

EDUKANS, NETHERLANDS

MAPPING STUDY – LEARN4WORK TVET-FOOD SECURITY
SITUATION IN RWANDA

DRAFT REPORT

John Gaga and Ibrahim C. Musobo

KIGALI, OCTOBER 2012

Table of Contents

LIST OF ABBREVIATIONS AND ACRONYMS	5
PART 1. FOOD SECURITY SECTOR.....	7
1.1. Country Context	7
1.2. Background to Food Security.....	9
1.3. Facts and Assessment.....	9
1.3.1. Demographics and context	9
1.4. Economic facts sheet.....	11
1.5. Rwanda's Industry Sector.....	13
1.4.1 The Primary Industries.....	13
1.6. Governance - National Policy Framework for Food Security in Relation to TVET.....	13
1.6.1. Rwanda's Vision 2020 (2002-2020).....	14
1.6.2. The EDPRS (2008-2012).....	14
1.7. Most important and relevant policies related to food security - Agriculture Related Policies, Strategies and Programs.....	16
1.7.1. The PSTA 2009-2012.....	16
1.7.2. Rwanda's National Export Strategy, 2011.....	17
1.7.3. The National Rice Policy (NRP).....	17
1.7.4. The National Decentralization Policy (NDP)	18
1.7.5. The Agricultural Mechanization Strategy–AMS (2010-2015).....	19
1.7.6. The National Post-Harvest Staple Crop Strategy (2011-2016).....	21
1.7.7. The Tea Strategy for Rwanda (2009-2012).....	21
1.7.8. Coffee Strategy for Rwanda (2009-2012).....	22
1.7.9. Rwanda's Horticulture Strategy (2006).....	23
1.7.10. The National Gender Policy.....	25
1.7.11. The Girls' Education Policy and a Strategic Plan were approved in 2008.....	26
1.7.12. The Agriculture Gender Strategy (2010).....	26
1.8. Agricultural Programs and Project Initiatives (Since 2008)	27
1.7.1 Key Funding Partners in Food security Programs.....	28
1.8.1. The MINAGRI and Partner Institutions involved in the Food Security Agenda.....	29
<i>SOURCE: PRIMARY DATA</i>	30
1.8.2. RWANDA'S PRIVATE SECTOR.....	31

1.8.3.	POSSIBLE NICHE FOR LEARN4WORK.....	31
1.8.4.	PRIVATE SECTOR CAPACITY ENHANCED.....	36
1.8.5.	INSTITUTIONAL ARRANGEMENTS AND KEY STAKEHOLDERS IN IMPLEMENTATION OF TVET IN RWANDA.....	36
TABLE 5. KEY STAKEHOLDERS IN THE IMPLEMENTATION OF TVET IN RWANDA.....		37
PART 2. TVET SECTOR – FACTS AND ASSESSMENT		40
2.1.	Education system – TVET in perspective	40
2.2.	TVET Access & Equity.....	44
2.2.1.	Number of Student enrolment	45
	TVET students population is still relatively low compared to general and science education as seen in the below table.....	45
2.2.2.	Number of Graduates	46
2.2.3.	Number of TVET Providers	46
2.2.4.	Attendance by different groups	47
2.3.	Finances	48
2.4.	Link between Formal, non-formal and informal TVET	49
2.5.	TVET Governance.....	50
2.5.1.	Main ministries/authorities and their role and responsibilities.....	50
2.5.2.	Role and responsibilities of WDA.....	50
2.5.3.	Activities of WDA.....	53
2.5.4.	Priority Economic Sectors.....	53
2.5.5.	Most important and relevant policies and acts over the last 15 years	54
2.5.6.	Main non-government stakeholders.....	55
2.5.7.	Relevance of curricula and training.....	56
2.6.	Teachers Training Colleges.....	58
2.7.	Other relevant initiatives linking TVET to the labour market.....	59
2.8.	Main donors and their programmes related to TVET and labour market development, 60	
2.9.	Analysis of the world of work in relation with TVET sector.....	63
2.9.1.	The Rwandan labour Market	63
2.9.2.	TVET providers.....	64
2.9.3.	TVET quality and relevance.....	65
2.9.4.	Dilemma between Skills shortage and limited opportunities.....	65

2.9.5. Entrepreneurship and self employment	67
2.9.6. TVET contribution to the labour market demands.....	67
2.9.7. Key opportunities for the Learn4Work programme to focus on.....	68
2.9.8. SWOT Analysis of the Rwandan TVET system.....	69

PART 3. POTENTIAL ORGANIZATIONS FOR LOCAL COORDINATION OF LEARN4WORK.....	72
--	----

List of Abbreviations and Acronyms

ADARWA	Action for development of artisans in Rwanda
AMS	Agricultural Mechanization Strategy
APARWA	Association for promotion of artisans in Rwanda
APEFE	Association pour la Promotion de l'Education et de la Formation
BTC	Belgium Technical Cooperation
CBT	Competence based training
CFJ	Centres de formation des jeunes
CIDA	Canadian International Development Agency
CIP	crop intensification process
CoE	College of Education
COSOP	Country Strategic Opportunities Programme
CoT	College of technology
CSO	
DED	German Development Services
DFID	Department for International Development
DIP	Decentralization Improvement Program
EDC	Education Development Center
EDPRS	Economic Development and Poverty Reduction Strategy
ESP	The Education Sector Policy
ESSP	Education Sector Strategic Plan
EU	European Union
FAO	Food and Agricultural Organization
GDP	Gross Economic Product
GIZ	German development Cooperation
GTZ	German technical cooperation
HIDA	Human Resources and Institutional Capacity Development Agency
ICT	Information and Communication Technology
IFAD	International Federation of Agricultural Development
IPAR	Institute of Policy Analysis and Research
IPRC	Integrated Polytechnic Regional Centers
ISAR	Institut des Sciences Agronomiques du Rwanda
JICA	Japan International Cooperation agency
KOICA	Korean International Cooperation agency
MINAGRI	Ministry of Agriculture and Animal resources
MINECOFIN	Ministry of Finance and Economic Planning (MINECOFIN),
MINEDUC	Ministry of Education
MINICOM	Ministry of Industry and Commerce
MINIJUST	Ministry of Justice
NAEB	National Agricultural Export Development Board
NAP	
NDP	National Decentralization Policy
NEPAD	New Partnership for Africa's Development

NGO	Non-Government Organization
NISR	National Institute of statistics of Rwanda
NQF	National Qualification Framework
NRP	National Rice Policy
NTQF	National TVET Qualification Framework
NUFFIC	Netherlands organization for international cooperation in higher education
NVC	National vocational certificate
OCIR	Rwanda Tea & Coffee Authority
PDRCIU	Umutara Community Resource and Infrastructure Development Project
PPP	Public Private Partnerships
PSF	Private Sector Federation
PSTA	Strategic Plan for the Transformation of Agriculture
QTS	qualified Teacher Status
RADA	Rwanda Agricultural Development Authority
RBS	Rwanda Bureau of Standards
RHODA	Rwanda Horticulture Development Authority
RIEPA	Rwanda Investment and export Agency
RTQF	Rwanda TVET qualification framework
SDC	Swiss Agency for Development and Cooperation
SDEEP	Skills Development, Entrepreneurship and Employment Promotion):
SDF	Skills Development Fund
SEZ	Special Economic Zone
SJITC	Saint Joseph Integrated Technical College
TCT	Tumba College of Technology
TEVSA	Technical and Vocational Schools Association
TEVSA	Technical and Vocational Schools Association
TOT	Training of Trainers
TSC	Teachers Service Commission
TSS	Technical secondary school
TTC	Teachers Training Colleges
TVET	Technical and Vocational Education and Training
UNDP	The United Nations Development Program
UYS	Upgrade Your Skills
VTC	Vocational training center
VVOB	Flemish Association for Development Cooperation and Technical Assistance
WDA	The Workforce Development Authority
WFP	World Food Program

PART 1. FOOD SECURITY SECTOR

1.1. Country Context

Rwanda is a poor rural country with about 90% of the population engaged in mostly subsistence agriculture. Commercial agriculture mainly in coffee and tea is practiced on fairly large scale basis. Tourism, minerals and agro industry are the country's main sources of foreign exchange. The 1994 genocide decimated Rwanda's fragile economic base, severely impoverished the population and temporarily stalled the country's ability to attract private and external investment.

However, the GoR has made progress in stabilizing and rehabilitating the economy to pre-1994 levels. GDP has rebounded with an average annual growth of 7%-8% since 2003 and inflation has been reduced to single digits (CIA-World Fact Book, 2012).

Although much has been registered, a significant portion of the population still lives below the official poverty line. UNDP country report estimates 60% of the population to be living in poverty and 42% in absolute poverty and using the household as a unit, 57% still live below the poverty line (UNDP Rwanda Annual Country Report, 2011). Despite Rwanda's fertile ecosystem, food production often does not keep pace with demand, a situation which sometimes has to be augmented by food imports.

Rwanda has undertaken bold steps to address the socio-economic growth and the poverty-reduction objectives which still rely critically on agricultural growth. The country is cognizant of the need to activate new drivers to sustain rapid and inclusive growth, raise incomes and reduce household poverty. Government has identified agriculture as one of the key sectors in both its poverty reduction strategy, the EDPRS (II), in its longer-term Vision 2020 document as well as the 7-year government program. Indeed, the improved performance in GDP growth of 8.5 percent registered in 2008 was largely credited to strong agriculture growth of 14.8 percent in the same year (Global Finance, Rwanda Country Report, 2012). This was mainly attributed to the sector's size and its important backward and forward linkages.

Despite Rwanda's potential for growth, at the present time, Rwanda remains one of the world's poorest countries, with an average annual income of US\$652 per capita (World Economic Outlook, 2012). More than one-third of all Rwandans live in extreme poverty (defined as earning less than RWF175

per day, the level of income needed to support daily food consumption of 2,500 KCal), and more than one-half live in moderate poverty (defined as earning less than RWF250 per day). Poverty remains largely a rural and agricultural phenomenon with rural poverty at 67 percent.

Agriculture remains the backbone of Rwanda's economy, accounting for about 33 % of GDP, 90% of employment, and more than 50% of foreign exchange earnings (World Bank, 2010). It also provides 90% of the country's food needs. Total arable land in Rwanda is slightly above 1.5 million ha, 90% of which is found on the country's rugged hillsides.

The sector faces several challenges: (i) a binding land constraint that limits land consolidation and mechanization; (ii) small average land holdings (0.4 ha) which inhibits commercial agriculture; (iii) poor water use management, climate variability characterized by prolonged dry spells and erratic rainfall which causes variability in production resulting from very low levels of irrigation (15,000 ha in the whole country); (iv) limited extension services for farmers; and (v) limited commercial orientation constrained by poor access to output and financial markets. Without the option of land consolidation and mechanization, agricultural intensification must take place in the context of a potentially fertile, but challenging, physical environment of rural Rwanda. Steep terrains and the population growth rate of 2.6% (CIA-World fact Book, 2012) leading to the highest population density in sub-Saharan Africa of 355 inhabitants per km². This makes good land husbandry an absolute necessity to address eminent erosion and otherwise maintain the quality of the soil on the hillsides, as well as overall environmental management. Rwanda is also endowed with untapped energy of the youth would. Currently Rwanda is projected to have a total population of 10,412,821 (est 2011) of which the youth form 40.2%. According to the National Institute of Statistics, the national population projections for 2007 – 2022, the population of the youth is projected to increase to 5,297,764 in 2022. Given the low absorption capacity of the Rwandan labor market, a large portion of the youth population will remain unemployed and redundant.

