REPUBLIC OF RWANDA





RTB STRATEGIC PLAN 2021-2024

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ACRONYMS

Association pour la Promotion de l' Education et de la Formation à l' Etranger

APEFE (Belgium)

BRD Banque Rwandaise de Développement (Rwanda Development Bank)

CBA Competency Based Assessment
CBC Competency Based Curricula
CBT Competency Based Training
CSC Koblenz Chamber of Skilled Crafts

CPD Continuous Professional Development

DACUM Developing a Curriculum
DP Development Partner
EAC East African Community

EDPRS Economic Development and Poverty Reduction Strategy

ESSP Education Sector Strategic Plan

GIZ Gesellschaft für Internationale Zusammenarbeit (German cooperation agency)

GoR Government of Rwanda
HEC Higher Education Council
HEI Higher Education Institution

ICT Information and Communication Technology
IPRC Integrated Polytechnic Regional Colleges
JICA Japan International Cooperation Agency
KOICA Korea International Cooperation Agency

M&E Monitoring and evaluation

MIFOTRA Ministry of Public Service and Labor

MINALOC Ministry of Local Government

MINECOFIN Ministry of Finance and Economic Planning

MINEDUC Ministry of Education

MIS Management Information System
MoU Memorandum of Understanding
NEP National Employment Programme
NGO Non-Governmental Organization
NST-1 National Strategy for Transformation

PESTEL Political Economical Social Environmental Environmental

PSF Private Sector Federation
REB Rwanda Education Board
RP Rwanda Polytechnic

RTB Rwanda Technical and Vocation Education and Training Board

RTTI Rwanda Technical Trainers Institute
RTQF Rwanda TVET Qualification Framework

SDC Swiss Agency for Development and Cooperation

SPIU Single Project Implementation Unit

STEM Science, technology, engineering and mathematics
SWOT Strengths, Weaknesses, Opportunities, and Threats
TVET Technical and Vocational Education and Training

UNESCO United Nations Educational, Scientific and Cultural Organization

UR University of Rwanda

USAID United States Agency for International Development

WDA Workforce Development Authority

WPL Work Place Learning

Executive summary

This Strategic Plan for the period 2021-2024 lays a foundation for Rwanda Technical and Vocational Education and Training Board (RTB) to carry out its mandate and functions to achieve a modern and labour-market responsive TVET system for Rwanda. The TVET sector has emerged as a priority for Rwanda to transform into a knowledge-based economy that will have the capacity of creating 214,000 productive jobs annually, to do so TVET has to absorb 60% of 9 years basic education graduates pursuing further learning by 2024 to address the challenge of mismatch in labor market demand as per NST1.

The strategic plan was developed through a collaborative process with RTB staff and key stakeholders of IPRC. The work involved an analysis of the current environment of RTB, to ascertain the operational background. The internal environment was analyzed using the SWOT (Strengths, Weaknesses, Opportunities and Threats) model while the external environment analysis was based on the PESTLE (Political, Economic, Social, Technological, Legal and Ethics) model and and stakeholder analysis which was conducted as part of the strategic planning process

Subsequently, the Goals and Strategic Objectives were formulated. The goals are the intended outcomes while the strategic objectives are the sub components that drive the achievement of the strategic goals. The strategic objectives are driven by specific activities, which form the action plans for this strategic plan. These are detailed to enable the RTB realize its Mission and Vision. An implementation framework was developed based on the Objectives and Strategies. The responsibility of achieving the Objectives and Strategies is also defined within set time frame during the implementation of this strategic plan.

This strategic plan takes a more outward looking approach taking the entire TVET system as a point of reference. Furthermore, national policies such as Vision 2050 and NST1 are guiding. Throughout the strategic plan there is a strong focus on industry involvement, as it recognizes that TVET growth must be driven by industry actors.

The RTB strategic plan is designed to achieve 5 strategic areas that are in accordance with mandate of RTB. Namely, A) Curriculum and instructions B) ICT in TVET C), Access and Partnership D), Human resources development E) and Global TVET trend and Quality

The RTB strategic plan is structured into three main parts: Part A provides a strategic overview of the TVET subsector which incorporates the country context, institutional context, RTB's vision, mission, values, and the process in which this plan was developed. Part B is the situational analysis whereas parts C is the core of the strategic plan in greater detail where strategic area as well as strategic outcomes are defined.

Within each of the strategic areas a number of strategic outcomes have been formulated, all of them accompanied by activities, which have to be completed within the strategic plan

period. While putting in place strategic plan witness a good start, the real proof lies in its implementation.

Part A: Strategic overview of the TVET Sub-sector

1.1 Country context

Rwanda has been a frontrunner among African economies in the Doing Business indicators, moving from a global rank of 148 in 2008 to 38 in 2020, which is second in Sub-Saharan Africa after Mauritius According to the latest Integrated Household Living Conditions Survey (the fifth Enquête Intégrale sur les Conditions de Vie, EICV5), between 2001 and 2017, poverty as measured by the international poverty line fell from 77.2 percent to 55.5 percent, and by the national poverty line from 58.9 percent to 38.2 percent. Poverty has also become less severe, with a shrinking gap between average consumption of the poor and the poverty line. However, despite Rwanda's good record in poverty reduction, the fifth Integrated Household Living Conditions Survey (Enquête Intégrale sur les Conditions de Vie; EICV5) showed that poverty reduction stagnated between 2014 and 2017 owing to droughts, a slowing down of the structural transformation and rural to urban transition, and a weakening of the job-creating potential of Rwanda's recent growth.

Rwanda's development strategy is laid out in its latest seven-year plan, the National Strategy for Transformation (NST1) for 2017–2024, prioritized by the three pillars of economic transformation, social transformation, and transformational governance. The NST1 aims to lay the foundation for achieving upper-middle-income country status by 2035 and high-income status by 2050. It is guided by the Sustainable Development Goals (SDGs), the Africa Union Agenda 2063 and its first 10-year Implementation Plan 2014–2023, and the East African Community Vision 2050.

Rwanda, a small landlocked economy with population of 12.5 million and GDP per capital of US\$ 819.652 in 2018, has been experiencing rapid economic growth over the past sixteen years. Before the coronavirus disease 2019 (COVID-19) pandemic, Rwanda was in the midst of an economic boom. Between 2017 and 2018, Rwanda grew on average at 7.2 percent annually outperforming its neighbors political stability, prudent macroeconomic policies, promotion of good governance and favorable investment climate contributed to the fast growth and low inflation. Growth has been driven primarily by services 53 percent contribution to overall growth, followed by agriculture 31 percent, and industry 16 percent. In 2019, the economy expanded from 8.6 percent in 2018 to 9.4 percent, the highest growth rate on the continent and well above Rwanda's average growth of the past 10 years. Investments were the main driver of growth, expanding by 23.3 percent and supported by strong public investments as implementation of NST1. Private consumption also grew by 9

percent. The contribution of net exports to growth was negative because the growth had been led by domestic demand. As of December 2019, public and publicly guaranteed debt reached 58.5 percent of GDP.

The growth momentum was interrupted by the pandemic as the GoR put in place a nationwide lockdown to contain the spread of coronavirus while international flow of goods and services was disrupted with significant spillovers to Rwanda's broader economy. Within three weeks, total declared turnovers dropped by 55 percent year on year average, driven by both industry and services sector with an average decline of 45 percent and 60 percent year on year basis respectively. The main affected sub-sectors are trade, manufacturing, hotels and restaurants. Slowdown in economic performance is exacerbated further because of low international prices of commodities that Rwanda exports. Rwanda's debt remains sustainable and the risk of debt distress has shifted from low to moderate as a result of the COVID-19 pandemic (Debt Sustainability Analysis of June 2020)

The unprecedented nature of the COVID-19 pandemic shock is likely to jeopardize Rwanda's gains in poverty reduction over the last two decades. Negative coping mechanisms among the population could lead to erosion of human capital, perhaps irreversibly. The flagship safety net program, the VUP, currently supports the poorest households. Those who are able to work benefit from the VUP's labor intensive public works. The VUP's direct income support is available for labor constrained households such as the elderly and persons with disabilities.

The Government of Rwanda emphasizes human capital development to support the economic and social transformation of the country. GoR identified the development of world-class human capital as the first reform priority. As articulated through NST1, education is a cross-cutting area of focus under both the economic transformation pillar and the social transformation pillar, where targets of access to quality education especially TVET stream are outlines. The NST1 emphasizes the importance of human capital in building and sustaining broad-based and inclusive growth. In the education sector, primary net enrollment rose from 73 percent in 2000 to 98.5 percent in 2019 and the country achieved gender parity in school enrollment and completion at the primary level. Social protection remains a top priority, and over the last decade, significant investments have been made to build and operationalize an integrated system that promotes poor and vulnerable households' resilience to shocks, access to various social services, and enhanced opportunities to sustain themselves in the long run. Rwanda also remains committed to women's empowerment and ranks first in the world on female representation in the national parliament as well as in the cabinet.

Low human capital has been identified as one of the key structural bottlenecks to achieving Rwanda's inclusive growth and poverty reduction agenda. The 2020 Human Capital Index (HCI), which quantifies the contribution of health and education to the productivity of the

next generation of workers, estimates that a child born today in Rwanda will be just 38 percent as productive as an adult compared to what s/he could have achieved with good education and health as defined by the HCI. This score places Rwanda amongst the lowest performing countries in Sub-Saharan Africa.

1.2 Sector and institutional context

The Education 2030 agenda clearly shows the need for rethinking of technical and vocational education and training (TVET) and skills development. Among the ten education goals, two are TVET related targets: 1) to ensure equal access to affordable and quality TVET for all (SDG4.3) and 2) to increase the number of youth and adults with relevant skills for employment, decent work and entrepreneurship (SDG4.4).

In Rwanda, the education system is composed of four main levels: (a) pre-primary, (b) primary, (c) secondary, and (d) higher education, with a significant TVET stream at both secondary and higher education levels. Compulsory education spans the nine years from age 6 to age 14, covering primary and lower secondary education, and is commonly known as nine years of basic education.

Until recently Rwanda had four disjointed QFs managed by different educational institutions namely, (a) the Rwanda National Examination Grading System for primary and secondary education implemented by REB; (b) the Rwanda Technical and Vocational Education and Training Qualification Framework coordinated by the (WDA); (c) the Rwanda Qualification Framework for Higher Education implemented by HEC; and (d) the National Qualification Framework for Adult Education implemented by REB. The HEC had been leading the process to consolidate the National Qualification Framework to create Learning Pathway with support from REB and the WDA. The Rwanda Educational Qualifications Framework (REQF) as consolidated qualification framework was approved by MINEDUC's Senior Management Meeting in 2016.

Until recently TVET has been offered through three different types of public institutions in Rwanda, namely the Vocational Technical Centres (VTCs), Technical Secondary Schools (TSSs) and Polytechnics. Previously these institutions had operated under different Ministries at different levels with different names. The Ministry of Labour oversaw the vocational training centres, the Ministry of Education oversaw the upper secondary technical schools, the Ministry of Agriculture ran agriculture training schools, the Ministry of health oversaw health training schools, etc. The schools themselves had different names such as the "Centres de Formation des Jeunes" (Youth Vocational Training Centres) and the "Ecoles Techniques Officielles" (ETOs: Upper Secondary Technical Schools). The WDA had considerably progressed in bringing all public technical education into the new TVET system which is provided by the following three types of institutions:

- ☑ Vocational Training Centres (VTCs); these centres deliver vocational training for principally primary school leavers and secondary school drop-outs, and in some cases secondary school leavers and mature students, regardless of their level of education. These centres are predominantly offering from level 1 (= TVET Certificate 1 up to Level 3 (= TVET Certificate 3) to all Rwandans. These qualifications utilize a modular design, allowing these modules to be offered at the VTCs as short-courses for rapid skill upgrading.
- ☑ *Technical Secondary Schools (TSSs)*; these schools function as upper secondary technical schools training students in years 10-12. Students entering come from lower secondary schools and have completed the first 9 years of basic education (9YBE). Under the new system and RTQF they are offering up to Level 5 (TVET Certificate 5), primarily still to students coming out of lower secondary general education schools however there will be additional pathways for entry for others who meet minimum entry requirements.
- ☑ Polytechnics; these institutes function as post-secondary technical colleges. Students who entered had finished upper secondary school. They provided 2-3 year diploma and advanced diploma courses to produce higher-level technicians. Under the new system and qualification framework Polytechnics will offer up to Level 7 (TVET Advanced diploma). However they were primarily geared towards offering Level 6 and 7 qualifications which correspond to the previous diplomas and advanced diplomas¹.

