AFRICAN DEVELOPMENT BANK GROUP

Skills for Employability and Productivity in Africa (SEPA) Action Plan, 2022–2025

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ACRONYMS AND ABBREVIATIONS

(Bank's Organisational Units shown in *italics*)

AfDB	African Development Bank Group	NEET	Not in Employment, Education, or Training
ADB	African Development Bank	NSOs	Non–Sovereign Operations
ADER	Annual Development Effectiveness Review	NTF	Nigeria Trust Fund
ADF	African Development Fund	PBOs	Policy–Based Operations
AESTIF	Africa Education, Science Technology, and Innovation Fund	*PECG*	*Climate Change & Green Growth*
AfCFTA	African Continental Free Trade Area	*PERN*	*Renewable Energy & Energy Efficiency*
AHAI	*Agriculture & Agro-–Industry*	*PESD*	*Power Systems Development*
AHGC	*Gender, Women and Social Security*	*PICU*	*Infrastructure & Urban Development*
AHHD	*Human Capital, Youth & Skills Development*	*PIFD*	*Financial Sector Development*
AHWS	*Water & Sanitation*	*PINS*	*NSO & Private Sector Support*
AU	African Union	*PITD*	*Industrial & Trade Development*
AUC	Africa Union Commission	R&D	Research & Development
BDEV	*Independent Development Evaluation*	*RDRI*	*Regional Integration Coordination Office*
CSPs	Country Action Plan Papers	*RDTS*	*Transition States Coordination Office*
CSOs	Civil Society Organizations	RECs	Regional Economic Communities
DFI	Development Finance Institution	RISPs	Regional Integration Strategy Papers
DPs	Development Partners	RMC	Regional Member Country
ECAD	*African Development Institute*	RF	Results Framework
ECGF	*Governance and Public Financial Management Coordination Office*	SDGs	Sustainable Development Goals
ECMR	*Macro-–Economic Policy, Forecasting & Research*	SEPA	Skills for Employability and Productivity in Africa
ECST	*Statistics*	SEZ	Skills Enhancement Zones
ESOs	Enterprises Support Organizations	*SNDR*	*Delivery, Performance Management and Results*
FIRM	*Resource Mobilization and Partnerships*	*SNSC*	*Safeguards and Compliance Department*
4IR	Fourth Industrial Revolution	*SNSP*	*Action Plan & Operational Policies*
GCI	General Capital Increase	*SNOQ*	*Operations Committee Secretariat & Quality Assurance*
GDP	Gross Domestic Product	SOs	*Sovereign Operations*
HCS	Human Capital Strategy	SSA	*Sub-Saharan Africa*
HE	Higher Education	STEM	Science, Technology, Engineering and Mathematics
HEST	Higher education, science, and technology	STI	Science, Technology, and Innovation
HESTI	Higher Education, Science, Technology, and Innovation	ToC	Theory of Change
JfYA	Jobs for Youth in Africa	TSF	Transition Support Facility

ICT	Information and Communication Technology	TVET	Technical and Vocational Education and Training
IFFEd	International Financing Facility for Education	TYS	Ten–Year Strategy
ILO	International Labour Organization	UN	United Nations
M&E	Monitoring and Evaluation	UNESCO	United Nations Educational, Scientific and Cultural Organization
MDBs	Multilateral Development Banks	UNHCR	The United Nations High Commissioner for Refugees
MOOC	Massive Open Online Courses	UA	Unit of Account
MoU	Memorandum of Understanding	USD	United States Dollar (usually expressed as "$"
MSMEs	Micro, Small and Medium Enterprises	WB	World Bank
NDC	Nationally Determined Contribution		

VOICES ON SKILLS DEVELOPMENT IN AFRICA

Fostering more inclusive growth would also require building Africa's human capital and creating more jobs in high-productivity sectors. To do so, countries should seek to integrate education and skills development strategies into their economic development plans, while upgrading and expanding education and training programs to strengthen worker employability and firm productivity. That requires measures to improve both the quantity and the quality of education.

Specifically, it requires expanding access to schools in remote areas, increasing incentives to invest in education, developing a demand-driven education system in sync with employers' needs, investing in nutrition to help poorer children, and building STEM and ICT capacity.

Dr. Akinwumi A. Adesina, President,
African Development Bank Group
Foreword, *African Economic Outlook 2020: Developing Africa's Workforce for the Future*

To support the rapidly changing demands in African economies, the education system needs to build skills in traditional professions—such as teachers, nurses, and lawyers—and in science, technology, engineering and mathematics. Also urgent is the need to develop skills for micro, small and medium enterprises.

Investment in technology and science will be at the centre of the Bank's skills development agenda. To increase the supply of skilled workers, the Bank will step up its support for technical and vocational training linked to specific needs in the labour market, in both the formal and informal sectors, including the skills to create small businesses. It will also support programs for women studying in technical and scientific areas.

AfDB, *At the Center of Africa's Transformation, Strategy for 2013–2022*

With the shortage of engineering, scientific, and digital skills in Africa, human capital remains a key constraint in preparing for the future of production shaped by the disruptive technologies of the 4IR. Absent major changes in education and training systems, this problem is likely to worsen. University education is concentrated in business administration, social sciences, education, and humanities, while the STEM studies that are crucial in a 4IR world are under-represented. For example, enrolment is under 10% in engineering and in natural sciences, mathematics, and statistics, and under 5% in information and communication technologies. To better prepare for the future of work, education and training institutions in Africa should give more emphasis to STEM subjects, with enhanced public–private sector collaboration to ensure that skill development is in tune with labour market needs.

AfDB, *African Economic Outlook 2020: Developing Africa's Workforce for the Future*

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EXECUTIVE SUMMARY

The AfDB's Skills for Employability and Productivity in Africa (SEPA) Action Plan, 2022–2025, presents a structured approach to operationalising its commitment to raising the skill levels of Africa's workforce. The Plan builds on the Bank's 2014–2022 Human Capital Strategy (HCS) achievements and underpins its commitment to Skills and Technology under the Ten-Year Strategy (TYS 2013–2022). SEPA is anchored to the 2016–2025 Jobs for Youth in Africa (JfYA) Strategy and will contribute to the goal of creating 25 million jobs and equipping 50 million young people with skills for productive employment and self-employment. SEPA seeks to bridge Africa's skills gap, addressing skills mismatch and relevance to the Fourth Industrial Revolution (4IR), climate change and the green-economy agenda, and digital transformation in the labour market.

The development of the SEPA Action Plan was a collaborative and consultative process. The stakeholders, including Regional Member Countries (RMCs), Development Partners, Private Sector representatives, and Civil Society Organisations (CSOs), endorsed SEPA's priority focus and affirmed its responsiveness to the continent's aspirations for a productive and skilled labour force.

SEPA is aligned with the Bank's strategic frameworks, and continental and global initiatives to advance Africa's economic transformation. It is consistent with TYS 2013–2022, and with its "Skills and Technology" priority. It is also in the spirit of the Bank's 5th High 5 priority: Improve the Quality of Life of the People of Africa, and is central to the achievement of the other High 5s: Light Up and Power Africa, Feed Africa, Industrialise Africa, and Integrate Africa. Furthermore, SEPA is compatible with the African Union's Agenda 2063, which prioritises actions to catalyse an education and skills revolution, with active promotion of science, technology, research, and innovation. It is also aligned with the United Nations 2030 Agenda and the Sustainable Development Goals (SDGs), notably SDG4 on equitable education and skills development, SDG8 on inclusive growth, productive employment[i] and decent work for all, and SDG1 on ending poverty.

SEPA will contribute to building an innovative, productive, and skilled workforce to drive economic transformation and job creation with the overall goal of improving the quality of life of the people of Africa. This goal will be reached by: (i) reducing skills gaps and mismatches, (ii) increasing engagement in productive self-employment, (iii) increasing innovation aligned to industrialisation and development needs, and (iv) improving the policy and regulatory environment for skills related to the key sectors.

SEPA is articulated around two mutually reinforcing areas of intervention: (i) expanding infrastructure for the development of demand-driven skills, and (ii) strengthening the enabling environment for skills development. Activities under SEPA will benefit young people and the entire labour force in addressing the skills gap and mismatch, which are widening because of evolving needs in the labour market driven by technological advances and the needs of the green economy. In line with the Board's guidelines on sharpening the Bank's strategic focus in the context of the High 5s, SEPA focuses on expanding infrastructure for STEM in Higher Education, TVET, digital skills, and online learning. SEPA will adopt and roll out a Skills Enhancement Zones (SEZ) approach that aims to develop a skilled workforce tailored to support value chain development, business growth, and attracting new industries to

ensure that industry can reach its potential in transforming African economies and creating employment[1].

SEPA will also support an environment that develops skills directly linked to industry needs and youth entrepreneurship. In this context, the Bank will leverage its unique role as a trusted partner, knowledge broker, and convenor to (a) harness strategic partnerships with African governments, development partners, training institutions and industry to support industry-relevant skills building and mobilising additional resources for skills development; and (b) improve regulatory and institutional capacity through sector reforms, technical and statistical capacities, and knowledge generation in order to strengthen management, quality assurance, and the regulatory environment. SEPA will further support an enabling environment for harnessing entrepreneurial skills and investing in youth enterprises in a systemic, scalable, and sustainable manner to expedite the JfYA's job-creation agenda. The implementation of SEPA will be monitored and evaluated based on the detailed workstream/activities described in the Implementation Action Matrix (IAM), and the indicators and conceptual framework—the Theory of Change (ToC) and the Results Framework (RF).

[1] More details on SEZ Flagship Program are provided in Annex III.

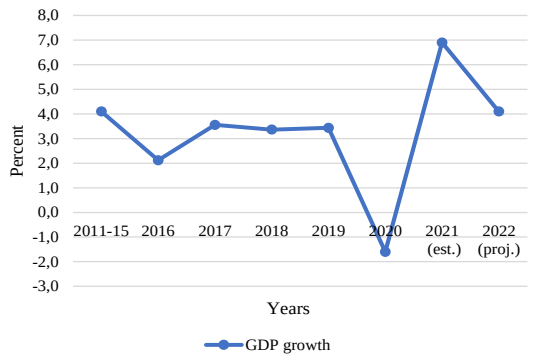
1. INTRODUCTION

Background

1.1 **Africa's strong real GDP growth over the past two decades has not been translated into robust, productive employment and has, moreover, worsened under the impact of COVID–19.** Africa was the second fastest-growing region globally and maintained an average growth rate of 4.6% between 2000 and 2016 (OECD, 2018) and 3.4% between 2017 and 2019 (AfDB, 2021). However, with an average elasticity of employment to growth of 0.41 between 2000 and 2014 — lower than the ideal 0.7 that allows for employment and productivity growth (AfDB, 2018a) — 83% of the 18 million young people who enter the labour market in sub-Saharan Africa every year remain jobless or underemployed in the informal sector (Mo Ibrahim Foundation, 2019). A highly skilled labour force is associated with higher earnings for people, higher income for countries, and stronger cohesion in societies (World Bank, 2020b). Thus, the ***skills-growth-jobs nexus*** establishes a strong theoretical link between skills development and sustainable growth, provided complementary investments are made in the productive sectors of the economy.

1.2 Africa's real GDP contracted by 1.6% in 2020 due to the COVID–19 pandemic but grew by 6.9% in 2021 (Figure 1). Due to GDP contraction, an additional 30 million Africans descended into extreme poverty in 2020, then 39 million more in 2021, bringing the total to 465.3 million by 2021 (AfDB, 2021). This compounded the already high incidence of working poverty among the youth, with over 70% of working young people in sub-Saharan Africa and 25% in North Africa living in extreme or moderate poverty (ILO, 2016). However, the strong economic recovery in 2021 was followed by two major global crises: the persistence of the COVID–19 pandemic; and the Russian invasion of Ukraine. These issues will continue to impact growth, which is thus projected to decelerate to 4.1% in 2022, reflecting these uncertainties and the ebbing of base effects, especially in countries that had emerged strongly from sharp pandemic-induced contractions (AfDB, 2022).

Figure 1: Africa GDP contracted in 2020 amid COVID-19 Pandemic



1.3 **The COVID–19 pandemic caused serious disruption to education systems globally and revealed major weaknesses in African skills development systems.** The pandemic worsened the state of education in Africa, where, in 2018 and prior to the pandemic, 33% of the global number of out-of-school adolescents (aged 12–18) were to be found (UNESCO, 2019). Part of the reason for this negative impact of the pandemic was the lack of ICT-based learning in Africa. According to a May 2020 joint ILO-UNESCO-World Bank survey on skills development, only 20% of respondents from Africa indicated that training was being provided through online and/or offline distance learning, compared to more than 60% in other regions of the world. Many teaching staff and university faculty are not trained in ICT integration in teaching and have never designed or delivered lectures through online means (Danner, 2018).

Rationale for the Bank's investment in skills development

1.4 **The Bank made commitments under the 15th replenishment of the African Development Fund (ADF–15) and the 7th General Capital Increase (GCI–7) on "Building skills for jobs and expanding economic opportunities for youth"**. The specific commitments include: developing skills and supporting Jobs for Youth, with targets of (a) at least 40% of Bank-ADF approved projects to integrate skills and jobs for youth by 2022; (b) fourteen innovation centres of excellence created and 30,000 youth and women reached across Africa by 2022; and (c) at least 10 projects supported to boost decent job creation and skills development through investments in TVET, STEM in higher education and ICT, with a strong focus on youth and women by 2022. Furthermore, the Bank's selectivity principle on sharpening its strategic focus under the High 5s reinforces these commitments. SEPA will contribute to developing a skilled workforce for the implementation of the High 5s in critical sectors, such as agriculture, industry, energy, infrastructure, transport, mining, and health (see Table 3). Achieving and sustaining investments in the Bank's High 5s requires a skilled labour force; thus, SEPA presents a structured tool for the Bank to meet its commitments.

1.5 **Africa needs a skilled labour force to achieve and sustain inclusive economic growth and transformation.** The East Africa Economic Outlook 2020 identified shortages in specialised high- and low-end technical and vocational skills as a threat to Africa's industrialisation and integration (AfDB, 2020b). As more Regional Member Countries (RMCs) transition to middle-income status, they need skilled workers in all sectors. At the same time, rapid developments in technology and ICT are redefining the future of work in Africa (OECD, 2016; and WEF, 2017). The current and future workforce needs stronger STEM skills. Informed by lessons from the COVID–19 pandemic, addressing this challenge includes creating more online learning opportunities and digitalisation of service delivery. To obtain quality jobs or grow their own businesses, young people need the skills to innovate and adapt to the evolving needs of industry.

1.6 **Limited funding of TVET and Higher Education (HE) by RMC governments and Development Partners (DPs) is a challenge.** Public financing of TVET and HE has not kept pace with the increase in the number of potential students in the sub-sectors. RMCs invest only 0.2% of GDP in TVET and 0.9% in HE, compared to 1.24% for HE in high-income countries in 2018[ii]. The bulk of this expenditure is for salaries and operating costs (80%–90% for TVET), leaving a minimal share of investments for infrastructure. There is also low investment by DPs in TVET and HE in Africa (Table 1 and Annex VI). Of the $ 4.9 billion[iii] invested each year by DPs in the education sector in Africa between 2015 and 2018, only 39% was devoted to TVET and HE (AfDB, 2020d). About 13% of financing needs for skills development in Africa is covered by existing DP financing. An additional $40 billion is needed every year to finance education and skills development in Africa by 2030, and over 70% of this amount is required to fill the infrastructure gap (AfDB 2018b). Furthermore, only 0.4% of GDP is invested in Research and Development (R&D) in Africa compared to 1.7% globally (AfDB, 2018c). African countries' investments in science and technology and TVET are too low to build the skills needed for industrialisation and manufacturing.