A census carried out by the Ministry of Youth revealed that unemployment among the youth ages 15-17 was 0.7% () while among the ages 20-24 was found to be slightly higher at 1.6%

1.2. Background to Food Security

The Government of Rwanda has for last several years implemented various programs and strategies to deal with the problem of food security in the country. Among the most outstanding programs is that of intensive agricultural productivity for staple crops with the ultimate goal of not only being food self-reliant but also to reach a productivity level oriented to markets and household generating revenue.

Since 2008 with the introduction of key strategies such as the crop intensification program and the land consolidation, agricultural production has increased significantly. This success in increasing the agricultural productivity has however to be accompanied with measures and strategies to handle the excess of food supply particularly through the capacity building of post-harvest infrastructure, organizational capacity development of institutions and bodies involved in food production, post harvest management and market access.

1.3. Facts and Assessment

In order to understand the connection between agriculture in general and food security in particular in Rwanda with other socio economic activities in the country, it is important have a view of key indicators as presented in the following sections.

1.3.1. Demographics and context

Rwanda is a poor rural country with about 90% of the population engaged in (mainly subsistence) agriculture and some mineral and agro-processing. Tourism, minerals, coffee and tea are Rwanda's main sources of foreign exchange. Minerals exports declined 40% in 2009-10 due to the global economic downturn.

With the increasing population of about 12million people in Rwanda and since nearly 90 percent of the population relies on subsistence agriculture and farmers are dependent on rain for good harvests, food security has become a major concern for the government of Rwanda, thus the agricultural sector has been given a high priority in the government's planning for development.

The 1994 genocide decimated Rwanda's fragile economic base, severely impoverished the population, particularly women, and temporarily stalled the country's ability to attract private and external investment. However,

Rwanda has made substantial progress in stabilizing and rehabilitating its economy to pre-1994 levels.

GDP has rebounded with an average annual growth of 7%-8% since 2003 and inflation has been reduced to single digits. Nonetheless, a significant percent of the population still live below the official poverty line. Despite Rwanda's fertile ecosystem, food production often does not keep pace with demand, requiring food imports.

Africa's most densely populated country is trying to overcome the limitations of its small, landlocked economy by leveraging regional trade. Rwanda joined the East African Community and is aligning its budget, trade, and immigration policies with its regional partners. The government has embraced an expansionary fiscal policy to reduce poverty by improving education, infrastructure, and foreign and domestic investment and pursuing market-oriented reforms.

Energy shortages, instability in neighboring states, and lack of adequate transportation linkages to other countries continue to handicap private sector growth. The Rwandan government is seeking to become regional leader in information and communication technologies.

In 2010, Rwanda neared completion of the first modern Special Economic Zone (SEZ) in Kigali. The SEZ seeks to attract investment in all sectors, but specifically in agribusiness, information and communications technologies, trade and logistics, mining, and construction. The global downturn hurt export demand and tourism, but economic growth is recovering, driven in large part by the services sector, and inflation has been contained. On the back of this growth, government is gradually ending its fiscal stimulus policy while protecting aid to the poor. In 2011 rises in global food and fuel prices increased inflation in Rwanda from 1% in January to more than 7% in October.

1.4. Economic facts sheet

Table 1: Economic status of Rwanda:

GDP (purchasing power parity)	\$13.46 billion (2011 est.) \$12.55 billion (2010 est.) \$11.73 billion (2009 est.)
GDP - real growth rate	7% (2011 est.) 7.5% (2010 est.) 4.1% (2009 est.)
GDP - per capita (PPP)	\$1,300 (2011 est.) \$1,300 (2010 est.) \$1,200 (2009 est.)
GDP - composition by sector	Agriculture: 33% industry: 13.9% services: 53.1% (2011 est.)
Labor force	4.446 million (2007)
Labor force - by occupation	agriculture: 90% industry and services: 10% (2000) Unemployment rate among the youth 0.7% (ages 15-17) and 1.6% (20-24)
Investment (gross fixed)	22.2% of GDP (2011 est.)
revenues:	\$1.436 billion
expenditures:	\$1.637 billion (2011 est.)
Taxes and other revenues	26% of GDP (2011 est.)
Budget surplus (+) or deficit (-)	-2.3% of GDP (2011 est.)
Inflation rate (consumer prices)	5.5% (2011 est.) 2.3% (2010 est.)
Central bank discount rate	7.75% (31 December 2010 est.) 11.25% (31 December 2008)
Commercial bank prime lending rate	16% (31 December 2011 est.) 16% (31 December 2010 est.)
Stock of narrow money	\$233.6 million (31 December 2005) \$596.3 million (31 December 2011 est.) \$540.2 million (31 December 2010 est.)
Stock of broad money	\$1.254 billion (31 December 2011 est.) \$1.243 billion (31 December 2010 est.)
Stock of domestic credit	\$605.4 million (31 December 2011 est.) \$538.1 million (31 December 2010 est.)
Agriculture – products	coffee, tea, pyrethrum (insecticide made from chrysanthemums), bananas, beans, sorghum, potatoes; livestock
Industries	cement, agricultural products, small-scale

	beverages, soap, furniture, shoes, plastic goods, textiles, cigarettes
Industrial production growth rate	7.5% (2010 est.)
Electricity Production Electricity – production by source	160 million kWh (2008 est.) fossil fuel: 2.3% hydro: 97.7% nuclear: 0% other: 0% (2001)
Electricity -consumption Electricity Export Electricity import	236.8 million kWh (2008 est.) 2 million kWh (2008 est.) 88 million kWh (2008 est.)
Exports	\$293 million (2011 est.) \$234.2 million (2010 est.)
Exports – commodities	coffee, tea, hides, tin ore
Exports – partners	Kenya 36.6%, Democratic Republic of the Congo 14.7%, China 9.1%, Swaziland 5.9%, US 5.3%, Pakistan 4.6% (2009)
Imports	\$1.307 billion (2011 est.) \$1.121 billion (2010 est.)
Imports – commodities	foodstuffs, machinery and equipment, steel, petroleum products, cement and construction material
Imports – partners	Kenya 19.6%, Uganda 17.7%, UAE 8.4%, Tanzania 5.7%, China 5.3% (2009)
Reserves of foreign exchange and gold	\$931.7 million (31 December 2011 est.) \$812.8 million (31 December 2010 est.)
Debt – external	\$NA (31 December 2010 est.) \$747 million (31 December 2009 est.)
Exchange rates Rwandan francs (RWF) per US dollar -	607.2 (2011 est.) 583.11 (2010 est.) 568.18 (2009) 550 (2008) 585 (2007)

Source: Secondary Data

1.5. Rwanda's Industry Sector

Rwanda's industry sectors are still in a nascent stage, when compared to the rest of the world. Shortage of raw materials and 90% of the population being involved in agriculture in rural areas has impacted the growth of industry severely in the nation. Given that imports are far higher than exports, the fact that the Government of Rwanda is eager to take steps to create a lasting infrastructure is a very good sign for foreign investors.

The sector is next to the agricultural sectors in terms of employment and its contribution to GDP. The sector contributes 13.9% to GDP. The current industrial production growth rate is around 7% and only 10% of the population is involved in the manufacturing and service sectors combined (see table above).

1.4.1 The Primary Industries

In 2007-2008, food production in Rwanda's agriculture sector increased by 14%. Tea and coffee have been the main exports. Export revenues went up three fold from 2003 to 2007, but the share of tea and coffee declined to about 50%. According to the figures released by the International Coffee Organization, Rwanda produced 425,000 bags of coffee in 2008. Reducing farm size and a rainfall-dependant system of fragmented, subsistence farming are some of the hurdles that have to be overcome. Currently the average farm size is approximately half-an-hectare per family which renders the land unfeasible for large-scale agri-business. Other crops grown are bananas, beans, sorghum and potatoes.

Agriculture and agriculture-based business accounts for 33 % of the GDP in Rwanda (see table above). Minerals such as cassiterite, columbite-tantalite, wolframite and small quantities of gold and sapphire are also mined. Natural gas reserves to the tune of 56.63 billion cu m have also been found in the country, in the form of methane gas.

1.6. Governance - National Policy Framework for Food Security in Relation to TVET

Food security has been a priority of the Government of Rwanda as demonstrated by multiple actors involved in addressing the matter. There have also been various policy frameworks and strategies that have been developed and implemented over the years to deal with food security in the country. The major ones are discussed below.

1.6.1. Rwanda's Vision 2020 (2002-2020)

The government of Rwanda pursues *Vision 2020*, a key intervention to achieve MDGs and other economic goals. Under Vision 2020, the government of Rwanda intends to become middle income economy (with a per capita income of 900 USD), decrease the poverty to 30%, and increase the average life expectancy to 55 years by the year 2020 (MINECOFIN, 2003). Achieving these goals hinges on one of the pillars of Vision 2020 "Transformation of agriculture into a productive, high value, market oriented sector, with forward linkages to other sectors". The rest of the pillars play a complementary role in the agricultural transformation. Other pillars bear an indirect positive synergy to agricultural development.

Gender is a crosscutting issue. Rwanda is also envisioned to promote gender equality. This means that women should benefit from develop as much as men do. All policies and programmes are expected to take gender into account and ensure women and girls needs are taken into account equally with those of men and boys.

Through Vision 2020, the Government of Rwanda is also committed to investing in the development of human resources in order to create a knowledge-based and technology-led economy. Comprehensive human resources development is considered to be one of the necessary pillars to reach the status of a middle income country (US\$220 Gross Domestic Product-GDP/capita in 2003 to US\$900 GDP/capita) by 2020.

1.6.2. The EDPRS (2008-2012)

The Economic Development and Poverty Reduction Strategy (EDPRS) is the implementation strategy for *Vision 2020*. The EDPRS is Rwanda's medium-term framework for achieving its long-term development aspirations including the Millennium Development Goals. EDPRS seeks to reduce poverty and income inequality, increase GDP and improve human development. Much more relevant to agriculture is the EDPRS' objective "increase economic growth" under which strategic interventions to "increase contribution of strategic exports to GDP, enhance business climate and increase agricultural productivity" are aligned. Setting its framework for the medium term (2008-2012), the EDPRS includes raising agricultural productivity and improve food security among its priorities. EDPRS seeks to promote human development, population growth and development, gains through good governance among other objectives (MINECOFIN, 2007). Strategic interventions set out under these objectives bear potential to

provide a positive synergy to agricultural growth and transformation. For example, the pursued macroeconomic stability and debt sustainability strategic intervention creates a supportive environment for agricultural growth and transformation. EDPRS also is committed to promote gender equality.

This strategy also advocates consolidating decentralization and recognizes the key role of the private sector in accelerating economic growth to reduce poverty. It emphasizes skills development as essential precondition for sustainable economic growth. Consequently it demands a strong push for TVET strengthening and proposes to create important elements for an outcome-based demand-driven TVET system. Besides the establishment of a Skills Enhancement Fund the suggested institution building in the form of TVET Board, National Employment Agency and Rwanda Workforce Development Authority is envisaged to close the existing capacity gap concerning the matching of TVET with labour market needs. It seeks to increase budget allocation to the education sector (20.9% of the total budget) and reallocation of resources within the education sector boosting TVET more than the other education streams.

This to a great extent has been realized through the implementation of various TVET initiatives within the framework of EDPRS like the establishment of IPRC, development of a CBT (Competency Based Training) curriculum just to mention a few.

1.7. Most important and relevant policies related to food security - Agriculture Related Policies, Strategies and Programs

The following section discusses some of the most relevant policies, strategies and programs that the GoR has instituted at various levels to address food security issue in the country.

1.7.1. The PSTA 2009-2012

The Strategic Plan for the Transformation of Agriculture phase two (PSTA-II) in the period is consistent with the EDPRS's focus "raise agricultural Productivity and improve food security". In Phase two of the PSTA sets out to; energize activities to improve the production and productivity of rice crop through production intensification, promote the use of farm mechanization in appropriate forms, promote development of agro-processing industries, enhance agricultural technology and develop road infrastructures.

