

**PROGRAM-FOR-RESULTS INFORMATION DOCUMENT (PID)
CONCEPT STAGE**

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Country	Rwanda
Sector	Education
Lending Instrument	Program-for-Results
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Other Decision <i>{Optional}</i>	

I. Introduction and Context

A. Country Context

1. **Rwanda, a small landlocked economy with population of 11.6 million and GDP per capita of US\$ 697 in 2015, has been experiencing a fast growth over the past fifteen years.** Between 2000 and 2015 Rwanda grew on average at 7.7 percent annually outperforming its neighbors. Political stability, prudent macroeconomic policies, promotion of good governance and favorable investment climate contributed to the fast growth and low inflation. Growth has been driven primarily by services - 58 percent contribution to overall growth, followed by agriculture – 24 percent, and industry – 18 percent.

2. **Rapid economic growth was accompanied by job creation with addition of 630,000 new jobs to the economy between 2006 and 2011, 73 percent of them in non-agricultural sector.** Furthermore, 70 percent of non-farm employment was in wage sector. In 2011, the working age population amounted to 5.9 million and the number of employed was 4.9 million. The majority of employed population were working in the agriculture - 3.5 million - out of which 83 percent were self-employed farmers. Non-agriculture employment accounted for 1.46 million workers, out of which 0.56 million were self-employed, 90 percent of which informally; and 0.9 million were wage-workers, 55 percent of which were informal. The sectoral composition of non-farm employment shows that most of jobs were created in construction, followed by public sector, and domestic services. Bundervoet et al. 2015 show that employment growth between 2006 and 2011 was most responsive to growth in industry. For example, a one percent increase

in industry output growth was associated with 1.6 percent increase in industry employment, compared to 0.8 percent increase in services employment and 0.2 percent in agriculture in response to the respective sector output growth. Within industry, employment response was the highest in mining and utilities, and manufacturing.

3. **A salient feature of Rwandan economy is that it is largely informal,¹ dominated by micro firms.** According to the GoR's definition of formality, 95 percent of all firms operating in Rwanda are informal. While share of informal firms declines with the size, it is substantial across the board – 68 percent of small firms (4-30 employees), 39 percent of medium firms (31-100 employees), and 28 percent of large firms (≥ 101 employees) are informal. Furthermore, more than 90 percent of non-farm firms are micro firms, i.e. employ 1-3 workers and are responsible for 53 percent of non-farm employment.

4. **The flows of foreign direct investments (FDI) have been rising steadily from almost non-existent in 2000 to 4 percent of GDP in 2015.** The largest inflow of FDI went mining US\$ 136.2 million, ICT – US\$ 116.1 million, followed by tourism - US\$ 71.8 million, and finance and insurance - US\$ 68.8 million. The foreign owned investments created opportunities for 37,000 people (90 percent Rwandans), out of which 24,000 unskilled workers, 8,000 skilled, and the rest managerial and administrative. Public investments have also been increasing over time, but they are mostly financed by foreign aid. The share of investment increased from 16 percent in 2006 to 25 percent in 2013, mainly due to investment in construction, whereas investment in capital goods increased only marginally.

5. **Rwanda considers regional economic integration as one of the crucial elements of achieving the Vision 2020.** As part of the East African Community (EAC), the Republics of Kenya, Uganda, the United Republic of Tanzania, Republic of Rwanda and Republic of Burundi phased in a customs union between 2005 and 2010, began phasing in of a common market in 2010, and talks are underway about a monetary union. Advances in East African integration are crucial, through projects such as the Northern Corridor initiative, as it has the potential for higher than usual benefits for Burundi, Rwanda and Uganda, because for them the costs of being landlocked are very high. Successful integration would transform the five countries into a strong regional economy, slashing transport and other costs (World Bank, 2012). However, the low level of human resource development – severe skills shortages in both public and private sectors in Rwanda – has been widely recognized as one of the major roadblocks towards the achievement of the Vision 2020 goals.

6. **The competitiveness and further growth of Rwandan economy are constrained by lack of skilled labor force.** Rwanda was ranked as 62 out of 189 countries by Doing Business Indicators and 58 out of 140 by Global Competitiveness Index in 2016, significantly higher than its neighbors in the EAC. Rwanda has steadily improved in business sophistication and financial markets over the past few years and has a flexible labor market and high female participation in the labor force. However, basic weaknesses need to be tackled: despite improvements, infrastructure (ranked 97th of 140) is hampered especially by electricity and telephony (112th),

¹ According to Rwanda's establishment census, to be classified as "formal", an establishment must: (a) be registered with Rwanda Revenue Authority (RRA) and, for smaller companies with fewer than five employees, maintain regular operational accounts.

while the workforce's health (108th) and higher education (120th) remain low. An 'inadequately educated workforce' was ranked the second most problematic factor in doing business by firms in Rwanda following in 2016 (the most problematic factor was access to financing). This highlights both qualitative and quantitative shortcomings of education and training system.

7. **The education levels of those in the labor force in 2013 was very low.** 20 percent of the labor force at the time had never attended school, with 45 percent dropping out of primary education and only 15 percent completing primary education. Only about 3 percent of the labor force had completed lower secondary and an equivalent amount upper secondary, while less than 2 percent had completed higher education and the remaining 12 percent dropping out of secondary education. Looking at a younger cohort of the labor force of 15-24 year olds, it appears that a greater proportion of the population is going to schools (with about 7 percent having never attended school), but a slightly lower percentage of the population completing primary school (14 percent).