Table 1: Funding of TVET and HEST by Development Partners in 2015–2018 ($ Million)

Funding Sources	Total education sector		TVET sector only			HE (Post-Secondary) only		
	No of DPs	Total	No of DPs	Total	Average amount	No of DPs	Total	Average per DP
Multilaterals (including MDBs)	7	7,311.2	5	1,316.2	263.2	6	1,121.6	186.9
Bilateral DPs	37	12,390.6	29	1,122.1	38.7	32	4,566.8	142.7
Other DPs	4	231.8	2	5.0	2.5	1	0.1	0.1
TOTAL	**48**	**19,933.6**	**36**	**2,443.3**	**67.9**	**39**	**5,688.4**	**145.9**

Source: AfDB 2020d.

1.7 **The Bank is well-positioned to support skills development in Africa, especially infrastructure for STEM and TVET, in view of its comparative advantage in the sector**. Several leveraging factors work in the Bank's favour — its track record in infrastructure investments (TVET, HE and specifically in STEM); the various instruments it deploys including sector policy dialogue and analytical, technical and knowledge advisory services; as well as its convening power — and have contributed to making the Bank a partner of choice. Since 2005, the Bank's strategic focus on infrastructure development in TVET and Higher Education, Science and Technology (HEST) has positioned it well to bring innovative solutions and to lead other partners in supporting Africa's youth and increase access to industry-relevant skills for a more productive and innovative workforce. Box 1 summarises the Bank's comparative advantage in the sector based on its own criteria.

Box 1: Summary of the Bank's Comparative Advantage in Skills Development

Track record of providing effective support to education infrastructure in TVET and STEM

- Since 1975, the Bank has been supporting the education sector. The strategic focus has evolved over time: 1986–2000, basic education; 2000–2005, sector-wide approach to educational development; 2005 to date, TVET and STEM.
- Between 1975 and 2006 the Bank financed 168 education projects, 79% of which related to infrastructure. Between 2014 and 2020 about 90% of approvals in education have been for TVET and HE.

Growing Demand

- The financing gap in education and skills development is estimated at $40 billion annually, especially in TVET and HEST (AfDB, 2018b).
- Very few donors invest in TVET and HE. From 2014 to 2020, the Bank committed $916 million to TVET and HE. The Bank allocated 71% of its the total education commitment to TVET over the 2015–2018 period, which is high, compared to other multilateral institutions (World Bank [12%], EU [19%] and the Islamic Development Bank [12%]). The Bank allocated 20% of its total education commitment to HE compared to the World Bank (13%), the Islamic Development Bank (39%) and the EU (6%). (AfDB 2020d).
- The Bank's special feature is its exceptionally high share of total approvals for education devoted to TVET. Among the top 11 donors to TVET in Africa, only Luxembourg and Switzerland allocate more than 25% of their education investments to TVET. The other multilateral development banks (MDBs) allocate between 12% and 19% of their total education investment to TVET.

Increased operational focus and capacity in policy reforms, sector governance and private sector engagement in skills development

- From its HEST (Higher Education, Science and Technology) Strategy (2008), the Bank began to place more emphasis on links between the education system, the productive sectors, and the private sector. Examples include HEST projects in Zambia, Uganda, and Kenya; and projects in support of Regional Centres of Excellence and HE institutions in the EAC and ECOWAS.
- Since 2014, the Bank has supported reforms in the sector that promote private-sector engagement in skills development to enhance relevance and create jobs for young people. Examples include Programme Based Operations (PBOs) related to skills, employability and entrepreneurship in Côte d'Ivoire, Morocco, Tunisia, and Rwanda.
- The Bank has human resource capacity that can be used to foster business development in skills, especially in sovereign operations, including 38 operational staff with technical expertise in education, skills development, and entrepreneurship.

Convening power and partnership

- Leveraging its convening power, the Bank has organised 3 high-level Africa Science, Technology, and Innovation (STI) Policy Forums (2012, 2014 and 2018) with over 20 partners. The forums have attracted high-level policy makers, deepening and broadening commitment to advance science and technology.
- There is now increasing demand from RMCs for the Bank to convene continent-wide forums on TVET.

2. SKILLS DEVELOPMENT IN AFRICA

Status and Key Challenges

2.1 **The African continent is considered the least skilled in the world.** The HE enrolment rate[iv] in 2018 was 9% in sub-Saharan Africa (SSA) and 35% in North Africa, compared to 38% globally. Of the 199 million adolescents (aged 12–18) that are not in school, 65 million are in Africa, with girls representing 52% (UNESCO, 2019). African countries have not prioritised science, technology, and engineering, including at the tertiary levels of education. For example, the engineering, manufacturing, construction, and health sectors had only 19% of HE graduates in 2018 compared to 27% in developed economies[v].The gender gap is also pronounced — only 25% of female students at HE institutions are enrolled in STEM, compared to 34% of male students (AfDB, 2017b). The quality of learning at all levels of skills development is equally low compared to other regions. Only four African universities were in the *Times Higher Education* top 500 universities globally in 2020[vi]. African countries are also at the bottom of global rankings on performance in mathematics and science at all levels (OECD, 2019).

2.2 **Inadequate industry-relevant skills constrain the transformation of Africa's economies and limit inclusive growth and shared prosperity.** Low value-added production patterns make African countries dependent on exports of raw materials, notably agricultural products (cocoa, coffee, tea, etc.) and mineral products (oil, gold, diamonds, cobalt, etc.)[vii], creating wealth for foreign processors and manufacturers, exporting jobs, and leaving swathes of Africa in poverty. The skills mismatch affects productivity and value addition because of the weak links between entrenched education systems and the needs of labour markets. Some 46% of Africa's employed youth perceive their skills as mismatched to their jobs (Mursy et al., 2019); and some 21% of business leaders reported that the lack of adequate skilled workers was a major constraint to their operations, with over 29% of production workers rated as unskilled[viii].

2.3 **Analysis of the context of skills in Africa highlights key constraints limiting economic transformation, skills development, and creation of productive jobs (Table 2).**

Table 2: Africa's Overarching Development Problems and Related Key Constraints

Overarching Problem	Key Constraints related to skills development
• Slow economic transformation • Non-inclusive and jobless growth • High poverty and inequality	• Infrastructure gaps in quantity and quality for skills development, research, and innovation, including digital learning skills; • Shortages of TVET and STEM skills for industrial change, climate change, and the transition to a digital economy; • Skills mismatch, poor quality and lack of relevance of skills to industry's needs, and lack of entrepreneurship skills result in high unemployment among graduates; • Low labour productivity and competitiveness of enterprises, especially in the informal sector, due to the lack of productive and entrepreneurship skills; • Enabling infrastructure (ICT connectivity, energy, transport, water) in short supply affecting quality and resilience of the core training infrastructure; • Weak policy regulatory frameworks in TVET and HE, resulting in low emphasis on STEM, leading to low capacity in research and innovation; and • Limited financing for skills development and weak sector governance.

2.4 **Weak emphasis on STEM has affected Africa's capacity for research and innovation**. STEM research constitutes only 29% of Africa's total research output (Bloom et

al, 2016), despite the need for more research into energy, transport, light manufacturing, and the extractive industries. This is low, compared to over 67% in other developing countries, such as Malaysia and Vietnam. The gender gap is also wide, with females representing only one researcher in three in SSA. Africa's share of global patent applications is less than 1%, and its share of global research output is only 3.8% (AfDB 2018c). Out of 129 countries included in the 2019 ranking of the World Intellectual Property's Global Innovation Index, 19 of the bottom 30 countries are in Africa (WIPO, 2019). Africa lags behind in the creation of home-grown solutions to development challenges, as was shown during the COVID–19 pandemic that exposed the inadequacies in African skills development and triggered a deep reflection on the effectiveness of the current education model and capacity to innovate. As of September 2022, developed countries had vaccinated nearly 80% of their populations against COVID–19, while the African continental figure was barely over a quarter at 28%, partly due to lack of vaccine manufacturing capacity. Africa manufactures only 1% of vaccines administered on the continent[ix].

2.5 **TVET contributes to skilling youth for employability and value-chain development, but African countries have not invested in TVET at scale.** TVET may often be perceived as the last choice for students who fail to enrol in university or to pursue general education. In 2018, only about 13.4% of students in upper-secondary education were enrolled in vocational programmes in SSA, and 30.1% in North Africa, reflecting a marginal decline from 14.1% and 31.1%, respectively, in 2008 (AfDB 2020c). However, despite this overall downward trend, some progress has been made in some countries over the last decade, notably in Cameroon (+6%), Mozambique (+6%) and Niger (+15%) (AfDB 2020c). Women are also under-represented in trades perceived to be exclusive to males such as mechanics, welding, construction, carpentry, and electrical works. Lack of financial and policy support to the TVET sub-sector by governments may be contributing to low enrolments. In 2018, African countries allocated only 5% of their education budgets to TVET (AfDB 2020c). Africa has thus not fully leveraged the opportunities offered by TVET as a critical source of middle-level technical skills for driving industrialisation and value-chain development.

2.6 **Insufficient quality infrastructure for skills development and research is affecting inclusive access and quality.** Quality infrastructure for specialised skills in areas such as oil and gas, mining, and agro processing is beyond the reach of many RMCs, forcing Africans to seek skills training outside the continent, with many failing to return. A survey conducted by the Bank in 2020 indicated that 70% of African university leadership considers inadequate training infrastructure as the most significant barrier to STEM research and entrepreneurship development (AfDB 2020f). Investments in infrastructure development for TVET and STEM are being outpaced by demographic growth in many RMCs. For example, between 2013 and 2017 only 20% of TVET applicants in Tanzania were accorded a place. In Malawi, more than 13,000 youth applied for TVET admission in 2019, but only about 16% were able to enrol. The lack of gender-responsive infrastructure (e.g., hostels) has undermined female enrolment, which partly explains why females accounted for only 30% of the total TVET enrolment in 2020[x].

2.7 **ICT infrastructure and connectivity, which are key to ensuring quality service delivery, supporting continuity of learning, ensuring remote access, and increasing enrolments and outputs, are in short supply.** In 2019, internet penetration in Africa averaged 39.6% compared to a global average of 62.7%[xi]. About 82.2% of households in Africa lack access to the internet in their homes[xii] compared to 43% worldwide[xiii]. ICT is an enabler in facilitating learning and acquiring skills for employability. Low internet penetration has put

most of the African population, especially the youth, at a disadvantage in acquiring digital skills (AfDB, 2020a and 2020b).

2.8 **While Africa is experiencing a vibrant wave of entrepreneurship, sustaining businesses is a challenge because of poor entrepreneurship skills and culture.** Globally, universities on top of the Graduate Employability Rankings[xiv] bridge academic learning with business incubation and entrepreneurship programmes; they nurture strong partnerships with industry to produce innovation and high levels of potential start-ups. The Global Entrepreneurship Index (GEI) emphasises entrepreneurship in education and skills development as foundational to anchoring productive enterprises in the labour market. In 2019, Tunisia was the only African country to rank among the top 50 countries globally in the GEI (42.4/100) owing to the availability of venture capital and high quality human capital in business and in STEM. A major strength of the Tunisian education system is that it equips a large proportion of students with basic entrepreneurship skills (OECD, 2012). Some 70% of the bottom 20 countries on the GEI are in Africa, due to poor quality of the entrepreneurial environment. Developing entrepreneurship skills in TVET and HE can enhance innovation and the culture of entrepreneurship, as well as enterprise competitiveness, while contributing to intellectual capital with extensive economic returns. It also has significant potential to reduce graduate unemployment.

2.9 **Limited systemic support for skills upgrading in the informal labour force is hindering enterprise productivity**. The informal sector remains the largest source of employment opportunities in Africa, especially for young people and women: 95% of young Africans are employed in the informal sector[xv], which is dominated by micro, small and medium enterprises (MSMEs)[xvi], many of which are hindered in their growth by sub-standard skills, lack of access to affordable finance, quality business development services, and a weak enabling policy environment. Overall, almost 9 out of 10 work opportunities (86%[xvii]) are in the informal sector where, however, skills development faces several challenges, including limited regulation of apprenticeship training, poor pedagogical and technical competences of master craftspeople, and weak links to formal skills development systems. Challenges to equipping the youth with skills include: (i) low foundational skills; (ii) quality deficits of technical and vocational skills in the informal economy and informal apprenticeship; (iii) lack or insufficient availability of formal opportunities to acquire skills; and (iv) non-inclusive formal TVET provision that is neither oriented to the needs of the small formal economy nor to the large informal economy (World Bank 2019a, AfDB 2020c).

2.10 **Developing skills in fragile[xviii] situations is a challenge**. Long periods of conflict and war undermine efforts to build a skilled and productive labour force and are an important cause of low literacy levels. Civil conflict has destroyed education and training facilities, while the lack of skills has resulted in high unemployment and contributed to instability. In South Sudan, for example, some 72% of the adult population (81% of women) are illiterate and 42% of public-sector workers do not have higher than primary school education (World Bank, 2015); youth literacy was estimated at 44%, while half of secondary-school-age children and adolescents do not attend school.

Emerging Opportunities for Skills and Entrepreneurship Development

2.11 **Labour market needs are evolving due to technological advancement.** Emerging issues such as climate change demand new solutions. Technology and ICT are rapidly changing and defining the future of work (OECD, 2016), requiring a more skilled workforce heavily

weighted towards STEM professionals. ICT literacy is expected to be at the centre of core skill requirements for many industries (WEF, 2016). Some 230 million digital jobs are projected to be created in Africa by 2030[xix]. Some countries, notably Ethiopia, Ghana, South Africa, and Mauritius, are already gearing up by developing Digital Transformation Strategies/Action Plans[xx], presenting the Bank with an opportunity to support such transformational initiatives. Job displacement is also an issue, as much of the continent's current employment is low-skilled and labour-intensive, with a significant risk of displacement by automation, which implies reskilling and upskilling.

2.12 **The deepening of African economic integration through the African Continental Free Trade Agreement (AfCFTA) presents an opportunity to accelerate industrialisation and job creation.** For RMCs to harness the benefits of the AfCFTA, they need to equip their workforces with technical and entrepreneurial skills leading to value-chain development, growth in manufacturing, and trade facilitation (Box 2, the example of East Africa). The AfCFTA also increases the demand for highly skilled labour and opens opportunities for skills mobility. This calls for harmonisation and recognition of education and skills qualification frameworks across the continent.

Box 2: Skills and Regional Integration

'Transformation towards services and regional integration in East Africa is expected to boost the region's demand for educated and skilled labour. The Northern Corridor Integration Project (NCIP) and Central Corridor Initiative have created a workforce demand of 4,500–15,500 for maritime transport and shipping logistics in ten years, while Lamu Port-South Sudan-Ethiopia-Transport (LAPSSET) is to generate 200,000 jobs through port and related activities. The NCIP's regional demand for Information and Communications Technology (ICT) skills is expected to increase to between 8,300 and 30,600 skilled ICT workforce, while a regional strategy for scaling up access to modern energy services will demand 12,044 professional and technical staff in the geothermal industry'.