PSTA also has well aligned strategies to achieve the set objectives. These include; raising the total area under rice cultivation (to 16,442 hectares) by developing marshlands, subsidizing fertilizer, seed and water, offering training and access to finance, renting or selling mechanization services to farmers, developing an efficient private sector, assigning a greater role in policy implementation to markets and increasing public investments in construction and rehabilitation of feeder roads. **The crop Improvement Program (MINAGRI, 2011)**

The CIP among the food security strategies aim to raise the productivity of priority crops, increase the revenues in small holder farms and thereby ensure food security through sustainable intensification processes. The crop intensification process targets priority crops including maize, rice, wheat, beans, cassava, banana, soy bean, sunflower and Irish potatoes. These crops are perceived to provide the necessary dietary needs of an active and healthy life under the current definition of food security.

In a bid to minimize losses that occur between harvesting and storage, and improved marketing capacities in rural areas, the program alongside establishing appropriate storage facilities, seeks to create awareness through hands-on training to farmers across the country. The CIP also seeks to conduct comprehensive training programs and establish infrastructures around crop clusters (areas with high consolidated land use and production) for handling, storage and processing of farm outputs.

1.7.2. Rwanda's National Export Strategy, 2011

Rwanda's Export Strategy is envisioned to *"Transform Rwanda into a globally competitive export economy."* This is closely aligned with the Trade Policy Mission: *"Growing sustainable and diversified products and services for trading locally, regionally, and internationally, with the aim of creating jobs, increasing incomes, and raising the living standards of Rwandans."*

Human Capital Development is identified among the ten priority issues and strategic actions to achieve the objectives of this policy. To achieve human development for export competitiveness, the need for education and training, skills, attitudes and motivation is highlighted. In addition, professional degrees and certifications and job related skills are highlighted. Education, knowledge and investments in R&D is perceived to allow Rwanda to develop knowledge - intensive production and export competencies.

The NES also identifies the need for human capital development to implement its national and sector export strategies

1.7.3. The National Rice Policy (NRP)

Rwanda under the Rice Policy is envisioned to attain self-sufficiency and competitiveness in rice production in the next 10 years. The NRP sets out interventions aimed at enhancing the productivity levels and raising the standards of post-harvest processing of rice in a bid to improve volume (quantity) and value (quality) of rice looking forward to create self sufficiency in the domestic rice market. In other words, the NRP focuses on the need to address the challenge of rice shortage in the domestic market. The government of Rwanda had Rice had earlier (in 2002) identified rice as a priority crop. However, due to the rapidly increasing population, its consumption continued to increase at a much higher rate than production that led to persistent rice shortage in the domestic markets. The NRP is directly streamlined under the PSTA objectives. PSTAII seeks to energize activities to improve the production and productivity of rice crop. Under program 1 the plan focuses on rice production intensification to improve the efficiency of use of inputs such as seeds, fertilizers, soil and water. Under sub program 1.3, the plan intends to develop marshlands and raise the total area under rice cultivation.

Alongside Rwanda's Agricultural Policies, several other policies are pursued to meet its development aspirations. However, it is important to identify some policies that are more relevant to the agricultural transformation.

Policy formulation and implementation recognizes the local governance structures and the service delivery system. The plan, alignment and effectiveness of the structures can influence policy effectiveness or trigger amendment and even dissolution of some policies. The existence, alignment and effectiveness of governance structures can favor, promote or discourage agricultural programs implementation. Since 2000 the government of Rwanda has pursued the National Decentralization Policy (NDP) that translates into a decentralized system of service delivery to the public agricultural production services inclusive. The National Decentralization Policy reflects government's commitment to politically, economically, socially and technically empower the local population to fight poverty. Within the framework of the NDP, the Decentralization Improvement Program (DIP) and the National Agriculture Extension Strategy are built.

1.7.4. The National Decentralization Policy (NDP)

Policy formulation and implementation recognizes the local governance structures. The plan, alignment and effectiveness of the structures can influence policy effectiveness or trigger amendment and even dissolution of some policies. The existence, alignment and effectiveness of governance structures can favor, promote or discourage agricultural programs implementation. Since 2000 the government of Rwanda pursues the National Decentralization Policy (NDP). The National Decentralization Policy is based on the government's commitment to politically, economically, socially and technically empower of the local population to fight poverty.

The NDP is an umbrella of the Decentralization Improvement Program (DIP) and the Agricultural Extension Strategy that agricultural extension services are delivered to farmers in Rwanda. Before decentralization, the Ministry for Agriculture (MINAGRI) was directly responsible for delivering extension services to farmers through agricultural extension workers at Sector (Monagris), District and Provincial level, who were accountable to the Ministry. Following the decentralization and administrative reform of 2004-2005 (the new DIP), delivery of extension services was put under direct responsibility of the decentralized entities. The reporting system is from Sector to District, from District to Province and to the Ministry of Local Government. In the new context of decentralized extension, the main functions of the Ministry for Agriculture and Animal Resources are as follows: (i) coordination and planning of agricultural development programs, (ii) agricultural sector information function, (iii) monitoring and evaluation function, (iv) regulation and control function, (v) resources mobilization

function. The MINAGRI receives information from Districts to be able to properly plan the development of the agricultural sector, while Districts get support from MINAGRI to ensure coherence and effectiveness in formulating and implementing policies and agricultural development programs. This coordination is emphasized in the new through its focus on building capacity in local government, enhancing stakeholders' coordination and harmonization of interventions.

1.7.5. The Agricultural Mechanization Strategy–AMS (2010-2015)

The AMS (MINAGRI, 2010) is Rwanda's road map to creating conditions that are conducive to the adoption of appropriate farm tools, implements and machinery in the most effective and efficient way. Agricultural mechanization refers to the use of tools, implements and machines for agricultural land development, crop production, harvesting, and preparation for storage, storage, and on-farm processing. The strategy responds to agricultural sector challenges such as over-reliance on less productive and less efficient human labour and seasonal labour and constraints from the rapidly changing demographic trends such as urban migration, ageing rural population, ageing farmers, and the HIV/AIDS pandemic that add more concerns on labour availability. It seeks to enhance the adoption of mechanization looking forward to enhanced crop productivity, increasing the area being cultivated for food crops and consequently contribute to food security. It borrows from successful experiences from Asia, Latin America and in some African countries where labour productivity was greatly enhanced by using alternate farm powers such as motorized engines and draught animals.

The strategy focuses on mechanization in the commodity value chain thereby enhancing farm produce quality, value, marketability and consequently farm profitability. Enhanced processing will not only improve the agricultural commodity chains but also enhance rural employment opportunities and livelihoods in Rwanda. It aspires to increase the share of motor and animal power substantially by 2020 in a bid to contribute to increase in labour productivity and to modernize agricultural value chains as set out in the PSTA-II. Ultimately, this will contribute to the transformation of agriculture into a market-oriented sector as outlined in Vision 2020. The strategy envisages having 25 per cent of agricultural fields mechanized by 2015.

More specifically, the mechanization efforts aim to: raise the power inputs of farming activities thereby putting more land into production, decrease drudgery in field operations thereby enhancing quality of life of rural men and women, improve the timeliness and efficiency of field work, carry out tasks that are otherwise difficult to perform without mechanical means, advance the quality and value of agricultural produce and processed products of Rwanda, provide entrepreneurship opportunities and sustainable rural livelihoods and facilitate crop processing and thereby improve rural economic opportunities.

In a bid to enhance adoption of mechanization technologies, the strategy recognizes the need to educate and train farmers on the various avenues of mechanization in post-harvest handling, storage, and primary and secondary agro processing enterprises. Secondly, it recognizes the need to develop technical skills among rural artisans, operators, mechanics, and service providers to develop locally adaptable mechanization technologies and widen the choice of mechanization options. Finally, it recognizes the need to help farmers' cooperatives in establishing business plans and enhance their financial integrity to foster their leverage to access credit to finance mechanization

The strategy is aligned in the Rwanda's development policy framework, particularly agricultural policy, and the international development context. The government seeks to transform farming into a productive, high value, market-oriented sector by modernizing 50 per cent of its agriculture by 2020 and thereby improving livelihoods of the rural population, achieve food security and increase exports of agricultural products as reflected in the millennium development goals (MDG) and New Partnership for Africa's Development (NEPAD). The NAP sets modernization of agricultural production through development of animal traction farming and agricultural machineries suitable to the real conditions as one of the specific objectives. Under the sub-program 1.5.2, PSTA-II intends to inform farmers of appropriately scaled mechanization options and offer training and access to finance to local entrepreneurs who wish to acquire tractors and other machinery and rent the machinery or sell mechanization services to farmers. Finally, MDG 1 emphasizes that increase in food production through development and rehabilitation of irrigation facilities and post-harvest mechanization.

1.7.6. The National Post-Harvest Staple Crop Strategy (2011-2016)

The National Post-Harvest Strategy (MINAGRI, 2011) is a policy framework to assist with strengthening the harvesting, post-harvest handling, trade, storage, and marketing within staple crop value chains; strengthening markets and linkages for farmers; and reducing post-harvest losses. The strategy addresses the challenges that accrued following successful implementation of the CIP. Basically, the CIP resulted in increased crop yields with unanticipated surpluses in key staple grains and cereals. The strategy therefore responds to the heavy post-harvest losses that accrue from the lack of capacity in post-harvest handling and storage. The strategy is MINAGRI's initiative through the Post-Harvest Task Force that was formed in 2009, essentially to maximize net profits for small-scale farmers and reduce food insecurity by strengthening staple crop value chains and reducing post-harvest losses. The 5-year action plan, approved in March 2011 by the Agriculture Sector Working Group, remains Rwanda's guiding strategy to address sector-wide post-harvest loss issues by several ministries and agencies. It recognizes the need to capture income potential from increased productivity and production competitiveness. It considers the comparative advantages of producing staple foods over producing other crops in Rwanda and identifies staple crops with a critical role to enhancing food security. Based on this, it recognizes the need to prioritize investment in market linkages and supply chain efficiency to enhance agricultural competitiveness and sustainable adoption of modern agricultural technologies particularly with regard to staple foods. The strategy focuses on post-harvest development and aims to strengthen food security among rural staple crop producers, improve consumer access to safe and affordable food, support the private sector to invest in strengthening the competitiveness of the staple crop and value supply chain, improve efficiency and decrease marketing costs along the staple crop value chain and enhance producers' access to and linkages with markets.

1.7.7. The Tea Strategy for Rwanda (2009-2012)

Tea has historically been one of Rwanda's export focuses. Although Rwanda is diversifying, tea will continue to be an important element in Rwanda's economy. The government factors the increased revenues expected from Rwanda's expanding tea industry into its overall plan under Vision 2020 to increase per capita GDP from the \$250 in 2000 to \$900 in 2020. The

government's strategy regarding tea is two-fold: increase production and improve quality.

To increase production, the strategy is to expand and consolidate land dedicated to farming tea. The target is for each tea farmer to farm 0.5 ha of land. Currently, tea farmers are cultivating on plots that average .25 ha in area. There will be a census conducted of these farmers to establish baseline data in order to monitor progress and track implementation.

The government will also implement a more strategic use of fertilizers. Currently, generic fertilizers are being applied. By simply continuing the use of generic fertilizers, yields will improve; however, the government advocates soil testing and using fertilizers mixed specifically for the soils in different regions to further increase yields. The Rwandan Tea Authority is currently establishing a laboratory to have the country's soils tested so they can move forward with fertilizer optimization.

There is also the dual issue of low capacity of tea processing factories and poor pruning and plucking practices. These are both issues of efficiency and can be addressed by reducing waste within the system and will lead to gains without directly affecting crop yields. There are some factories that either have to work at over-capacity or simply refuse crops because of a lack of capacity. This reduces both quality and quantity of tea production. Reinvestment will be made in factories to increase productive capacity. Pruning and plucking can also be improved to increase yields. There will be increased training on proper techniques to increase efficiency in both caring for crops and harvesting them.