8. **Overall, most children participate in primary education in Rwanda; however, opportunities for secondary and higher education need to be expanded.** In 2014, the education system enrolled around 3 million students, the majority of whom were in primary school (78 percent), with about 18 percent enrolled in secondary education and less than 3 percent in higher education institutions. Furthermore, student learning outcomes are low. A 2012 assessment of reading and math proficiency of Grade 4's and 6's in Rwanda, conducted by USAID, revealed that 13 percent of fourth-graders could not read a single work of text geared to grade 2-3 level of reading in Kinyarwanda, a mother tongue to 98 percent of students; average oral reading fluency was 26 words read correctly per minute for P4 students and 48 words read correctly per minute for P6 students².

9. **Rwanda has entered its demographic window of opportunity.** Since 2005, fertility rates have fallen rapidly, from 6.1 in 2005 to 4.6 in 2010, a 25 percent decline. However, for the demographic potential to be realized, productive employment opportunities have to be created, and competent and skilled youth workforce has to be developed. This in turn requires a transformation of economic structures to spur the movement of people away from scarce agricultural land into higher productivity non-agricultural activities that provide jobs and facilitate the movement of people to urban areas³.

10. **Building skills to advance the country's economic agenda is a priority in the GoR's ongoing *Second Five-Year Economic Development and Poverty Reduction Strategy (EDPRS-2)*.** Launched in September 2013, EDPRS-2 seeks to transform the country by raising its per capita GDP to middle-income level by 2020 and expanding the share of middle-income households in population. A productive workforce equipped with skills that are relevant and productive, one whose members have more chances to access stable jobs with middle-class incomes, is considered an essential ingredient for the success of this economic and social

² Between 45 and 60 words per minute pm is considered the minimum required level of fluency for solid comprehension for beginning English language readers. It is likely that the minimum level for Kinyarwanda is somewhat lower given the difference in word length from English. However, it would be desirable for P6 students to well surpass the minimum level on a P2-P3 level text.

³ EDRPS 2

transformation.

11. The EPDRS-2 has an ambitious target of creating 200,000 off-farm jobs annually, which is commensurate with the estimated total of 125,000 new entrants to the labor market each year, most of them youth. Chapter 4 of the EDPRS focuses on improving productivity and youth employment and emphasizes the need to build critical skills for economic transformation in priority sectors including *transport, energy, mining, hospitality* (including basic mastery of international languages such as English and French), *IT and trade logistics* while some sectors will require the development of basic skills (including numeracy and literacy) for massive job creation in *construction, transport, agro-processing and light manufacturing*. There is also a focus on developing six secondary cities Huye, Muhanga, Musanze, Nyagatare, Rubavu and Rusizi as regional centers of growth and investment. The development of these cities will ensure more balanced regional growth and opportunities for increased access to off farm employment for a larger proportion of the rural population. Under EDPRS-2 two specific programs pay specific attention to skills building, viz.:

- The National Employment Program (approved by Cabinet in 2014); and
- The National Science, Technology, Innovation and Research Policy (in the process of being approved by Cabinet).

12. **Key provisions under the National Employment Program (NEP)'s five-year time span (2014-2019) fall under four pillars of:** (i) skills development; (ii) entrepreneurship and business development; (iii) labor market intervention; and (iv) coordination and monitoring and evaluation. The National Employment Program (NEP) of the Government of Rwanda (GoR) is designed to serve the following objectives (1) creating sufficient jobs that are adequately remunerative and sustainable across the economy,(2) equipping the workforce with vital skills and attitude for increased productivity that are needed for the private sector growth, and (3) provide a national framework for coordinating all employment and related initiatives and activities in the public, private sector and civil society.

13. **The National Science, Technology, Innovation and Research (STIR) Policy aims to build a strong national research and development (R&D) and innovation system.** Such a system would strengthen Rwanda's capability for economic catch up, by encouraging the following: knowledge acquisition and deepening at all levels of education; knowledge creation through research in priority economic sectors; knowledge transfer to benefit economic activity in the priority sectors; and innovation and entrepreneurship.

14. The focus of this operation will be on supporting the NEP given the STIR policy is yet to be approved by Cabinet. However, activities supported under the NEP through this operation will complement and support the implementation of the STIR policy, particularly related to knowledge creation in priority economic sectors.

B. Sectoral (or multisectoral) and Institutional Context of the Program

15. The Government of Rwanda (GoR) recognizes the availability of a well-educated labor force with the right skills for the economy is a key enabler of private sector growth and job creation. The GoR's ability to attract foreign direct investment and improve its

competitiveness in the region will increasingly be driven by the availability of a well-skilled labor force at all levels.

16. **From the training perspective, challenges related to access, equity, quality and relevance persist at the Technical Vocational and Education Training (TVET) and higher education sub-sectors.** The Workforce Development Authority (WDA) has focused on increasing the supply of TVET by focusing on infrastructure development. The WDA has constructed a large number of TVET schools and polytechnics, and supplied a significant amount of training facilities and equipment to TVET institutions. As a result of this and other factors, the total number of students enrolled in TVET institutions (Vocational Training Centers-VTCs, Technical Secondary Schools-TSSs, Polytechnics) in Rwanda has increased dramatically by nearly 80 percent in a short span of time from 2010 to 2014, from 52,000 to 93,000 students. More than half (53%) of that increase of 41,000 students were accounted for in the vocational streams in secondary education, TSSs.