***Source**: AfDB East Africa Economic Outlook Report 2020*

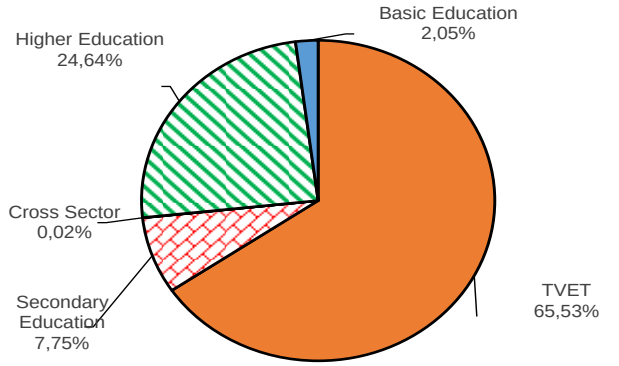
2.13 **Another big opportunity for skills and job creation stems from the strong and pervasive entrepreneurial spirit across the continent.** Africa accounts for the world's largest share of start-ups, but they are often in sectors where productivity remains low (AfDB, 2017a). Investment in the entrepreneurship ecosystem and the green economy will increase innovation, harness the culture of entrepreneurship, and contribute to the development of intellectual capital. In 2018, some 442 innovation hubs were established in cities such as Lagos, Cape Town, Accra, Nairobi, and Cairo. The rapid rise in entrepreneurship is due to the increase in start-up funding of up to $560 million made available for the establishment of IT-related innovations (African Union, 2019). Africa is also experiencing an influx of the diaspora into start-up businesses, especially in digital systems.

3. THE BANK'S SUPPORT TO SKILLS DEVELOPMENT IN AFRICA

The Bank's Portfolio in Skills Development

3.1 **Skills development is an integral part of the Bank's portfolio both through stand-alone projects and their integration in sector projects.** Between 2014 and 2020, the Bank committed about UA 694 million[2] in loans and grants to the education sector, out of which 90.2% supported TVET and HE (Figure 2). About 55% of the total approvals in volume were core lending to ADB-member countries, while 43% were through the ADF window. The highest number of approved projects (31 of 46) were ADF-funded compared to 8 projects via ADB core funding and 7 through the Nigeria Trust Fund (NTF), the MIC Technical Assistance Fund (MIC-TAF) and the Special Relief Fund (SRF). The average project size of an ADB-funded project (UA 47.9 million per project) was about four times the average size of a stand-alone ADF-funded project (UA 10.9 million). With the GCI–7 commitments and based on the principles of selectivity, SEPA will invest in fewer, but larger and more strategic and transformative operations.

Figure 2: UA 694 million committed over 2014-2020 for Education/Skills Development, out of which 90% was allocated to TVET and Higher Education



Source: AfDB (2021)

3.2 **All the five sub-regions of the continent benefited from the Bank's investments in skills development between 2014 and 2020, although with some imbalance.** There were more approvals in volume terms in East Africa (28%), North Africa (19%), and Southern Africa (22%). A high number of projects (12/46) in West Africa were approved but, due to the small volume of funding, the region only accounted for 16% of the total. Central Africa attracted fewer investments (16% of the volume). About 16% of total approvals went to transition countries, demonstrating the Bank's strong track record in education and skills development in fragility contexts. Multi-regional operations accounted for 2% of total approvals.

The Bank's Achievements

3.3 **The Bank's investments in TVET and HE in RMCs have yielded significant developmental results that need to be scaled up (Box 3)**. SEPA will enhance monitoring, evaluation, and learning systems.

Box 3: Results in TVET and HE investments (2014–2018)

- 4,000 education facilities constructed/rehabilitated;
- 1.7 million students provided with quality education;
- Sector reforms promoted to enhance relevance, access to skills, and inclusion;
- More than 1 million youths equipped with vocational and technical skills;
- Over 88,000 teachers trained to improve quality of teaching;
- About 600,000 people in the labour force received demand-driven training;
- Over 50 million Africans, of whom 7 million are youth, have indirectly been impacted since 2006; and
- 3 Africa forums on Science, Technology and Innovation organised between 2012 and 2018.

Source: AfDB (2020g), Human Capital Strategy "Management Implementation Review" 2014–2020.

[2] Equivalent USD 982 million

3.4 **The Bank's interventions are adapted to the evolving needs and priorities of RMCs**. These interventions ranged from policy dialogue and sector reforms to specific investment projects. In the policy area, the Bank has been leading high-level policy dialogues on Science, Technology, and Innovation (STI) since 2012. Through STI forums, the Bank has promoted STEM and innovation in skills development. Between 2012 and 2018, the Bank held three STI forums, an indication of its strategic and catalytic role in promoting investments in STI for Africa's growth and competitiveness (see Box 4).

Box 4: Incentivising RMCs to invest more and smartly in STEM, and Research and Innovation Capacities for job creation through the STI Forum.

The first forum, in Nairobi, Kenya, 2012, connected STI efforts in Africa to global sustainable development processes. It further informed the Bank's Human Capital Strategy (HCS) 2014–2018. The second forum (Rabat, Morocco, 2014) focused on: (i) assessing the state of STI in Africa; (ii) showcasing global best practices; (iii) promoting innovative uses of ICT; (iv) enhancing skills development and jobs; and (v) spurring strategic partnerships on STI. The third forum (Cairo, Egypt, 2018) focused on improving research relevance to catalyse innovations and usable goods and services through the support of the private sector in five selected clusters: climate change/green jobs and green economy; agro-industry/nutrition; water; ICT; and the pharmaceutical industry.

Key outcomes for the Bank include: (i) Increased business development in STI/TVET-focused projects aimed at boosting youth employability, entrepreneurship and innovation for employment in Africa; (ii) Fostering stronger and better coordinated STI strategic partnerships/collaboration at regional level to promote STEM skills, especially for girls; and (iii) Enhanced capacities amongst TVET and HE Institutions in RMCs for STEM skills to contribute to the creation of more youth employment opportunities.

3.5 **The Bank has supported reforms in the skills sector to enhance inclusive access, efficiency, quality, and relevance.** One of the areas of reform has been the promotion of private-sector engagement in education and skills development. Examples of funded projects with significant sector-reform measures since 2013 include the *Zambia Support to Science, Technology and Education Project*; *Rwanda Skills for Employability and Entrepreneurship Program* (SEEP, I, II & III), *Uganda HEST Project*, and the *Morocco Training-Employment Matching Support Program* (PAAFE). The Bank has also conducted analytical work on national innovation systems — for example, in Burkina Faso, Ghana, Kenya, Nigeria, Rwanda, and Morocco. These analytical works helped to foster the Bank's dialogue and strengthen collaboration with other DPs in TVET and STEM.

3.6 **Integrating skills development into the Bank's other operations has facilitated the implementation of the High 5s by supporting agribusiness, transport, industry, and energy sectors.** In Ghana, the 2017 *Savannah Zone Agricultural Productivity Improvement Project* (SAZAPIP) focuses on agricultural value chain for food and nutrition security, and localised job and wealth creation. In Morocco, the *Support Programme for Inclusive and Sustainable Development of the Agriculture Sector* (PADIDFA, 2018–2019) promoted agricultural sector reforms. The programme enabled the training and qualification of nearly 200 trainers and managers, 2,000 graduates as technicians and specialised workers, and the certification of around 5,000 young farmers who have benefited from apprenticeship training[xxi]. In Rwanda, the *Skills Development in the Energy Sector (SDES) Project* contributed to the creation of tools needed for increasing the availability of a skilled workforce for the energy sector, contributing to efforts to increase competitiveness and productivity in the energy sector.

3.7 **To contribute to innovation, the Bank has financed regional operations such as the Pan African University (PAU) Project to support the development of quality HE and research in Africa**. The project has promoted innovations in Science, Engineering, Agriculture, Biotechnology, Social Sciences, Humanities and University Governance. The PAU was designed as an academic network of existing post-graduate and research institutions with 5 Institutes, each specialising in one thematic area, located in each sub-region of the continent. The 5 thematic areas and locations are: West Africa, Earth and Life Sciences

(including Health and Agriculture); North Africa, Water and Energy Sciences (including Climate Change); Central Africa, Governance, Humanities and Social Science; East Africa, Basic Sciences, Technology, and Innovation; and Southern Africa, Space Sciences.

Lessons learned

3.8 **SEPA is enriched by the lessons learned from the implementation of the HCS.** These include the findings and conclusions of the Mid-Term Review (MTR), the Management Implementation Review (MIR), and related project completion reports, as well as lessons learned from implementing the JfYA between 2016 and 2021 and the experience of other development partners[xxii] (Box 5). Detailed information on how the lessons learned are considered in the formulation of SEPA is provided in Annex IV[xxiii].

Box 5: Key lessons learned by the Bank

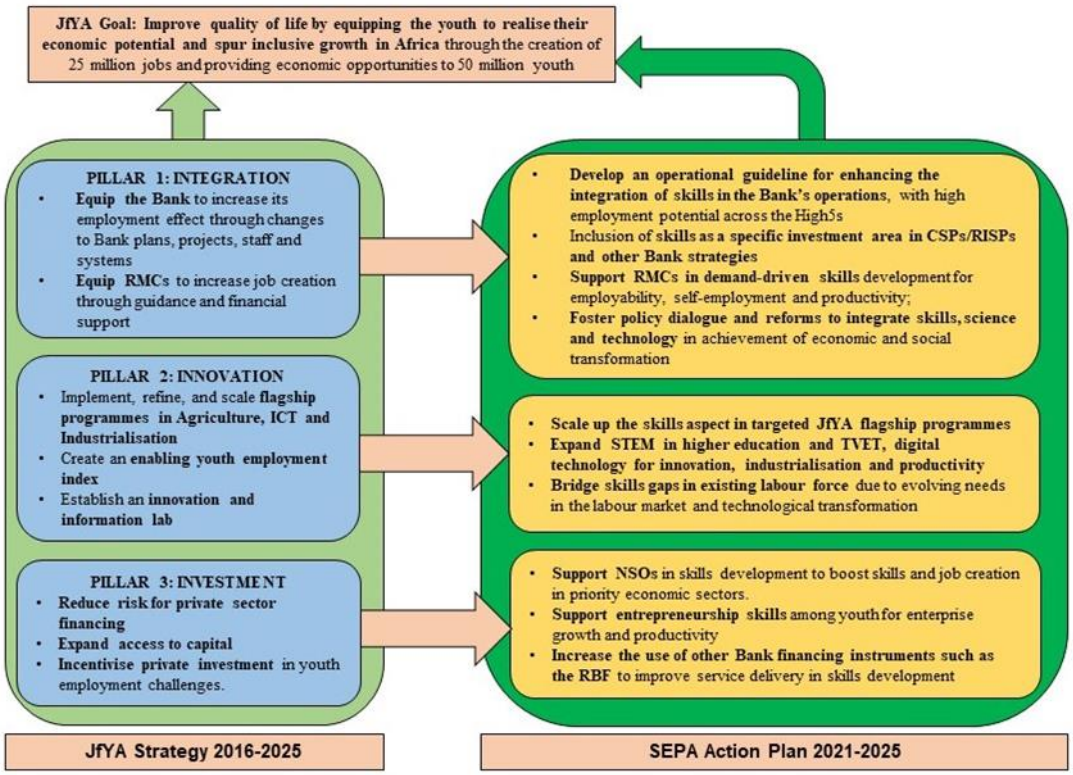
- **Human capital needs on the continent are imposing and evolving.** Demographic trends indicate that these needs will continue rising, providing opportunities for continued investment in human capital, with a focus on demand-driven skills-development programmes and projects. The Bank cannot adequately address all of them; therefore, partnerships with other stakeholders, including the private sector, are necessary to bring interventions to scale.
- **Maintaining STI as a key focus area for future interventions is critical.** The review of the Bank's Human Capital Strategy 2014–2021 stressed the need for the Bank to maintain science and technology as a strategic focus area to support Africa's socio-economic transformation. The reviews also emphasised the need for the Bank to scale up STI to link skills development with productive sectors according to demand. These areas remain relevant and critical in the current context of the industrialisation and manufacturing/value addition agenda and the AfCFTA.
- **Infrastructure deficits in HE and TVET remain the biggest constraint to improving the quality of Africa's workforce.** The Bank's interventions need selectively to support investments in quality infrastructure for these sub-sectors.
- **Building more relevant skills development ecosystems, ensuring private-sector engagement in education and training systems to mitigate shocks and fragility.** The Bank's support to reforms in the sector highlighted the need for strong partnerships between education/skills development and the private sector to improve relevance, promote research and enhance private financing. There is a need to build a more relevant skills development ecosystem by promoting national frameworks that ensure private-sector engagement in education and training systems[xxiv].
- **Accelerate investments in digital infrastructure and solutions to build strong and resilient skills development systems in RMCs and Regional Hubs.** The COVID–19 pandemic has accentuated the need for the Bank to mobilise more co-financing adequately to meet the demand from its RMCs, invest in digital skills, and support skills development systems that are resilient to shocks and fragility.
- **Integration of entrepreneurship in TVET and higher education curriculums helps harness entrepreneurship skills and promotes the links between university and industry under the Triple Helix Model** (connection between academia, the private sector and government). This is critical for equipping the future labour force with productive skills for self-employment, thereby addressing high graduate unemployment and limited access to productive jobs.
- **A strategic focus on skills development infrastructure should go hand in hand with strengthening the enabling environment** to ensure high-performing infrastructure in terms of accessibility, efficiency, relevance, resilience and sustainability.
- **Forging strong collaboration with the private sector in specialised skills training.** This is based on the experience of the labour-intensive and specialised sectors (oil & gas, agriculture, mining industry) where the private sector has financed specialised skills development centres to meet their needs.
- **Operational capacity for Action Plan implementation**: Close attention should be paid to staffing, smart managing of talent and expertise, timely resource allocation and robust Monitoring and Evaluation (M&E) framework.

4. SETTING AREAS OF INTERVENTION UNDER SEPA

Linking SEPA to the JfYA Strategy

4.1 **SEPA is anchored to the Jobs for Youth in Africa (JfYA) Strategy, 2016–2025, and will contribute to the achievement of its overall goal of creating 25 million jobs for young people and equipping at least 50 million youth with skills to realise their full economic potential**. JfYA is being implemented through three strategic pillars: integration, innovation, and investment. It promotes inclusive employment and entrepreneurship, aims to strengthen human capital, and contributes to creating durable labour market linkages. JfYA flagship programmes focus on equipping the youth with entrepreneurial and digital coding skills, which enable RMCs to respond to rapid skills demands, thus fostering better pathways to productive self-employment, efficient school-to-work transition, and enhanced skills for industry needs. Following the expiry of the HCS, SEPA will scale up the skills component of JfYA. SEPA expands support to STEM in HE and TVET, digital technology beyond coding, and online learning skills infrastructure, while supporting an environment that develops skills directly linked to jobs and youth entrepreneurship by rolling out the Skills Enhancement Zone (SEZ) approach. It also addresses skills gaps, mismatch, and relevance in the labour force on the back of the 4IR, green-growth and green-economy agendas, digital transformation, and evolving needs in the labour market. SEPA sets the Bank's framework for targeted investments to build relevant skills that promote youth employability and gender equality. Figure 3 presents the link between JfYA and SEPA, while Annex III contains more details on JfYA.

Figure 3: Link between SEPA and JfYA



Guiding Principles

4.2 **SEPA aligns with the guiding principles of the JfYA Strategy:** (i) strengthening core competencies (STEM, digital/online learning, and entrepreneurial competencies); (ii) amplifying existing work, which implies building on the achievements of the HCS and JfYA, especially in digital coding and entrepreneurship; (iii) fostering collaboration, both within and outside the Bank; (iv) applying a strategic approach by integrating high-impact activities, and undertaking activities in a phased approach; and (v) using private-sector instruments to boost the development of demand-driven skills in priority economic sectors.

Based on the Bank's comparative advantage and commitments in the ADF–15 and the GCI–7, SEPA is also guided by additional principles including (i) selectivity, (ii) collaboration and (iii) complementarity.

