a. Safeguards**

The project was classified as Category B and triggered OP/BP 4.01 Environmental Assessment, as the environmental impacts of project activities were expected to be limited since most activities were technical assistance or training. Consistent with Bank procedures, an Environmental and Social Management Framework (ESMF) was developed and disclosed in country on January 25, 2011. Project design incorporated measurements to limit any negative environmental or social impact of the project, and the SDF manual included a negative list of items that could not be funded, especially those items that would cause environmental issues and/or trigger additional safeguards.

During the initial phases of the project, some safeguards issues were encountered, and a rating on compliance was often missing from the ISRs. The ICR does not provide specific information regarding dates or description of safeguards issues. Later on, however, there was an increased focus on safeguards with training provided under components 2 and 3, and the safeguards specialist recommended screening of sub-projects under the SDF. This screening was undertaken by the grantees. Lead focal persons in COTVET,



PSU, and MEST also received training in safeguards. □ Safeguards assessments stated that the project was compliant with safeguards requirements, and no major impacts (either positive or negative) were observed.

There was concern related to potential support for the construction of a building to house the STI Directorate in 2015. Once it was determined that this activity would trigger OP/BP 4.12 Involuntary Resettlement, it was agreed that the project would support only minor renovations to the existing offices instead.

## **b. Fiduciary Compliance**

### *Financial Management (FM)*

An FM consultant familiar with Bank procedures was hired to work closely with COTVET to establish robust FM systems and to provide training and technical assistance to accounting staff. Core staff included an FM specialist, three FM officers, and a few finance assistants who were junior and senior accountants. While the initial accounting system was deemed adequate by the Bank, a new system, purchased and installed under the project, was rolled out in 2012 to provide additional tools to systematically monitor financial transactions. FM performance was generally adequate and complied with key FM covenants of reporting. Some limitations, like incomplete and delayed interim financial reports, were identified and addressed in a timely manner. All external audits were unqualified, though some were slightly delayed. An FM review in June 2015 identified ineligible expenditures. These applied to COTVET (not project) resources, but this was nevertheless of concern to the Bank. The Government and COTVET worked closely with the Bank to resolve this issue (ICR, p. 14), providing all necessary information related to the ineligible expenditures in a timely manner. The amount was reimbursed in full by early September 2016. The Bank put mitigation measures in place to prevent any sort of recurrence.

### *Procurement*

An assessment of procurement capacity during project preparation concluded that COTVET was in compliance with procurement law. The PSU hired additional procurement staff with relevant procurement experience. Procurement performance was generally adequate, but with some challenges related to record-keeping and the different procurement requirements of various development partners. The Bank recommended a consolidated procurement plan and provided training on the Bank's procurement procedures. Initially, there were significant delays in recruiting the firms who would provide technical assistance under components 1 and 2, but these issues were ultimately addressed. Some delays were also the Bank's responsibility, when non-objections to specific procurement activities were not provided in a timely manner. Despite these initial delays, overall procurement performance improved following the MTR and remained generally strong until project closing.

## **c. Unintended impacts (Positive or Negative)**

None reported.





#### d. Other

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### 12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	---
Risk to Development Outcome	Modest	Modest	---
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Borrower Performance	Moderately Satisfactory	Moderately Satisfactory	---
Quality of ICR		Substantial	---

#### Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.

### 13. Lessons

These lessons are adapted from the ICR (p. 31):

- **Close collaboration with Government, other partners, and key stakeholders is critical in ensuring buy-in to project design, particularly in terms of those activities supporting sector reforms.** This may be achieved when the Bank works closely with the Government and other key stakeholders throughout preparation to ensure that a project's design and objectives are tailored to the needs and larger Government strategies for the relevant sector.
- **The incorporation of capacity-building activities into project design is likely to reap important dividends in introducing and guiding sustainable change.** Capacity building of key government institutions in relevant sectors may contribute to their strong establishment, enhanced visibility, and improved coordinating efforts in their respective sectors. Such entities will have the potential to become strong proponents of continued reforms.
- **Targeted technical M&E support during implementation can be useful in addressing any limitations to the M&E system and ensuring the collection and analysis of adequate information to measure progress made under a project.** With targeted technical M&E support provided by the Bank, the M&E system for this project was significantly strengthened and capable of collecting comprehensive datasets on key inputs, outputs, and outcomes.
- **Competitive skills funds can guide and transform the provision and delivery of training with important dividends for industries and TVET providers alike.** Available data and information obtained through the



course of this project have demonstrated potential outcomes of the SDF in terms of increased productivity, generation of resources, and the establishment of mutually beneficial partnerships between research and technology institutes and industry/private enterprises.

#### **14. Assessment Recommended?**

No

#### **15. Comments on Quality of ICR**

The ICR provides a detailed overview of the project. It is concise and succinct. In addition to providing relevant and important contextual information regarding the project, the ICR is highly results-oriented, and the quality of evidence and analysis is solid. It is internally consistent and in compliance with guidelines, including clear and tidy information on the overall and break-down of project costs. The ICR's lessons are clear, useful, and based on evidence outlined in the ICR.

##### **a. Quality of ICR Rating**

Substantial