17. While there are still challenges with adequate supply of TVET infrastructure and equipment, there are other pressing challenges affecting the quality and relevance of training in the TVET sub-sector including: (i) many teachers lack adequate qualifications or have little or no practical experience in the relevant fields; (ii) training programs in some of the promising emerging industries, where there are high active demands for skills, are still missing or slow to be scaled up; (iii) the examination system of TVET tends to measure only theoretical achievements; and (iv) links with potential employers are often missing or too weak, creating disconnects between training and the reality of industries, (v) Lack or poor institutionalized Research between Education and labour market. This leads to poor innovations and adaptations within the TVET system. In addition, under-funding has been a chronic structural problem in TVET sector (World Bank, 2016).

18. In contrast, there has been a somewhat modest increase in higher education enrollment in Rwanda, with private universities playing a substantial role in meeting higher education demands from the growing cohorts of upper secondary graduates. In five years between 2010 and 2014, the total student enrollment in higher learning institutions (excluding those in polytechnics) grew by around 31 percent from 62,301 to 81,668. The modest increase in higher education enrollment has been, however, overshadowed by the magnitude of growth in upper secondary enrollment, which increased by 70 percent between 2010 and 2014. Many of the same concerns on the quality and relevance of training at the TVET level, apply to higher education as well. In addition, there are challenges with access to higher learning by women and low-income groups. Higher education institutions also have a shortage of well-trained and qualified teachers, especially in Mathematics and Sciences. Finally, there are concerns with ineffective management and control systems at this level (World Bank, 2016).

19. **The country has made significant strides in establishing mechanisms to support skills development of the labor force including through the implementation of the National Employment Program (NEP).** Coordinated by the Ministry of Public Service and Labor (MINFOTRA), the NEP is designed around four pillars, each placed under a lead line ministry. Key provisions under the NEP's five-year time span (2014-2019) are as follows

under these pillars⁴:

Pillar 1: Skills Development, led by MINEDUC

- (i) Provide short-term vocational training and informal apprenticeships, along with tool kits for self-employment, to out-of-school youth to give them practical skills for work in labor-intensive trades⁵ that align with local demand and opportunities;⁶
- (ii) Offer targeted rapid response training, as part of the GoR's investment attraction packages⁷;
- (iii) Strengthen private sector participation in skills building, through the creation of sector skills councils as a key mechanisms for engagement, and by enlisting firms to host industrial attachments and professional internships; and
- (iv) Develop specialized skills at the technician and professional levels, with a focus on priority economic sectors and big investment projects⁸ and creating a database to keep track of students enrolled in and graduating from critical programs in local and foreign institutions.

Pillar 2: Entrepreneurship and Business Development, led by MINICOM

- (i) Promote Medium Small and Micro Enterprise (MSME) growth and development, through mentorship, coaching and business advisory services to enable firms to win public tender contracts and become suppliers to large investors; and nurturing new business ideas and facilitating access to funding for bankable proposals;
- (ii) Expand business development capacity and facilities, by training and certifying business development advisors, and refurbishing and equipping district-level facilities;
- (iii) Enhance competitiveness of SMEs, by providing tailored business advisory services and technical assistance for standards compliance, and assistance in negotiating supply contracts;
- (iv) Promote skills upgrading and technology for innovation, by creating accessible spaces for hawkers, street vendors; and equipping Integrated Craft Production Centers (ICPCs) and Community Processing Centers (CPCs); and
- (v) Develop business process outsourcing services, through infrastructure investment for BPO centers; by attracting international companies; and by offering refresher courses and soft skills training for BPO center operators.

Pillar 3: Labor Market Intervention, led by MINALOC⁹

- (i) Strengthen labor market information system (LMIS) with linkages to district-level

⁴ Based on the July 2014 GoR document entitled "Design of Five-Year National Employment Program (NEP) for Rwanda". It uses the information on pp. 67-80 which show itemized costs as well as the agencies or ministries responsible for each activity. Descriptions of the NEP pillars are also found on pp. 55-66 and 93-4, but there are slight inconsistencies or sufficient detail. Also consulted was the 2013 document entitled "Five Year Program for Priority Skills Development to Deliver EDPRS II (2013 - 2018)," prepared by MIFOTRA and NCBS, which provided estimates of "Skills Area And Numbers Of Priority Skills Required Across Rwanda."

⁵ Examples include masonry, plumbing, carpentry, woodworking, construction, welding, pottery, handicrafts, tailoring, culinary arts, and food and beverage services (p.55-56).

⁶ Opportunities are expected to be associated with growth of the emerging economic sectors which include: agribusiness, agro-processing, mining, manufacturing, construction, ICT, retail and trade, tourism, hospitality services.

⁷ Listed on p. 57 but omitted from pp 67-80.

⁸ Pipeline projects include those in railways, oil and gas, airport, and urban development plans.

⁹ MIFOTRA is identified as the lead ministry on p. 77 while on p. 97, it is MINALOC taking the lead.

- employment services, by upgrading LMIS system, mainstreaming job creation in PEDRS-2 sector strategies, and conducting annual labor force surveys; and
- (ii) Promote job creation under public works projects, by consolidating relevant databases on beneficiaries as part of redesigned public works programs; and by negotiating contracts on big public works tenders to employ massive numbers of youth, and promote skills training; and implementing at least one new public works project per district (e.g., greening the economy); and
 - (iii) Enable access to foreign employment opportunities, by developing and approving a guiding framework, and setting the stage for use of private employment agencies to export labor.