The education and training system is the principal mechanism through which skills and knowledge are transferred to the current and future work force. All pupils are expected to complete nine years of basic education, comprising six years of primary school followed by three years of lower general secondary education. Upon completing basic education, which aims to equip graduates with the minimum of cognitive and catalytic skills, graduates pursue further education or enter the labor market. Those who pursue further education can continue the general education (basic education) track or start technical and vocational education and training (TVET) stream from level 3 of REQF upward. Whereas those who dropped out in primary education and willing to acquire vocational skills, maybe admitted

¹ Preparations are underway to expand the current RTQF with level 8 (Bachelor of technology) and level 9 (Master of technology) to better cater for the needs for highly qualified practitioners in the labour market

at level 1 of REQF and those who dropped out in ordinary level of secondary education i.e who did not complete ordinary level or completed only primary education and be 16 years old and above pursue level 2 of REQF in vocational education and training the Government is committed to bridge the mismatch between supplying and demand side by increasing the percentage of students pursuing TVET stream . This move is expected to result in entrants into vocational training who have a stronger basis of general knowledge and skills, and who are thus able to acquire the necessary skills that allow them to become productive in the labor market. Also, the number of pupils meeting this new entry criterion is expected to increase substantially considering the GoR's efforts to implement the Nine Year Basic Education. Upper general secondary education aims to equip students with increased levels of cognitive and catalytic skills, before they enter the labor market or pursue higher education. After entering the labor force, individuals can continue developing their skills either through on-the-job learning and/or through participating in shorter or longer term education and training throughout their working life.

Upon completion of level five of REQF in TVET School, the graduates may go through a two-year diploma program or a three-year advanced diploma program, these programs are generally offered by eight Rwanda's public IPRCs or other private polytechnics. They may also move to Bachelors, Masters and PhD programs in public or private universities in Rwanda or join directly the labor market. Individuals also have the option of enrolling in short-courses (6 months to one year) in one public and private TVET schools in Rwanda depending on the competencies they wish to acquire and pre-established prerequisite they possess.

The ministry is supported by different Autonomous Education Agencies which are mainly for the implementation of various aspects of MINEDUC's policies. For example, the Workforce Development Authority (WDA), established in 2009, was the apex body mandated to spearhead TVET system where its responsibilities included developing TVET curricula and standards; training of TVET trainers; setting up a system for examinations, certification, and accreditation; and the establishment of a National TVET Qualification framework among others. In 2018 WDA was restructured and WDA henceforth focused on quality assurance of the TVET institutions and the Rwanda Polytechnic Higher Learning Institution; (RP) established in the same year and was mandated to implement TVET system across the eight polytechnics and TVET schools. In 2020 Rwanda Technical and Vocational Education and Training (RTB) and National Examinations and School Inspection Authority (NESA) were formed as new institutions with mandate to promote quality education in technical and vocation education and training from level one (1) to five (5) aimed at fast tracking socio-economic development of the country and to ensure quality of education in basic education and Technical and Vocational Education and Training (TVET) from level one (1) to five (5) and to regulate the comprehensive assessments of students and national examinations respectively. whereas Higher Education council (HEC) and RP were

restructured with an additional mandate to manage of quality assurance of the TVET institutions in higher learning institutions and manage implementation of TVET in higher learning institution.

The relatively new Rwanda Technical and Vocational Education and Training (RTB) is responsible for implementing MINEDUC's policies in the area of TVET from level 1 to 5 of Rwanda Education Qualification Framework (REQF). The RTB is legal entity established as government institution by Presidential Order No 123/01 of 15/10/2020 with the clear mandate to design and distribute curricula, teaching materials, trainer's guides, methodologies and establish training methods for technical and vocation education and training from level one (1) to five (5); to promote the use of information and communication technology in technical and vocation education and training from level one (1) to five (5); to coordinate and fast track technical and vocation education and training programs and activities; to coordinate programs and activities to ensure trainers development, build their capacities and monitor their management among others. The core mission is to promote quality education in technical and vocation education and training from level one (1) to five (5) aimed at fast tracking socio-economic development of the country.

1.3 The legislative relevant to RTB

RTB is legally established as government institution by Presidential Order No 123/01 of 15/10/2020 with the clear mandate to design and distribute curricula, teaching materials, trainer's guides, methodologies and establish training methods for technical and vocation education and training from level one (1) to five (5); to promote the use of information and communication technology in technical and vocation education and training from level one (1) to five (5); to coordinate and fast track technical and vocation education and training programs and activities; to coordinate programs and activities to ensure trainers development, build their capacities and monitor their management among others. The core mission is to promote quality education in technical and vocation education and training from level one (1) to five (5) aimed at fast tracking socio-economic development of the country.

The following are the policy documents relevant for TVET implementation

- Rwanda Education Qualification Framework, 2016
- Rwanda TVET Qualification Framework, 2012
- TVET policy, 2015
- National strategy for transformation 1, 2017
- Vision 2050, 2020
- Revised national employment policy, 2019
- Education Sector Strategic Plan 2018/19-2023/24.

• Workplace Learning Policy

1.4 Rationale and justification

It is important and a requirement to have a documented strategic plan that sets out the aspirations of the institution, the drivers of performance, accountabilities, and forms the basis of resource allocation, performance monitoring, and evaluation. A strategic plan is a critical tool in interpreting how RTB Mandate is approached in the implementation of its mandate. It also provides the opportunity to ensure that the mandate is effectively delivered. Additionally, where opportunities exist for the review or update of the mandate, a framework exists to drive this through the strategic plan. A strategic plan aligns the institution with the parent Ministry's vision, objectives, and priorities in line with national policy. This would then ensure that resources available are appropriately allocated to the key result areas. Furthermore, the strategic plan is a key tool in the management of RTB; all activities and staff performance are driven by the strategic plan, and annual performance targets will be derived from it. This serves as the reference point and brings clarity on individual performance expectations.

1.5 Vision and Mission

Vision

The provision of a high-quality and demand-driven TVET system responsive to emerging skills shortages in higher value-added industries aims to deliver a competent workforce and self-reliant citizens for sustainable economic, social, and environmental development.

Mission

- To design and distribute curricula, teaching materials, trainer's guides, methodologies and establish training methods for technical and vocation education and training from level one (1) to five (5);
- To promote the use of information and communication technology in technical and vocation education and training from level one (1) to five (5);
- To coordinate and fast track technical and vocation education and training programs and activities;
- coordinate programs and activities to ensure trainers development, build their capacities and monitor their management among others.

- to promote quality education in technical and vocation education and training from level one (1) to five (5) aimed at fast tracking socio-economic development of the country.
- To advise the Government on all activities which can fast track technical and vocation education and training development in Rwanda.

Values:

- Integrity
- Professionalism
- Accountability
- Loyalty
- Competitiveness & Creativity
- Efficiency
- Team Work

Part B. SITUATIONAL ANALYSIS

The Situational Analysis conducted for this Strategic Plan consists of a problem analysis, PESTEL Analysis, SWOT Analysis and Stakeholder Analysis. The Summary tables are presented below while the full Situational Analysis including the narrative is as follows.

2.1 Problem analysis

Main challenges	Root causes	Effect
Negative perception of	• Lack of decent job opportunities for	• Low enrollment
TVET by some	TVET graduates.	in TVET Schools
stakeholders hence	• Mismatch between youth	
Reluctance of students	expectations, the salaries and	
and families to enroll	working conditions of TVET-level	
in technical education	jobs.	
and training	• Lack of articulated Pathway	
	Agreement.	
	• Absence of career guidance and	,
	counselling at the right time	

	 Lack of policy recognizing certificates offered by TVET Schools 	
Weak relevance of TVET training to labour market demand	 Lack of systematic participation of the industry in implementation and evaluation of TVET programmes. Lack of accurate and reliable information on current and future needs of the market. Poor infrastructure Inadequate equipment, tools Lack of trainers who have current and relevant industry/technical experience for training on competencies in demand in the labour market Limited interest among the private sector to partner with TVET schools on accommodation of trainees for industrial attachment Weak infrastructure of TVET institutions in need of refurbishment and equipment to keep up with the requirements of employers and the changing needs of the labour market. Insufficient allocation of consumables and materials to allow trainees to learn through trial and error. Inadequate of relevant training manual Absence of industrial sector committees 	Producing half cooked graduates who are not in good position to compete to the high remunerative work

2.2 SWOT Analysis

The Strengths, Weaknesses, Opportunities and Threats were analysed and applied in strategy

development. The aim of this was to assist RTB to maximise on the internal organisational strengths and opportunities and minimise its weaknesses and threats.

Strength	Weakness
 Development Partners Positive engagement of DPs available policies advocating for TVET Competency based approach in place Staff conversant with DACUM and competency based training approach 	 Private sector engagement Inadequate of training manuals Few qualified and competent trainers Inadequate equipment and infrastructure Inadequate consumables and running costs Implementation of CBT/CBA Budget constraint Limited number of companies (private) Digitization of TVET delivery Weak linkage with industry leading to low pace of industrial placement of
Opportunities	trainees Threats
 East Africa Community (EAC) and regional integration Committed DPs provide opportunity for growth Positive political will of government Global trend towards TVET "Made in Rwanda" promotion High Demand by private secto Private sector needs skilled workforce Youth Population Young and Dynamic human resources Many new fields-skills needs Growing manufacturing industries 	 Negative perception on TVET High turnover of Trainers Small private sector Insufficient budget allocated to TVET subsector Limited opportunity for industrial exposure Qualified workforce from EAC competing for local jobs

2.3 PESTEL analysis

Another tool used in the development of a strategic plan is an analysis that considers factors beyond the control of RTB, known as PESTLE analysis. PESTLE analysis covers the Political, Environmental, Social/Cultural, Technological, and Legal factors that could impact RTB positively or negatively. This analysis examines the external macro environment affecting RTB operations. The key factors directly impacting and influencing how RTB currently operates, as well as those affecting the future period covered in this strategic plan, are outlined below.

Political

- Political will and prioritization of TVET Subsector by the Government as articulated by NST1.
- TVET Policy in place
- Different policy documents advocating for access to equitable, quality and relevant education and training.
- Government's commitment to Development of TVET.
- Development partners' policies and priorities for TVET.

Economic

- Annual average of GDP growth of 8% realized from 2006-2018
- Skills requirements (especially technical) by Vision 2050 for the economic sectors
- Increased financial requirements of TVET caused by increased access and introduction of CBT/CBA in TVET
- Gap between political prioritisation and actual budget allocation for TVET.
- Rwanda now aspires to reach Middle Income Country (MIC) status by 2035 and High-Income Country (HIC) status by 2050
- According to World Bank,
- Gross domestic product: 9.509 billion USD (2018)
- GDP per capita: 772.94 USD (2018)
- GDP growth rate: 8.6% annual change (2018)

Rwanda was in the middle of an economic boom prior to the COVID-19 (coronavirus) pandemic. Economic growth exceeded 10% in 2019, driven mostly by large public

investments for implementation of the National Strategy of Transformation. Strong growth was expected to continue in 2020.

Social

Rwanda's strong economic growth was accompanied by substantial improvements in living standards, with a two-thirds drop in child mortality and near-universal primary school enrollment. A strong focus on homegrown policies and initiatives has contributed to significant improvement in access to services and human development indicators. Measured by the national poverty line, poverty declined from 77% in 2001 to 55% in 2017, while Life expectancy at birth improved from 29 in the mid-1990s to 69 in 2019. The maternal mortality ratio has fallen from 1,270 per 100,000 live births in the 1990s to 290 in 2019².