4.3 **Selectivity: The Bank will focus on areas where it can demonstrate concrete comparative advantage and value addition** (Box 1). The Bank will focus on financing climate-smart and sustainable skills infrastructure, strengthening capacity in skills-development institutions, and engaging in evidence-based policy dialogue with RMCs in line with the Bank's Selectivity Guidelines[xxv]. Notably, SEPA will focus on STEM in HE and TVET, digital and online learning infrastructure, with attention to efficiency and quality infrastructure. Adhering to the selectivity guidelines, SEPA will not typically support general education at the primary and secondary levels but could, exceptionally, support STEM in secondary education in fragility contexts. Through policy dialogue and technical assistance, the Bank will support RMCs in their efforts to mobilise resources from other DPs for investment in science infrastructure at the lower levels of education to build a strong pipeline to produce students for advanced STEM education at higher education.

4.4 **Collaboration and partnership: The Bank will deepen collaboration and partnerships** with the private sector, other DPs, UN agencies, reputable academic and research institutions, and civil society organisations to produce results with maximum impact. The Bank will also align its interventions with international, continental, regional, and national policies and strategies, encouraging strong buy-in and shared ownership with RMCs.

4.5 **Complementarity: SEPA complements other strategies under the High 5s to address specific skills gaps in the relevant sectors of the Bank's operations (Table 3).** These include the Bank's Strategy on Feed Africa; the New Deal on Energy for Africa; the Industrialization Strategy, the Regional Integration Policy and Strategy; the Strategy on Addressing Fragility and Building Resilience in Africa; the JfYA Strategy; the Gender Strategy; the Governance Strategy; the Capacity Building Strategy; and others, including those that are under development. Addressing these specific skills gaps will facilitate effective implementation of the Bank's operations. In the spirit of the "One Bank" approach, SEPA will promote joint operations with other sectors such as Transport, Water and Sanitation, Health, Agriculture, Industrialization, ICT, and Governance.

Table 3: Link Between SEPA and the Bank's High 5 Priorities

High 5s	Link with SEPA
Industrialize Africa	SEPA will support the creation of a skilled workforce, including middle-level technicians, engineers, and other professionals who will promote production and innovation to exploit national, regional, and global supply chains. SEPA will pay attention to developing digital skills to enhance Africa's capacity to participate competitively in the 4IR. SEPA will ensure collaboration with the PITD Department.

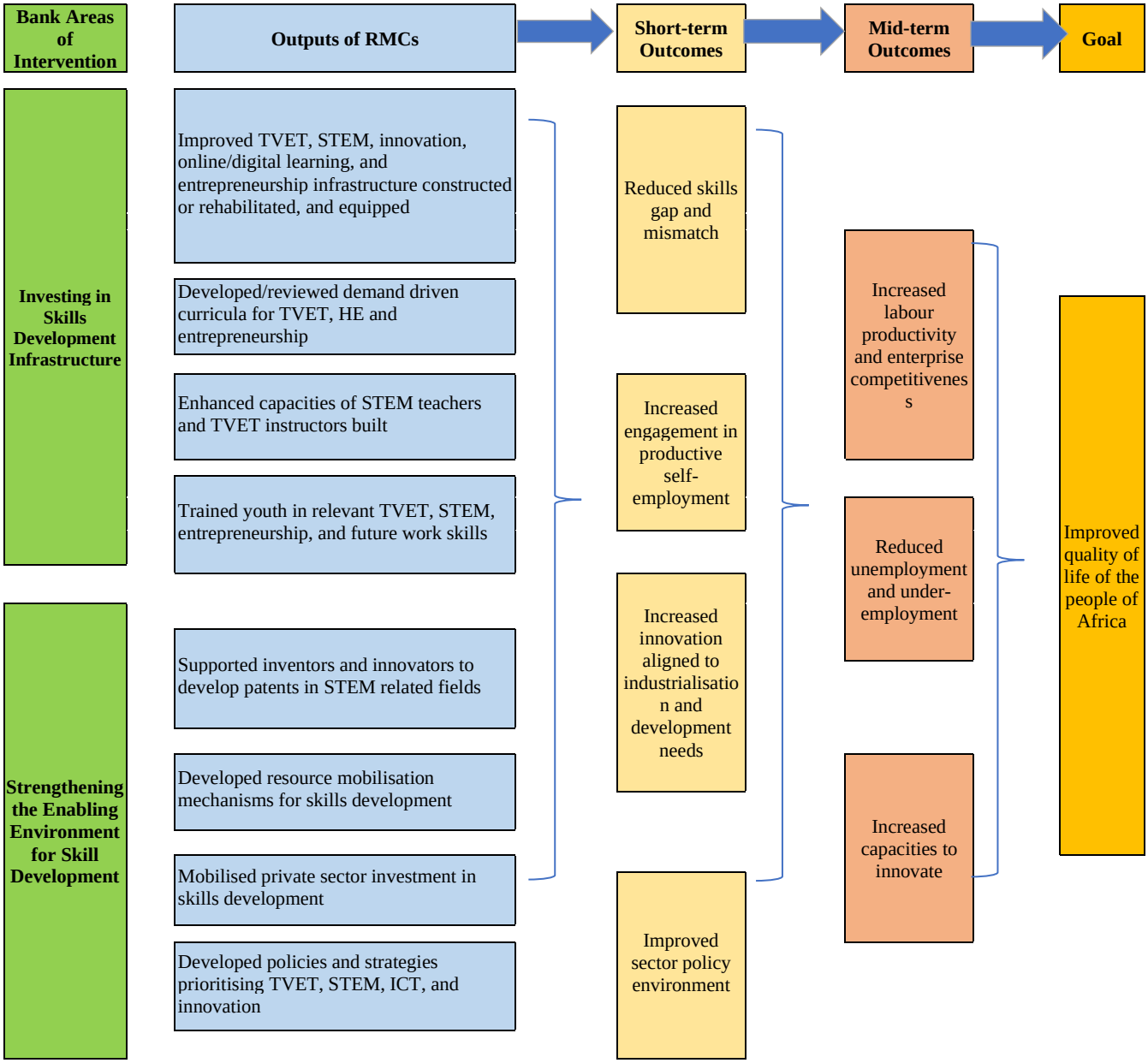
High 5s	Link with SEPA
Feed Africa	SEPA will equip the youth with relevant skills in agri-business and scientific research to support agro-industry, including value-chain development. It will also promote innovations for improving agricultural productivity and value addition.
Integrate Africa	SEPA will focus on continental skills mobility to advance AfCFTA objectives. This will require improved curricula and quality-assurance standards in TVET and HEST. Specifically, SEPA will support the scaling up of regional centres of excellence, with a focus on the critical skills needed to transform Africa and on harmonisation of the qualification frameworks across the continent to facilitate labour mobility. This will ultimately help advance the creation of more regional centres of excellence in alignment with the GCI–7 commitments.
Light Up and Power Africa	Special attention will be paid to developing skills to support the development of renewable energy to facilitate universal access to electricity and underpin the creation of green jobs and a green economy. Energy is critical to building and maintaining technology advancement and SEPA will nurture strong synergy with the African Network of Centre of Excellence in Energy (ANCEE-RACEE) to improve skills in the sector.
Improve the Quality of Life for Africans	SEPA will support skills development, especially among the youth and women, to promote productive jobs. It will also support skills development in the health, and water and sanitation sectors to enhance quality service delivery and innovation.

Goal, Objectives, and Theory of Change

4.6 **The overall goal of SEPA is to improve the quality of life of the people of Africa through a productive and innovative workforce**. This goal will be reached through four objectives: (i) reduced skills gaps and mismatches; (ii) increased engagement in productive self-employment; (iii) increased innovation aligned to industrialisation and development needs; and (iv) improved sector policy environments.

4.7 **SEPA is underpinned by a Theory of Change (ToC) based on robust evidence**[xxvi]. The ToC flows from the fundamental logic that increasing the supply of demand driven TVET, STEM and digital skills will facilitate the building of a critical mass of skilled labour that is innovative, productive, and entrepreneurial. The strategic thrust of SEPA is a game changer as it emphasises the connection between skills supply and demand, thus minimising skills mismatch. SEPA recognises the strong links between skills and economic transformation, focusing on skills for industrialisation, for improved productivity, and for value-chain development. Under the assumption that the industrial sector expands to create jobs[xxvii] and that adequate complementary investments are made in the productive sectors of the economy, the ToC assumes that the supply of quality and relevant TVET, STEM and digital skills will improve employability, promote job-creating growth, and contribute to improved quality of life for the African population.

Figure 4: SEPA Theory of Change



Assumptions:
1. The quality of basic education (literacy, numeracy, life skills) improves.
2. Households/Individuals can afford costs for training/skilling/re-skilling.
3. Private sector increases participation in curriculum development and financing of research and innovation.
4. Barriers to starting small scale businesses are lowered.
5. Continued economic growth, especially in labour-intensive industries.
6. More youth become opportunity-driven entrepreneurs.
7. Private sector and MSMEs are expanding enough to create more jobs.

Areas of Intervention

4.8 **SEPA is organised around two areas of intervention (AIs) and five operational objectives (OOs), as well as cross-cutting themes.** An overview of the AIs and their corresponding OOs is presented in Table 4, while the SEPA Implementation Action Matrix

(IAM) in Annex II contains detailed work streams and activities. AI.1 focuses on the development of quality infrastructure for skills and is the core of SEPA, while AI.2 focuses on the enabling environment, which covers the 'soft' aspects of SEPA. About 90% of resources for SEPA will be devoted to infrastructure development while the remaining 10% will go to the enabling environment intervention area. SEPA pays close attention to the efficiency of investments that result in real skills acquisition and sustainable job creation. This is addressed by AI.2 through support to demand-driven curricula, sector reforms and governance, and building statistical and M&E capacities. The Bank will also support the development of Skills Strategies/Action Plans in RMCs to facilitate close alignment of SEPA with RMCs' own strategic frameworks.

Table 4: Summary of SEPA Areas of Intervention and Operational Objectives

Areas of Intervention	**Operational Objectives**					
1. Investing in skills-development infrastructure	1.1: Expand quality HE infrastructure with a focus on STEM					
	1.2: Expand market-oriented TVET infrastructure					
	1.3: Expand infrastructure for digital skills and online learning					
2. Strengthening the enabling environment for skills development	2.1: Harness strategic partnership and resource mobilisation					
	2.2: Improve regulatory and institutional capacity					
Integrating cross-cutting themes	Entrepreneurship	Fragility	Gender	Climate change	Social inclusion	Knowledge Generation

Area of Intervention 1: Investing in Skills Development Infrastructure

4.9 **To deliver on this area of intervention effectively, the Bank will focus on three OOs:**

OO.1: Expand quality of HE infrastructure with a focus on STEM

4.10 **A workforce equipped with quality STEM skills is crucial to fostering innovation and building a knowledge economy.** The Bank's investments in STEM infrastructure aim to improve the relevance and quality of STEM skills, while promoting equitable access to training and research facilities. Towards this Objective, the Bank will support investment in inclusive, quality STEM infrastructure (construction, expansion, rehabilitation, equipment) in RMCs to address related constraints in skills development. The Bank will also support the establishment of centres of excellence to enhance innovation, research and development (R&D), and harmonisation of skills development for skills mobility.

OO.2: Expand Market-Oriented TVET infrastructure

4.11 **The urgency of focusing on skills development through TVET is underscored by the high demand for mid-level skilled workers (technicians) for value-chain development and manufacturing**. TVET can be a pathway to providing skills needed by young people for productive self-employment. Technical and vocational skills among the youth are also becoming critical tools for promoting peace and inclusiveness in fragile contexts, and for supporting livelihoods in rural economies. For this Objective, the Bank will support investments in the construction and rehabilitation of TVET infrastructure, the acquisition of equipment, and the purchase of teaching and learning materials. Emphasis will also be placed

on digital infrastructure enhancements in TVET institutions and support to the development of effective employment promotion services and incubation. To ensure availability of relevant skills required especially by industrial clusters (manufacturing, agro-industrial processing, ICT etc.), SEPA will support establishment of Skills Enhancement Zones (SEZs) within industrial parks or special economic zones. Special emphasis will also be placed on promoting infrastructure development that enhances the learning environment for girls.

OO.3: Expand infrastructure for digital skills and online learning

4.12 **Technological transformation is changing skills agenda and the way people learn and work.** Digitalisation of systems and service delivery is growing, along with the demand for digital skills, making some existing skills obsolete. Furthermore, the COVID–19 pandemic has exposed inadequacies in the use of digital technology in learning, service delivery, and workspace in Africa. For Africa to benefit from the emerging economic opportunities, to be competitive and to reap the benefits of the 4IR, the continent needs to develop a workforce that is fit for purpose. Towards this Objective, the Bank will support investment in ICT infrastructure for digital-skills development and ICT access for education resilience and continuity during times of crisis, e.g., pandemics or conflict. Thus, SEPA will support investments in the development of e-learning infrastructure through the establishment of e-learning platforms and the deployment of Open and Distance e-Learning (ODeL). To complement the Bank's Coding for Employment platform implemented under the JfYA, SEPA will support investments in innovative ICT infrastructure in skills training facilities that promotes fast data transfer, and establishment of digital hubs to improve digital access and connectivity. SEPA will collaborate with PITD in promoting ICT infrastructure and internet connectivity.

Area of Intervention 2: Strengthening the Enabling Environment for Skills Development

OO.4: Harness strategic partnerships and resource mobilisation

4.13 **Enhancing the efficiency of interventions that improve the matching of skills and labour-market demand requires strategic partnerships with industry**. To achieve this Objective, the Bank will support RMCs' partnering with the private sector and industry for students to acquire on-the-job training through internships, SEZs, and curriculum and entrepreneurship development. The Bank will also support twinning arrangements and strategic partnerships with renowned universities and technical institutions for better quality skills and practices that meet international standards. A good example of such partnership is the Bank's support to Rwanda through the Regional ICT Centre of Excellence in Rwanda (also known as Carnegie Mellon University Africa), which is producing high-quality ICT engineers.

4.14 **The Bank will deploy its convening power for resource mobilisation for skills development, especially for non-sovereign operations** (NSO)[xxviii], through public-private partnerships (PPPs), direct funding and in-kind support to position the continent better in the era of 4IR. The Bank will enhance collaboration with the African Union and its Education, Science, Technology, and Innovation (ESTI) Commission for innovative financing in TVET and STEM to tap into the Bank's forthcoming African Education, Science, Technology, and Innovation Fund (AESTIF) and international co-financing facility for education. The Bank will assist RMCs to develop innovative and sustainable financing mechanisms for skills development, and for research and development (R&D)[xxix].

OO.5: Improve regulatory and institutional capacity

4.15 **Building on the Bank's experience of policy-based lending and institutional support, SEPA will support RMCs in reforms that reinforce an enabling environment for skills development**. Strengthening the management, co-ordination, governance, and regulatory environment of skills development in the TVET and HE sub-sectors is critical for enhancing the efficiency of investments. The Bank will support reforms under this Objective that (i) promote the relevance and quality of skills development through the participation of the private sector and industry; (ii) enhance access and equity, especially for girls and disadvantaged youth; (iii) improve co-ordination and governance systems in the skills eco-system; and (iv) increase national and DP funding for skills development. The Bank will deploy policy dialogue with RMCs and the private sector to support reskilling workers whose skills have become obsolete due to technological advancement, adoption of a green-growth agenda, and the impact of digital transformation. The Bank will also support regional policy reforms promoting skills mobility and the harmonisation of qualification frameworks to foster regional integration. To enhance the efficiency of its interventions further, and in line with the Bank Group's Capacity Development Strategy, and the Bank's statistical capacity building programmes, it will strengthen statistical, monitoring and evaluation (M&E) capacities in TVET and HE institutions, supporting tracer and employers' surveys to inform skills needs and employment outcomes and assess the relevance of graduates to their eventual employment. Through SEPA, the Bank will enhance knowledge generation and dissemination and promote evidence-based policies in TVET and HE.