Pillar 4: Coordination and M&E, led by MIFOTRA

- (i) Strengthen the M&E system, to enable electronic profiling of all NEP beneficiaries, coordination and reporting on the implementation of NEP activities

20. The first year of the NEP (2014-15)¹⁰ was largely focused on Pillar 2 of the plan, i.e. entrepreneurship and business development; as well as two activities under Pillar 1 namely, the short-term vocational training and informal apprenticeships and targeted rapid response training. The focus was on 12 “quick wins” projects with a target of serving some 11,000 beneficiaries in the first year. In ten of these projects, the provision of training was the center of attention,¹¹ while in the other projects it was part of broader activities focused on setting up facilities (e.g., production centers) or business units (e.g., cooperatives) and financing arrangements for promising start-ups. The training programs were short-term courses on lower-level operational skills, with some courses specifically designed for vulnerable population groups (e.g., the disabled). Thus far, the NEP shows an imbalance of focus towards short-term training for artisans and craftsmen rather than on longer term, technician and professional training.

21. The report from the first year of NEP implementation shows good progress in creating the capacity for business development and growth, as reflected in the number of Business Development Advisors certified, and the number of district-level business development facilities set up. For skills development, details related to strengthening of private sector participation in skills development and developing skills at the technician and professional levels in priority economic sectors were not reported. Similarly, the status of the LMIS and the public works program were not reported.

22. **The absence of this data can be attributed to a weakness in reporting and coordination rather than a gap in implementation.** Training has been ongoing at the technician and professional levels for in priority economic sectors within higher learning and TVET institutes. In addition, the foundations for effective collaboration between the public and private sectors in developing skills has been partially institutionalized with the establishment of the Sector Skills Councils (SSCs) in four sectors. SSCs are a vehicle for the government to specify skills standards with systematic input from employers in order to improve worker productivity and enhance firm competitiveness. The Councils determine skills profiles

¹⁰ from The NEP Secretariat’s report for 2014-15

¹¹ Training for road paving, garment manufacturing, food processing, hairdressing, tailoring, embroidery, candle and wheelchair-making, management of small income-generating activities, and so on (see p. 21).

(including competencies at various levels) for their respective sectors and are comprised of a plurality of employers along with representatives of workers and government ministries. In addition, the first labor force survey is currently being undertaken by the National Institute of Statistics in Rwanda (NISR), which will contribute towards the further development of the LMIS which is currently being implemented by the Ministry of Local Government.

23. The challenges of reporting under the NEP are understandable given it is only the second year of implementation by ten Ministries and private sector representation. Recognizing the complexity of the program, the GoR placed the NEP under the Ministry of Public Service and Labor (MIFOTRA) and established the following mechanisms for coordination:

- A Ministerial Steering Committee meets quarterly to provide overall guidance and orientation on key program priorities and to address institutional barriers that impede implementation;
- A Senior Technical Committee comprising the relevant Permanent Secretaries, Directors-General and Heads of Institution meets quarterly to assess implementation progress and to remove technical barriers that block program implementation, and
- A Working-level Technical Committee comprising technical staff from the relevant Institutions meets regularly to share feedback on implementation progress;
- A NEP Secretariat under MIFOTRA's Productivity and Employment working group guides the mainstreaming of NEP employment planning, implementation and overall reporting; mobilizes extra-budgetary donor resources (e.g., to support projects on youth employment, skills training and business development); coordinates follow-up and reporting on NEP interventions implemented by all line ministries, agencies and districts; and publishes the annual NEP report on implementation progress. The Secretariat is also mandated to report on the NEP to MINECOM's working group on Private Sector Development and Youth Employment (PSDYE).

24. The GoR is nonetheless taking steps to reinforce the foregoing arrangements. For now, the NEP Secretariat is responsible for monitoring, evaluating and reporting on the NEP but in future these functions will be transferred to the Capacity Development and Employment Services Board (CESB) under MIFOTRA¹². The new arrangement reinforces the NCBS's function as the apex body to provide national level coordination and implementation oversight of the GoR's capacity development policy, including a broadening of its mandate beyond skills-building for the public sector. The role of CESB will be to facilitate information exchange, coordinate interventions and build synergies. In the interim, the PforR will support the NCBS and the NEP Secretariat to improve coordination amongst the stakeholders and to ensure effective reporting against targets.

C. Relationship to CAS/CPF

25. The proposed PforR is aligned with themes under the World Bank's Country Partnership

¹² The positioning of CESB under MIFOTRA is yet to be agreed. Alternatives positioning under the MINECOFIN or the Prime Minister's office are being considered.

Strategy (CPS) for Rwanda FY2014-2018, which identifies the following areas as a focus for IDA resources: energy, urban development, rural development, social protection and accountable governance¹³. These areas are further grouped into three themes: Theme 1: Accelerating economic growth that is private-sector driven and job-creating; Theme 2: Improving the productivity and incomes of the poor through rural development and social protection; and Theme 3: Supporting accountable governance through PFM and decentralization.

26. Specifically, the proposed PforR, which aims to improve skills for job opportunities, supports theme 1 and 2. The operation will focus on developing skills within three priority economic sectors (energy; transport and logistics, manufacturing- agro-processing and garments). Energy, one of the proposed priority sectors is a focus under theme 1, and transport and logistics are relevant theme 2.

27. The proposed PforR builds on the successes of the IDA-financed Skills Development Project (SDP) that closed at the end of May 2016. Given the achievements of the SDP and the leadership exercised in the region by the Rwandan government in skills development agenda, the new project is an opportunity to progress to the next level by developing a more comprehensive, innovative and results oriented approach to skills development in Rwanda.