Technological

- Information and Communication Technology is a central engine to driving Rwanda's transformation to a knowledge based economy, a fact Rwanda has acknowledged by allocating a budget to ICT as a percentage of its GDP that is at par with OECD countries
- Rwanda continues to be one of the fastest growing African countries in ICT and there are several avenues for growth for the ICT sector from ecommerce and e-services, mobile technologies, applications development and automation to becoming a regional center for the training of top quality ICT professionals and research³.
- Use of ICT in education and training (e.g., smart classrooms).
- Use of ICT in delivery of government and other services such as IREMBO etc

Legal

- Existence of TVET policy
- Existence of Rwanda TVET Qualification Framework embedded in Rwanda Education Qualification Framework
- Existence of workplace policy
- TVET Certificates that are not recognized by Rwanda labor law.

Environmental

 Pollution from waste: Like many other environmental problems, it is the poor who suffer the most as a result of improper solid waste disposal. Municipal waste collection services is generally lacking especially in slum areas or areas characterized by poverty, putting the residents of such neighborhoods' at relatively greater risk of health

² The World Bank: Rwanda overview (2020)

³ Rwanda Development Board: https://rdb.rw/departments/information-communication-technology

- hazards due to improper solid waste management.
- Deforestation: Rwanda is today ranked 89 out of 180 countries in terms of tree cover loss.
 Deforestation is a challenge especially due to the fact that a majority of the population is dependent on fuel wood as the main energy source.
- Access to energy: In Rwanda access to electricity is mainly concentrated in the urban areas (67%). Electrification of the rural areas is limited. Only about one out of twenty households (5%) in rural areas have access to electricity.
- Lack of water and sanitation: About 76% of the population in Rwanda have access to improved water sources (72% of rural, 87% of urban population). Only 62% of the total population have access to improved sanitation

2.4 Stakeholder analysis

Stakeholder Framework	Stakeholder	Role of Stakeholder	Mutual Interest
Primary stakeholder	 Trainees Parents Training Providers Employers (Industries, Companies) 	 Consumers of TVET Manage the learning / training Support implementation 	 Participation in development of relevant occupational standards Competent Monitors and Evaluators Workplace attachment Employment of TVET graduates

		of TVET programmes Raise visibility of TVET implement TVET programmes Provide sector specific experts on occupational standards Additional Resource Mobilisation Provide internships and attachments Provide Employment Participate in training delivery and assessments	development
Secondary beneficiaries	 Communities Civil Society Local Communities State Owned Enterprises Non-Profit Organizations 	Support implementation of TVET programmes Raise visibility of TVET	Benefit from TVET programmes at local level
Media	 RBA Different private radio Diffrenet private TVs 	Publish information	 Rebranding TVET Advo-cacy, communication
Regulators	• NESA	Assure quality training delivery	Credibility of assessment and certification process

		Award certificates	• Assess and certify competences
Development Partners	 USAID Huguka Dukore Akazi Kanoze Akazi Kanoze Access SEAD Project Swiss Contact Korea International Cooperation Agency (KOICA) United States Agency for International Development (USAID) Japan International Cooperation Agency (JICA) Swiss Agency for Development and Cooperation (SDC) CSC Koblenz Association pour la Promotion de l'Education et de la Formation à l'Etranger (APEFE) German Cooperation 		
	Bank (KfW) • Mastercard Foundation		

• Indian
Government
Gesellschaft für
Internationale
Zusammenarbeit
(GIZ)
World Bank

Part C: STRATEGIC FRAMEWORK

1.1 Strategic area

- Curriculum and instructions
- ICT and Digitalization in TVET
- Access and partnership
- Human resources development
- Global TVET trend and Quality

3.1 Strategic area and strategic outcomes

Strategic area	Strategic outcomes
Curriculum and instructions	 CBT/CBA implementation manual is developed, validated and implemented in all TVET schools Strategic outcome: All TVET Level 1 to 5 Curricula are developed and aligned to the labour market needs Training Organization guides (TOG) for all curricula are developed/reviewed, validated and implemented All training manuals of Curricula from level 1 to 5 are developed Ensure required Training Equipment and Consumables are supplied to all public TVET schools
ICT and digitization in TVET	 All TVET Level 1 to 5 Training content is Digitized and implemented Emerging Technologies are initiated and expanded in TVET system All RTB Services are available online
Access and partnership	• 60% of 9YBE leavers enrolled in TVET Level 3

	 DP's interventions are well coordinated and aligned with RTB strategic objectives RTB Budget is implemented in full compliance with Public Fund Management Principles and Guidelines All Projects under RTB are efficiently, effectively and timely implemented and coordinated in line with project's documents and related financing agreements Production units and Incubation centers are operationalized in TVET schools Special academies are operationalized and well-coordinated Innovation and creativity in TVET schools promoted Private sector is fully engaged in skills development RTB activites are aligned to various government strategic documents (NST1, ESSP, TVET-Policy, NSDEPS, Etc)
Human resources development	 All TVET public TVET schools have required competent and qualified Trainers Continuous Skills upgrading programs for TVET trainers and School managers are organized and conducted Management and retention strategies for TVET trainers put in place and implemented
Global TVET trend and Quality	 Research in international TVET trend and national TVET situational analysis conducted TVET awareness structures, platforms and tools are in place and well strengthened RTB's contribution to TVET standards development ensured

Strategic area one: Curriculum and instructions

The development or review of a curriculum goes hand in hand with creating skills profiles and competencies in priority economic sectors. This process provides critical information that significantly impacts education and training providers, fostering a strong connection between the learning environment and the workforce. Utilizing this information can aid in

designing or revising competency-based course curricula that align with evolving employer expectations in the labor market conditions.

Involving industry stakeholders in shaping training content is crucial to ensure that course offerings meet the needs of enterprises and the labor market. RTB's work aims to draw highlevel insights from industry leaders and active practitioners. As part of this effort, the activity will engage industry representatives during occupational profiling, competency standards development, and defining assessment packages to facilitate systematic and well-moderated interactions. These interactions assist training designers in creating truly demand-driven curricula and course materials tailored to local and sector-specific requirements.

Beyond providing inputs and support for curriculum development and pedagogy, involving industry representatives can enhance public-private partnerships (PPPs). This collaboration creates opportunities for trainers and trainees to engage with companies, gaining practical work experience through attachments.

Strategic outcome two: CBT/CBA implementation manual is developed, validated and implemented in all TVET schools

For consistency in expected outcomes, it is advisable to establish a guiding document beforehand. This document will serve as a blueprint for the exercise, ensuring that each component is adequately addressed. The exercise will not commence from scratch, as there is an existing competency framework that will serve as a baseline. The activity is scheduled to take place in February. The primary outputs of this activity are expected to be the establishment of two competency-based curriculum development frameworks: the first for qualification-related curriculum and the second for the development of short-course curricula.

A competency-based TVET curriculum starts by identifying training needs across various sectors and sub-sectors within a nation's economy. It is crucial to identify every potential source of employment within the nation's economy to develop relevant TVET education curricula. Therefore, it is essential for TVET curriculum developers to ensure the comprehensive identification of all areas of employment.

Essentially, to design a competency-based TVET curriculum, curriculum developers must assess current and future labor market demands within their communities to create relevant TVET programs. A triangulation approach will be utilized to obtain reliable data, incorporating employer surveys, extrapolations, labor market signals, and job vacancies.

However, the primary focus will be on assessing labor market data through employer surveys. Both primary and secondary information about the labor market data will be gathered. The report will encompass details about the industries and firms within sectors, including size, location, market segments, as well as the issues and challenges faced by these firms.

Additionally, the report will capture information about the labor force within the industry or sector, covering aspects such as size, age, gender, and qualifications. Moreover, the study will analyze employers' descriptions of the necessary knowledge, skills, and attitudes required for firms and enterprises to remain competitive in their respective markets. The exercise aims to identify gaps between the determined requirements from data analysis and the existing scenario. Recommendations will be made regarding the types of programs needed for each sector, particularly focusing on training programs for key occupations and suggesting new directions for program development.

Strategic outcome three: All TVET Level 1 to 5 Curricula are developed and aligned to the labour market needs

To address the discrepancy between educational outcomes and the qualification needs of the job market, competency-based systems have been chosen as the approach to align the education and training system with the demands of employers. Occupations and their related occupational standards are crucial elements in bridging the gap between job market demands and the education and training system. Occupational standards serve as reflections of the real workplace scenarios, encompassing both current and future requirements. These standards will outline the competencies expected from a worker, aligning with the needs of the labor market. Additionally, occupational standards will comprehensively define the skills, knowledge, and attitude necessary for individuals to be considered proficient in a specific field. Competence will encompass the entire spectrum of skills, knowledge, and attitude required to successfully perform a particular job. The process will rigorously employ the DACUM approach to accurately reflect the duties and tasks performed by active practitioners within the workshop model.

Several crucial factors must consistently be considered to maintain the relevance of a competency-based TVET curriculum for trainees, enabling their successful transition into the workforce and further education. As competency-based TVET curriculum is inherently dynamic, it should be adaptable to workplace changes and further learning. Its modifications should yield tangible improvements, notably in articulating vertical pathways. Ideally, the curriculum should undergo revisitation every five years to ensure it remains current. However, many existing curricula were developed back in 2013, necessitating an urgent revisit and update to align with present needs.

Under this strategic outcome, the RTB will undertake the following activities to achieve the strategic outcome: conducting sectoral skills surveys to identify labor market needs, which will inform the development of required curricula per sector, creating new competency-based TVET curricula aligned with current labor market needs, and reviewing outdated TVET curricula

Strategic outcome four: Training Organization guides (TOG) for all curricula are developed/reviewed, validated and implemented

The education sector, including TVET, plays a crucial role in equipping trainees with the competencies needed to become valuable contributors to society and the economy. Insufficient tools and equipment for practical activities, particularly inadequate training equipment, can lead to overcrowding during practical demonstrations. This situation often results in most trainees merely observing the demonstration without gaining hands-on practice. Consequently, TVET programs may lean towards theoretical teaching methods, and graduates might not be perceived as more skilled than their academic counterparts by the labor market.

To enhance the relevance of TVET, there should be a clear mechanism for continuously upgrading the infrastructure, tools, and equipment in TVET institutions. Many institutions lack adequate, appropriate, updated, or functional tools and equipment. Acquiring suitable tools and equipment poses challenges due to limited funding and a lack of mechanisms for sourcing funds. This status significantly impacts the quality of graduates trained by these institutions. The scarcity of equipment limits practical sessions and hampers achieving the expected level of quality and technological know-how demanded by the evolving market.

In numerous TVET institutions, both classrooms for theory sessions and workshops for practical sessions are often inadequate in terms of numbers, capacity, and equipment. Outdated or broken training tools, insufficient teaching and learning facilities, all contribute to the poor quality of TVET delivery.

After the development of the curriculum, an exercise will be conducted to determine precise details concerning infrastructure, equipment, and facilities (e.g., workshops, labs). This assessment will encompass both quantitative aspects (the required number of items) and qualitative aspects (specifications, condition, effectiveness, and relevance). The process will involve workshops where meaningful dialogues between TVET providers, suppliers, technical experts, and active practitioners will occur to establish standards for tools and equipment lists. These will guide the provisioning of necessary resources to schools offering the respective curriculum.

The plan includes the development and dissemination of 110 Training Organization Guides (TOGs) to TVET schools, facilitating resource advocacy and mobilization. Under this strategic outcome, the RTB will conduct the following activities to achieve this: develop and validate new TOGs, review and validate existing TOGs, and design, print, and distribute copies of the validated TOGs to all TVET

Strategic outcome five: All training manuals of Curricula from level 1 to 5 are developed

Today, a variety of learning resources are utilized to support trainees in their learning processes, with textbooks being among the most prominent. Textbooks play a significant role in nearly every school system worldwide, serving as a valuable resource for both trainers as course designers and trainees acquiring competencies. The RTB plans to develop 944 training manuals

Strategic Outcome six: Ensure required Training Equipment and Consumables are supplied to all public TVET schools

The TVET Information System to be established must include provisions for collecting detailed data on equipment, tools, and consumables. This should cover quantitative aspects such as availability and volume, as well as qualitative aspects provided in the Standards Tools and Equipment lists within the TVET sector. The data should be disaggregated by TVET providers, districts, sectors, and cells. This information will inform the 'TVET Provision Mapping,' helping determine when and where the provision of equipment and/or consumables is needed.