Cross-cutting Themes

4.16 **Entrepreneurship:** Training in entrepreneurial skills is under-emphasised in TVET and HE institutions. In a move to correct this, SEPA will (i) integrate entrepreneurship into training curricula and qualification frameworks, and (ii) develop entrepreneurship and business infrastructure (incubators, accelerators, and maker spaces and fab labs[xxx]) within learning institutions to enhance the competitiveness of the labour force. The triple helix model (connection among academia, the private sector, and communities) will be promoted as a catalyst for relevance and innovation. SEPA will support industrial skills hubs, principally in industrial parks. Partnerships with the private sector will be emphasised in the funding, running, and management of entrepreneurship-related infrastructure and facilities.

4.17 **SEPA will reinforce the JfYA emphasis on building and scaling up youth entrepreneurship ecosystems** to ensure more coherent and effective access to financial and technical capacity support for youth entrepreneurs, as well as improving the business environment. SEPA will focus on providing quality non-financial services by deepening the provision of technical skills for entrepreneurship training and mentorship. SEPA also supports the Bank's operationalisation of new initiatives that enhance youth entrepreneurship such as the Youth Entrepreneurship Investment Bank (YEIB). YEIB aims to support the growth and survival of youth enterprises that can create jobs and contribute to the sustainable economic development of Africa.

4.18 **Gender Mainstreaming:** In line with Pillar 2 of the Bank's Gender Strategy 2021–2025, "Accelerating employability and job creation for women through skills enhancement", SEPA will tackle the issues responsible for gender barriers to skills development. The Bank will undertake initiatives to bridge the gender gap in its interventions through gender mapping in SEPA-supported projects and programmes. The Bank will also support affirmative policies

for girls to pursue STEM-related courses in higher institutions and enter male-dominated trades in TVET.

4.19 **Climate Change:** SEPA will contribute to the Bank's efforts to address climate change and the green-growth and green-economy agendas, in line with the Bank's climate change and green-growth strategy (CC&GG 2021–2030). In this context, the Bank will support skills training and innovations that promote green technologies and address local, regional, and global environmental concerns. CC&GG recognises the need to pay attention to: (i) improving awareness, knowledge of climate change (and related job opportunities) among the youth through the integration of climate change and environmental issues in school curricula, particularly in STEM subjects; and (ii) expanding the involvement of women and young entrepreneurs in climate-smart and green innovations. SEPA will promote the emergence of a talent pool among the youth to develop solutions to cope with climate-change and green-economy challenges, and low-carbon development. SEPA will comply with the Bank's mandate of climate-change marking in its supported operations, as well as its social and environmental standards, as defined in its Integrated Safeguards System.

4.20 **Fragility:** Prolonged conflict, vandalism, insecurity, and underinvestment in the context of social, economic, and political fragility destroy education infrastructures and imperil skills development. SEPA activities in fragility situations will be implemented in the context of the Bank's new Strategy for Addressing Fragility and Building Resilience in Africa (2022–2026). Priority area 3 of the Strategy focuses on ''*Catalyzing private investments for job creation and inclusive economic development*". The areas of skills development in the Strategy are vocational training and entrepreneurship, with special attention to youth- and women-owned businesses. It prioritises support to start-ups and SMEs development to spur domestic value-chain development. Considering the orientation of the Strategy, SEPA will (i) focus on developing entrepreneurship skills for enterprise growth, and (ii) support TVET, STEM and digital skills infrastructure for value-chain development to boost productivity in the informal sector and enhance worker employability, overall. SEPA will also collaborate with ECAD and ECGF on institutional and public workforce capacity building in partnership with higher learning institutions.

4.21 **Social Inclusion:** The lack of access to quality skills among the youth from poor households and rural areas, and among persons with disability (PWDs), deepens their marginalisation. This excludes them from opportunities for upward social mobility, career development, and escaping from poverty. SEPA will support skills-development initiatives that promote social cohesion, peace building, and inclusion of the marginalised, including PWDs. SEPA will consider the needs of young internally displaced persons (IDPs), ex-combatants, and returnees in skills development. These objectives will be achieved, among other things, through reforms and targeted interventions, such as expanding Open Distance and eLearning (ODeL) systems.

4.22 **Knowledge Generation**: Knowledge generation and effective dissemination will be an important non-lending instrument of SEPA. Each area of intervention will be a source of quality information to generate knowledge products (Economic Sector Work, diagnostics, flagship reports etc.) on key issues related to skills development in Africa. The Bank will use its convening power to disseminate knowledge products to policy makers, DPs, and investors through seminars, forums, training events, and knowledge-outreach activities. The knowledge products will underpin policy dialogue and advisory services on skills development to RMCs.

Thus, in the context of SEPA, the Bank will seek to become more prominent as a knowledge provider on skills development.

5. IMPLEMENTING THE SEPA ACTION PLAN

Operational Arrangements

5.1 **The implementation of SEPA will adopt a demand-driven and differentiated approach based on country context.** For example, in Middle Income Countries (MICs)**,** the provision of knowledge products and advisory services is becoming increasingly important. In such countries, the focus of SEPA will be on soft issues, in addition to the development of STEM in HE and TVET, digital technology and online learning infrastructure. In transitional states, conflicts have contributed to the destruction of public infrastructure, including skills-development facilities, while constraining public administration and service delivery. In such contexts, SEPA will, in partnership with higher learning institutions and in collaboration with ECAD, also focus on rebuilding the workforce with the necessary qualifications and relevant skills for public administration and service delivery.

5.2 **Operations under SEPA will be designed and implemented in full compliance with the Bank's operations cycle and standard operating procedures.** Given the complementarity between SEPA and other strategies under the High 5s to address specific skills gaps in the relevant sectors of the Bank's operations (paragraphs 3.6 and 4.5 above), the Human Capital, Youth and Skills Development Department (AHHD) will lead and co-ordinate with other departments and organisational units towards the implementation of SEPA under the "One Bank" approach. SEPA will facilitate the development of tools for integrating skills into the Bank's operations. Different Departments and Divisions will participate in project design and implementation, as well as monitoring and follow-up through supervision missions, to identify potential early warning signals on emerging portfolio management issues. The implementation of SEPA rests with existing units within AHHD, with direct oversight by the Education and Skills Development Division (AHHD.1) in close relation with the Jobs Team.

5.3 **AHHD.1 will facilitate**: (i) linking SEPA with the High 5s to ensure the effective integration of skills development in both sovereign and non-sovereign operations with priority to sectors with high job-creation potential such as the agriculture value chain, transport, energy, ICT, and water; (ii) strengthening a "One Bank" approach in the implementation of the operations supported by SEPA; and (iii) promoting strong partnerships with UN agencies and CSOs for capacity building and implementation of activities, especially in transitional states. On the side of the RMCs, the central Ministry of Finance (or Planning depending on the country) will be the key counterpart of the Bank, but relevant sector ministries, sub-national authorities, and the private sector will share the responsibility for project identification, preparation, and implementation.

Human and Financial Resources

5.4 **The effective implementation of SEPA requires adequate human and financial resources.** The focus on TVET, STEM, ICT, and entrepreneurship skills will increase demand for the Bank's technical assistance and advisory services. The Bank will assess its human resource gaps and identify areas with limited experience. To address gaps, some staff will be upgraded or retrained. In fields where it is not feasible to develop internal staff expertise, the Bank will consider engaging external expert organisations and individuals for support. In these

new priority areas, the Bank will need flexibility, innovative implementation modalities, and rely on collaboration with other DPs and the private sector. The Bank's administrative budget will cover some of the expenditure related to internal processes for the implementation of SEPA. The costs of SEPA-designated operations will follow the Bank's applicable funding policies and procedures. Financing SEPA, from approval to completion in 2025, will amount to some UA550 million[3] based on historical performance, the Bank's commitments, and AHHD's proposed Indicative Operational Programme (IOP). This sum includes funding the operations cycle, contributions to project funding, and contingencies. Up to 25% of the financing could also be mobilised through co-financing.

Internal and External Communication

5.5 **A SEPA communication plan will be developed to ensure** improved dialogue with RMCs, RECs, private sector partners, and key stakeholders at the country and sub-regional levels to include and prioritise skills development in Country Strategy Papers (CSPs) and Regional Integration Strategy Papers (RISPs). The implementation of SEPA will require effective communication with a clear action plan that selectively fosters the integration of skills across the Bank's interventions. The Bank will continue to build effective communication in skills development on the continent, while strengthening partnerships with the AU, RECs, UN agencies, and other organisations, such as WorldSkills, that are dedicated to showcasing the value of skills, raising the profile of skilled professionals, and demonstrating the importance of skills in economic growth.

Monitoring & Evaluation (M&E)

5.6 **SEPA implementation will be monitored and evaluated based on the workstream/activities described in the SEPA Implementation Action Matrix (IAM),** the conceptual framework of ToC, and a Results Framework (RF) (Figure 4, Annexes I and II). These instruments offer a robust implementation plan and M&E framework that clearly describe the expected impact (goals) of SEPA, short- and medium-term outcomes, outputs, and key indicators with their logical connections. Getting accurate and timely data on skills development proved to be a challenge under the Bank's Human Capital Strategy (HCS) that SEPA succeeds, so SEPA operations will include concrete measures to build human and institutional capacity in RMCs for data collection, analysis, management, and a comprehensive results-measurement framework. The Delivery Performance Management and Results (SNDR) and IT (CHIS) Departments of the Bank will design a tool (in essence, a Skill for Productive Jobs Dashboard) for integrating skills and jobs in Bank operations in line with ADF–15 commitment, for the monitoring of performance indicators. SEPA will leverage the Joint Impact Model under JfYA and the Employment Dashboard under Enable Youth to measure direct, indirect, and induced jobs. This integrated skills and job marker will be included in the Dashboard. SEPA will also utilise results from joint-portfolio performance reviews, conducted by the Bank and RMCs, and the Mid-Term Review of the JfYA by BDEV. A mid-term review of SEPA will be conducted in 2024 and a full review at completion in 2025.

Risks and Mitigation Measures

5.7 **Risks that could limit the achievement of the objectives of SEPA** are outlined in Table 5, together with mitigation measures.

[3] Equivalent USD 778 million

Table 5: Risks and Mitigation Measures

Risk Category	Risk Description	Rating	Mitigation Measures	Risk Owner
Institutional	Weak institutional capacity to prioritise and integrate skills and jobs in operations	Medium	- Provision of training and promoting awareness of skills development inside the Bank - Identification of skills-development champions across Bank departments - Continuous dialogue within the Bank to foster cross-departmental and cross-complex work and with RMCs.	Bank
Macro-economic	Macroeconomic vulnerability, due to prolonged impact of the COVID–19 pandemic, limiting resource mobilisation, pipeline development and project/strategy implementation	Medium	RMCs continued implementation of economic reforms in the post-COVID–19 period to stabilise the economy, enhance fiscal and domestic revenue mobilisation performance, and enhanced budgetary allocation for education and skills development	RMCs' governments
Political	Political governance risks (including those related to security)	Medium	SEPA particularly caters for this risk by tailoring interventions to fragile contexts and inclusion of marginalised groups (such as the youth, women, and displaced and hosting communities, among others) as beneficiaries in the design and implementation of project/programmes	RMCs' governments
	Low government commitment to policy reforms and adequate budget allocation to education and skills development	High	Engage in policy dialogue to sensitise RMCs' governments on the importance of investing in people and skills development to spur economic transformation and productive jobs creation	RMCs' governments and the Bank
Economic transformation	Continued slow economic transformation may limit the need for skills.	High	- Continued investment in structural reforms for private-sector development, and in economic infrastructure, governance, and skills development - High-level dialogue with RMCs to advocate more investment resources to be allocated to skills development	RMCs' governments and the Bank
Maintenance	Maintenance of the skills-development infrastructure (facilities, equipment)	Medium	Conduct policy dialogue with RMCs to advocate more resources to be dedicated to the sector development budgets for maintenance of skills infrastructure (facilities and equipment)	Bank/RMCs' governments

6. CONCLUSION

SEPA is the timely and relevant response of the Bank to the demands of its RMCs for more investment in skills development to enhance labour productivity, innovation, and employability. SEPA provides the Bank with a tool to deepen and broaden its engagement in skills development under JfYA for 2022 to 2025. SEPA aligns with the development priorities of RMCs alongside the Bank's commitments and its development agenda. Drawing on the lessons of past strategies in education and skills development, and with AfDB's comparative advantage in the sector, SEPA will enable the Bank to consolidate its past achievements in supporting skills development for inclusive economic growth and poverty reduction in Africa. For maximum effectiveness, and based on rational selectivity, SEPA focuses on skills development in STEM in Higher Education, TVET, and digital and online learning infrastructure to promote a productive, innovative and, above all, an employable labour force.

ANNEX I: SEPA 2022–2025 RESULTS FRAMEWORK

SKILLS FOR EMPLOYMENT AND PRODUCTIVITY IN AFRICA (SEPA) ACTION PLAN 2022–2025						
RESULTS CHAIN AND INDICATOR DESCRIPTION	**UNIT OF MEASUREMENT**	**BASELINE (2018–2022)**	**TARGET (2025)**	**MEANS OF VERIFICATION**	**FREQUENCY OF DATA COLLECTION**	**RESPONSIBILITY FOR DATA COLLECTION**
A. ALIGNMENT INDICATOR						
Improved economic and social wellbeing of all Africans						
Reduction of share of Africans living in poverty	Africans living on less than $1.90 a day (%)	34 (2020)	< 33	SEPA MTR and Completion Reports	At MTR and Completion	AfDB ADER, AHHD, RDGs, BDEV, SNDR
B. OUTCOME INDICATORS						
MID-TERM OUTCOMES						
OUTCOME 1: Increased labour productivity and enterprise competitiveness						
RMCs in Top 100 in Global Competitiveness Index	RMCs (#)	< 15 (2020)	15	SEPA MTR and Completion Reports	At MTR and Completion	AfDB ADER, AHHD, RDGs, BDEV, SNDR
OUTCOME 2: Reduced unemployment and under-employment						
• Reduced Youth unemployment • Reduced Youth underemployment	• Youth unemployment rate (%) *Female (%)* • Youth underemployment rate (%) *Female (%)*	12 (2020) *12 (2020)* 19.1 (2020) *21(2020)*	11 *11* 18.5 *20.5*	SEPA MTR and Completion Reports	At MTR and Completion	AfDB ADER, AHHD, RDGs, BDEV, SNDR
OUTCOME 3: Increased capacities to innovate						