The strategy also recommends the diversification and branding of its teas. Currently, the world black tea market is saturated, pushing down prices. Rwanda will diversify into different varieties of teas and premium products. The government is also moving toward a Rwandan brand to signal quality and to encourage single origin sales.

To achieve these goals and make these improvements, the government is focusing investment in four broad areas: production, institutional support, processing and marketing. The Rwanda Tea Authority will be instrumental in overseeing and implementing this strategy.

1.7.8. Coffee Strategy for Rwanda (2009-2012)

Coffee is one of Rwanda's most important export sectors and is relied on as the most important cash crop of Rwanda's nearly half million coffee growers.

Over the last decade, the industry has been steadily growing; however, it is falling short of targets set for itself in 2002. The primary constraints are: insufficient production of coffee cherries, high operating costs, weak management skills, slow implementation of value-adding processes, and lack of data for monitoring and evaluating progress.

The National Coffee Strategy addresses these constraints with the following programs:

- improving the use of good farming practices and integrated pest management systems through focused agronomist support;
- providing a voluntary turnaround support program for Coffee Washing Stations that have the potential to become profitable;
- improving sales and distribution mechanisms through capacity building of private exporters;
- implementing a census and Geographic Information System study of all coffee producing regions;
- implementing value addition activities including Toll Roasting in China, Toll Roasting in Middle East, and a partnership with the distributor Marks & Spencers.

Rwanda's targets are to move from production of 19,900 tonnes (average from 2005-2007) to 33,000 tonnes during this strategy cycle with an estimated revenue of USD 115 million. This is a comprehensive strategy with OCIR-Café leading the coordination efforts.

1.7.9. Rwanda's Horticulture Strategy (2006)

The overarching vision of Rwanda's Horticulture industry is to help diversify Rwanda's economy by tapping the industry's potential. In addition, as an employment-intensive and high-value crop, Horticulture will help create wealth in rural areas. To achieve this vision, Rwanda's horticulture industry has a twofold mission: (1) to foster the development of a competitive Horticulture industry and (2) to create employment for rural communities. In the essence, the industry and the strategy too, covers all horticulture crops including flowers as well as fruits and vegetables.

Rwanda's Horticulture strategy is envisioned to create a production platform, attract and sustain investment as well as identify and access opportunities. The strategy objectives are to position Rwanda as a new player in the

world's horticulture arena by targeting specific niches where it can have competitive advantages by earning premium receipts, thereby improving the well being of the average citizen, especially horticulture producers. The strategy contributes to Rwanda's ambitious goals for horticulture development. The strategy recognizes the need for coordination of public and private sector initiatives in order to attain the objectives of the strategy.

The strategy identifies strategic choices of intervention including; attraction of established floriculture producers and exporters from Europe or from the region, support existing players in expansion plans (e.g. Rwanda Flora, focus on specific segments including **Fresh Organic Fruit** to Europe; **Dried Organic Organic Tropical Fruit** to Europe and the United States; **Dried Organic Birds Eye Chillies** to Europe and the United States; and **Premium Juice** for the regional market.

For the chosen products and segments, the strategy provides a thorough understanding of the best products, best markets and best distribution channels is recommended. And given the limits to the potential scale of Rwandan horticulture, the strategy recognizes the need to focus on quality as a winning strategy rather than on volume or price. In the essence, the desired quality is the intrinsic product quality such as taste, as well as appearance and certification issues essence.

Being a new industry with few players, the strategy identifies the need to build the enabling environment necessary to attract additional private sector entrepreneurs into the industry. The strategy further recommends efforts to create an attractive investment promotion package, comprising fiscal, land, financing and transport benefits. And given the small anticipated volumes and learning curve necessary during the initial years of the industry development, the strategy recommends Rwanda working with the "first points of entry" along the distribution and marketing chains.

The strategy presents an action plan grouped around three imperatives for the industry. They include; (i) creating a Production Platform that aims at efforts to strengthen horticulture production basics and rural organization, (ii) attracting and Sustaining Investment that proposes plans to attract new investment and to create an enabling environment to support entrepreneurs and investors once they have entered the industry and (iii) accessing & Identifying Export Markets geared to the improvement of export infrastructure (export standards and transportation) as well as resources to target the best niche markets.

The action plan revolves around three major areas that stakeholders recommended as a pre-requisite to kick start the industry. These investment areas include: joint public-private partnership in basic infrastructure development; creating investment incentives and support farmers in product development (production/protection /post harvest handling) including extension services, training technicians, skills in transformation, support to market, input and finance access initiatives.

The strategy was previously implemented by the Rwanda Agriculture Board (RAB), the private sector, and decentralized structures such as districts, business development centers, MINALOC and RAB are instrumental in mobilizing the farmers to increase production of selected horticulture crops particularly because farmers need to be guided on the best horticulture crops among many that could be grown. RAB takes on a key role as central coordinator for the industry, liaising with other government bodies involved in horticulture including National Agricultural Export Development Board (NAEB), Rwanda Bureau of Standards (RBS), MINAGRI, and RDB) in order to ensure a coordinated and effective approach.

1.7.10. The National Gender Policy

The National Gender Policy provides a framework for the promotion of gender equality and the empowerment of women and demonstrates the Government's commitment to addressing all forms of gender inequality in the country. The National Gender Policy clearly sets out the process of mainstreaming gender in all public and private sectors, policies, programs, projects and so on. It also concerns the empowerment of women. The Ministry of Gender and Family Promotion coordinates the implementation of the policy. The Policy sets out the key objectives for ensuring the economic empowerment of women: for employment and growth; for health; in education and vocational training; in governance and justice; in environment protection and land use management; of the most vulnerable; for participating in the private sector; in water and sanitation; in infrastructure; in transport; and, in ICT. All of these are in line with the *EDPRS* priorities. Among other policies for gender promotion includes the Girls' Education Policy and a Strategic Plan were approved in 2008.

1.7.11. The Girls' Education Policy and a Strategic Plan were approved in 2008

They are aimed at achieving gender equality in education at all levels. The Policy will be implemented through Girls Education Strategic Plans at District, school and institutional levels. The overall objective of the Policy is to guide and promote action aimed at the progressive elimination of gender inequalities in education and training at all levels. A Girls' Education Task Force collects data to assess progress annually and reports on the findings.

1.7.12. The Agriculture Gender Strategy (2010)

The gender strategic goal is to ensure that agricultural output and incomes increase rapidly under sustainable production systems for all groups of farmers, and that food security is ensured for all the population by 2012. The overall objective of the gender strategy is to contribute to poverty reduction and sustainable development through institutionalization of gender responsive programming (planning and budgeting), implementation, monitoring and reporting systems and improve gender equality in the agriculture sector.

The Agriculture Gender Strategy responds to the gender mainstreaming challenges including: the missing gender equality and accountability with regard to agriculture in the national policy framework; the limited awareness and understanding of gender equality and equity related issues at national, provincial, district and local levels; and low representation of women in decision making processes at local levels. These challenges are responsible for the prevailing gender gaps in access to and adoption of input technologies, access to extension services, commercialization, participation and benefit from value chain of key export crops as well as gender gaps in institutional development.

To improve gender equality in the agriculture sector and address the existing disparities, the agricultural gender strategy is oriented around five objectives:

- To institutionalize gender equality in the agriculture sector
- To develop capacities in the agriculture sector to enable gender sensitive programming
- To enhance the gender responsiveness in delivery of agricultural services including crop intensification, livestock, value chain

development, access to commodity markets, access to extension services such as training and technologies

- To promote equal participation in decision making processes
- To develop and coordinate partnerships and collaborative mechanisms amongst government institutions, CSOs, private sector and development partners and integrate appropriate actions to respond to practical and strategic gender needs in the agriculture sector

1.8. Agricultural Programs and Project Initiatives (Since 2008)

The Girinka program “One Cow per poor Family”: The program is a presidential initiative under the Vision 2020, EDPRS. This program initiated in 2001 strives to enable every poor household to own and manage an improved dairy cow which would help the family to better their livelihood through increased milk and meat production and improve soil fertility using the available manure.

The Umutara Community Resource and Infrastructure Development Project (PDRCIU): The PDRCIU project is funded by the International Federation of Agricultural Development (IFAD), an international agency currently in its second generation of implementing activities in Rwanda. IFAD has since 1981 financed 14 rural development programmes and projects in Rwanda for a total amount of US\$189.8 million. IFAD in Rwanda is currently pursuing a strategy Country Strategic Opportunities Programme (COSOP), which strives to address poverty by promoting equitable economic growth, modernize agriculture, encourage exports and promote employment.

The Purchase for Progress initiative (P4P): The initiative by World Food Program (WFP) in Rwanda provides market for farm produce. In 2011, WFP purchased food worth approximately 350 million Rwandan Francs (almost US\$600,000) from the Eastern and Southern provinces. The initiative is an opportunity to encourage farmers to increase production, a vital step toward achieving sustainable food security in Rwanda. In 2011, 3,300 metric tons of maize grain and beans had been purchased from approximately 14,000 small farmers in ten co-operatives and two farmers' unions

The Millennium Village Project: Work with the farming community in Bugesera district to improve access to good quality seed, diversify to high value and drought tolerant crops and to venture into off-farm income generating opportunities. The project also focuses on business development.

1.7.1 Key Funding Partners in Food security Programs

The partners in contributing to food security in Rwanda are mainly international development agencies who initiate and fund projects that contribute directly and indirectly to agricultural productivity and growth. We give a highlight on some most recently initiated projects that are contributing to the PSTA. Among the partners include the Belgian Government, World Bank, FAO, IFAD, BTC, JICA, DFID, EU, WFP, UNDP, and CIDA among others.

The United Nations Development Program (UNDP): UNDP initiatives since 2008 are primarily focused on MDG 1 following poor progress during the previous period. It has reaffirmed human development and poverty reduction as the overall development goals for Rwanda following 2007 Millennium Development Goals Report. The report set out the national progress in achieving the MDGs based on national targets tailored to Rwanda's development circumstances. UNDP has also initiated the "Millennium Village Project". A project to identify absorption capacity bottlenecks was initiated in collaboration with HIDA (the Human Resources and Institutional Capacity Development Agency working under Rwanda's Ministry for Public Services and Labour).

Canadian International Development Agency (CIDA): CIDA is committed to help Rwanda increase food security by improving agricultural productivity. CIDA project assists in the formation of farmer linkage to markets, countering soil erosion enhance agricultural production and productivity through irrigation. Overall, CIDA strives to increase agricultural production and incomes for poor rural farmers

Food and Agricultural Organization (FAO): FAO is doing technical interventions in the field intended to benefit Rwanda's technical expertise accumulated in various fields related to agriculture, food security and natural resource management. In addition, it is providing support to agribusiness and food security outside the United Nations (UN) framework

Belgium Technical Cooperation: BTC is collaborating with MINAGRI in the seed sector and agricultural advisory services. A five-year, 18.6 million Euro project was launched in July 2011 and JICA is implementing a 3 year project (2010-2013) for increasing crop production with quality extension services in the Eastern Province of Rwanda

1.8.1. The MINAGRI and Partner Institutions involved in the Food Security Agenda

The MINAGRI is the lead Ministry for pre-running the agriculture sector. It has one Minister, one Minister of State and the Permanent Secretary. Working under the Permanent Secretary there are two directorates each headed by the Director General. The Ministry is envisioned to modernize Agriculture and livestock to achieve food security. The ministry sets out its plan integrating four programs; intensification and development of sustainable production system, support for producer professionalization, promotion of product chains and agro-industry development and institutional development. Currently, the Ministry’s strategic interventions are aligned within the framework of the PSTA. The MINAGRI is responsible for development of strategies and national programs, planning and budget preparation and coordinating relationships with international partners.