A meaningful and frequent dialogue between RTB, public, and private TVET providers will be initiated to ensure the provision of TVET that aligns with local labor market needs and remains cost-effective. This entails developing and implementing new, market-responsive TVET curricula at the local level while leveraging regionally available expertise, infrastructure, equipment, and facilities for districts and sectors lacking these resources.

Under this strategic outcome, the RTB will undertake the following activities: compile a comprehensive report for standards training equipment lists, tools, and consumables, showing costs by trade; supply training equipment to TVET schools; and provide training consumables to all public TVET schools

Strategic area two: ICT and digitalization in TVET

The use of ICT in education and training, such as computer labs of excellence, has significantly impacted education in Rwanda, particularly in the TVET sector. The introduction of Smart Classrooms has elevated Rwanda's learning facilities for TVET, providing world-class educational environments. These Smart Classrooms have revolutionized TVET teaching and learning by integrating cutting-edge technologies, software, simulations, experiments, and hands-on practical education. They serve as innovative spaces where ideas are incubated based on industry and labor market demands.

Computer labs of excellence enhance traditional TVET teaching methods by introducing learner-centered approaches, interdisciplinary work, Competence-Based Education and Training (CBET), and maximizing the utilization of existing workshop equipment. This is achieved through presentations, digital lessons, investigations, on-screen simulations, virtual experiments, practical exercises, group work, and projects. They foster a mindset shift among both trainees and instructors, fostering innovation, creative thinking, exploration skills, problem-solving-based learning, and the development of design, programming, and production skills.

The vision includes the digitization of all TVET Level 1 to 5 trainees' manuals, the connection of all public TVET schools to high-speed internet for daily training activities, and the availability of all RTB services online

Strategic outcome one: All TVET Level 1 to 5 Training content is Digitized and implemented

The rapidly advancing information and communication technology (ICT) and the evolving work culture in the digital world necessitate workers to acquire not only technological competencies but also various soft skills. This need opens up opportunities for individuals, regardless of their location, to access training and acquire new skills. The process of imparting these new skills also offers the potential to introduce innovative pedagogies. Such empowerment aligns with the plans proposed in the Education 2030 Framework for Action, which aims to ensure 'inclusive and equitable quality education and lifelong learning opportunities for all'.

In this regard, RTB aims to digitize all developed trainees' manuals, targeting 2320 training manuals

Strategic outcome two: Emerging Technologies are initiated and expanded in TVET system

Another distinctive feature of the Education 2030 agenda is the recognition of information and communications technology (ICT) as an essential tool for strengthening education systems and enhancing quality and effective learning. Significantly, ICT holds the potential to bring transformative changes in skills development and TVET, surpassing the traditional view of ICT solely for increasing access to education.

New possibilities facilitated by ICT include flexible lifelong learning, enhanced knowledge sharing, social learning between peers and experts, and authentic learning experiences through simulations and virtual reality. ICT can also improve monitoring of learning progress and provide personalized feedback to keep students on track. When carefully considered and fully realized, ICT can elevate learning experiences to a new level in TVET.

The potential of ICT in TVET has been acknowledged by several declarations, such as the 'Shanghai Consensus' from the 3rd International Congress on Technical and Vocational Education and Training (TVET), which recommended further integration of ICT in TVET to reflect the transformations in the workplace and society at large. RTB is committed to integrating ICT in TVET through the strategic outcome 'Emerging Technologies are initiated and expanded in the TVET system'. Under this strategic outcome, RTB will carry out the following activities: initiating simulation and new ICT-based training technologies in all TVET schools, supporting 416 schools, and ensuring that all TVET trainers have laptops, targeting 4499 trainers to be equipped

Strategic outcome three: All RTB Services are available online

In the early 1990s, developing nations experienced the widespread adoption and utilization of ICTs. This proliferation of ICT has significantly influenced various social, economic, and political aspects of societies across many nations, particularly in Sub-Saharan Africa. Rwanda, located in this region, has not been an exception to this trend.

Public institutions have been actively implementing e-Governance systems to enhance public service delivery and streamline governance processes. These technological innovations have brought substantial benefits to citizens, providing access to innovative services both within and beyond public institutions. Rwanda has made remarkable progress in promoting e-services.

As part of this strategic outcome, RTB will develop an RTB service charter and digitize it on RTB MIS

Strategic area three: Access and partnership

Despite the substantial increase in budget allocations to the TVET sector by the Government of Rwanda, budget constraints necessitate prioritization. There are doubts regarding the sustainability of these financing levels. Simultaneously, the overall expenditure for TVET is expected to increase due to the planned expansion of TVET (with 60% of upper secondary students opting for TVET) and the implementation of a national TVET reform aimed at enhancing the quality and relevance of TVET. The introduction of improved Quality Assurance measures, including REQF governance, and the establishment of a National Training of Trainers Institute will require additional resources.

It is well-known that high-quality TVET is costly, often significantly more expensive than general education. TVET must remain adaptable to the continuously changing demands of the labor market, whether through developing new training programs, employing new training technologies, or providing opportunities for employees to engage in continuous professional development and lifelong learning. Addressing these challenges requires governments to collaborate with partners in TVET, both in terms of financing and delivery.

Moreover, Technical and Vocational Education and Training (TVET) faces the challenge of an unfavorable reputation rooted in the long-standing perception that it is a career path for those less academically inclined. This perception stems from the relatively lower academic entry requirements for TVET, limited opportunities for further education, and the misperception that TVET primarily aims to keep dropouts from the basic and secondary school system 'off the streets'.

Elevating the status and attractiveness of TVET involves transforming public perceptions and attitudes toward technical and vocational education. The key to altering these perceptions lies in demonstrating the positive outcomes achievable through TVET and shaping students' attitudes, starting from an early stage (e.g., 9YBE), to appreciate the benefits of pursuing TVET qualifications over purely academic ones. Additionally, promoting TVET as a vehicle for economic empowerment in Rwanda is crucial. Achieving this goal requires a coordinated effort involving MINEDUC, RTB, TVET providers, and the Private Sector Industry, each playing a pivotal role

Strategic outcome One: 60% of 9YBE leavers enrolled in TVET Level 3

To enhance enrollment in TVET, it is essential to bolster career guidance services in primary and lower secondary schools. This step will effectively inform prospective students/trainees and their parents/guardians about the opportunities available through TVET. To reshape the image of TVET and counter negative perceptions, RTB plans to execute well-designed awareness campaigns aimed at improving the public's perception of TVET. This will involve

actively publicizing and marketing TVET programs across various media platforms such as radio, TV, and through dramatic presentations to augment public awareness, support, and engagement. RTB will educate the public on the diverse opportunities TVET can offer individuals and families.

Multiple communication strategies will be employed, including showcasing role models from the TVET sector and involving successful entrepreneurs in motivational campaigns, particularly within school settings. Utilizing electronic media for promoting TVET has proven effective. Additionally, RTB will advocate for the orientation of 9YBE leavers in an activity chaired by MINEDUC

Within this strategic outcome the following activities will be conducted

- Train career guidance & Gender focal persons in TVET schools
- Organize TVET awareness in order to ensure increased access and relevance for TVET
- Support each TVET school to develop expansion and maintenance plan

Strategic outcome two: DP's interventions are well coordinated and aligned with RTB strategic objectives

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Within this strategic outcome RTB will organize strategic consultation meetings & Retreats with development partners for effective planning

Strategic outcome three: RTB Budget is implemented in full compliance with Public Fund Management Principles and Guidelines

The financing of Technical and Vocational Education and Training (TVET) stands as one of the most critical and heavily debated issues within the TVET system. On a per-student basis, when compared to other levels of education—particularly primary and general secondary education—TVET is considerably more expensive to deliver.

Despite the substantial increase in budget allocations to the TVET sector by the Government of Rwanda, budget constraints remain a pressing issue, compelling authorities to manage limited available funds. Simultaneously, the overall expenditure for TVET is anticipated to increase due to the planned expansion of TVET (with 60% of upper secondary students opting for TVET) and the implementation of a national TVET reform aimed at enhancing the quality and relevance of TVET. It is widely recognized that high-quality TVET is costly, often significantly more expensive than general education.

Within this strategic outcome, RTB will ensure that all RTB staff involved in financial and procurement management adhere to official rules and guidelines, as well as recommendations provided by the Office of the Auditor General (OAG)

Strategic outcome four: All Projects under RTB are efficiently, effectively and timely implemented and coordinated in line with project's documents and related financing agreements

As the government emphasizes stringent performance monitoring, the establishment of a Monitoring and Evaluation (M&E) system constitutes an integral component of project coordination. The M&E system will be developed and implemented to (a) evaluate the performance of each project by collecting and processing M&E data related to all performance indicators, and (b) guide adjustments in project activities to enhance project performance.

Within this strategic outcome, RTB will ensure that all projects under its purview have operational manuals. Additionally, RTB will ensure the timely implementation of project activities and the sharing of reports

Strategic outcome five: Production units and Incubation centers are operationalized in TVET schools

It is widely acknowledged that high-quality Technical and Vocational Education and Training (TVET) is inherently more expensive than general education. TVET programs need to be adaptable to meet the ever-changing demands of the labor market. Presently, the Government of Rwanda is actively considering the possibility of cost-sharing with those who benefit from TVET, including employers, trainees, their families, or society at large.

An alternative approach to addressing sustainable financing issues and simultaneously enhancing the relevance of the TVET system involves promoting the establishment of production units within TVET schools. This initiative encourages TVET providers to increase their income generation by setting up production units, where both materials and human resources are utilized to create goods, items, or provide services. These units function akin to industrial sectors within educational institutions, allowing trainees to work under qualified instructors' supervision. This hands-on approach bridges the gap between theoretical learning and practical application, offering students real-world experiences engaging with customers and mastering technical skills.

The benefits of this approach are multifaceted: It synthesizes theoretical and practical learning, provides on-the-job training, and addresses the concerns of employers regarding certified graduates lacking practical skills. Encouraging the principle of school production units could significantly enhance trainees' confidence, customer relations, collaborative skills, and problem-solving abilities. Such units essentially bring the world of work into learning institutions, aligning with Rwanda's workplace learning policy or dual training initiatives.

To fulfill this strategic outcome, RTB will support the establishment of incubation centers in TVET schools

Strategic outcome six: Special academies are operationalized and well-coordinated

The initiative will encompass all provinces of Rwanda, namely East, West, South, including Kigali City, totaling 5 special academies to be established. These special academies will predominantly focus on imparting rare skills that significantly contribute to the country's rapid development. The sectoral focus will vary from province to province based on their priorities and the opportunities they present.

The objective of this initiative is to establish provincial flagship TVET schools dedicated to producing high-quality skills in selected sectors. Training programs will be designed according to standards and qualifications recognized by industries operating in the East Africa regional or international markets. Each flagship TVET institute will specialize in specific fields with a defined set of training qualifications. As part of this strategic outcome, RTB will support the establishment of these special academies

Strategic outcome seven: Innovation and creativity in TVET schools promoted

Skills competition has received credits in the developed countries and has been increasingly used in the developed nations and in strong emerging countries such as China and Korea as an engine to promote excellence and improve the country's image. In a bid to promote innovation and creativity among TVET trainees as well as in their respective TVET schools

RTB will be organizing skills completion benchmarking to the World skills model⁴. within this strategic outcome, RTB will Organize National & regional skills competition for promoting Innovation in TVET schools where 1 skills completion will be organized.

Strategic outcome: District local leaders are fully engaged in TVET schools daily operations

Rwanda has been decentralizing since the early 2000s with the objective of "promoting good governance, service delivery, and national development"⁵. The ongoing decentralization of the Rwandan public administration empowers local governments to deliver education policies to end users and, more broadly, serve as the focal point in representing the needs of the local communities and coordinating multi-sector responses.