28. The proposed PforR is also aligned with the World Bank's Africa Regional's strategic focus (high quality human capital)¹⁴, and complements other IDA-financed projects in Rwanda such as the current Electricity Sector Strengthening Project, the Urban Development Project, and the Transformation of the Agriculture Sector Program. It will also complement the forthcoming Rural Electrification operation, the third Social Protection Development Policy Operation as well as regional programs such as Africa Centers of Excellence (ACE) programs and Partnership for Skills in Applied Sciences, Engineering and Technology (PASET), which aim to improve skills at different levels, from upper secondary through higher learning, for economic transformation.

II. Program Development Objective(s)

A. Program Development Objective(s)

29. The Proposed Program Development Objective (PDO) of the program is to reinforce governance of the skills development system and expand opportunities for the acquisition of quality, market-relevant skills in selected economic sectors.

B. Key Program Results

30. Key results area of the proposed program are:

- 1) Reinforce governance of the skills development system;
- 2) Ensure provision of quality training programs with market relevance; and
- 3) Expand opportunities for acquisition of quality, market relevant skills in selected economic sectors

¹³ These areas are selected based on five criteria: (i) alignment with the EDPRS 2, (ii) Bank's comparative advantage, (iii) within World Bank Group synergies; (iv) client demand and (v) risk are used to identify the areas to concentrate IDA resources.

¹⁴ <http://www.worldbank.org/en/region/afr/overview#2>

III. Program Description

A. PforR Program Boundary

Program Boundaries

Government Program (National Employment Program)		Program for Results
1. Skills Development (led by Ministry of Education)	Provide short-term vocational training and informal apprenticeships	X
	Offer targeted rapid response training	X
	Strengthen private sector participation in skills building	X
	Develop specialized skills at the technician and professional levels	X
2. Entrepreneurship and Business Development (Led by Ministry of Trade and Industry)	Promote MSME growth and development	
	Expand business development capacity and facilities	
	Enhance competitiveness of SMEs	
	Promote skills upgrading and technology for innovation,	
	Develop business process outsourcing services,	
3. Labor Market Intervention (Led by Ministry of Local Government)	Strengthen labor market information system with linkages to district-level employment services	X
	Promote job creation under public works projects,	
	Enable access to foreign employment opportunities	
4. Coordination and M&E (Led by Ministry of Public Service and Labor)	Strengthen the M&E system	X

31. As stated earlier, the PforR will focus on the skills development components of the NEP. The focus will be on building a continuum of skills to grow and transform Rwanda's economy with a focus on three priority sectors: energy; transport and logistics; and manufacturing (including agro-processing, garments and other Made-in-Rwanda initiatives). The operation's boundaries under the NEP include reinforcing governance, meeting skills demand; ensuring relevance, and expanding opportunities. Details of these are highlighted below:

(1) Reinforce governance of the skills system to meet the demand for skills in priority

economic sectors (Strengthening Pillars 1 and 3 of the NEP)

1.1 Design and implement a strategic skills plan for the selected economic sectors:

32. To sustain Rwanda's record of growing at more than 7 percent a year since 2000, the GoR considers human capital a key ingredient of its economic strategy.¹⁵ In the three selected economic sectors, an important concern are gaps in technical and professional skills that undermine the performance of ongoing or pipeline projects, in both the public and private sectors, that are critical to Rwanda's economy at this stage of its development. In the energy sector, for example, the paucity of skills to manage power distribution undermines power utilities' ability to assure stability in electricity supply, especially to commercial clients, thus increasing business risks and reducing Rwanda's attraction to potential investors. Transport and logistics is another "backbone" sector besides energy, given its role in enabling other sectors of the economy to function efficiently. The GoR considers skills gaps in managing the movement of goods and people—by air, road, rail and water—ripe for focus in developing the country's workforce. Addressing these gaps is timely as the country begins to invest in building secondary cities; to partner with neighboring countries in the Northern Corridor project; and to develop its capabilities as a major distribution hub in East Africa. In manufacturing—the third economic sector selected for focus in this PforR operation—the Rwanda Economic Development Board is working closely with the Ministry of Trade and Industry to support the emergence of "anchor" firms around which industry clusters may form and grow, and contribute to reducing the country's deficit. The approach follows the example of countries such as Costa Rica, Ireland, Singapore, and Vietnam among others, in which customized training are used to equip workers, technicians and professionals with the skills required to access jobs in these clusters and support the growth and viability of the enterprise base in these clusters.

33. In light of concerns about skills gaps, the GoR has taken steps to bring investments in workforce skills into closer alignment with Vision 2020 and EPDRS II, and to the country's longer term Vision 2050 and EDPRS III. A number of methods are used for this type of exercise, including forecasting occupational and skills profiles; engaging with industry representatives and other social partners; analyzing data from labor market information systems and employment services; and evaluating of the performance of training institutions, including through tracer studies of graduates' employment. In Rwanda, skills assessment studies were conducted across eight sectors in 2008 by the Rwanda Development Board (RDB). A similar, though much more detailed, exercise was completed in 2015 for the energy sector by the National Commission for Science and Technology (NCST) and currently, the National Capacity Building Secretariat is using the energy study as a template to guide replication of the exercise in new sectors, including horticulture, tourism, manufacturing (focused on Made-in-Rwanda products) and the MICE (Meetings, Incentives, Conferences and Exhibitions) services. Moving forward, the GoR will need to consolidate and institutionalize its current efforts in assessing skills gaps to inform strategic planning for skills development.