• Increased Africa's share of global patent applications • Increased Africa's share of global research output (%)	• RMCs' share (%) • RMCs' share (%)	1% (2018) 3.8% (2018)	1.5 4	SEPA MTR and Completion Reports, WIPO	At MTR and Completion	AfDB ADER, AHHD, RDGs, BDEV, SNDR
SHORT-TERM OUTCOMES						
OUTCOME 4: Reduced skills gap and mismatch						
Employed youth whose skills are mismatched to their jobs	Share of youth (%)	46 (2020)	40	Bank's Surveys, ILO, SEPA MTR and Completion Reports	At MTR and Completion	AfDB ADER, AHHD, RDGs, BDEV, SNDR
OUTCOME 5: Improved people's engagement in productive self-employment						
• Youth Not in Employment, Education or Training- (NEET) *Female* • Youth labour participation (%) *Female* • Direct/indirect (induced) jobs created by the Bank	• NEET rate (%) *Female* (%) • Rate for youth (%) *Female* (%) • jobs created (Million)	20.8 (2021) *25.9(2021)* 45 *46* 9.05 (2016–2020)	20.4 *25* *46* *47* -	SEPA MTR and Completion Reports	At MTR and Completion	AfDB ADER, AHHD, RDGs, BDEV, SNDR
OUTCOME 6: Increased innovation aligned to industrialisation and development needs						
• Enrolment in Higher Education (HE) *Female* • Enrolment in STEM at HE institutions *Female* • Enrolment in TVET training (%) *Female*	• Total Enrolment rate in HE (%) *Female* (%) • Total Enrolment rate (%) *Female* (%) • Total Enrolment rate (%)	9.44 (2018) *8.19 (2018)* 34 (2018) *25 (2018)* 11 (2020) *9 (2020)*	12 *10* 37 *30* 15 *14*	SEPA MTR and Completion Reports	At MTR and Completion	AfDB ADER, AHHD, RDGs, BDEV, SNDR

	Female (%)					
OUTCOME 7: Improved sector policy environment						
RMCs supported to improve the policy environment for STEM, TVET and Entrepreneurship Skills Development	RMCs supported (#)	< 10 (2021)	10	PAR, SEPA MTR and Completion Reports	At MTR and Completion	AfDB ADER, AHHD, RDGs, BDEV, SNDR
C. OUTPUT INDICATORS						
OUTPUT 1: Quality TVET, STEM, innovation, online/digital learning and entrepreneurship infrastructure constructed or rehabilitated, and equipped						
• TVET and HE institutions constructed/ rehabilitated equipped, including with ICT equipment (000) • New Open, Distance and e-Learning (ODeL) Centres supported	• TVET and HE institutions (#000) • ODeL Centres (#)	1.08 37	2 50	PAR, Supervision and Audit reports, MTR and PCR	At supervision (2 per year), MTR and Completion	AHHD, Project PIUs, RDGs, RMCs
OUTPUT 2: Demand driven Curricula for TVET, HE and entrepreneurship developed or reviewed						
Operations supporting the development of demand-driven curricula for TVET, HE and entrepreneurship	SEPA operations (#)	0	10	PAR, Supervision and Audit reports, MTR and PCR	At supervision (2 per year), MTR and Completion	AHHD, Project PIUs, RDGs, RMCs
OUTPUT 3: Capacities of STEM Teachers and TVET Instructors built						
Teachers and education staff, including TVET and HE, trained	Teachers and staff trained (000) *Of which Female (%)*	25.5 (2018) -	30 *50*	PAR, Supervision and Audit reports, MTR and PCR	At supervision (2 per year), MTR and Completion	AHHD, Project PIUs, RDGs, RMCs
OUTPUT 4: Trained people in relevant TVET, STEM, entrepreneurship, and future work skills						
Labour force in various economic sectors benefiting from targeted training	Members trained (000)	600 (2018)	700	PAR, Supervision and Audit	At supervision (2 per year),	AHHD, Project PIUs, RDGs, RMCs

				reports, MTR and PCR	MTR and Completion	
OUTPUT 5: Inventors and innovators receive adequate capacities to develop patents in STEM related fields						
• Innovation centres of excellence and entrepreneurship incubation centres established in TVET and HE institutions in RMCs and RECs • Youth and women across Africa reached by innovation centres	• Centres established (#) • Youth and women reached (000)	11 -	14 50	PAR, Supervision and Audit reports, MTR and PCR	At supervision (2 per year), MTR and Completion	AHHD, Project PIUs, RDGs, RMCs
OUTPUT 6: Innovative and sustainable resource mobilisation mechanisms developed						
Developed innovative funding mechanisms for TVET and STEM	Countries supported (#)	0	10	PAR, Supervision and Audit reports, MTR and PCR	At supervision (2 per year), MTR and Completion	AHHD, Project PIUs, RDGs, RMCs
OUTPUT 7: Private sector investment in skills development mobilised						
Established public-private partnerships frameworks for financing TVET and STEM and for entrepreneurship training	RMCs supported (#)	-	10	PAR, Supervision and Audit reports, MTR and PCR	At supervision (2 per year), MTR and Completion	AHHD, Project PIUs, RDGs, RMCs
OUTPUT 8: Policies and strategies prioritizing TVET, STEM, ICT and innovation developed in RMCs and RECs						
Developed policies and strategies prioritizing TVET, STEM, ICT and innovation	RMCs and RECs supported (#)	< 10 (2021)	10	PAR, Supervision and Audit reports, MTR and PCR	At supervision (2 per year), MTR and Completion	AHHD, Project PIUs, RDGs, RMCs
D. CORPORATE CROSS-CUTTING PRIORITIES						
CROSS-CUTTING PRIORITY 1: Integration of gender and climate change						

• Operations with gender-informed design and using the Gender Marker System • Operations integrating climate change, job creation and social inclusion	• SEPA operations (%) • SEPA operations (%)	96 (2020) -	97 90	PAR, Supervision and Audit reports, MTR and PCR	At supervision (2 per year), MTR and Completion	AHHD, Project PIUs, RDGs, RMCs
CROSS-CUTTING PRIORITY 2: Mobilisation of co-financing						
Co-financing leveraged with Banks's operations	Amount of co-financing (Million UA)	< 100 (2020)	200	PAR, Supervision and Audit reports, MTR and PCR	At supervision (2 per year), MTR and Completion	AHHD, Project PIUs, RDGs, RMCs
CROSS-CUTTING PRIORITY 3: Knowledge Generation						
• Science and Technology and Innovation (STI) forums held • Economic and Sector Work (ESW) on STEM, TVET and jobs for youth conducted • Skills demand reports with labour market input prepared	• STI forums held (#) • ESW conducted (#) • Reports prepared (#)	3 1 0	3 5 2	Annual Work Programmes, Study Reports	As required by specific event or study	AHHD, Project PIUs, RDGs, RMCs, RECs

ANNEX II: SEPA IMPLEMENTATION ACTION MATRIX

GENERIC SEPA ACTIVITIES						
Purpose	Tasks/Activities	Sequencing		Expected Results	Indicators	Responsible Units
		From	To			
To manage the process of SEPA implementation efficiently and effectively.	Prepare and implement knowledge events to formally launch SEPA	2022	2022	SEPA is launched and operational	At least **1** knowledge event (seminar or workshop) prepared and implemented to launch the SEPA	AHHD, RDGs
	Prepare and implement a communication and action plan for information and dissemination of SEPA	2022	2022	Communication and action plan for SEPA adopted and launched	At least **1** Communication Specialist or Consultant recruited or seconded to prepare a communication plan	AHHD, RDGs
	Engage in sector dialogue with RMCs, RECs, and DPs on skills and employability	2022	2025	Shared understanding with stakeholders of actions required to address issues of STEM and TVET skills development for jobs	Sector dialogue events organised in at least **25** RMCs and **2** RECs	AHHD, RDGs, AHWS, ECGF, JfYA, PITD, RDRI, RDTS, PINS
	Ensure the inclusion of skills development and jobs in CSPs, RISPs and other strategies and policies related to the Bank's High5s	2022	2025	Skills development included in Bank's relevant policy and strategy documents	At least **20** CSPs and **3** RISPs integrate skills development either as a pillar, sub-pillar or key activity	AHHD, RDGs, AHWS, ECGF, JfYA, PITD, RDRI, RDTS, PINS
	Build a pipeline of SEPA operations (projects, programmes, studies)	2022	2025	Strong pipeline of SEPA projects, programs and studies built	At least **50** new operations identified and prepared	AHHD, RDGs, AHVP, PINS
	Develop a dashboard linked to the Bank's Results Reporting System	2022	2022	Dashboard prepared for use in SEPA implementation	**1** Dashboard validated and used	AHHD, SNDR, SNOQ, ECST

	to track all the integration of skills and jobs in the operations of other Sector Departments					
	Conduct Economic and Sector Work on STEM, TVET and jobs for youth	2022	2025	Bank's stock of knowledge on skills and employability is increased	At least **3** ESW studies undertaken, and **3** knowledge events organized	AHHD, RDGs
	Establish annual work programmes, work plans and budgets for SEPA implementation	2022	2025	SEPA related activities effectively and timely implemented	**5** annual work programmes, work plans with budget allocations adopted to implement SEPA	AHHD, RDGs
	Implement SEPA operations and manage portfolio of operations in STEM, TVET and Entrepreneurship for Youth	2022	2025	Growing and well-managed SEPA portfolio	At least **25** new operations appraised, approved and added to AHHD portfolio	AHHD, RDGs
	Ensure quality at entry for all SEPA operations	2022	2025	Quality at entry for all SEPA operations enhanced	Average Readiness Review rating of **4** for SEPA operations	AHHD, RDGs, SNDR, SNSC
	Ensure effective mainstreaming of cross-cutting issues (gender, climate change, fragility, job creation) in operations	2022	2025	Cross-cutting issues properly mainstreamed in all SEPA operations	Of SEPA operations, **90%** have specific indicators and targets for mainstreaming cross-cutting themes and use the Gender Marker System	AHHD, RDGs, AHGC, RDTS, JfYA, PECG, SNSC
	Organise training of task managers on integrating jobs and skills to enhance mainstreaming across sectors	2022	2025	Training modules developed with the support of the JfYA team and implemented	All AHHD and RDGs TMs trained	AHHD, JfYA, ECAD

	Organise internal co-ordination with relevant Bank Units on SEPA and skills development	2022	2025	Concept of "One Bank" fully used to improve effectiveness of SEPA operations	**2** SEPA Technical Committee meetings and **1** Steering Committee meeting held annually	AHHD, RDGs
	Ensure external co-ordination with relevant Bank partners and stakeholders	2022	2025	Operations cycle strengthened with inputs from DPs and other stakeholders	**1** annual co-ordination meeting held between the Bank and its external partners and stakeholders	AHHD, RDGs, RDRI, RDTS
	Organise continuous monitoring and evaluation of SEPA	2022	2025	Implementation of SEPA is regularly monitored and evaluated	**2** project supervision, **1** audit and **1** SEPA review per year	AHHD, RDGs
	Conduct Mid-term SEPA review	2024	2024	Adjustments and/or corrective measures adopted where needed to improve SEPA implementation	**1** MTR exercise organized, and **1** report prepared for a revised implementation programme	AHHD, RDGs
	Conduct SEPA completion review	2025	2025	Completion report prepared and reviewed	**1** completion mission carried out and **1** closing knowledge event organised for SEPA completion	AHHD, RDGs

SPECIFIC AREAS OF INTERVENTION-RELATED ACTIVITIES

Area of Intervention 1: Investing in Skills Development Infrastructure

Purpose	Tasks/Activities	Sequencing		Expected results	Indicators	Responsible Units
		From	To			

To improve the quality of training infrastructure and build capacity for STEM in HE, TVET, Entrepreneurship and ICT.	Provide inclusive, quality infrastructure (construction, expansion, rehabilitation, equipment) for TVET, STEM and entrepreneurship, including classrooms, laboratories, lecture spaces, workshops, incubators, libraries, research labs, e-learning centres and ICT equipment for online learning	2022	2025	Inclusive quality TVET and STEM related infrastructure including for e-learning and digital skills built or rehabilitated and equipped. Entrepreneurship facilities (incubators, accelerators, etc.) in TVET and HE institutions built and equipped	At least **75%** of resources of SEPA operations used to finance infrastructure and equipment, including ICT equipment for HE and TVET institutions and entrepreneurship facilities	AHHD, RDGs, RDRI, RDTS, PICU
	Support research infrastructure linked to the High 5s priority areas, and industrial clusters	2022	2025	Research infrastructure linked to the High 5s priorities (e.g., industrial zones) available	At least **10** RMCs and **2** RECs supported to develop research infrastructure linked to the High 5s priority areas	AHHD, RDGs, RMCs, RDRI
	Facilitate demand-driven curriculum review for quality of training in TVET and HE	2022	2025	Demand driven TVET and HE curricula addressing needs of emerging/promising sectors	At least **10** RMCs supported to integrate demand-driven curriculum review in TVET and HE	AHHD, RDGs, RMCs
	Support training to build the pedagogical, technical, and managerial capacity of faculty and staff, including in digital and online based skills delivery	2022	2025	Trained people in quality TVET, STEM and future work skills	At least **25%** of pedagogical, technical, and managerial staff and faculty in target institutions trained	AHHD, RDGs, RMCs
	Support training to build the capacity of TVET instructors to upgrade their skills in competency-based curriculum	2022	2025	Trained STEM Teachers and TVET Instructors	At least **25%** of TVET teachers and instructors in target institutions trained or re-trained for skills in competency-based curriculum	AHHD, RDGs, RMCs

	Facilitate entrepreneurship skills training of labour force, including in the informal sector, to enhance their competitiveness	2022	2025	Trained male and female individuals competent in setting up a business. Platforms/mechanisms created for those in the informal sector to access and benefit from the training sessions	At least **10** RMCs supported to provide entrepreneurship skills training	AHHD, RDGs, RMCs, PINS
	Include in SEPA operations provision of resources to upgrade training infrastructure to match rapid advancement in industry specifications and standards	2022	2025	Resources earmarked for maintenance of infrastructure and equipment to ensure durability	**1%** of budgets of RMCs TVET and STEM institutions earmarked for maintenance of infrastructure and equipment	AHHD, RDGs, RMCs
	Extend access to training and improve equity and inclusion in access to skills development opportunities through ICT-enabled virtual/distance modes of learning, MOOCs	2022	2025	Internet-based distance learning introduced in TVET institutions	At least **15** RMCs supported to establish new virtual learning centres offering ICT-based learning	AHHD, RDGs, RMCs
	Build capacity of HE and TVET institutions for digital skills and upgrade skills for teachers and instructors in digital and online internet-based skills delivery	2022	2025	Teachers and instructors are capable of training students in digital and online internet-based skills development improved	At least **25%** of institutions and teachers in SEPA operations benefit from capacity building to master digital and online internet-based skills	AHHD, RDGs, RMCs
Area of Intervention 2: Strengthening the Enabling Environment for Skills Development						
Purpose	Tasks/Activities	Sequencing		Expected results	Indicators	Responsible Units
		From	To			

To increase financing for skills training, help establish partnerships improve the matching of skills development and labour market needs and improve TVET and HEST Sector governance.	Assist RMCs, including transition states, to develop innovative domestic resource mobilisation for skills and investment in research and development (R&D)	2022	2025	Bank's support to RMCs for increased investment in skills and R&D and domestic resource for skills	At least **10** RMCs supported to develop innovative funding mechanisms for TVET and STEM	AHHD, RDGs, FIRM. PINS
	Support RMCs, including transition states, to develop credible sector development policies, reforms, strategies, investment programmes and sector regulatory frameworks in TVET, STEM, research and innovation including through PPPs	2022	2025	RMCs and RECs will have developed strategies and regulatory policy frameworks for Research, Innovation and Technology transfer	**10** RMCs, including transition states and RECs supported to develop skills development policies	AHHD, RDGs, ECGF, PINS
	Leverage financing from other DPs and the private sector for lending and non-lending operations to support skills development	2022	2025	RMCs and RECs developed robust frameworks to enhance investment and prioritise STEM, entrepreneurship and TVET skills development	At least **25%** of SEPA operations co-financed by other DPs and private sector	AHHD, RDGs, RMCs, PIFD, FIRM, PINS
	Support statistical and M&E capacity building in TVET and HE	2022	2025	National observatories on skills and employment produce labour market information on skills needed, and tracers and employers' surveys	At least **10** RMCs, including transition states supported to develop their statistical and M&E capacity building in TVET and HE	AHHD, RDGs, RMCs, ECST
	Conduct knowledge work to inform business development and policy dialogue in TVET, STEM, entrepreneurship development and relevant cross-cutting issues	2022	2025	Significant increase of the Bank's stock of knowledge on business development and policy dialogue in TVET, STEM, entrepreneurship development and relevant cross-cutting issues	**10** studies and/or events conducted or organised	AHHD, RDGs, RMCs

	Improve private sector participation in skills development through structures such as sector skills councils and consultative frameworks with employers on training programmes to enhance strong collaboration for skills delivery	2022	2025	Quality and relevance of training programmes improved	At least **10** countries with mechanisms for private sector participation in skills development	AHHD, RDGs, RMCs, PINS
	Support RMCs to partner with top universities to improve quality of learning	2022	2025	Best skills training in foreign institutions made available to African students	At least **5** institutions in RMCs supported to establish a partnership with foreign institutions	AHHD, RDGs, RMCs, ECAD
	Foster regional integration with the aim of promoting skills mobility, harmonisation of qualification frameworks	2022	2025	More RMCs co-operate in mutual recognition of training programmes and diplomas, as well as on skills mobility	At least **8** RMCs and **2** RECs supported in putting in place harmonization of qualification frameworks in TVET and HEST	AHHD, RDGs, RDRI

ANNEX III: SEPA ALIGNMENT TO THE JfYA STRATEGY 2016–2025

III.1 **SEPA is anchored to the JfYA Strategy, 2016–2025, whose overall goal is to create 25 million jobs and equip at least 50 million youths with skills to realise their full economic potential.** JfYA is being implemented through three strategic interventions areas: Integration, Innovation, and Investment to increase inclusive employment and entrepreneurship, strengthen human capital, and create durable labour markets. To reinforce the implementation of JfYA, and following the expiry of the Human Capital Strategy (HCS) in February 2021, SEPA is designed to scale up the skills aspect of JfYA, particularly the flagship programmes in agriculture, industry and ICT focused on developing young entrepreneurs and enhancing the skills of youth to meet private sector needs, fostering improved pathways to productive employment.