Districts prepare their District Development Plans (DDSs) which run congruently with the national planning framework cycles. In doing so, they play an important role in implementing education programmes.

To operationalize vertical synergies, RTB will be organizing regular consultative meetings with District local leaders in order to evaluate the progress of activities and to diagnose where much more efforts is needed. Districts will be more actively involved in recruitment of trainers, school managers as well as other administrative staff.

Strategic outcome eight: Private sector is fully engaged in skills development

Improving the quality of TVET is one of the key reform agendas being addressed by governments throughout Africa, including Rwanda. A supply led skills' training, based on outdated curricula does not adequately prepare trainees for today's labour market. To address this, the private sector⁶ are being brought closer to the planning and delivery of TVET, as part of the process of making TVET delivery demand-driven and more adaptable to change and progress. To date, the involvement of employers and industry in TVET is rather limited and its influence on the training of young Rwandans is therefore modest.

There is a need to develop strategies that are focused on the engagement of the private sector in the development and delivery of TVET, including the provision of training. Although there are key roles for the private sector to play, its involvement is not simple and both the state and the private sector should participate as partners. There are clear benefits for such involvement:

⁴ https://www.worldskills.org/

⁵ GoR (2012): National Decentralization Policy (Revised), Ministry of Local Government, Kigali June 2012

⁶ The private sector includes industry and employers, as well as non-government training providers, which may include for-profit organisations, employers and NGOs.

- For the employer it can provide a means of identifying future employees with the appropriate skills and attitudes
- For the trainee it will enable him/her to gain the so called employability skills and access to the workplace
- For the TVET system the increased involvement of employers can provide a valuable means to make its delivery more relevant, for obtaining additional funds and technical advice to help ensure that provision becomes more efficient, and responsive to market needs.

The private sector is the main client of the TVET system and it is therefore imperative that they take on active involvement in TVET at different levels of the system, from policy & strategy development to provision of internships and apprenticeship programs. Such involvement could take the following forms⁷:

- System governance and financing (e.g. participation in overall decision making, policy & strategy development, prioritising TVET requirements and funding of training both inside and outside companies)
- Definition of training contents (e.g. participation in defining occupational profiles, participation in curriculum development and development of working aids and teaching materials)
- Execution of training (e.g. experts from the world of work teaching at TVET schools, training at the workplace through apprenticeships or internships, private sector as training providers, training of trainers)
- Diverse other functions (e.g. participation in promotion of innovations in TVET, participation in labour market research and in professional guidance)

Within this strategic outcome, RTB will Increase partnerships with private companies, where 1248 companies are targeted to sign MoUs with TVET schools for hosting trainers and trainees for industrial attachment, collaborate with relevant organs to Strengthen Sector Skills Councils engagement and to ensure all TVET schools are effectively implementing Workplace learning program and develop procedure manual of workplace learning (dual training, apprenticeship, industrial attachment and internship)

Strategic outcome nine: RTB activites are aligned to various government strategic documents (NST1, ESSP, TVET-Policy, NSDEPS, Etc..)

As articulated by Vision 2050, Rwanda aims at developing high-value and competitive jobs in prospective high -value sectors across Rwanda, in this regard TVET will play a pivotal role

⁷ Adapted from "The GMR EFA View on Vocational Education and Training: Isn't there more to do for the Private Sector?"- Franz Kehl et all (NORRAG 2013)

in building a stronger and competent society to boost productivity and investments in identified high value sectors where the country is having a niche and Private sector employers and firms are needed to invest in on-the job training for their workers to increase competitiveness⁸.

RTB Strategic Plan is an implementation plan for TVET implementation from level 1 to level 5 under Rwanda's National Strategy for Transformation (NST 1)9. It will guide public investments in TVET during the period 2021-24 and sets out the estimated required resources for the TVET sector in those 4 years, contributing to the three NST Pillars of economic, social, and governance transformation toward the aspirations of Vision 2050. Under this vision, Rwanda aspires to attain upper middle-income country status by 2035 and high-income status by 2050 with the intention of providing high quality livelihoods and living standards to Rwanda citizens. NST1 stresses the importance of TVET in economic growth and has set ambitious target to increase the proportion of students pursuing Technical and Vocational Education and Training (TVET) from 31.1% in (2017) to 60% by 2024, the need to make TVET training relevant to labour market needs is pertinent. Furthermore, NST1 highlight the set target to create 1,500,000 (over 214,000 annually) decent and productive jobs for economic development where TVET remains the backbone to realize the foregoing targets. In this regards, this strategic plan was developed in full consultation with national policies in a bid to reflect national targets.

Strategic area four: Human resources development

There are different factors that influence the quality of TVET, especially in providing workers with qualified knowledge, skill and attitude. From these different factors, qualification of trainers is the most salient one. Professionalization of TVET trainers is considered as a serious issue that affects the effectiveness of TVET in providing skilled workers for the world of work. Experience of trainers is highly important for effective training because trainers share experience from each other for successful training. Experience gained overtime, enhances the knowledge, skills, and productivity of trainers. It is through the real world application of techniques that trainers reach their full potential. To deliver this strategic objective the following activities will be conducted; develop a recruitment and Placement guidelines for TVET Trainers, put in place trainers management database (waiting lists for immediate replacement of leaving staff), strengthen partnerships with private sector in providing their staff to join training staff as visitor trainers, enhance capacity building of trainers in English proficiency as a medium of instruction, enhance capacity building of trainers in ICT and help them to get

⁸ Vision 2050

⁹ The NST follows the Economic Development and Poverty Reduction Strategy 2 (EDPRS 2, ending in June 2018) and will implement the last years of Vision 2020 and the first four years of the Vision 2050.

International Computer Driving license, organize capacity building workshops for school managers to equip them with the required ICT, pedagogical and leadership skills, collaborate with Rwanda TVET Trainers Institute for Training and certification of TVET trainers, advocate for effective implementation of Special statute for TVET Trainers (will help in setting up retention and incentive mechanisms for TVET trainers), advocate for Horizontal and vertical promotions and incentives to attract and retain trainers in TVET and develop TVET sustainable financing mechanism to support skills development

Strategic outcome one: All TVET public TVET schools have required competent and qualified Trainers

All TVET trainers will sign a performance-based contract linked to their pay and conditions. Similar to the best performing TVET trainers will be given incentives, such as laptops, housing, cows and opportunities to pursue further studies in their areas of specialisation. In addition to these incentives, the process of deployment and utilisation of TVET trainers will be improved. Newly appointed trainers will participate in school-/institution-based coaching and mentoring schemes for the first two years of their career. The most experienced and effective trainers will be identified and will conduct innovative school and cluster-based mentoring programmes that aim to promote trainers' competencies¹⁰ RTB will develop a recruitment and Ppacement guidelines for TVET Trainers, put in place trainers management database (waiting lists for immediate replacement of leaving staff) and strenghen partneships with private sector in providing their staff to join training staff as visitor trainers.

Strategic outcome two: Continuous Skills upgrading programs for TVET trainers and School managers are organized and conducted

The delivery of quality TVET is necessarily closely linked to the building of strong management and leadership capacity to drive the entire system. TVET school managers and other administrative staff will therefore also have to be trained and their skills upgraded to enable them confidently drive the system with its various implementation structures, including qualifications framework, accreditation standards, inspection guidelines, quality assurance and accountability frameworks. Furthermore, in order to realize an attractive TVET system of high quality, the Training of current and future TVET Trainers is crucial. A strong coordination mechanism will be put in place to effectively coordinate the range of interventions in this area, including those of Development Partners. The ToT

¹⁰ Education sector strategic plan

Implementation Framework will also provide measures for attracting and retaining quality trainers by providing them incentives and clear career perspectives. RTB will enhance capacity building of trainers on CBT/CBA curricula, enhance capacity building of trainers in English proficiency as a medium of instruction, enhance capacity building of trainers in ICT and help them to get International Computer Driving licence, organize capacity building workshops for school managers to equip them with the required ICT, pedagogical and leadership skills

Strategic outcome three: Management and retention strategies for TVET trainers put in place and implemented

TVET institutions are considered as instruments of accelerated and Sustained Development to end poverty at regional level specifically as well as national level at large. In order to achieve the above benefits from the sector, stable work environment in general and availability of experienced trainers' specifically is a crucial aspect. Nowadays turnover is more serious than ever. Rapid technological change and frequent revolutionized new ideas have created competition among organizations which increases an employee turnover and separation, coming to TVET trainers, the foregoing problem has affected a lot the TVET system in Rwanda. RTB has put forward the strategies to approach the problem sustainably. RTB plans to advocate for effective implementation of Special statute for TVET Trainers (will help in setting up retention and incentive mechanisms for TVET trainers), encourage horizontal and vertical promotions and incentives to attract and retain trainers in TVET and develop TVET sustainable financing mechanism to support TVET & skills development.

Strategic area Five: Global TVET trend and Quality

In all countries worldwide, fast-changing technical developments and global competition are leading to growing demand for well-qualified workforces; investments in education are an important means for Rwanda to keep pace internationally, as well as contributing to increased social cohesion. Financial investments alone are not sufficient to make TVET attractive, socially inclusive and competitive the quality of TVET must be considered too. Quality can be defined in many different ways. For instance, it can mean excellence, zero defects, uniform quality, satisfying customer needs or operational improvement. Instead of creating a pervasive and unequivocal definition of TVET quality, it is more relevant to examine it as a relative and contextual concept. Quality is always bound to satisfying customer needs. Benchmarking TVET with other countries renown to be successfully in TVET It is of paramount important in a bid to learn best practices where necessary to replicate them or to contextualize them here.

Strategic outcome one: Research in international TVET trend and national TVET situational analysis conducted

Global disruptions including climate change, digitalization, the Fourth Industrial Revolution, demographic change and migration are having an unprecedented impact on our lives, the world of work and the world of learning. The resulting transformations, especially the new job roles, call for learners to upgrade their knowledge, skills and competences constantly. These shifts are not only affecting the content and format of technical and vocational education and training, but also the teaching and training methods (both theoretical and practical).

An effective TVET system within a country is a critical pillar of any successful economy. It can serve as the impetus to boost the value of the nation and it's GDP in the global marketplace. The global economy demands much more from people than it has in the past. Competition is no longer just local, driving up the demands on employees, focusing employers on creating employees that are more fully engaged in the work. An effective TVET system needs to take into account not only principals and standards, but also the socioeconomic conditions, informal sector needs and TVET capacity, and labor market demands. Although, each country has its own TVET management system and its context, some best practices that worked well in other countries may work better in Rwanda through contextualization of best practices to our context, hence TVET system needs to benchmark with other international countries who have proven to be advanced in TVET system, to realise this, RTB plans to conduct researches on TVET development trend and share reports to relevant organs as well as conduct Tracer surveys on graduates absoption on labour market and employers satisfaction

Strategic outcome two: TVET awareness structures, platforms and tools are in place and well strengthened

Technical and Vocational Education and Training (TVET) holds a pivotal role in the international education agenda, as highlighted in Sustainable Development Goal 4 of the 2030 Agenda for Sustainable Development. Within this goal, three out of seven targets specifically focus on TVET, underscoring Member States' recognition of the importance of ensuring inclusive, equitable, and high-quality TVET for all. Furthermore, other goals also encompass TVET-related targets, emphasizing that skills and education are central to achieving all Sustainable Development Goals.

Despite the increasing acknowledgment of TVET's importance in international discourse and policies, the perception of TVET faces challenges compared to other educational pathways, particularly higher academic education. Even in countries with well-established TVET systems, initial enrollment in TVET programs is declining, with many students preferring the

academic education track as their primary choice. The perceived low image of TVET is thus a universal concern. In Rwanda, however, there has been a positive shift, with 60% of 9YBE leavers choosing to pursue TVET as outlined by NST1 in 2017.