1.2. Institutionalize skills assessments, and monitoring and evaluation of labor market trends:

¹⁵ It aims to universalize 12 years of education for all Rwandan children; and has started to shift enrollments in secondary education toward technical and vocational education and training (TVET) and to raise the share of tertiary level students pursuing courses in Science, Technology, Engineering and Mathematics.

34. Countries as diverse as Australia, Cost Rica, Singapore and the United Kingdom use an apex body, such as an Expert Skills Group, to conduct three tasks: occupational and skills profiling in areas critical to the economy, including foresight exercises on emerging trends and benchmarking of skills against industry standards; assessment of current and future skills gaps; and strategic planning and implementation. Such a body not only oversees the technical analysis but also advises the government on operational arrangements. Because skills development is a cross-cutting challenge, these arrangements make explicit the joint responsibility of line ministries for shared targets in skills development; explain the rationale for government involvement for financing and delivery of training programs as these evolve over time; and ensure accountability for results through targeted monitoring and evaluating.

35. In Rwanda, the apex body according to the Government's National Capacity Development Policy, Strategy and Implementation Plan (2016) will be the Capacity Development and Employment Services Board (CESB), which will merge a number of functions performed to date by NCBS and the NCST. The establishment of CESB was recently approved by Cabinet in Rwanda and while this signals commitment to strengthen coordination of strategic foresight exercises, there needs to be stronger engagement from anchor firms in the relevant economic sector and industries¹⁶ that are driving private sector development in these exercises. In the interim, this function will be assumed by the NCBS, which will be responsible for establishing an apex body, with a remit typical of an Expert Skills Group. The work of such a Group provides valuable oversight, guidance and information for industry partners such as those convened by the various Sector Skills Councils (SSCs) which are currently being set up in Rwanda.

36. More broadly, routine monitoring of developments and trends in the labor market is needed to contextualize the work of the Expert Group on Skills in the setting of the whole economy. The labor market is constantly evolving, and the specific occupations, skills and qualifications that are required by the economy are changing rapidly. Monitoring how training institutions are responding to emerging priorities in skills development on an ongoing and timely basis is half the story. The other half is the transmission mechanisms that make this continuous flow of timely information available to education and training institutions, private market trainers, employers, trade unions, young people and their families, and displaced workers. The SSCs are an important conduit for getting this information out through its constituents while the Employment Services Centers (that are being established provincially in Rwanda) play a critical role in making information available in the form of career guidance, vocational counselling, and materials on access to training and job-matching services.

1.3. Align financing incentives to foster market-responsive investments in skills

37. Under the NEP, training programs are already being rolled out in several fields, through three main avenues: Massive Vocational Training (MVT), Industry-Based Training (IBT), Rapi Response Training (RRT). The PforR focus on scaling up IBT and RRT for the target sector through the revival of the Skills Development Fund under the WDA. The Fund will be co-financed

¹⁶ Anchor firms are firms that have a key position in the economy through their interaction with suppliers and other firms. It is one of the largest employers in its sector, providing multilevel employment possibilities.

by the private sector through a matching grant contribution, and support training activities that lead to improved productivity and competitiveness in the formal and informal sectors. This will require strategic partnerships between firms, training providers and industry associations. It will specifically support training of the labor force in the priority sectors with skills identified by the Expert Skills Group and employers. The Rwanda Development Board and the Ministry of Trade and Industry (MINICOM) will be key stakeholders under this activity and will play an important role of identifying existing firms, or potential new firms willing to invest in Rwanda, that need to bridge the skills of its employees to improve its competitiveness.

(2) Enhance the relevance and quality of training programs targeted to the selected economic sectors (Pillar 1 of the NEP):

38. The development of skills profiles and competencies in priority economic sectors provide critical information to be disseminated amongst education and training providers in order to build a solid bridge between the world of learning and the world of work. Training providers can use the information to design competency-based course curricula that respond to employers' expectations as conditions in the labor market evolve. Such curricula are only part of the story, however; other factors that matter in equipping the graduates of training programs with employable skills include: competent faculty to deliver the training and suitable facilities and equipment and adequate provision of materials, all of which requires systematic validation through quality assurance protocols. Taken together, these requirements exert pressure on the cost of training and education programs, particularly in technical, vocational and professional fields of study. Managing costs while assuring quality and impact on students' employment prospects are therefore key challenges for service providers. The PforR operation will support selected institutions in responding to these challenges, focusing on training programs and courses geared toward meeting skills needs in the selected economic sectors.

2.1 Promote competency-based curriculum development and pedagogy:

39. Engaging industry in shaping and delivering training content is critical for ensuring that course offerings respond to the needs of enterprises and the labor market. The work of the Expert Skills Group taps into high-level insights from industry leaders. The connection to industry needs to be reinforced through additional interactions at the level of individual institutions between service providers and employers. These interactions can help training providers develop truly demand-driven curricula and course materials that respond to local and sector-specific requirements. The Sector Skills Councils (SSCs) that were recently established in a few sectors are a promising development in this regard. In addition to providing inputs and support for curricula development and pedagogy, SSCs can also facilitate public private partnerships (PPPs) to create opportunities for instructors and trainees to "intern" at companies and gain practical work experience; provide career guidance and counselling for trainees and conduct follow-up tracer studies of former graduates and customer satisfaction surveys with enterprises.