III.2 **Building on the JfYA strategic goal of equipping youth with skills, SEPA establishes the Bank's framework for targeted investments to build skills that promote youth employability, labour productivity and gender equality.** SEPA will expand STEM in HE and TVET, digital technology beyond coding, and online learning skills infrastructure, while supporting an environment that develops skills directly linked to jobs and youth entrepreneurship. It will also address the issue of obsolete skills in the adult working population due to transformation of the labour market towards digital and technical skills, and STEM-related competencies.

III.3 **Preliminary assessment in the mid-term review (MTR) of JfYA conducted in 2021 showed progress towards achieving the overall goal of the strategy.** Between 2016 and 2019, the Bank supported the creation of 8.5 million direct and indirect jobs (Table A–III.1). In 2020, 49% of all Bank-approved projects for ADF–15 countries included jobs and skills for youth (ADF–15 Commitments Report). As a mitigation measure to counter the impact of COVID–19 and reduce job losses, the Bank included business support and economic resilience components in all its COVID–19 Response Facility (CRF) operations to save and create more jobs. The Bank also included a social protection component, particularly for workers in the informal economy, the majority of whom are young people and women. For example, in 2020, the Bank's Business protection outcomes benefited more than 240,000 SMEs (RDVP CRF Q3 Progress Report).

III.4 **Equipping 50 million youths with relevant skills goes beyond technical skills and includes ensuring they also acquire soft skills**. The Coding for Employment (CfE) flagship programme has equipped over 80,000 youths from 45 countries with digital skills and relevant soft skills that go beyond the ICT sector. ENABLE Youth in Agribusiness has operationalised $406 million of projects in 14 countries, benefiting 23,000 young people and creating 58,000 jobs. The $40 million Youth Entrepreneurship and Innovation Multi-Donor Trust (YEI MDTF) is underpinning enterprise-support organisations — such as financial institutions, incubators and other agencies — that help youth-led start-ups and small and medium enterprises to thrive. For example, the Bank Trust Fund supported the Tony Elumelu Foundation (TEF), providing 10,000 youth entrepreneurs with technical assistance and mentorship life-cycle support they need to succeed. To date, the TEF Entrepreneurship Programme has funded and mentored over 9,000 young entrepreneurs, in under 7 years.

Table A–III.1: Number of jobs supported by operations approved in 2016–2020

Years	2016	2017	2018	2019	2020	Total 2016–20
Direct jobs	731,039	197,651	318,290	872,975	185,847	2,305,802
Induced & indirect jobs	1,138,759	1,980,082	1,585,206	1,677,142	363,306	6,744,495
Total Jobs	**1,869,798**	**2,177,733**	**1,903,496**	**2,550,117**	**549,153**	**9,050,297**

Source: AHHD Brief on JfYA Strategy for the 2021 Annual Meetings, May 2021

III.5 **The Bank is introducing Youth Entrepreneurship Investment Banks to help young entrepreneurs to reach their full potential.** The Bank recognises that market failures and lack of access to finance prevent young entrepreneurs from reaching their full potential. With Youth Entrepreneurship Investment Banks (YEIBs), the Bank seeks to support RMCs in addressing these failures through the provision of financial and non-financial instruments, as well as services to reduce risk for youth entrepreneurs. The Bank is seeking investors and advisors who will share its vision of ensuring that market failures hindering the ability of youth-led businesses to grow and create jobs are addressed.

III.6 **Lessons learned in implementing the JfYA Strategy.** The implementation of the Strategy so far has provided a number of lessons, informing the development of SEPA and subsequent implementation. One important lesson learned is that dedicated resources, including funding, need to be secured to be able fully to implement commitments under SEPA. This will require intensifying dialogue within the Bank and at the country level to generate interest and focus, as well as to obtain resouce allocations from Bank investment instruments. Another lesson learned is the need to establish a management-information system that tracks and reports results regarding achievement of SEPA's Key Performance Indicators to enable continuous learning and subsequent evaluation. There is also the need to ensure close alignment of SEPA indicators with the RF, which will report on corporate operational achievements and ensure high-level institutional visibility. It will also be crucial to ensure capacity building among operational staff across other sectors for increased mainstreaming and development impact on skills.

III. 7 **Under JfYA, the Bank is promoting the Skills Enhancement Zones (SEZ) approach, which aims to address the low productivity and competitiveness of the continent's workforce, a critical obstacle to Africa's industrialisation**. The SEZ is a two-pronged approach designed to: (i) build a relevant technical and vocational skilled workforce aligned to employer needs for a particular industrial cluster or sector (agriculture, ICT, etc), through demand-driven training and job placement interventions within that industrial cluster; and (ii) support potential entrepreneurs to take up business opportunities along the value chains linked to that particular industrial cluster and scale up their businesses, take advantage of local content opportunities, and boost youth employment.

III.8 **A key aspect of the SEZ approach is to offer a rapid response to on-demand skills by industry through short-term training programmes.** It promotes training within and/or around industrial parks to enhance on-the-job training. Under SEPA, SEZs will be expanded. Initially, the approach has been limited to selected industrial parks managed by government agencies.

III. 9 **The SEZ approach is an integral part of the Bank's Special Agro-industrial Processing Zones Programme (SAPZ).** Pilot operations in Côte d'Ivoire, Ethiopia, and Guinea benefit from direct Bank investment in ongoing SAPZ programmes amounting to $238.37 million (July 2021) and leveraging $159.81 million in co-financing. SEZ primarily targets middle-income countries where industrial sectors are established with at least an industrial park. SEPA will support the scale-up and adoption of the SEZ approach to other industrial clusters that have been already prioritised in the Bank's Industrialisation Strategy 2016–2025. These include: (i) sectors aiming at expanding domestic processing (building materials, textiles, chemicals, pharmaceuticals etc); (ii) natural resources (energy, mining, metallurgy); (iii) service (logistics, ICT); and (iv) supporting integration into international value chains (electronics, automotive) depending on the country context. These are the sectors that have the potential for moving the African industrial landscape from low-value, primary, unprocessed commodities to diversified value addition, job creation, and technology transfer. SEPA provides opportunities to extend the model to other RMCs, including in fragile contexts, that aim to pursue value-chain development but lack a skilled labour force. The SEZ approach is designed to equip the youth with the rapid acquisition of industry-sought skills, complementing traditional long-term career skills training.

ANNEX IV: INCORPORATION OF LESSONS LEARNED FOR THE FORMULATION OF SEPA

Lessons	Implications for SEPA formulation
The human capital needs of RMCs are huge and evolving and will continue to increase, thus providing opportunities for continued investment in demand-driven education and skills-development programmes and projects. To address all the needs, the Bank should work in partnership with other stakeholders, including the private sector.	SEPA provides a framework for continued investment in skills development for employability with the involvement of other funding sources, including the private sector, to close the financing gap.
The review of the Bank's Medium-Term Strategy 2008–2012 and the 2011 Medium Term Review of HEST stresses the need for the Bank to maintain science and technology as a strategic focus area and the need to scale up STI and link HE and TVET to productive sectors.	HE and TVET are Areas of Intervention of SEPA given that they remain relevant and critical in relation to skills for industrialisation and manufacturing/value addition.
More relevant skills-development ecosystems are needed to ensure private-sector engagement in education and training systems to mitigate shocks and fragility, improve relevance, promote research, and enhance private financing.	SEPA will help build more relevant skills-development ecosystems by promoting national frameworks that ensure private sector engagement in education and training systems.
The COVID–19 pandemic has highlighted the need for the Bank to mobilise more co-financing to meet the demand from its RMCs adequately, invest in digital skills and support skills-development systems that are resilient to shocks and fragility.	SEPA calls for more investment in digital skills, and resilient skills development systems. A sub-pillar is devoted to digital infrastructure and digital skills.
Close attention should be paid to staffing and the smart managing of talent and expertise with a focus on recruiting staff such as sector economists, architects, and IT specialists, and establishing a plan to attract and retain experts to improve the performance of AHHD.	SEPA takes stock of the available AHHD staff of 38 experts and envisions filling its current vacancies.
The success of SEPA hinges on forging strategic partnerships and rebuilding policy-dialogue capacity as shown by the contributions of the on-going partnerships in delivering the Bank's human-capital agenda.	Under SEPA, the Bank will keep and strengthen on-going partnerships in supporting skills development and build new partnerships. Building partnerships is a sub-pillar of SEPA.
A robust monitoring and evaluation (M&E) framework is necessary to measure results and impact effectively. Effective risk mitigation tools are also needed for successful implementation of the future Action Plan.	Operations under SEPA will include concrete measures to provide resources and build human and institutional capacity in RMCs for M&E data collection, analysis, and management. SEPA will enhance the alignment of SEPA indicators with the RF, which reports on corporate operational

	achievements, to ensure high-level institutional visibility. A management-information system will be established to track and report results regarding achievement of SEPA KPIs to enhance continuous learning and subsequent evalution.
There is a need to spur innovation in operation delivery and foster internal cross-sectorial collaboration for better integration of skills development in productive sectors such as agriculture, energy, water, transport, and other sectors.	SEPA is a Bank-wide Action Plan anchored to the JfYA Strategy and aligned with the Bank's High 5 priority areas with a focus on skills development in TVET and STEM that enhance employability in all these sectors. Through SEPA, capacity building of operational staff across other sectors for increased mainstreaming and development impact on skills will be enhanced.
It is essential to ensure timely allocation of budget to meet requirements in terms of human resources allocation, quality operation designs and strong sector dialogue.	Adequate resources will be budgeted for the effective implementation of SEPA.
Forging strong collaboration with the private sector in specialised skills training is necessary. In some operations in the oil & gas and mining industry, the private sector has supported specialised skills-development centres to meet their needs.	Under SEPA, operations will systematically include private-sector participation in skills development in all relevant areas.

ANNEX V: CONSULTATIONS TO INFORM THE SEPA ACTION PLAN

The SEPA Action Plan was prepared through a highly participatory approach guided internally by the "One Bank" approach that brought together a wide array of the Bank's Units, experts, and management. The Bank also consulted externally, guided by the principle of collaboration and partnerships with the private sector, other DPs, UN agencies, reputable academic and research institutions, and civil society organisations. Throughout the process of formulation, SEPA benefited from reviews and inputs from internal and external consultations.

Internally, a cross-Department Taskforce was set up to carry out the technical tasks of formulating the SEPA Action Plan. A cross-Complex Committee, involving the Directors[4] of the Taskforce members as the Steering Committee, guided the preparation of the Action Plan. This approach ensured the alignment of the Action Plan with other Bank policies and strategies and helped to secure buy-in from other Complexes.

Following the clearance of the draft SEPA Action Plan for consultations, internal meetings were organised to reinforce Bank-wide ownership of SEPA and discuss opportunities for collaboration among Departments for its implementation. These meetings were conducted in the form of webinars via Zoom online meetings with three groups as follows:

Date	Meeting	Audience	Stakeholders
30 November 2021	Consultation with SEPA IDWG Team	Internal	Bank's AfDB Experts and Managers
16 February 2022	Consultation with AHHD	Internal	Bank's AHHD Managers and Directors
21 February 2022	Consultation with Regions	Internal	Bank's Regional DGs, Managers and Experts

Preliminary external consultations were conducted through the knowledge work and studies that were carried out to inform the formulation of the SEPA Action Plan. The Bank commissioned four analytical notes to inform SEPA: (i) an Analytical Note on TVET; (ii) Higher Education, Science, Entrepreneurship, and Innovation; (iii) Mapping of DP interventions in RMCs; and (iv) Review of previous Bank interventions between 2014 and 2020. Processing the analytical work involved consultation and engagement with various skills-development stakeholders in public and private sectors, and from CSOs, who provided valuable information and advice on the key issues. Their feedback further enriched the focus of the Action Plan. The reports from these studies were part of the sources of information and data that informed the formulation of the Action Plan.

Following the completion of final consultations with the Bank's internal stakeholders, external consultation meetings were organised with the Bank's strategic partners to enhance ownership and relevance of SEPA and establish dialogue towards identifying opportunities for collaboration with these partners. These meetings were conducted in the form of webinars via Zoom online meetings with five groups of external stakeholders as follows:

[4] AHAI, AHGC, AHHD, AHWS, BDEV, ECMR, ECST, PECG, PERN, PESD, PIFD, PITD, RDRI , RDTS, SNOQ, and SNSP.

Date	Meeting	Audience	Stakeholders
24 February 2022	Consultation with DPs	External	Bilateral and multilateral Development Partners
24 February 2022	Consultation with private sector representatives	External	Private sector
25 February 2022	Consultation with CSOs	External	CSOs and NGOs active in skills development
12 April 2022	Consultation with RMCs Group 1	External	Governments and public training institutions (West, Central and North Africa)
13 April 2022	Consultation with RMCs Group 2	External	Government and public sector officials, (West, Central and North Africa)

Throughout the SEPA design process, the analytical work and the consultations confirmed the need for the Bank to develop a comprehensive strategic framework to address both the demand-side and the supply-side aspects of skills development to accelerate economic transformation, promote job creation, and ultimately contribute to improving the well-being of all Africans. They further helped to identify the overarching problems, key constraints, assumptions, and linkages among the various levels of the Theory of Change (ToC), a key conceptual framework for the SEPA Action Plan.