To address this concern further, RTB plans to implement several initiatives. This includes establishing a TVET Newsletter and TVET News Bulletin, developing the RTB website for continuous dissemination of TVET awareness-raising messages, and conducting bi-annual community TVET awareness campaigns at the institution level

Strategic outcome three: RTB's contribution to TVET standards development ensured

In countries worldwide, rapidly evolving technical advancements and global competition are generating an increased demand for highly qualified workforces. Investments in education are pivotal for Rwanda to remain internationally competitive and foster enhanced social cohesion. However, financial investments alone are inadequate to render Technical and Vocational Education and Training (TVET) appealing, inclusive, and competitive. The quality of TVET plays a crucial role.

Quality in TVET can be defined in various ways. It might encompass excellence, zero defects, consistent quality, meeting customer needs, or operational improvement. Rather than establishing an all-encompassing and definitive definition of TVET quality, it's more pertinent to perceive it as a relative and contextual concept. Quality is inherently linked to meeting customer needs. Defining quality is essentially a joint effort between TVET providers and their key customers and stakeholder groups.

In this regard, RTB is committed to contributing to the development of TVET standards. This involves collaborating with relevant organizations to create occupational standards and quality assurance manuals. Furthermore, RTB will ensure the implementation of quality assurance standards across all TVET schools

3.2 Results based framework

Goal/Impact	Competent TVET graduates are produced to meet labour market demands						
Strategic area: (Strategic area: Curriculum and instruction						
Outcome 1	Curricula, teaching materials, trainer's guides, methodologies designed and distributed and training methods for technical and vocation education and training from level one (1) to five (5) established						
	All TVET Level 1 to 5 Curricula developed and aligned to the labour						
Output 1.1	market needs						
	Develop new TVET competence-based curricula that are linked with the labour market needs from level 1 to 5						

	Incorporate sciences modules into existing curricula						
Output 1.2	Training Organization guides (TOG) for all curricula developed						
Activities	Develop and validate new TOG						
Activities	Disseminate soft and hard copies of new developed TOG in all TVET schools						
Output 1.3	All training manuals of Curricula from level 1 to 5 developed						
	Develop Training manuals and digitize them						
	Develop and validate CBT/CBA implementation manual						
Activities	Print and Disseminate CBT/CBA implementation manual in all TVET schools						
	Print and Disseminate norms and standards and other document related in all TVET						
Output 1.4	Required Training Equipment and Consumables provided to all public TVET schools						
	Make a comprehensive report for standards training equipment lists, tools and consumables showing costs by trade						
	Supply of training equipment to TVET schools						
	Elaborate list of consumables required						
Activities	Identify students to receive training consumables						
	Calculate consumables costs per student						
	Conduct needs assessment of equipment from schools						
	Supply of training equipment to all public TVET schools						
Strategic area: I							
Strategic area: I Outcome 2	Use of information and communication technology promoted in technical and vocation education and training from level one (1) to five						
	Use of information and communication technology promoted in						
Outcome 2	Use of information and communication technology promoted in technical and vocation education and training from level one (1) to five (5);						
Outcome 2 Output 2.1	Use of information and communication technology promoted in technical and vocation education and training from level one (1) to five (5); All TVET Level 1 to 5 Training content digitized and implemented						
Outcome 2 Output 2.1 Activities	Use of information and communication technology promoted in technical and vocation education and training from level one (1) to five (5); All TVET Level 1 to 5 Training content digitized and implemented Digitize all trainees' manual developed All Public TVET Schools connected using high speed internet and in daily						
Outcome 2 Output 2.1 Activities Output 2.2 Activity	Use of information and communication technology promoted in technical and vocation education and training from level one (1) to five (5); All TVET Level 1 to 5 Training content digitized and implemented Digitize all trainees' manual developed All Public TVET Schools connected using high speed internet and in daily training activities						
Outcome 2 Output 2.1 Activities Output 2.2	Use of information and communication technology promoted in technical and vocation education and training from level one (1) to five (5); All TVET Level 1 to 5 Training content digitized and implemented Digitize all trainees' manual developed All Public TVET Schools connected using high speed internet and in daily training activities Establish computer labs of excellence in all TVET schools						
Outcome 2 Output 2.1 Activities Output 2.2 Activity	Use of information and communication technology promoted in technical and vocation education and training from level one (1) to five (5); All TVET Level 1 to 5 Training content digitized and implemented Digitize all trainees' manual developed All Public TVET Schools connected using high speed internet and in daily training activities Establish computer labs of excellence in all TVET schools Emerging Technologies established in TVET system						
Outcome 2 Output 2.1 Activities Output 2.2 Activity Output 2.3	Use of information and communication technology promoted in technical and vocation education and training from level one (1) to five (5); All TVET Level 1 to 5 Training content digitized and implemented Digitize all trainees' manual developed All Public TVET Schools connected using high speed internet and in daily training activities Establish computer labs of excellence in all TVET schools Emerging Technologies established in TVET system Ensure that all TVET trainers have a laptop						
Outcome 2 Output 2.1 Activities Output 2.2 Activity Output 2.3 Activities	Use of information and communication technology promoted in technical and vocation education and training from level one (1) to five (5); All TVET Level 1 to 5 Training content digitized and implemented Digitize all trainees' manual developed All Public TVET Schools connected using high speed internet and in daily training activities Establish computer labs of excellence in all TVET schools Emerging Technologies established in TVET system Ensure that all TVET trainers have a laptop Put in place E-learning platform						
Outcome 2 Output 2.1 Activities Output 2.2 Activity Output 2.3 Activities Output 2.4	Use of information and communication technology promoted in technical and vocation education and training from level one (1) to five (5); All TVET Level 1 to 5 Training content digitized and implemented Digitize all trainees' manual developed All Public TVET Schools connected using high speed internet and in daily training activities Establish computer labs of excellence in all TVET schools Emerging Technologies established in TVET system Ensure that all TVET trainers have a laptop Put in place E-learning platform All RTB Services available online						
Outcome 2 Output 2.1 Activities Output 2.2 Activity Output 2.3 Activities Output 2.4 Activity Outcome 3	Use of information and communication technology promoted in technical and vocation education and training from level one (1) to five (5); All TVET Level 1 to 5 Training content digitized and implemented Digitize all trainees' manual developed All Public TVET Schools connected using high speed internet and in daily training activities Establish computer labs of excellence in all TVET schools Emerging Technologies established in TVET system Ensure that all TVET trainers have a laptop Put in place E-learning platform All RTB Services available online Develop RTB service charta and degitize it on RTB MIS Technical and vocation education and training programs and activities						
Outcome 2 Output 2.1 Activities Output 2.2 Activity Output 2.3 Activities Output 2.4 Activity Outcome 3	Use of information and communication technology promoted in technical and vocation education and training from level one (1) to five (5); All TVET Level 1 to 5 Training content digitized and implemented Digitize all trainees' manual developed All Public TVET Schools connected using high speed internet and in daily training activities Establish computer labs of excellence in all TVET schools Emerging Technologies established in TVET system Ensure that all TVET trainers have a laptop Put in place E-learning platform All RTB Services available online Develop RTB service charta and degitize it on RTB MIS Technical and vocation education and training programs and activities coordinated						

	Organize TVET awareness in order to ensure increased access and relevance for TVET
	Support each TVET school to develop expansion and maintenance plan
	Advocate for construction of new TVET schools to reach 60% target
Output 3.2	DP's interventions coordinated and aligned with RTB strategic objectives
Activity	Organize strategic consultation meetings & Retreats with DPs for effective planning
Output 3.3	RTB Budget implemented in full compliance with Public Fund Management Principles and Guidelines
Activity	Ensure that all RTB staff involved in financial & procurement management are following official rules and guidelines as well as OAG's recommendations
Output 3.4	All Projects under RTB implemented and coordinated in line with project's documents and related financing agreements
A -4.1 14.1 -	Ensure that all Projects under RTB have project Operational manuals
Activities	Ensure that Project activities are all implemented and reports are shared on timely basis
Output 3.5	All resolutions and recommendations from various organs implemented timely and (MINEDUC SMM, TVET-SMM, RTB-BoD, RTB-Management, OAG, National Leadership Retreat, National Dialog Council, Presidential pledges, Parliament, TSSWG, Etc)
Activity	Ensure a closer follow up of the implementation of All resolutions and recommendations from various organs
Activity	Production units and Incubation centers operationalized in TVET schools
Activity	Support the establishment of Incubation centers in TVET schools
Output 3.6	Special academies operationalized and well-coordinated
Activity	Support the establishment of Special academies
Output 3.7	Innovation and creativity in TVET schools promoted
Activity	Organize National & regional skills competition for promoting Innovation in TVET schools
Output 3.8	District local leaders are fully engaged in TVET schools daily operations
Activity	Organize regular consultative meetings with District local leaders
Output 3.9	Private sector engaged in skills development
	Increase partnerships with private companies
	Collaborate with relevant organs to Strengthen Sector Skills Councils
Activities	engagement
	Ensure all TVET schools are effectively implementing Workplace learning program
	Develop procedure manual of workplace learning (dual training,
	apprenticeship, industrial attachment and internship)
Output 3.10	RTB activities aligned to various government strategic documents (NST1, ESSP, TVET-Policy, NSDEPS, Etc)
Activity	Consult government strategic documents for effective planning
Strategic area:	Human resources development

Outcome 4	Programs and activities to ensure trainers development, build their capacities and monitor their management coordinated					
Output 4.1	All TVET public TVET schools have required competent and qualified Trainers					
output III	Develop a recruitment and Placement guidelines for TVET Trainers					
	Put in place trainers' management database (waiting lists for immediate					
Activities	replacement of leaving staff)					
	Strengthen partnerships with private sector in providing their staff to join					
	training staff as visitor trainers.					
Output 4.2	Continuous Skills upgrading programs for TVET trainers and School					
Output 4.2	managers organized and conducted					
	Enhance capacity building of trainers on CBT/CBA curricula					
	Strengthen partnerships with private sector in attaching trainers to their					
	companies.					
A	Enhance capacity building of trainers in English proficiency as a medium of					
Activities	instruction					
	Enhance capacity building of trainers in ICT and help them to get International					
	Computer Driving licence Organize capacity building workshops for school managers to equip them					
	with the required ICT, pedagogical and leadership skills					
0	Management and retention strategies for TVET trainers established and					
Output 4.3	implemented					
	Advocate for effective implementation of Special statute for TVET Trainers					
	(will help in setting up retention and incentive mechanisms for TVET					
	trainers)					
Activities	Horizontal and vertical promotions and incentives to attract and retain					
	trainers in TVET Develop TVET sustainable financing mechanism to support TVET & skills					
	development					
Strategic area:	Global TVET trend and Quality					
Outcome	The Government advised on all activities which can fast track technical					
Outcome 5	and vocation education and training development in Rwanda."					
Output 5.1	Research in international TVET trend and national TVET situational analysis					
	conducted					
	Conduct researches on TVET development trend and share reports to					
Activities	relevant organs Conduct Tracer surveys on graduates' absorption on labour market and					
	employers' satisfaction					
0	TVET awareness structures, platforms and tools are in place and well					
Output 5.2	strengthened					
	Put in place TVET Newsletter and TVET News Bulletin					
A -4::4	Develop RTB website and continuous sharing of TVET awareness raising					
Activity	messages on it					
	Conduct bi-annual community TVET awareness campaigns at institution level					
Output 5.3	RTB's contribution to TVET standards development ensured					
	Collaborate with relevant organs to develop occupational standards and					
	quality assurance manuals					

	Ensure that quality assurance standards are implemented in all TVET schools
Innuta	The costing estimated that the resources of implementing the RTB Sector
Inputs	Strategy over the period 2020-2024 are about RWF 198,094,076,000.