2.2 Invest in faculty development, facilities and equipment and in organizational reform:

40. These investments enhance providers' capacity to deliver competency-based training

programs and thus improve the effectiveness and efficiency of service provision. The pace of faculty upgrading has been modest, however. In 2013-14, only about 360 of the nearly 3,000 instructors in the public TVET system under the WDA's purview had benefited from training.¹⁷ In future the pace of upgrading can be expected to pick up with the establishment of the Rwanda TVET Trainer Institute (RTTI) which is being set up at the IPRC-Kigali with the help of assistance from the Korean government. Faculty upgrading is also an important aim at the University of Rwanda where only 20% of the faculty have a Ph.D. degree at present. As part of its strategic plan, the UoR aims to raise that share to 60% by 2025¹⁸.

41. With the support of its donor partners, Rwanda is also making substantial investments in upgrading the instructional infrastructure in TVET system and at the UoR. The recently-completed World Bank operation on skills, for example, upgraded the facilities at 6 VTCs (Busogo, Kinihira, Kibuye, Kabarondo, Kibungo and Kirehe VTCs), and provided them with equipment and materials to improve the quality of programs. Conditions remain sub-optimal, however, as reflected in these simple indicators: of the 389 TVET institutions under the WDA, only 131 have internet connections, while 37 still have no water and 3 have no electricity.¹⁹ The University of Rwanda (UoR) also recognizes the needs to improve its facilities, and aims to construct and maintain the facilities under the new UoR Strategic Plan²⁰.

42. With regard to organizational reform, the most significant development has been the creation of the University of Rwanda in 2013 through the consolidation of institutions that previously operated as stand-alone entities under a single umbrella with seven constituent colleges. This structure gives the UoR an organizational structure that benefits from consistency in management and the economies of scale in applying technology to manage costs. At the TVET level, the IPRCs are also a recent innovation designed to provide leadership for technical training in the regions. The idea of "One Polytechnic" is under consideration, as a way to capture economies of scale by sharing common resources—for curriculum development and staff and student management—across multiple institutions. The PforR operation will support selected TVET institutions and UoR Colleges in continuing to rationalize their organizational structures. The impact of their efforts on costs and the labor market outcomes of graduates will be an important focus of monitoring and evaluation under the PforR operation.

2.3 Strengthen system for program accreditation:

43. At this early stage of the modernization of Rwanda's system of TVET and tertiary education, there is an inevitable heavy focus on the inputs to assure quality, including the creation and use of competency-based curricula, the quality of instructors and faculty and the adequacy of the facilities, equipment and materials. The WDA accredits training providers mainly by inspection of the institutions; it has capacity to perform such inspections at the rate of about 100 institutions a year. In higher education, the accrediting body is the Higher Education Council (HEC). Going forward, the PforR will support the GoR to strengthen the accreditation

¹⁷ UNESCO (2015). Mapping Research and Innovation in the Republic of Rwanda. G.G. Lemarchand and A. Tash (eds.). GO→SPIN Country Profiles in Science, Technology and Innovation Policy, vol. 4. United Nations Educational, Scientific and Cultural Organization: Paris. (pp. 65.

¹⁸ University of Rwanda (2016). Strategic Plan 2016 – 2025 Draft One March 2016.

¹⁹ Data from <http://www.wda.gov.rw/tvetis/index/>, accessed on September 10, 2016.

²⁰ University of Rwanda 2016 Strategic Plan 2016 – 2025 Draft One.

system, focusing on programs rather than entire institutions and articulating the criteria for accreditation and support to institutions to achieve accreditation.

3. Expand opportunities for skills acquisition and skills upgrading:

44. Individuals' investment in skills acquisition should ideally equip them with credentials with economic value and position them to access additional opportunities for gaining new skills. Instead, learning pathways are not always clear and may lead to dead ends; worse still, they may provide credentials that are not valued by employers. A national qualifications framework, appropriate to Rwanda's economic context can help to address this challenge.

3.1 Consolidate the National Qualifications Framework to create learning pathways:

45. Till recently, Rwanda had four disjointed qualification frameworks managed by different educational institutions namely, (i) the Rwanda National Examination Grading System (RNGS) for primary and secondary education implemented by Rwanda Education Board (REB); (ii) the Rwanda Technical and Vocational Education and Training Qualification Framework (RTQF) coordinated by Workforce Development Authority (WDA); the Rwanda Qualification Framework for Higher Education implemented by Higher Education Council (HEC); and the National Qualification Framework for Adult Education implemented by REB.

46. These differing Qualifications Framework has meant that individuals could not easily progress from one level to another (for example, from TVET to higher learning), hence reducing learning pathways and career opportunities for individuals. A consolidated Qualifications Framework is key in clarifying learning and career pathways which are crucial for mobility and progression of learners in any education system. It is an instrument for the development, classification and recognition of skills, knowledge and competencies along a continuum of agreed levels that specifies what learners must know or be able to do whether learned in a classroom, on-the-job, or less formally²¹.

47. The HEC is leading the consolidation process with support from REB and the WDA. The vision is an education and training system with a coherent and permeable structure that not only promotes lifelong learning but also opens up opportunities—through the recognition of non-formally acquired skills—for large parts of the population previously excluded from the formal education system and facilitating their access into the system. The PforR will strengthen the qualifications framework (QF) consolidation process with particular emphasis on developing support and trust in the QF among employers and workers' organizations.

48. While the consolidation of the QF with the support of employers is one critical milestone in expanding opportunities for individuals to access education and training, the second critical element of a QF is quality assurance. Three important measures of quality assurance are: validation of qualifications and/or standards; accreditation and audit of education and training institutions; and quality assurance of skills and learning assessments leading to the award of

²¹http://www.ilo.org/wcmsp5/groups/public/@ed_emp/@ifp_skills/documents/instructionalmaterial/wcms_103623.pdf

qualifications²². The second element is a strong focus of the NEP supported by the PforR.