MINAGRI works closely with other government institutions (national boards and ministries), NGOs and development partners. Key among these institutions include the Rwanda Agricultural Board (RAB), the National Agricultural Export Development Board (NAEB), Ministry of Finance, Ministry of Finance and Economic Planning (MINECOFIN), Ministry of Justice (MINIJUST) and Institute of Policy Analysis and Research (IPAR). At district, cell and village levels, quite a number of farmer organizations exist. Responsibilities of these partners in agriculture concerns are given in table 2.

Table 2. Responsibilities of MINAGRI Partners in Agriculture Development

Institution	Responsibilities
RAB	Implementing the national policy of agriculture and animal husbandry and contributing to identification of policy in agriculture, animal husbandry, agricultural and animal husbandry research and technology.
NAEB	Participate in elaboration of policies and strategies for developing exports of agricultural and livestock products and implement policies and strategies for promoting and developing agricultural and livestock products for export among other roles.

MINALOC	Ensure good governance in all local administration levels including agricultural governance at local level, playing an intermediary role in channeling public funds for development projects, over-seeing various local communities agricultural development related programmes
MINECOFIN	Coordinates the National Budgeting, Planning and Financing Framework, including Agricultural services sector, resource mobilization and coordination of development partners, overseeing allocation of budgets to different Ministries the Ministry of Agriculture and Anima Resources inclusive
MINIJUST	Develops and advises on formulation of laws and regulations, oversees the formulation and enactment of various laws and regulations including those that are pertinent to the agricultural sector
Land National Center	Land Administration and Management both at the National and Decentralized level and support the local level in the sector of land
Districts	The basic political administrative units. Through the Agriculture Production Departments oversees monitors and provides technical backstopping to agricultural production activities at district and cell levels, coordinate the public (government) and private sector (private service providers) partnership in agriculture production mainly for quality control purposes.
NGOs and International Development Agencies	Finance agricultural development programs, provide Agricultural extension facilities, especially to the poor, provide technical support, advice in policy making for agricultural development.
The Ministry of Gender and Family Promotion	The Ministry of Gender and Family Promotion is located in the Prime Minister's Office. It leads the national machinery to promote gender equality and the empowerment of women throughout the country and the Minister represents women at Cabinet level. The Ministry is responsible for ensuring that the <i>National Gender Policy</i> is implemented.
The Gender Monitoring Office	The Gender Monitoring Office was mandated in the Constitution. It is responsible for ensuring that systems are in place for monitoring and evaluating the implementation of gender mainstreaming and that gender disaggregated data is collected to enable the monitoring of gender equality. It oversees the collection and analysis of gender disaggregated data at both national and local levels.

Source: Primary data

1.8.2. Rwanda's Private Sector

Rwanda's private sector is seen as an increasingly valuable contributor to the promotion of economic growth and the country's development. The EDPRS emphasizes the commitment to enabling the private sector to contribute to economic growth.

In particular, the Government recognizes the need for close coordination between the public and private sectors in order to achieve effective implementation of the EDPRS and calls for strong information sharing and high levels of trust.

Furthermore, the government, through the Ministry of Finance, is strongly promoting the development of Public Private Partnerships (PPP) in order to achieve a number of major infrastructure investment projects.

The business community is overwhelmingly composed of micro and small enterprises predominantly in the informal sector and with a work force of limited education/training (workers in the private sector with primary or no education make up 87% of the workforce).

However, the key challenge remains that the private sector in Rwanda is still very small with majority of enterprises (97%) being MSMEs most of which operate informally and employ majorly relatives and friends. Thus, it's still insignificant in playing a major role providing opportunities for internship and employment for TVET graduates.

1.8.3. Possible niche for Learn4Work

i. Hotel and tourism

Rwanda tourism is one of the booming economic sectors that is in constant demand of skilled manpower in Rwanda. One of the ways this can be seen is through the growing number of international airlines opening in the country as well as the number of new hotels. The number of hotels has drastically increased from a few local hotels a few years ago to a growing number of international chain hotels such as Serena, mariott, diplomat, new century, just to mention a few.

According to the national Skills Audit 2009 the hospitality industry has a total skills deficit of 69.4% which is more sensitive at the

supervisory level (chefs and assistant chefs) with only 4% of skills requirements, i.e. with a shortage of 96%. The report established that only 30% of needed staff are available in the low levels of artisans such as waiters and cleaners, making a skills deficit of 70%. As a consequence this has negatively affected the quality of service in the hospitality industry making it to be less competitive around the region.

A number of training providers around the country offer training in hotel and tourism. Most, if not all, are of the low vocational level commonly referred at as VTC (vocational training center) in very poor state. A new university college specializing in hotel and tourism management opened a couple of years ago. The problem, however, is that both institution types currently producing the sector's needed manpower are still far from effectively addressing the challenge the country is facing in this particular sector. The country needs more of skilled staff at medium and low levels of the industry such as waiters, cooks and housekeepers, rather than of hotel managers. Though the university college strives to offer quality training, this is not the case with most VTCs which are characterized by shortage of relevant training equipments and materials as well as qualified trainers.

Table 3. Industry of main job in past 10 years

	EICV3	EICV2	EICV1	Total Increase from EICV1 to EICV3	% annual increase from EICV1 to EICV3	% annual increase from EICV2 to EICV3
Agriculture, fishing, forestry	3,596	3,389	3,166	430	1.3	1.2
Mining and quarrying	48	18	7	42	22.1	21.4
Manufacturing	112	80	30	82	14.0	6.9
Utilities	10	4	4	6	8.8	22.4
Construction	146	66	20	126	22.0	17.4
Trade	444	296	107	337	15.3	8.4
Transport and communications	91	56	26	66	13.6	10.3
Financial services	20	13	15	5	2.8	8.9
Government	211	141	84	127	9.6	8.4
Recreation and tourism	23	9	3	20	21.1	22.2
Other services	205	193	97	109	7.8	1.2
Inadequately described	55	35	12	-	16.0	9.0
All 16+ years usually working	4,960	4,299	3,571	1,389	3.3	2.9

Industry of usual main jobs of persons aged 16+ years.
Source: EICV Thematic report, Economic activity EICV1,2,3, p.30

The growth of the tourism industry the above table which shows a positive trend in job increase in the sector. The sector occupies the second position after utilities sector with an annual increase of 22% from EICV2 to EICV3 i.e. between 2006 and 2010. The sector still maintains a good position by being third in job creation after Mining and construction with an annual increase of 21.1% from EICV1 to EICV3, i.e. between 2001 and 2010. The above information shows that the sector has potential in job creation.

ii. Automotive mechanic

Rwanda growth may also be seen through the constant increase in the number of cars imported that keep populating the small local road network. Majority of car imports are second-hand (or used cars) from Asia and Europe and come with new electronic systems that are not yet mastered by local mechanics most of which have been trained through traditional apprenticeship. Word of the mouth statistics talk of 300 new entrant cars in the road network every month making most roads of the city to be congested at peak hours, a situation which was not known in Rwanda a few years ago.

However, most local auto-mechanic garages are from the informal sector still operating using the old car technology which is still predominant as not only the sector is not well connected to formal training but also no training institutions are not yet familiar with new car technology. A part one TVET provider which has been recently upgraded and has introduced a modern training curricula in auto-mechanic, all other providers are still training on the old system using the old types of engine as training models.

Schools offering auto-mechanic are available in the country and a good portion of the youth register for the trade. These schools, however, have not been introduced to modern car engines which are characterized by modern technology with built-in electronics that seems to be a bit expensive.

The role of informal sector in which most auto-mechanic garages operate in the Rwandan society is very important and as the biggest employer, its training into the new engine system could impact a great part of the population employed in the auto-mechanic and create more jobs.

Table 4. Main usual occupation

	EICV3	EICV2	EICV1	Total increase from EICV1 to EICV3	% annual increase from EICV1 to EICV3	% annual increase from EICV2 to EICV3
Professionals	133	85	68	65	6.9	9.2
Senior officials and managers	5	4	1	4	13.5	7.9
Office clerks	45	25	24	20	6.3	12.1
Commercial and sales	374	253	97	276	14.4	8.1
Skilled service sector	266	237	101	165	10.2	2.3
Agricultural and fishery workers	3,601	3,418	3,163	439	1.3	1.1
Semi-skilled operatives	365	210	89	276	15.2	11.7
Drivers and machine operators	126	23	15	111	23.6	40.2*
Unskilled labourers	16	44	12	4	2.8	-18.5*
Missing information	29	-	-	-		
All 16+ years usually working	4,960	4,299	3,571	1,389	3.3	2.9

Base: Occupation of usual main jobs of persons aged 16+ years. *Changes in coding between the surveys make this comparison unreliable for unskilled workers.

Source: EICV1,2,3 p.34

The low annual increase percentage in skilled service sector from the above table may justify the continuous lack of needed skills for most technicians needed by the Rwandan labour market. As it is seen the table shows that the sector that includes the Auto-mechanic is the second last just after Agricultural and fishery workers as far as skills increase are concerned with only 2.3% from EICV2 to EICV3 between 2006 to 2010.

iii. Construction

Construction industry (sector) is one of the sectors with high potential to offer employment especially to the youth both directly and indirectly. The ecosystem of construction (building and roads) offers jobs that require skill levels that vary from low to highly technical occupations like architecture.

TVET can come in handy to provide training that requires middle to low level skills. These include training of brick layers, masons, plumbers, electricians, painters, interior designers, landscapers, surveyors, among others.

Economic data shows that the Rwanda's construction industry has been growing over time. Yet the industry still suffers an acute skills deficit. The National Skills Audit carried out in 2008 revealed that the skills problem largely affected key sectors of the economy, namely, construction, tourism, agriculture, finance and mining. This raised the question whether the private sector could really be relied upon as the engine of growth with the aforementioned skills profile.

Skills development in brick laying, masonry, plumbing, electrical works, painting, interior design, landscaping and surveying among others could be potential entry points for the L4W project in Rwanda.

iv. Beauty and Aesthetics

Until June 2012, Rwanda had no single training institute for Beauty and Aesthetics yet the country is awash with beauty salons. It is common knowledge that the majority of professional Beauty and Aesthetics service providers are nationals from the region notably Kenya, Uganda and the DRC. The few locals in the industry mostly learn on the job.

TVET service providers could develop a curriculum on haircut, pedicure, manicure, and massage among others and this offers another entry point for L4W to focus on skills development among the youth in these respective core areas.

1.8.4. Private Sector Capacity Enhanced

A fundamental problem for Rwanda is limited human capacity in both the public and private sectors. Enterprises repeatedly cite access to qualified labor, particularly technical labor, as their primary constraint.

Although state-sponsored technical and vocational schools have been established, at considerable expense to the government and donors, these institutions do not seem to be turning out graduates with the skills required by potential employers. Capacity-building partnerships between the private and public sectors are essential if the economy is to move into a self-sustaining productive phase. The Private Sector Federation is engaged to a significant degree in the planning and development of the education system in order to meet the skills requirements for the development of the Rwandan economy. It also provides Technical and Vocation Training to Rwandans.

The PSF-RWANDA is ideally positioned to understand the skill and training needs of the Rwandan economy and advocate for the required changes in the university education system reflecting the priorities for economic development. Results from two studies conducted in 2006 show that only 52 per cent of 25 interviewed enterprises were satisfied by TVET graduates' performance.

1.8.5. Institutional Arrangements and Key Stakeholders in implementation of TVET in Rwanda

Both the GoR and Development partners recognize the pivotal role the TVET can play both rolling out citizens with employable skills who by extension can be fundamental in capacitating the food security value chain in the country. The following table presents key stakeholders in Rwanda's TVET ecosystem.