3.3. Logical framework

Key Performance	Unit Baseline Target						Means of	Assumption				
Indicators	Unit	Daseille	2020/2021	2021/2022	2022/2023	2023/2024	verification	Assumption				
Strategic area: Curi	Strategic area: Curriculum and instruction											
Outcome 1: Currio	Outcome 1: Curricula, teaching materials, trainer's guides, methodologies designed and distributed and training methods for technical and vocation education and training from level one (1) to five (5) established											
	ar	id vocation educ	cation and trai	ning from leve	l one (1) to five	e (5) establish	ed					
Number of new curricula developed from level 1 to 5	Number	Existing TVET curricula available	2	36	36	36	RTB Reports	availability of necessary resources				
Number of chronograms developed	Number	Chronograms of past school year	90	90	90	90	Chronograms published on website	availability of necessary resources				
Number of short courses curricula developed	Number	Existing short course curricula	5	10	20	30	RTB Reports	availability of necessary resources				
Number of sciences modules developed and incorporated into existing curricula	Number	Existing curricula for level 3 to 5	71	0	0	0	RTB Reports	availability of necessary resources				
Number of ToG developed	Number	TBD	2	36	36	36	Reports of ToG developed	Access to the necessary funding and other resources				
Number of TOG disseminated	Number	TBD	2	36	36	36	Reports of toGs disseminated	Access to the necessary funding and other resources				
Number of trainees and trainers 'manuals developed	Number	21 trainees' manual and 21 trainer's manuals for level 2	80	288	288	288	Reports of training manuals published	Access to the necessary funding and other resources				

Key Performance	Unit	Baseline		Tar		Means of	Assumption	
Indicators	Unit	Baseline	2020/2021	2021/2022	2022/2023	2023/2024	verification	Assumption
Number of Teachers' guides developed	Number	85	90	124	150	240	RTB Reports	Access to the necessary funding and other resources
Number of CBT/CBA implementation manual	Percentage	176 CBT/CBA curricula	0%	0%	100%	0%	RTB Reports	Access to the necessary funding and other resources
Number of copies of CBT/CBA implementation manuals printed and disseminated	Number	177 CBT/CBA curricula	0	0	1500	1500	RTB Reports	Access to the necessary funding and other resources
Number of reports showing standards training equipment lists, tools and consumables	Percentage	Few STELs	2	36	36	36	RTB Reports	Access to the necessary funding and other resources
Number of schools supplied with training equipment	Number	155 public and government aided Schools	26	40	60	90	RTB Report	Access to the necessary funding and other resources
Number of schools supplied with training consumables	Number	156 public and government aided Schools	0	156	310	370	RTB Report	Access to the necessary funding and other required resources

Strategic area: ICT in TVET

Outcome 2: Use of information and communication technology promoted in technical and vocation education and training from level one (1) to five (5);

Key Performance	** '-			Tai	Means of	A		
Indicators	Unit	Baseline	2020/2021	2021/2022	2022/2023	2023/2024	verification	Assumption
Number of digitized manuals	Number	0	0	80	288	288	Report	Access to the necessary funding and other required resources
Number of computer labs of excellence established	Number	2	20	45	99	144	Report of computer labs of excellence established	necessary funding and other required resources
Number of Schools supported with ICT based training technologies	Number	2	20	45	99	144	RTB Reports	Access to the necessary funding and other required resources
E-learning platform in place and easily accessible	Percentage	Existing RP platform	0%	30%	100%	N.A	RTB Reports	
Nr for RTB digitized service charta	Percentage	TBD	0%	100%	N.A	N.A	RTB Reports	Access to the necessary funding and other required resources
Strategic area: Acco	ess and partn	ership						
Outcome 3: Techni	cal and vocat	ion education a	nd training pro	ograms and act	ivities coordin	nated		
Nr of career guidance & Gender focal persons trained	Number	TBD	50	100	150	151	RTB Reports	Access to the necessary funding and other required resources
Number of TVET awareness events organized	Number	TBD	1	1	1	1	RTB Reports	Access to the necessary funding and other required resources

Key Performance	Unit	Baseline		Tai	get		Means of	Accumution
Indicators	Unit	Baseline	2020/2021	2021/2022	2022/2023	2023/2024	verification	Assumption
Number of schools having expansion and maintenance plan	Number	366 schools available	50	100	150	151	RTB Reports	Access to the necessary funding and other required resources
Number of new TVET schools constructed	Number	155 public schools	82	30	11	27	RTB Reports	Access to the necessary funding and other required resources
Number of strategic Meeting and Retreats organized	Number	NA	4	4	4	4	RTB Reports	DPs are willing to participate in the strategic consultation meetings and retreats
Number of reports on effective implementation Public Fund Management Principles and Guidelines	Number	NA	1	1	1	1	RTB Reports	Continuous improvement in financial and procurement management
Number of Project Manuals Developed	Number	NA	1	1	1	2	RTB Reports	The project team members are committed to following the established process and procedures

Key Performance	TT . **	D P		Tai	get		Means of	
Indicators	Unit	Baseline	2020/2021	2021/2022	2022/2023	2023/2024	verification	Assumption
Number of Project reports shared on quarterly and Yearly basis	Number	NA	5	5	5	5	RTB Reports	The project team members are committed to following the established process and procedures
Number of progress reports shared by about resolutions and recommendations from various organs	Number	NA	4	4	4	4	RTB Reports	External factors, such as changes in government policies, economic conditions, or natural disasters, do not significantly impact the working serenity
Number of Incubation centers established and equipped TVET schools	Number	3	0	0	0	5	RTB Reports	External factors, such as changes in government policies, economic conditions, or natural disasters, do not significantly impact the availability of resources needed

Key Performance	TT:-	Baseline		Tar	get		Means of	A
Indicators	Unit	Baseline	2020/2021	2021/2022	2022/2023	2023/2024	verification	Assumption
Number of Special academies established and equipped	Number	5	1	1	1	2	RTB Reports	External factors such as economic conditions, natural disasters, do not significantly impact the availability of resources needed
Number of skills competitions organized	Number	NA	1	1	1	1	RTB Reports	External factors such as economic conditions, natural disasters, do not significantly impact the availability of resources needed
Number of meetings organized		NA	2	2	2	2	RTB Reports	commitment of local leaders vis a vis TVET promotion
Number of MoUs signed between TVET schools and companies for hosting trainers and trainees for industrial attachment	Number	NA	312	312	312	312	RTB Reports	commitment of private sector vis a vis TVET promotion

Key Performance	IIi.	Dagalina	Baseline Target				Means of	Aggreention
Indicators	Unit	Baseline	2020/2021	2021/2022	2022/2023	2023/2024	verification	Assumption
Number of sector skills council fully operational	Number	NA	2	4	6	10	RTB Reports	commitment of private sector vis a vis TVET promotion
Number of schools implementing Dual training	Number	NA	15	30	45	60	RTB Reports	commitment of private sector vis a vis TVET promotion
Strategic area: Hun	nan resource	s development						
Outcome 4: Progra	ms and activi	ties to ensure tr	cainers develo	pment, build tl	eir capacities	and monitor t	heir manageme	nt coordinated
The recruitment and Placement manual guidelines for TVET Trainers	Percentage	TBD	20%	50%	70%	90%	RTB Reports	Access to the necessary data and information systems
Number of operational database for effective trainers management	Percentage	TBD	20%	40%	60%	100%	RTB Reports	Access to the necessary data and information systems
Number of private sector employees involved as visiting trainers	Percentage	TBD	0%	10%	40%	50%	RTB Reports	Commitment of private sector vis a vis TVET promotion
Percentage of trainers trained	Percentage	10%	20%	40%	60%	80%	RTB Reports	Access to the necessary funding and other required resources
Number of private sector companies attached trainers	Percentage	TBD	5%	10%	30%	60%	RTB Reports	Commitment of private sector vis a vis TVET promotion

Key Performance	Unit	Baseline		Tai	get		Means of	Acquiretton
Indicators	Unit	Baseiine	2020/2021	2021/2022	2022/2023	2023/2024	verification	Assumption
Percentage of trained trainers	Percentage	TBD	20%	40%	60%	90%	RTB Reports	Access to the necessary funding and other required resources
percentage of trained trainers	Percentage	TBD	20%	40%	50%	75%	RTB Reports	Access to the necessary funding and other required resources
percentage of school managers trained	Percentage	TBD	25%	50%	75%	100%	RTB Reports	Access to the necessary funding and other required resources
Number of reports on special status for TVET trainers progress and incentives	Percentage	TBD	25%	45%	70%	90%	RTB Reports	The special statute is not significantly impacted by external factors, such as changes in economic conditions
Percentage of satisfied trainers	Percentage	TBD	25%	45%	70%	90%	RTB Reports	The special statute is not significantly impacted by external factors, such as changes in government policies or economic conditions

Key Performance	** **	n 11		Target			Means of	
Indicators	Unit	Baseline	2020/2021	2021/2022	2022/2023	2023/2024	verification	Assumption
Number of reports on raised funds		0	25%	50%	75%	100%	RTB Reports	Commitment of stakeholders vis a vis TVET promotion
Strategic area: Glol	bal TVET tren	d and Quality						
The Government a	dvised on all	activities which	can fast track	technical and	vocation educa	ation and train	ing developmer	nt in Rwanda."
Number of research done	Number	TBD	3	3	3	3	RTB Reports	Establishment of effective communication channels and enabling facilities
Number of tracer surveys conducted	Number	TBD	1	1	1	1	RTB Reports	Access to the necessary funding and other required resources
Number of promotional articles published	Number	TBD	1	1	1	1	RTB Reports	Access to the necessary funding and other required resources
Number of traffic on RTB website	Number	TBD	20%	40%	60%	100%	RTB Reports	Commitment of stakeholders vis a vis TVET promotion
Number of reports on TVET awareness campaigns	Number	TBD	2	2	2	2	RTB Reports	Access to the necessary funding and other required resources
Number of occupational standards and	Number	TBD	10	36	36	36	RTB Reports	Access to the necessary funding and

Key Performance	II!t	Dagalina	Target		Means of	Aggumention		
Indicators	Unit	Baseline	2020/2021	2021/2022	2022/2023	2023/2024	verification	Assumption
quality assurance manuals								other required resources
Number of quality audit conducted	Number	2	1	1	1	1	RTB Reports	Access to the necessary funding and other required resources

${\bf 3.4\ Implementation\ framework\ and\ costing}$

Required Activities	Total targets for 4 years	Responsible within RTB	External stakeholders	4 Years Costs estimation					
Strategic area: Curriculum and instruction									
Outcome 1: Curricula, teaching materials, trainer's guides, methodologies designed and distributed and training methods for technical and vocation education and training from level one (1) to five (5) established									
Develop new TVET competence-based curricula that are linked with the labour market needs from level 1 to 5	110 new TVET curricula	Head of Curriculum and Instructional Materials Development Department & Department staff	NESA, Private Sector	1,760,000,000					
Develop chronograms for all curricula under implementation	360 chronograms	Head of Curriculum and Instructional Materials Development Department &	NESA, Private Sector	1,744,000,000					

Required Activities	Total targets	Responsible	External	4 Years Costs
14.	for 4 years	within RTB	stakeholders	estimation
		Department staff		
		Stall		
		Head of		
		Curriculum		
		and		
		Instructional		
Incorporate sciences modules into existing curricula	71	Materials	NESA, Private	51,000,000
		Development	Sector	, ,
		Department &		
		Department		
		staff		
		Head of		
		Curriculum	NESA, Private	271,000,000
		and		
	110 770 74	Instructional		
Develop and validate new TOG	110 TOG for new	Materials		
•	Curricula	Development Department	Sector	
		&		
		Department		
		staff		
		Head of		
		Curriculum		
		and		
	- ·	Instructional		
Number of short courses curricula developed	65 short courses	Materials	Private Sector	975,000,000
	curricula	Development Department		·
		&		
		Department		
		staff		
	110 TOG	Head of	NESA, Private	
Disseminate copies of validated TOG in all TVET schools	designed and	Curriculum	Sector	95,000,000
	disseminated	and		