3.2 Reduce training dead ends for individuals to improve livelihoods and realize career goals:

49. Modularization effectively means breaking down whole educational qualifications into useful sub-units (a module), each with measureable outcomes that are assessed (and sometimes certified) in their own right and as well as contributing to an overall educational outcome (primarily, a qualification). Modularizing programs creates opportunity for access to education and training for disadvantaged individuals and also improves their ability to progress through programs. Modular programs can potentially improve access by, for example, reducing financial costs (paying per module rather than the whole qualification), and can assist with regard to time commitment since people can take one course at a time rather than the whole qualification at once. The PforR will support the modularization of courses within the target sectors in line with the QFs developed. This will enable the development of career pathways and extend opportunities for training to a wider population.

3.3 Strengthen foundational skills

50. Large numbers of Rwandan youth leave school every year with weak foundations in mathematics and science. They lack the skills and knowledge to qualify for jobs in modernizing economies and are ill-prepared for post-secondary courses in science, technology, engineering and mathematics that can equip them for well-paying jobs. This weak pipeline also undermines efforts to improve faculty quality in both tertiary institutions and schools, creating a vicious cycle. The GoR, according to its new STIR policy, will promote innovative methods of teaching science, technology, engineering and mathematics (STEM) at all levels of the education and training systems which strengthen and instill scientific critical thinking, creativity, problem solving, as well as research and innovation oriented cultures, starting from the early stage of the learning process. The PforR will support a pilot program to strengthen teaching and learning of science and mathematics in a selected number of upper secondary schools in Rwanda. This program will be closely linked to the proposed Center of Excellence within the College of Education in UR, that is focusing on 'Innovative Teaching methods for Mathematics and Science' targeting pre-service training of teachers.

51. Initial proposal for DLIs are (to be updated):

DLI 1: NEP Joint Performance Contract contains results relating to the PforR Operation

DLI2: Labor Force Survey conducted based on successful pilot of instrument and results published on NSIR website at least twice annually along with public access databases.

DLI3: Skills Development Fund funded, and funds used to provide internships, industrial attachments, apprenticeships, work place training and rapid response training (RRT).

DLI4: High level professionals and academics upgraded with qualifications, knowledge and skills for teaching, research and innovations in the selected priority economic sectors

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DLI5: New or updated programs in targeted training areas accredited

DLI6: Number of trainees completing competency-based training programs to earn credentials suitable for jobs in the selected economic sectors.

DLI7: Proposal for piloting one selected innovation in 200-300 secondary schools funded, implemented and evaluated for impact, with recommendation on improvements to the innovation and options for scaling up.

IV. Initial Environmental and Social Screening

52. The Bank Safeguard Task Team has conducted initial screening of the Program proposal for potential environmental and social risks and effects and made a conclusive determination that there are no civil works or Category A-type activities under the Program. Agreement has been reached with the Government of Rwanda that the project will not include any civil works or infrastructure works. The main activities will include skills development, entrepreneurship and business development, labour market intervention and coordination, monitoring and evaluation. These activities will ensure that the workforce skills are aligned to the EPDRS and Vision 2050 priorities. The project will be implemented by Government Departments and agencies that include NCBS/CESB, RDB, MINICOM, NCST, REB, HEC, WDA, NISR, MIFOTRA, MINALIOC, NEP Secretariat and private companies/anchor firms. While the program activities are not expected have significant environmental and social footprint, the ESSA will provide an opportunity whenever possible to enhance the recognition of environmental, social, health and safety and long-term sustainability aspects in training institutions and programs at the technical, vocational and the university levels. This will be reflected in the proposed sectors e.g. construction, mining, etc.

53. The broad environmental and social goal of the ESSA will be to mainstream environmental and social due diligence and awareness into the selected sectors. After an in-depth analysis of the environmental and social risks associated with the proposed sectors.

54. In a bid to assure environmental and social sustainability, the effective management of the environmental and social concerns will be addressed through the preparation of an environmental and social systems assessment (ESSA) by the Bank Safeguard Task Team, which will be completed by December 2016. This process will be participatory and consultative. The ESSA will review existing regulations and policies, their legal and practical applicability at the program level, institutional capacity, and the effectiveness of implementation in practice. Through the ESSA, identification and consideration of potential range of environmental and social effects that may be relevant to the Program will be undertaken and an assessment of the capacity and competencies of key implementers at the national and sub-national levels for effective environmental and social management, in light of proposed arrangements and resource availability for new programs will be analyzed. The key measures, including institutional capacity building for safeguard implementation, monitoring and reporting, out of the assessment of the capacity of implementing institutions for environmental and social management will be incorporated into the overall Program Action Plan. During the Program implementation phase, implementing entities of the Borrower will monitor program effectiveness and share monitoring information with the Bank Task Team. This will include monitoring against Program capacity-

strengthening measures as well as the effectiveness of any agreed impact mitigation measures identified during the ESSA preparation and incorporated in the Program Action Plan.

55. Prior to appraisal, the draft ESSA will be disclosed alongside with the PID with a summary of the ESSA findings and recommendations at the Bank's InfoShop. As good practice the draft ESSA will also be disclosed in country. National and sub-national level consultations will be held before or during appraisal, with relevant stakeholders regarding draft ESSA (and proposed specific actions, if necessary).

V. Tentative financing

Source:	(\$m.)
Borrower/Recipient	0
IBRD	0
IDA	100
Others (specify)	0
Total	100

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