Table 5. Key Stakeholders in the Implementation of TVET in Rwanda

Category of Stakeholder in TVET	Institution	Responsibilities
Government Institutions	The Ministry of Education (MINEDUC)	Plays a key regulatory role in the TVET sector. This includes policy development and implementation oversight in the sector.
	The Workforce Development Authority (WDA)	Focused on promoting partnerships in financing and management of TVET as well as ensuring quality of TVET in the country.
Development Partners	German cooperation, Netherlands cooperation, Japanese cooperation, Belgium cooperation	Support in financing, management and delivery of TVET services in Rwanda. GIZ/DED provides a Technical Assistant to continuously train TVET's training services providers and link them to the relevant Industry
Private NGOs	Private Sector Federation (PSF)	Support in employment and skills development. Plays a pivotal role in absorbing the TVET products through provision of employment as well as placement for internship and apprenticeships in their premises

TVET institutions offering technical education and vocational training to boost skills and capacity for employment. For a comprehensive detailed list of TVET providers, see annex.

<ul style="list-style-type: none"> • Ecole Technique Kabgayi in Automotive Mechanics, • SOS Technical School Kigali in Electrical Installation, • Saint Joseph Integrated Technical College, Nyamirambo in Construction and Public works • Groupe Scolaire de Parents of Butare in Electronics and telecommunication, • ASPEJ of Rwamagana in Computer Science • Eto Muhima and St. Joseph, Nyamirambo 	<p>Use the best practices to improve TVET through cost effective and innovative strategic partnerships.</p> <p>E.g the TEVSA centers of excellence have been established from the partnership between the TEVSA and German Development Services (DED)</p>
--	---

<ul style="list-style-type: none"> • both in Nyarugenge district, Central Province • ADB Nyarutarama in Gasabo district Central Province • Eto Kibungu in Ngoma district in Eastern province • Eto Gitarama in Nyanza district, Southern province • ET Save in Huye district, Southern province. • Senior Secondary Schools in Rwanda • Universities in Rwanda 	
---	--

Source: primary data

Table 6. Policies and Strategies providing a guiding framework for the work of TVET in Rwanda

Policy/ Strategy	Provisions for TVET
<p>The Education Sector Policy (ESP)</p>	<p>The ESP goal is to transform the Rwandan population into human capital for national Development through acquisition of development skills. The policy identifies Technical and Vocational Training among the top priorities in the ESP</p> <p>A key policy objective, in the medium term, is to maximize quality and access to vocational training by having around 100 new TVET schools well distributed in all districts with at least 3 per district by 2017. Some progress has been made and the details of numbers and distribution are provided in the Table 6 below.</p> <p>Education Policy strategies p. 18, 19 and 23, emphasize the following: Take measures that promote performance of women and men, boys and girls, take affirmative actions to promote the education of girls and women in secondary and higher education in an appropriate manner and take affirmative action for girls to study science and technology related subjects</p> <p>The policy complements the objective of promoting education of boys and girls highlighted in the National Gender Policy. The National Gender Policy also emphasizes equal access to Educational</p>

	opportunities in a manner that guaranties satisfactory performance and output in all fields of study.
The Girls' Education Policy (MINEDUC, 2008)	<p>The policy is envisioned to have a society free from gender disparities in all sectors of development and an education system where all children (girls and boys) have equal access to quality education</p> <p>The overall objective of the Girls` Education policy is to guide and promote sustainable action aimed at the progressive elimination of gender disparities in education and training as well as in management structures.</p>
Education Sector Strategic Plan (ESSP) – 2010 to 2015 (MINEDUC, 2010)	The strategic plan (2006-2010), at Technical School level, aimed at having twelve Technical Schools in Rwanda.
The National Policy of Science, Technology and Innovation	Provide a platform for TVET to develop
The TVET Policy (MINEDUC, 2008)	<p>Rwanda's economy is characterized by a serious lack of qualified people in the workforce, particularly in the technical sectors. The goal of education and TVET is therefore to fight ignorance and illiteracy so as to produce competent human resources for economic and social development.</p> <p>The TVET policy identifies vocational standards, national needs and reaching a sufficient number of graduates who are well-trained and therefore able to meet the development needs of Rwanda.</p>
The Work Force Development Authority (WDA) and The TVET authority	Responsible for overall coordination of TVET support activities by stakeholders
The National Employment Policy, 2006	<p>The policy sets out to enable people to choose fully productive employment in accordance with the dignity and respect of fundamental human rights.</p> <p>Among the five objectives of the policy is to improve work productivity by delivering a better synergy between education and employment. This is also reflected in the TVET Policy.</p>

Source: Primary Data

PART 2. TVET SECTOR – FACTS AND ASSESSMENT

2.1. Education system – TVET in perspective

The National Education system in Rwanda is made up of two main educational divisions namely Basic Education and Post Basic Education. Basic education is composed of pre-primary, primary and lower secondary school levels while post basic education is made from upper secondary to higher education levels. TVET in the Rwandan context starts from lower secondary school level and spreads up to higher education. All formal TVET provision forms part of the national education system and falls under the Ministry of education.

Non-formal TVET provision is offered across the country and through traditional apprenticeship in garages, workshops, cobbler's shops and other artisan facilities.

Three varieties of TVET provision are currently available under the following three types of TVET institutions:

i. Vocational training center (VTC)

VTCs offer low level vocational training comprising mainly of lower secondary school. Entry level requirements are primary school level or certificate, or lower secondary school level, but these are flexible. These requirements are subject to change with full implementation of the 9YBE (nine years basic education) system after which completion of 9YBE will be the pre-requisite. Length of training in VTCs ranges from 1 to 3 years and sanctioned accordingly with a national vocational certificate Level 1 up to 3.

ii. Technical secondary school (TSS)

Technical secondary schools are secondary schools offering technical education to candidates who have completed the three years of lower secondary. Entry level requirements are completion of lower secondary school for a technical training offered in a three years period. At successful completion of technical school a graduate is issued with an end of secondary school diploma in technical studies, allowing him to register for university or any institution of higher education. Technical education in Rwanda covers vocational education in one part and a good amount of

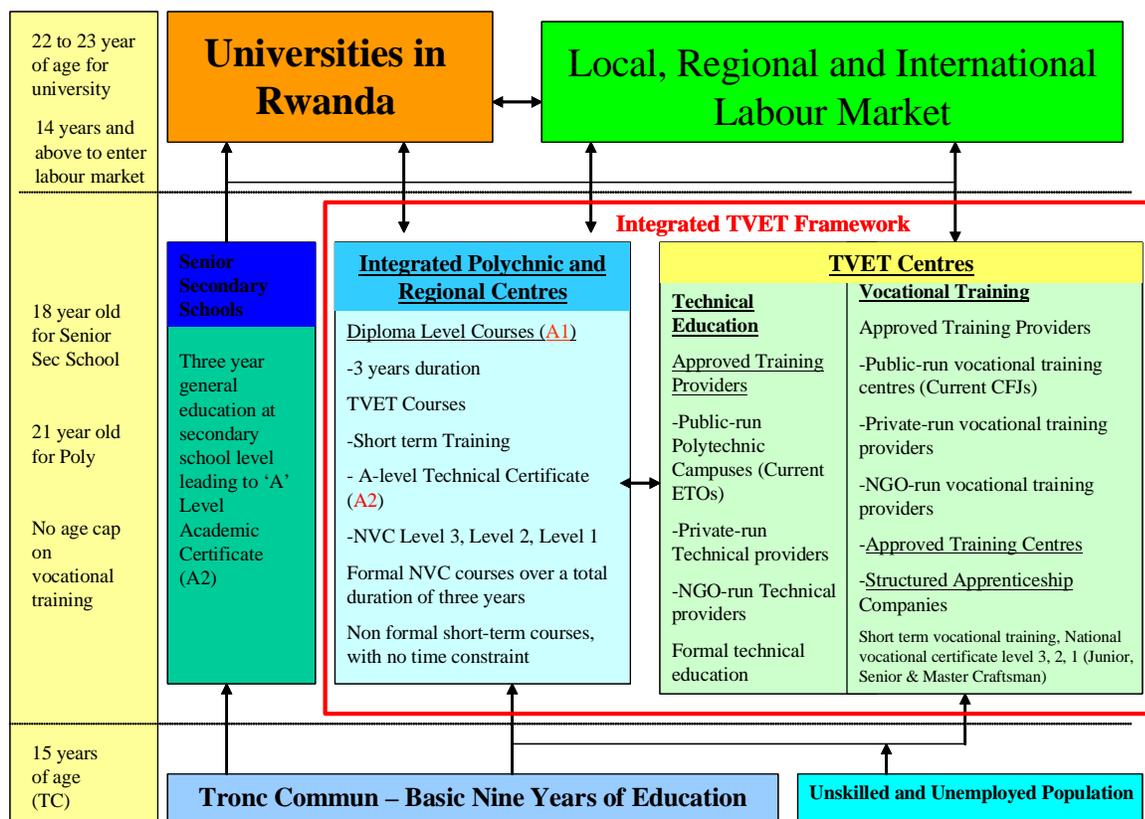
scientific subjects such as mathematics, physics and chemistry on another part.

iii. College of technology (CoT) and Integrated Polytechnic Regional Centers (IPRC)

COT are colleges or polytechnics offering technical education and training at higher education level. Successful completion of general secondary education or technical education is the entry level requirement. Colleges of technology offer a two years training which is sometimes prolonged to a 3 years period to allow a 1 year compulsory industrial attachment program. Successful completion of the college is sanctioned by an A1 College diploma.

While CoT, TSS, and VTCs may be either public or private, IPRC are training centers established by the government to offer quality training and supervisory and coordination services to other TVET centers operating in every province and the capital city by providing a one stop center with state of the art equipments and highly qualified trainers. This has the advantage of making available equipments to all TVET institutions (public and private) within the province that would be otherwise unavailable in their respective institutions at no cost. IPRCs include all the current three levels of TVET from the low to the high level of training. Five IPRCs in total are planned to be in the country, of which three (IPRC Kigali, IPRC South and IPRC West) are already partly operational while others are under construction or development.

Figure 1. Rwanda Education structure



Source: cabinet concept paper – development and implementation of an integrated TVET System, 2008

Figure 1 above shows the Rwandan Education System with a TVET focus including its components, recruitment sources, and potential future destinations of graduates. The basic nine years of education include Primary school and leads to the upper level of secondary education which may be general education (senior secondary schools) or technical and vocational education depending on the candidate's choice. The unskilled and unemployed population without formal educational background may join TVET on short courses or on NVC levels. The integrated TVET framework includes the and the TVET centers which are basically the same except that the Integrated Polytechnic regional centers (IPRC) is a new TVET setup that should include all the 3 levels of TVET which are VTC (vocational training centers), offering NVC (national vocational certificate) level 1, 2 and 3 certificates, the TSS (technical secondary school) offering A2 certificate, which in actual facts are end of secondary studies diploma, and the College of technology offering A1 diploma which is a higher education diploma.

TVET centers are similar to IPRC in what they offer as training except that they may not necessary offer A1 level. TVET Graduates may directly join the labour market or pursue their studies at universities depending on cases.

Table 7. Levels in Rwanda Education System

	EDUCATIONAL LEVEL	General Primary and Secondary	TVET	Teacher Education	General Higher Education
Post-Basic Education	Postgraduate			Postgraduate certificate qualifying to teach in HE	Postgraduate (masters & above)
	A0			Degree with qualified Teacher Status (QTS) for Upper Secondary	Degree
	A1		College of Technology Diploma; TVET Grade 1	Diploma with QTS for Lower Secondary	
	A2 (3 years)	A Level Certificate (S4-S6)	TVET Grade 2; A2	Certificate qualifying to teach in Primary	Certificate of completion of general secondary education
Basic Education	Lower Secondary School (3 years:S1-S3)	O Level certificate (S1-S3)	TVET Grade 3		
	Primary (6 years: P1-P6)	Primary Leaving Certificate			
	Pre-primary (PS1-PS3)	-			

Source: Education Sector Strategic Plan (ESSP) 2010-2015, MINEDUC, 2010

From the above diagram TVET is seen to be part of secondary education and spreads up to the first level of higher education. TVET Grade 3 (the equivalent of NVC 1, 2 and 3 certificates in Figure 1) is offered at VTC level while TVET Grade 2 and A2 are offered at TSS level.