Required Activities	Total targets	Responsible	External	4 Years Costs
•	for 4 years	within RTB Instructional	stakeholders	estimation
		Materials		
		Development		
		Department		
		&		
		Department		
		staff		
		Head of		
		Curriculum		
	044 77 1	and		
	944 Trainees' and trainer's	Instructional Materials	NESA, all	
Develop Training manuals and digitize them	manuals	Development	NESA, all TVET schools	5,900,000,000
	developed	Department	TVET SCHOOLS	
	developed	&		
		Department		
		staff		
		Head of		
		Curriculum		
		and		
		Instructional		
Develop teachers' guides	604 teachers'	Materials	TVET Schools	1,970,000,000
	guides	Development		
		Department &		
		& Department		
		staff		
		Head of		
		Curriculum		
	CBT/CBA	and		
Develop and validate CBT/CBA implementation manual	implementation	Instructional		
	manual	Materials	NESA, Private	40,000,000
	available and	Development	Sector	10,000,000
	updated	Department		
	regularly	&		
		Department staff		
		Ställ		

Required Activities	Total targets for 4 years	Responsible within RTB	External stakeholders	4 Years Costs estimation			
Disseminate CBT/CBA implementation manual in all TVET schools	3000 copies of CBT/CBA implementation manual disseminated to all TVET schools	Head of Curriculum	NESA, all TVET schools	30,000,000			
Make a comprehensive report for standards training equipment lists, tools and consumables showing costs by trade	100 % of all Trades have comprehensive report for standards training equipment lists and tools showing costs by trade	School equipment specialist	NESA, all TVET schools	5,000,000			
Supply of training equipment to TVET schools	216 public and government aided schools have appropriate and enough training equipment	School equipment specialist	NESA, all TVET schools	30,000,000,000			
Provide funds for training Consumables to all public and government aided TVET schools	370 public, government aided and private schools are supplied with consumables on regular basis	School equipment specialist	NESA, all TVET schools	20,200,000,000			
Strategic area: ICT in TVET							

Required Activities	Total targets for 4 years	Responsible within RTB	External stakeholders	4 Years Costs estimation
Outcome 2: Use of information and communication technology pro	moted in technica			
one (1) to	five (5);			
Digitize all trainees' manual developed	944 Training manuals developed	Digital Technologies Division Manager and his team	NESA, all TVET schools	26,400,000,000
Establish computer labs of excellence in all TVET schools	310 computer labs of excellence (1 Per TVET school)	Digital Technologies Division Manager and his team	RISA and TVET schools	41,600,000,000
Ensure that all TVET trainers have a laptop	4499 trainers	Digital Technologies Division Manager and his team	RISA and TVET schools	2,249,500,000
Put in place E-learning platform	N.A	Digital Technologies Division Manager and his team	RISA and TVET schools, RP, EDC Huguka Dukore	80,000,000
Develop RTB service charta and degitize it on RTB MIS	One developed & digitized service charta and available RTB MIS	Digitla Technologies Division Manager and his team and DAF	RISA and TVET schools	1,000,000
Strategic area: Acce	ss and partnershi	p		
Outcome 3: Technical and vocation education ar	nd training progra	ms and activitie	es coordinated	
Organize TVET awareness in order to ensure increased access and relevance for TVET	4 Big events organized (One per year)	Office of DG / RTB	RP, RBA, and TVET schools	400,000,000
Support each TVET school to develop expansion and maintenance plan	451 Career guidance and	Office of DG / RTB	TVET schools	20,000,000

Required Activities	Total targets for 4 years	Responsible within RTB	External stakeholders	4 Years Costs estimation
	gender focal persons trained			
Advocate for construction of new TVET schools to reach 60% target	451 standard public schools are available across the country	Office of DG / RTB	RHA MINEDUC,	1.000.000
Organize strategic consultation meetings & Retreats with DPs for effective planning	At least 16 Strategic meetings	Office of DG / RTB	DPs	80,000,000
Ensure that all RTB staff involved in financial & procurement management are following official rules and guidelines as well as OAG's recommendations	comprehensive reports on effective implementation Public Fund Management Principles and Guidelines	DAF and Procurement	MINECOFIN and AOG	8,000,000
Ensure that all Projects under RTB have project Operational manuals	5 Project Manuals Developed	SPIU coordinator, SDF Manager, DAF and Procurement	MINECOFIN and AOG	8,000,000
Ensure that Project activities are all implemented and reports are shared on timely basis	20 comprehensive Projects reports developed and shared	SPIU coordinator, SDF Manager, DAF and Procurement	MINECOFIN and AOG, DPs	8,000,000
Ensure a closer follow up of the implementation of All resolutions and recommendations from various organs	16 reports shared (4 per year times 4 years)	DG's office	MINECOFIN, MINEDUC and AOG, DPs	8,000,000

Required Activities	Total targets for 4 years	Responsible within RTB	External stakeholders	4 Years Costs estimation
Support the establishment of Incubation centers in TVET schools	5 Incubation centers operational	Head of training management and his team	MINECOFIN, MINEDUC and, DPs	26,250,000,000
Support the establishment of Special academies	5 Special academies fully operational	Head of training management and his team	MINECOFIN, MINEDUC and, DPs	1,050,000,000
Organize National & regional skills competition for promoting Innovation in TVET schools	4 (One per year	Head of training management and his team	MINECOFIN, MINEDUC and, DPs	1,000,000,000
Organize regular consultative meetings with District local leaders	8 (2 per year)	Office of DG / RTB	MINECOFIN, MINEDUC and, DPs, Districts	160,000,000
Increase partnerships with private companies	1248 companies	Office of DG / RTB	MINECOFIN, MINEDUC and , DPs, Districts	80,000,000
Collaborate with relevant organs to Strengthen Sector Skills Councils engagement	10 Sector skills councils fully operational	Head of training management and his team	MINECOFIN, MINEDUC and , DPs, Districts, RDB	60,000,000
Ensure all TVET schools are effectively implementing Dual training program	60 schools supported	Head of training management and his team	MINECOFIN, MINEDUC and , DPs, Districts, RDB	8,320,000,000

Strategic area: Human resources development

Outcome 4: Programs and activities to ensure trainers development, build their capacities and monitor their management coordinated

Required Activities	Total targets for 4 years	Responsible within RTB	External stakeholders	4 Years Costs estimation
Develop a recruitment and Placement guidelines for TVET Trainers	The recruitment and Placement guidelines for TVET Trainers developed and validated	Head of training management and his team		10,000,000
Put in place trainers management database (waiting lists for immediate replacement of leaving staff)	Trainers management database fully operational	Head of training management and his team	MINECOFIN, MINEDUC and , DPs, Districts, RDB	20,000,000
Strengthen partnerships with private sector in providing their staff to join training staff as visitor trainers.	Exchange of staff between TVET schools and Industries well implemented	Head of training management and his team	MINECOFIN, MINEDUC and, DPs, Districts, RDB	1,664,000,000
Enhance capacity building of trainers on CBT/CBA curricula	80% of all TVET trainers to be trained and certified and the acquired skills are fully implemented	Head of training management and his team	MINECOFIN, MINEDUC and, DPs, Districts,	6,000,000,000
Strengthen partnerships with private sector in attaching trainers to their companies.	60% of all TVET trainers to be attached in private companies implemented	Head of training management and his team	MINECOFIN, MINEDUC and, DPs, Districts, RDB, PSF	3,780,000,000
Enhance capacity building of trainers in English proficiency as a medium of instruction	90% of all TVET trained and certified in English as medium of instruction	Head of training management and his team	MINECOFIN, MINEDUC and, DPs, Districts, RTTI	6,000,000,000

Required Activities	Total targets for 4 years	Responsible within RTB	External stakeholders	4 Years Costs estimation
Enhance capacity building of trainers in ICT and help them to get International Computer Driving licence	75% of all TVET trained and certified in ICT and get International Computer Driving Licence	Digital Technologies Division Manager and his team	MINECOFIN, MINEDUC and, DPs, Districts, RTTI, RISA	1,600,000,000
Organize capacity building workshops for school managers to equip them with the required ICT, pedagogical and leadership skills	All school managers trained on ICT, English and CBT/CBA	Head of training management and his team	MINECOFIN, MINEDUC and, DPs, Districts, RTTI,	416,000,000
Advocate for effective implementation of Special statute for TVET Trainers (will help in setting up retention and incentive mechanisms for TVET trainers)	Fully developed and approved special status for TVET trainers	Head of training management and his team	MINECOFIN, MINEDUC and, DPs, Districts, RTTI,	30,000,000
Horizontal and vertical promotions and incentives to attract and retain trainers in TVET	90% of trainers to be satisfied by the quality of life and working conditions	Head of training management and his team	MINECOFIN, MINEDUC and, DPs, Districts, RTTI,	120,000,000
Develop TVET sustainable financing mechanism to support TVET & skills development	100% of TVET financing model fully operational	Head of training management and his team	MINECOFIN, MINEDUC and, DPs, Districts, RTTI, MIFOTRA	20,000,000

Strategic area: Global TVET trend and Quality

The Government advised on all activities which can fast track technical and vocation education and training development in Rwanda."

Required Activities	Total targets for 4 years	Responsible within RTB	External stakeholders	4 Years Costs estimation
Conduct researches on TVET development trend and share reports to relevant organs	The international TVET trend analysed and the feedback incorporated into national TVET context	Head of training management and his team	MINECOFIN, MINEDUC and , DPs, Districts, RTTI,	80,000,000
Conduct Tracer surveys on graduates absorption on labour market and employers satisfaction	Tracer survey feedback analyzed and implemented to improve TVET sector	Head of training management and his team	MINECOFIN, MINEDUC and , DPs, Districts, RTTI,	200,000,000
Put in place TVET Newsletter and TVET News Bulletin	Annual TVET awareness compaigns organized	DG's office	MINECOFIN, MINEDUC and , DPs, Districts, RTTI,	160,000,000
Develop RTB website and continuous sharing of TVET awareness raising messages on it	functioning and containing all necessary information on TVET including MIS and IPPS embedded	Digital Technologies Division Manager and his team	MINECOFIN, MINEDUC and, DPs, Districts, RTTI,	20,000,000
Conduct bi-annual community TVET awareness campaigns at institution level	Public relations office creates community assessment committees	DG's office	MINECOFIN, MINEDUC and , DPs, Districts, RTTI,	200,000,000
Collaborate with relevant organs to develop occupational standards and quality assurance manuals	Standards and quality assurance manuals fully developed and approved	Head of training management and his team	MINECOFIN, MINEDUC and , DPs, Districts, RTTI,	20,000,000

Required Activities	Total targets for 4 years	Responsible within RTB	External stakeholders	4 Years Costs estimation	
Ensure that quality assurance standards are implemented in all TVET schools	Quality assurance system updated and approved at regional and national levels	Head of training management and his team	MINECOFIN, MINEDUC and, DPs, Districts, RTTI,	40,000,000	
TOTAL BUDGET FOR 4 YEARS					

3.5 Risk management matrix

Risk ID	Description	Consequences	Risk level	Mitigation plan		
				Contingency plan	Response	Type of measure
Budget constraints	delay of budget may affect the timeframe of the activity	It may affect the quality of the results	Very Serious	Earmarking the activity	Accept	preventive
Availability of technical expert risk	Technical experts who may not be released by their employers	Results not addressing the labor market needs	very Serious	Engaging employers prior to the activity	Accept	Preventive
Delay in payment process for technical expert risks	Threatens the good serenity of the workshop. hence ,less motivation of technical experts which led	Low productivity	Moderate	Start payment process from the first day of the workshop	Accept	Mitigation

Low	Limited capacity	It may affect	Serious	Strengthen teacher	Accept	mitigation
proficiency of	to deliver using	delivery of		training in		
English	the language of	training		English		
	instruction					
Low practices	Insufficient	It affect the	very serious	Minimum standard	accept	mitigation
over theories	materials at the	quality of training,		package of		
	appropriate level	hence the		materials to be supplied		
	for learners	graduates may				
	resulting to	not be responsive				
	concentrate on	to the labor				
	theories rather	market				
	than practicals					
Low	Poor perception	the target set	serious	Communication and	accept	mitigation
attractiveness	visa a vis TVET	maybe affected		public		
for TVET	stream			awareness campaigns		
				promoting TVET		
Low	Insufficient	TVET may end up	serious	Incentives, including tax	accept	mitigation
engagement	incentives for	by being		breaks, to encourage		
of private	private sector	irrelevant		private sector		
sector	engagement			investment/sponsorship		