The main outcome of the consultations was a clear validation by all stakeholders of the timeliness and relevance of SEPA. Participants to the consultation meetings hailed SEPA as a most welcome, coherent, and critical intervention in skills development with ambitious and well-targeted plans that are very promising for the continent. They underlined the importance of the fact that SEPA is well anchored in the Bank's strategic priorities, the national development plans of African countries, the AU's Agenda 2063 aspirations, and the UN Sustainable Development Goals (SDGs). They provided valuable suggestions that would enhance the success of SEPA implementation.

Once finalised and approved, the SEPA Action Plan will be posted on the Bank's external website in conformity with the Bank Group's Policy on Disclosure and Access to Information (DAI).

ANNEX VI: DONOR MAPPING — EDUCATION AND SKILLS DEVELOPMENT

DP investments in General Education and Focus on TVET and HE, 2015–2018' ($ Million)

Sectors	Total education sector			TVET sector			HE sector		
Category	Donors	Education Total Investment	Percentage of contribution	Donors	TVET Total investment	Percentage of contribution	Donors	HE Total Investment	Percentage of contribution
Bilateral	France	3,188.26	25.7%	Germany	348.83	31.1%	France	2,236.32	49.0%
	United	2,390.35	19.3%	France	180.22	16.1%	Germany	999.67	21.9%
	Germany	2,012.28	16.2%	Luxembour	90.44	8.1%	United States	369.04	8.1%
	Japan	834.29	6.7%	Switzerland	71.91	6.4%	Japan	258.78	5.7%
	UK	491.48	4.0%	Japan	67.32	6.0%	Korea	224.97	4.9%
	Saudi Arabia	464.04	3.7%	Belgium	60.24	5.4%	Portugal	71.99	1.6%
	Norway	455.75	3.7%	Canada	57.80	5.2%	UK	58.18	1.3%
	Korea	385.25	3.1%	Norway	45.97	4.1%	Belgium	56.04	1.2%
	Canada	370.97	3.0%	Saudi	31.81	2.8%	UAE	42.41	0.9%
	Italy	278.87	2.3%	United	30.41	2.7%	Sweden	42.31	0.9%
	Sweden	230.85	1.9%	Italy	20.76	1.8%	Austria	34.21	0.7%
	Belgium	191.60	1.5%	Korea	19.78	1.8%	Canada	28.50	0.6%
	Switzerland	190.99	1.5%	Netherlands	19.78	1.8%	Norway	27.60	0.6%
	Luxembourg	140.62	1.1%	Sweden	17.91	1.6%	Hungary	24.63	0.5%
	Portugal	135.58	1.1%	UK	17.39	1.5%	Italy	21.38	0.5%
	Finland	103.16	0.8%	Austria	12.44	1.1%	Finland	17.49	0.4%
	Ireland	101.06	0.8%	Ireland	10.38	0.9%	Switzerland	15.49	0.3%
	Netherlands	72.29	0.6%	Spain	6.39	0.6%	New Zealand	12.45	0.3%
	UAE	69.28	0.6%	Finland	4.01	0.4%	Ireland	5.13	0.1%
	Spain	63.23	0.5%	Portugal	2.80	0.2%	Czech Rep.	4.84	0.1%
	Kuwait	59.31	0.5%	Slovakia	2.42	0.2%	Spain	4.21	0.1%
	Austria	53.65	0.4%	Czech Rep.	1.79	0.2%	Poland	3.89	0.1%
	Poland	31.22	0.3%	Poland	0.50	0.0%	Romania	2.47	0.1%
	Hungary	24.66	0.2%	Turkey	0.34	0.0%	Greece	1.71	0.0%
	New	12.80	0.1%	Australia	0.32	0.0%	Luxembourg	1.36	0.0%
	Denmark	9.02	0.1%	Iceland	0.08	0.0%	Turkey	0.62	0.0%
	Czech	8.41	0.1%	UAE	0.05	0.0%	Slovakia	0.62	0.0%
	Slovakia	4.76	0.0%	Denmark	0.03	0.0%	Australia	0.14	0.0%
	Iceland	4.47	0.0%	Slovenia	0.00	0.0%	Slovenia	0.14	0.0%
	Greece	3.21	0.0%				Netherlands	0.10	0.0%
	Australia	3.10	0.0%				Lithuania	0.04	0.0%

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	Turkey	2.82	0.0%				Croatia	0.02	0.0%
	Romania	2.54	0.0%						
	Slovenia	0.42	0.0%						
	Lithuania	0.04	0.0%						
	Croatia	0.02	0.0%						
	Estonia	0.01	0.0%						
Total Bilateral		***12,390.6***	***62.2%***		***1,122.1***	***45.9%***		***4,566.8***	***80.3%***
Multilateral	WBG	4556.88	62.3%	WBG	530.98	40.3%	WBG	585.09	52.2%
	EU	929.24	12.7%	AfDB	500.32	38.0%	IsDB	324.11	28.9%
	IsDB	841.33	11.5%	EU	180.59	13.7%	AfDB	141.12	12.6%
	AfDB	709.12	9.7%	IsDB	103.38	0.08%	EU	52.32	0.05%
	AFESD	166.67	2.3%	OPEC	0.96	0.1%	OPEC	17.87	1.6%
	OPEC	82.92	1.1%				AFESD	1.05	0.1%
	EBRD	25.01	0.3%						
Total Multilateral		***7,311.16***	***36.7%***		***1,316.2***	***53.9%***		***1,121.6***	***19.7%***
Others	UNICEF	228.85	98.7%	UNICEF	4.29	86.6%	UNDP	0.05	100.0%
	IFAD	1.24	0.5%	ILO	0.67	13.4%			
	UNDP	1.05	0.5%						
	ILO	0.67	0.3%						
Total Other		***231.80***	***1.2%***		***4.95***	***0.2%***		***0.05***	***0.0%***
Total		**19,933.56**			**2,443.25**	**12.3%**		**5,688.45**	**28.5%**

Source: OECD Statistics, October 2020
Note: Rounding up means that some columns do not add exactly to 100%.

ANNEX VII: GLOSSARY

- **Digital skills** are broadly defined as those needed to "use digital devices, communication applications, and networks to access and manage information".

- **Education** is the process of imparting or acquiring general knowledge, skills and developing the powers of reasoning and judgment, and generally of preparing oneself or others intellectually for mature life.

- **Entrepreneurship**/**Entrepreneurial skills** are a combination of hard skills (technical and financial skills) and soft skills that include leadership, creativity, innovation, risk-taking and business management competences necessary to successfully run a business or a project, leading to self-employment and job creation.

- **Fab lab and maker spaces** refer to a space with a set of digital fabrication machines for invention, innovation, and entrepreneurship with a unique operation. The term is widely used by academia and DFIs. These digital fabrication spaces have the potential to transform service delivery, develop local industry, boost entrepreneurship, provide hands-on learning experience, and increase interest in STEM education[xxxi].

- **The "Fourth Industrial Revolution" (4IR)** describes a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres. It highlights the positive relationship between higher education, STI, R&D and sustainable development through private and public channels. Three key elements 4IR are: (i) the development of digital skills is paramount; (ii) all industries are being digitally disrupted, presenting an opportunity for growing a new knowledge economy; and (iii) government and the private sector must collaborate, perhaps via PPPs, which are powerful levers for change. See the Bank's analytical work on the status of science, technology and innovation (STI) in Africa prepared in 2018 (AfDB, 2018c).

- **Fragility**: Defined by the Bank as, "A condition where the exposure to internal or external pressures exceeds existing capacities to prevent, respond to, and recover from them, creating risks of instability."

- **Higher education** comprises all post-secondary education, training, and research guidance at tertiary institutions such as universities. It provides learning activities in specialised fields and aims at learning at a high level of complexity and specialisation. Higher education includes what is commonly understood as "academic" education but also refers to advanced vocational or professional education, including teacher-training schools (for secondary school teachers).

- **Productive employment** is broadly defined as a job that creates value addition that can be exchanged for capital, but it can also mean employment yielding sufficient returns to labour to permit the worker and her/his dependents a level of consumption above the poverty line. (ILO, 2012).

- **Skills refers to** the ability to perform duties and responsibilities effectively and efficiently within the time allotted. It can also refer to the ability to perform an action with determined results often within a given amount of time, energy, or both. Skills can be domain-general or domain-specific and include cognitive and socio-emotional skills. Cognitive skills include literacy and numeracy, which endow the ability to understand complex ideas, adapt effectively to the environment, learn from experience, and reason. Socio-emotional skills refer to the ability to navigate interpersonal and social situations effectively and include leadership, teamwork, self-control, and courage. Specific or technical skills refer to the acquired knowledge, expertise, and interactions needed to perform a specific job, including the mastery of materials, tools, or technologies. The acquisition of practical competencies, know-how, and attitudes are necessary to perform a particular trade or occupation in the labour market.

- **Skills-development infrastructure**. In this document, "Skills Infrastructure" refers to both physical (hard) and soft infrastructure. Physical infrastructure includes the construction, expansion, rehabilitation, and equipment for TVET, STEM and entrepreneurship-related infrastructure, including classrooms, laboratories, lecture spaces, workshops, incubators, libraries, research labs, e-learning centres, and ICT equipment for online learning, among others. Soft infrastructure refers to services that are required to ensure high-performing hard infrastructure that delivers accessibility, efficiency, relevance, resilience and sustainability. These include issues such as curriculum, teachers, governance arrangements and M&E systems, etc.

- **Skills Enhancement Zones** constitute a skills-development approach under the JfYA Strategy that aims to develop a skilled workforce aligned to employer needs by creating demand-led training and job-placement programmes within industrial clusters. The approach is based upon the proven success of the dual vocational education and training (VET) approach to skills development, linking theoretical and practical training and reinforcing close collaboration between educators and employers to ensure that the acquired skills meet the needs of employers.

- **Technical and vocational education and training (TVET)** refers to a broad range of preparation at different levels of the education and training system.
    - "Technical" refers to occupations in the technician category that are usually prepared at the post-secondary level.
    - "Vocational" refers to middle-level, or traditional trade occupations for semi-skilled and skilled workers.
    - "Vocational and technical education" refers to exposure to the world of work, and to preparation for entry into further vocational and technical studies.
    - Technical and vocational "training" means preparation for direct entry into, or upgrading in, specific (or clusters of) occupations in the labour market.

- The **Triple Helix Model** of innovation refers to a set of interactions between academia (the university), industry, and government, to foster economic and social development, as described in concepts such as the knowledge economy and knowledge society.

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29. World Bank, 2020b; *The Human Capital Index 2020 Update: Human Capital in the Time of COVID–19.* Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/34432 License: CC BY 3.0 IGO."
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31. World Bank, 2015, Systematic Country Diagnostic for South Sudan. Washington DC.
32. World Economic Forum, 2017, *The future of Jobs and Skills in Africa: Preparing the region for the fourth industrial revolution*. Geneva. World Economic Forum.
33. World Economic Forum, 2016, *The future of Jobs: Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution*. Geneva. World Economic Forum.

[i] The definition of productive work is given in the glossary.
[ii] Staff calculations based on global data from www.uis.UNESCO.org.
[iii] "$" in this document refers throughout to United States dollars.
[iv] The enrolment rate is a measure of the "quantity of schooling" defined as the ratio of children of official school age who are enrolled in school to the population of the corresponding official school age.
[v] Calculations based on global data from the UNESCO Institute for Statistics.
[vi] Africa's leading universities are concentrated South Africa. These are Witwatersrand University, Stellenbosch University, University of Kwazulu-Natal and University of Cape Town.
[vii] Africa accounts for about 12% of global coffee output and over 70% of global cocoa output, largely exported as raw beans. The same is evident in mining, where most of the output of the mineral products (oil, gold, diamonds, cobalt and other ores) is exported as ore.
[viii] Staff calculations based on data from www.enterprisesurveys.org. Website accessed in July 2020. The information is for the most recent year available which is around 2015 in average.
[ix] https://www.premiumtimesng.com/news/headlines/469193-africa-produces-only-1-of-vaccines-administered-on-continent-minister.html
[x] Vocational Education and Training Authority (VETA) Statistics Handbook, 2019. United Republic of Tanzania.
[xi] https://www.brookings.edu/blog/africa-in-focus/2020/02/07/shooting-for-the-moon-an-agenda-to-bridge-africas-digital-divide/.
[xii] http://uis.UNESCO.org/en/blog/importance-monitoring-and-improving-ict-use-education-post-confinement
[xiii] https://www.internetworldstats.com/stats1.htm
[xiv] Graduate Employability Ranking 2020: https://www.topuniversities.com/university-rankings/employability-rankings/2020
[xv] World Economic Forum, 2015, Why SMEs are key to growth in Africa. Also, see https://www.norfund.no/archive/Bilder/Publications/SME% 0and% 20growth%20MENON%20.pdf.
[xvi] MENON Business Economics definition of MSMEs: micro as 1-9 employees, small as 10-50 employees, and medium as 50-250 employees
[xvii] *Ibid*
[xviii] Definition of fragility is given in the glossary.
[xix] International Telecommunication Union (2020): https://www.itu.int/en/ITU-D/Regional-Presence/Africa/Pages/projects/2020/COVID-africa.aspx.

[xx] See for example: Federal Democratic Republic of Ethiopia (2020), Digital Ethiopia 2025 – A Digital Strategy for Ethiopia Inclusive Prosperity; and Federal Democratic Republic of Ethiopia (2020), Digital Skills Country Action Plan (DSCAP) For Higher Education and TVET (2021-2030).
[xxi] SAZAPIP and PADIDFA completion reports.
[xxii] AHHD commissioned an analytical work on "Development Partners' investment in skills development during 2015-2019" as part of the analytical underpinning for DSWA.
[xxiii] These are informed by (i) the Management Implementation review of the HCS; (ii) lessons from other Development Partners, based on their own external evaluations, or the results from the Bank's analytical work on the Mapping of DPs interventions in skills development (AfDB 2020d).
[xxiv] Examples of such projects funded since 2013 include the Zambia Support to Science, Technology and Education Project (SSTEP); Rwanda Skills for Employability and Entrepreneurship Programs (SEEP, I, II & III), and Morocco Training-Employment Matching Support Program (PAAFE I, II).
[xxv] Sharpening the Bank's Strategic Focus – A Proposal to increase the Bank's Selectivity Strengthening; ADB/BD/WP/2021/06/Rev.2/Approved ADF/BD/WP/2021/05/Rev.2/Approved 28 May 2021.
[xxvi] The overarching problems, key constraints, assumptions and linkages among the various levels of the Theory of Change were identified on the basis of the existing literature and various internal or external reports that are listed in Annex VII.
[xxvii] By doing so, the TOC clearly articulates its dependence on—and therefore complementarity with—the broader work of the Bank in promoting job creation, through private sector development, economic governance, and investment in economic infrastructure as outlined in existing strategies (Feed Africa, New Deal on Energy, Industrialize Africa, Governance, Jobs for Youth, etc.).
[xxviii] With a potential of USD 1 billion annually, Africa's private HE, TVET and teacher training show growing investment potential (see Caerus Capital, 2017).
[xxix] For example, the Bank mobilized UA 100 million to co-finance with the French Development Agency (AFD) the *Training-Employment Matching Support Program* (PAAFE: 2013–2015) in Morocco to improve the employability of HE and vocational training graduates.
[xxx] "Maker spaces" and "fab labs" are small-scale studios or workshops offering digital tools in a collaborative environment.
[xxxi] Sources:

- https://blogs.worldbank.org/endpovertyinsouthasia/how-can-fab-lab-help-boost-innovation-and-entrepreneurship-bangladesh-s-universities
- https://www.worldbank.org/en/topic/edutech/brief/leveraging-fab-labs-the-case-of-fab-lab-lima