2.2. TVET Access & Equity

TVET currently covers 38% of upper secondary education, in other words TVET students make 55,033 students out of a total population of 144,695 in upper (senior) secondary school. The government target is a 65% coverage by 2017. This orientation is believed to be in the urge to have an education system that produce job creators rather than job seekers, as TVET is known to be instrumental in empowering people with employable skills. However, a number of challenges, still facing the sector need to be quickly addressed if this target would be effectively reached. Access to quality TVET needs to be highly increased and entrepreneurship (with appropriate and locally developed strategies), has to be one of the top priorities. This calls for huge resource mobilization and major budget increment to oversee overall readjustment of the whole education system in general and TVET in particular, ranging from training of trainers, retraining former teachers and reorienting them to TVET, rehabilitation and construction of new TVET centers,... to purchasing of relevant training equipments and materials, just to mention a few.

Girls access to TVET is relatively low, compared to that of boys, but this comes as a result of general perception and female preferences rather than orientations. A number of initiatives have been taken at local and country level (including among others sensitization campaigns, opening girls schools, and scholarships) to encourage and increase girls access to education and TVET, and progress is being made as show in the table below.

2.2.1. Number of Student enrolment

TVET students population is still relatively low compared to general and science education as seen in the below table.

Table 8. TVET students population and fields of study 2011

#	TVET SPECIALISATION	BOYS	GIRLS	TOTAL	%
1	Secretariat	499	2,229	2,728	5
2	Accounting	8,002	16,811	24,813	45.1
3	Agriculture	1,321	883	2,204	4
4	Veterinary	985	749	1,734	3.2
5	Tourism	268	320	588	1.1
6	Tailoring	13	67	80	0.1
7	Carpentry	130	7	137	0.2
8	Forestry	191	88	279	0.5
9	Fine arts and sculpture	84	38	122	0.2
10	Hotel management	335	625	960	1.7
11	Building construction	5,201	503	5,704	10.4
12	Electrical	1,928	329	2,257	4.1
13	Automobile	1,465	34	1,499	2.7
14	Electrical engineering	974	408	1,382	2.5
15	Electronics engineering	1,186	279	1,465	2.7
16	Information technology	1,599	1,163	2,762	5
17	Information management	1,960	2,395	4,355	7.9
18	Automobile engineering	543	137	680	1.2
19	General mechanical engineering	378	42	420	0.8
20	Civil works construction	653	211	864	1.6
	TOTAL	27,715	27,318	55,033	100.0

Source: Education statistics 2011, MINEDUC, 2012

Formal TVET currently has 20 training trades with a total of 144695 registered students as shown in the above table. The most demanded trade look to be Accounting followed by Building construction, while fine arts, tailoring and carpentry are the least demanded. A big majority of candidates

in Accounting are girls making 23.5% of whole TVET girls population. From the above data accounting is the most prominent course but it's in the list of the top priority sectors. Also secretarial studies are among the top 5. The above data may be show that something need to be done in order to align TVET provision to the twelve economic sectors set as a priority by the Workforce Development Authority (WDA).

2.2.2. Number of Graduates

A total number of 17,426 candidates from TSS sat for national practical exams 2012. College of Technologies and IPRC have a combined total number of 578 graduates this year 2012 (made of 300 from TCT, 44 from SJITC, and 234 from IPRC Kigali). Figures for graduates of VTCs were not available at the time this report writing.

2.2.3. Number of TVET Providers

Table 9. List of TVET Providers per Location and Status

#	PROVINCE	DISTRICT	TSS		VTCs		TOTAL
			Public or Government Aided	Private	Public or Government Aided	Private	
1	KIGALI	NYARUGENGE	0	8	0	10	18
2	KIGALI	GASABO	0	13	1	9	23
3	KIGALI	KICUKIRO	1	11	0	8	20
4	SOUTH	KAMONYI	0	3	2	3	8
5	SOUTH	MUHANGA	3	4	3	2	12
6	SOUTH	RUHANGO	1	7	2	6	16
7	SOUTH	NYANZA	1	7	1	3	12
8	SOUTH	HUYE	1	2	2	2	7
9	SOUTH	GISAGARA	1	0	2	1	4
10	SOUTH	NYARUGURU	1	0	2	0	3
11	SOUTH	NYAMAGABE	1	1	1	4	7
12	WEST	RUSIZI	1	3	3	2	9
13	WEST	NYAMASHEKE	1	1	3	2	7
14	WEST	KARONGI	4	2	0	1	7
15	WEST	RUTSIRO	1	2	0	2	5
16	WEST	NGORORERO	3	3	0	2	8
17	WEST	NYABIHU	3	2	1	3	9
18	WEST	RUBAVU	3	8	1	4	16
19	NORTH	MUSANZE	1	5	0	3	9

20	NORTH	BURERA	1	4	0	3	8
21	NORTH	GAKENKE	1	4	1	0	6
22	NORTH	RULINDO	1	2	0	1	4
23	NORTH	GICUMBI	5	1	1	4	11
24	EAST	NYAGATARE	0	3	1	2	6
25	EAST	GATSIBO	3	0	3	0	6
26	EAST	KAYONZA	0	1	2	3	6
27	EAST	RWAMAGANA	1	5	1	3	10
28	EAST	BUGESERA	1	2	2	2	7
29	EAST	NGOMA	3	1	2	3	9
30	EAST	KIREHE	0	1	1	3	5
S/Total			43	106	38	91	278
Total			149		129		278

Source: List of TVET providers, WDA, 2012

A total of 278 providers are available country wide, of which 197 or 70.9% are private and 81 or 29.1% are public. Southern province has the most TVET providers (69) while the northern province has the least (38). Compared with population figures in the different provinces we may say that the northern province which is the most populated of the country is very badly represented in TVET.

2.2.4. Attendance by different groups

Table 10. NUMBER VTC STUDENTS AND ACCESS BY SOCIAL STATUS

Students enrolment in VTC's 2010 and 2011						
LEVEL	2010			2011		
	Boys	Girls	Total	Boys	Girls	Total
Short Training	251	243	494	2,629	1,869	4,498
First Year	2,306	2,170	4,476	2,909	1,722	4,631
Second Year	1,270	1,006	2,276	1,250	735	1,985
Third Year	35	33	68	132	69	201
TOTAL	3,862	3,452	7,314	6,920	4,395	11,315
VTC's orphan students by level in 2011						
LEVEL	Mother	Father	Both parents	Boys	Girls	Total
Short Training	544	650	623	1,011	806	1,817
First Year	573	751	608	1,024	908	1,932
Second Year	273	396	374	607	436	1,043

Third Year	27	44	24	54	41	95			
TOTAL	1,417	1,841	1,629	2,696	2,191	4,887			
VTC's students with disabilities by level in 2011									
LEVEL	Hearing	Visual	Dumb	Physical	Mental	Others	Total		
							Boys	Girls	total
Short Training	38	33	4	204	38	51	219	149	368
First Year	10	25	1	43	12	24	64	51	115
Second Year	3	3	1	9	4	10	15	15	30
Third Year	0	8	0	1	0	0	5	4	9
TOTAL	51	69	6	257	54	85	303	219	522

Source: Education Statistics 2011, MINEDUC, 2012

TVET access by the vulnerable or marginalized groups such as orphans and people with disability is shown in the above table. The figures concern only VTCs which are normally low level vocational training consisting of 1 up to 3 years. Most students go to look for job after completing a short course or a year and obtaining a certificate, and may come back for another year or two afterward.

2.3. Finances

Estimates of state expenditure on education in 2010 were 116, 860, 008, 784¹ RWF while the national TVET budget (2010/2011) accounts for a total estimate of 12,393,739,744 ²RWF i.e. a 10.6 % share on the education budget. TVET budget for 2012 is estimated at 9,338,064,882 RWF distributed in 5 priority areas namely infrastructure, equipments, salaries, consumables and maintenance with a percentage share of 34, 4, 27, 28 and 1 % respectively, making a total of 94% on budget utilization. It should be noted that the above figures are estimates from government institutions not including TVET expenditure or budget from private TVET providers which otherwise constitute the majority of TVET provision in the country.

TVET in Rwanda is provided by both the private and the public sector. Private providers may be parents associations, association of individuals, groups of people, religious organizations or NGOs. Public providers may be government schools or government aided/subsidized schools which are former private schools which have been handed to government for support and joint-running due to the owners' financial constraints.

¹ MINECOFIN, state expenditure 2008-2010

² WDA, TVET Budget 2009-2012

Private schools are fully funded through school fees collection from students and are independent in their recruitment. Private schools fund themselves but depend on government for registration, accreditation, evaluation and certification as all other TVET providers.

Finances of Government or subsidized schools are fully supported by government for the running of the schools and the latter depend solely on the government for teachers and students recruitment.

Both public and private schools charge school fees to students, but school fees in government schools are subsidized and therefore low. Public TVET schools charge between 36,000 and 40,000 RWF (Rwandan francs) which is between 58 and 64 USD (600 RWF = 1USD) per student per term including boarding while private TVET providers charge between 80,000 and 150,000 RWF which means between 129 and 242 USD for the same services.

2.4. Link between Formal, non-formal and informal TVET

Generally speaking TVET encompasses a broader range of skills training activities offered both by the formal and informal sectors. Quoting the Rwanda TVET Policy, *“TVET serves here as an overarching term to describe all kinds of formal, non-formal and informal training and learning provided by or in all different institutions, providers and learning locations.”*

In addition to Policy, TVET stakeholders acknowledge the need for an integrated system that insures linkages between all forms of TVET including formal, non-formal and informal training. The recently launched RTQF (Rwanda TVET qualification framework) in accordance with the Policy makes provision for valorizing skills acquired through non-formal or informal training. However, outside some capacity building efforts organized from time to time by stakeholders or development partners, which may or may not involve the non-formal or informal TVET actors, there are not yet any established (or formal) links between the formal and non-formal or informal TVET.

2.5. TVET Governance

2.5.1. Main ministries/authorities and their role and responsibilities

For a long period TVET in Rwanda was sub-divided into two branches namely Vocational training and Technical education respectively under the Ministry of public service and labor and the Ministry of education. The TVET system was functioning without any clear existing policy apart from a curriculum for technical education which was part of normal secondary education. Vocational training by then was mainly made of youth training centers commonly referred at as CFJ (centres de formation des jeunes – in French) operating without any official curriculum and recruiting mostly from primary and secondary schools the drop-outs who also could have no other educational path after completing their vocational training, while Technical education was characterized by technical secondary schools restricted to candidates who successfully completed lower secondary school, and a technical college receiving graduates from upper secondary schools.

In 2008 a national TVET policy was published according to which Rwanda opted for an “integrated TVET system that is labor market-driven and that allows flexible, horizontal and vertical mobility in access throughout the TVET training. With the new policy all technical and vocational education and training have been put under a single ministry, the Ministry of Education.

A TVET authority in charge of coordinating all TVET activities and implementing the TVET policy was created and launched in 2009 for effective implementation of TVET Policy and strategy, under the name of Workforce Development Authority (WDA). Ever since the TVET sector operates under a clearly defined structure supervised by the new TVET Authority which reports to the Ministry of education.

2.5.2. Role and responsibilities of WDA

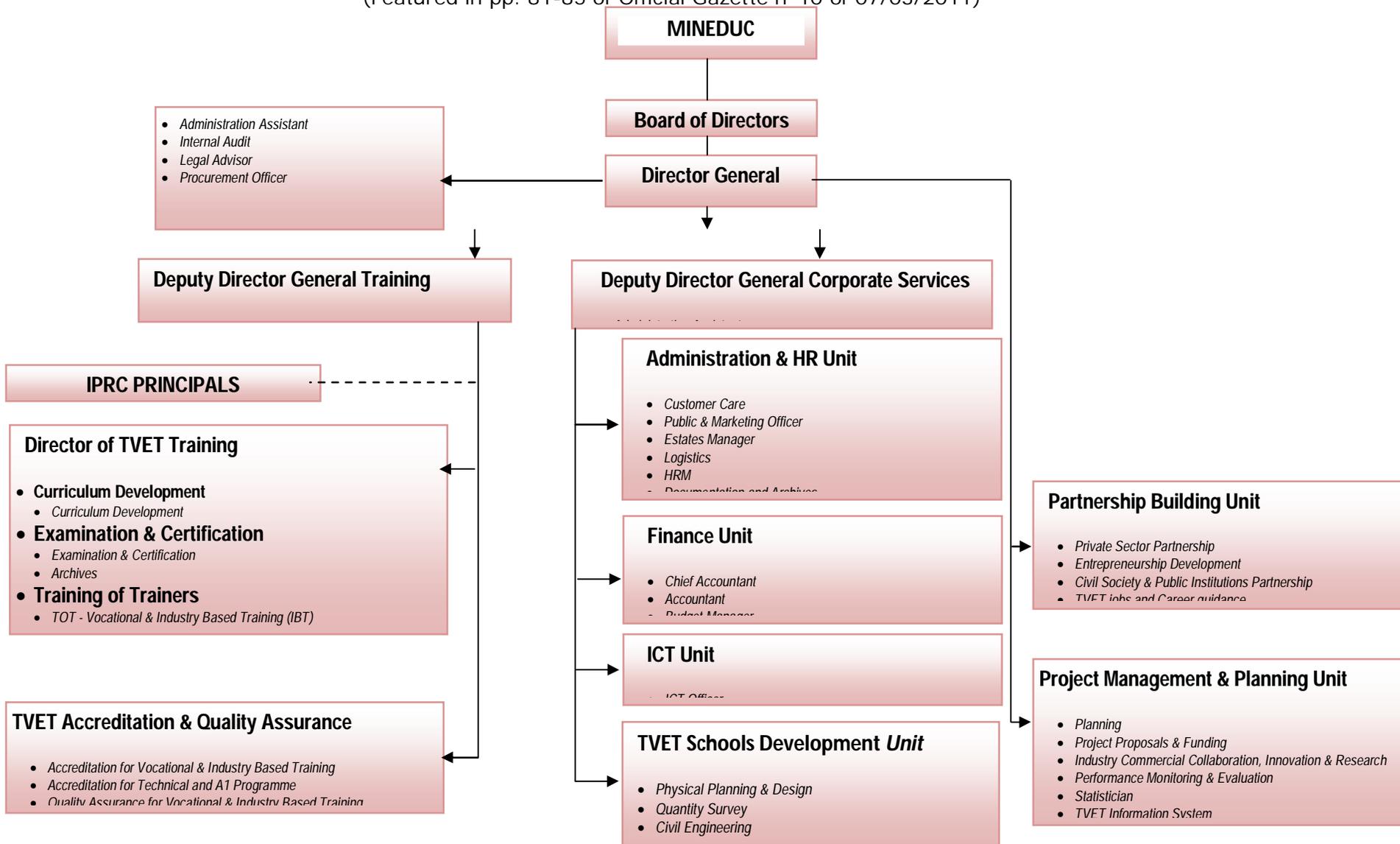
All activities related to skills development and TVET in particular fall under the mandate of WDA which has been established by the government as “*an institutional framework to provide a strategic response to the skills development challenges facing the country across all sectors of the economy.*”

WDA which is in charge of TVET regulation, certification and accreditation has the following mandate:

- i. To regularly identify TVET subjects that are recognized in Rwanda.*
- ii. To develop curriculum and standards on all TVET education in Rwanda.*
- iii. To conduct inspection of observance of standards.*
- iv. To set up a labour market information system in order to develop curricula and standards that are tailor made to the labour market needs.*
- v. To teach and train vocational and technical trainers at all levels.*
- vi. To set up of a system of certification and accreditation of all TVET institutions.*
- vii. To train workers in various positions in order to upgrade their technical and hands-on skills.*
- viii. To sensitize and facilitate investors to invest in TVET in Rwanda.*
- ix. To promote employment of TVET graduates through entrepreneurship development in collaboration with relevant authorities.*
- x. To establish a coherent National TVET Qualification Framework (NTQF) that ensures vertical and horizontal mobility and one that is well integrated in the National Qualification Framework (NQF)*
- xi. To establish relationship with other regional and international agencies carrying out similar missions.*

Figure 2. WDA ORGANISATIONAL STRUCTURE

(Featured in pp. 81-85 of Official Gazette n°10 of 07/03/2011)



Source: Approved WDA & IPRC structures, WDA, 2012

2.5.3. Activities of WDA

The activities of WDA are centered on the following five pillars of TVET development:

- *Skills Development through TVET.*
- *Business Incubation and Entrepreneurship Development.*
- *Development and establishment of a Rwanda Labor Market Information System.*
- *Ensuring international benchmarking of the TVET curriculum by incorporating into it, international and industry standards.*
- *Regulation, Accreditation and Certification of TVET institutions*
- *Forming affiliations with regional and international TVET regulating bodies.*

2.5.4. Priority Economic Sectors

12 economic sectors have been identified and earmarked as priority for TVET investment and initiatives. These sectors have been determined through mini surveys conducted by WDA.

- i. Construction and building services
- ii. Hospitality and Tourism
- iii. Agriculture and forestry processing
- iv. Technical servicing and Assembly
- v. ICT
- vi. Manufacturing
- vii. Clean and sustainable energy
- viii. Mining and Mineral processing
- ix. Water resources management
- x. Beauty and Aesthetics
- xi. Arts and crafts
- xii. Film making

With reference to Learn4Work, four sectors (in addition to Agriculture) included in the above list have been found to be of possible focus for the project (Learn4Work) due to their great potential for growth in the country. They include Construction, Hospitality, Technical servicing and Beauty and aesthetics as explained in section 1.8.2. on Rwanda's Private Sector

2.5.5. Most important and relevant policies and acts over the last 15 years

The Rwandan TVET sector is governed and influenced by a number of national policies and acts among which we have the following:

- **Vision 2020:** a long-term national strategic plan giving the country vision and or direction in its developmental course. The vision makes a strong reference to the development of human resources, with an objective of transforming the country into a knowledge based economy by the year 2020.
- **EDPRS:** a medium-term strategy, serving as a tool for the achievement of the vision 2020. The strategy acknowledges the important role of TVET in the future economic growth of the country. Currently the country is in the completing phase of its second EDPRS (2008-2012) while the elaboration of the next EDPRS is on course.
- **ESSP:** the ESSP (Education Sector Strategic Plan) is a medium-term strategic plan giving orientation the education sector, including the TVET sub sector. The ESSP, (currently ESSP 2010-2015) is supported by a yearly Education Sector Review that gives an assessment of achievements and challenges faced by the sector.
- **TVET Policy:** the TVET policy developed in 2008 regulates all TVET activities and projects in the country. The policy advocates for an 'all inclusive', integrated TVET system that allows horizontal and vertical mobility in its entry paths.
- **Concept Paper:** the paper was developed in 2008 and gives details on the development and implementation of the integrated TVET system.
- **Concept note on IPRC:** outlines the purpose and function of the IPRC (Integrated Polytechnic Regional Center). IPRCs are supposed to play a double role in serving as a training centers and at the same time as supervisory body for all TVET activities and projects in each province (provincial representative of WDA) and the city of Kigali. 5 IPRCs have

been planned to be established in the country, of which 2 are already partly operational namely IPRC Kigali and IPRC South.

- **WDA law:** a law establishing the Workforce Development Authority and determining its mission, organization and functioning. The law was published in 2009.
- **RTQF:** RTQF (Rwanda TVET Qualification Framework) was published in June 2012 by WDA and gives a comprehensive framework to the TVET sector with regard to quality assurance, accreditation and qualification.
- **National Employment policy:** the policy makes mention of TVET as one of the its priority areas for human resource development and employability.

In addition, a number of other TVET implementation tools are currently under development by WDA such as the TVET strategy and the TOT (training of trainer) strategy. The TVET policy is currently under review with a plan of publishing an updated version by December 2012. The RTQF implementation plan has been developed and is awaiting its soon release or publication.

2.5.6. Main non-government stakeholders

Outside development partners (i.e. donors) and private TVET providers, TVET sector in Rwanda is known to have a limited number of formal or registered non-government active stakeholders. This is probably due to the fact that the sector has been underdeveloped and operating without a clear policy and structure for quite a long period of time till the launch of its policy in 2009.

Following is a list of main non-government stakeholders

- **Private TVET providers/schools:** private TVET schools make the bulk of TVET provision in Rwanda. Their role in improving relevance and quality of TVET is still limited due to their poor status mostly limited to survival.
- **Private Sector Federation:** is the umbrella organization of the private sector in Rwanda comprising of 10 chambers covering virtually all business activities in the country, including Agriculture, commerce,

crafts, industry, liberal professions, tourism, women entrepreneurs, young entrepreneurs, finance and ICT (information and communication technologies).

- **Cooperatives Associations, and local NGOs:** a few cooperatives of TVET related services providers exist even though not that much involved in TVET initiatives and projects.
 - **APARWA** (Association for promotion of artisans in Rwanda): an association of carpenters wood workers producers of
 - **ADARWA** (Action for development of artisans in Rwanda): like the previous ADARWA is not different from APARWA except in the name. they both operate in the same domain and are closely located. Both cooperatives are instrumental in distributing timber and wood products in Kigali city and traditional apprenticeship of youth in carpentry and woodwork.
 - **TEVSA** (Technical and Vocational Schools Association): is an umbrella association for advocacy of private TEVT providers in Rwanda. It has been involved in a number of activities for promotion of TVET in the country in the past, but its characterized by lack of creativity and vision making it redundant and mostly, if not entirely, dependent on donors support.
 - **SDEEP** (Skills Development, Entrepreneurship and Employment Promotion): is a local NGO and new player in TVET sector, specialized in TVET projects management, strategies and innovative solutions. It's made of TVET professionals who are engaged in skills development support to communities and the marginalized.

2.5.7. Relevance of curricula and training

A new VTC curricula has been developed by WDA for 22 occupations in 6 economic sectors, in addition to the existing curricula for TSS. The relevance of the curricula has been improved through the adoption of a new approach in curricula development namely the CBT (competence based training) model and, the involvement of representatives of the private sector. The curricula is modular and more practical oriented, emphasizing on completing the required competence than completing the whole course.

However, implementing the curricula at school level remains a big challenge due to the fact that most TVET providers are poorly equipped with less qualified trainers, in addition to lack of linkage with the labour market. The lack of proper training on the use of the new CBT curricula by most trainers may as well jeopardize the quality and impact of the curricula on trainees.

The involvement of the labour market in curricula development is organized through curricula development (and update) workshops in which the labor market representatives are invited and labor market surveys their opinions are considered. The cooperation with labour market in curricula development is still at conceptual level even though this is hopefully expected to improve with the implementation of the TVET qualification framework through sector skills councils. So far the existing curricula is designed for formal training.

Following is the new curricula under respective occupations and economic sector:

Agriculture

- i. Field Crop Grower For VTC
- ii. Veterinary Nurse For VTC
- iii. Veterinary Assistant For VTC,
- iv. Veterinary technician for VTC
- v. Forestry Worker For VTC
- vi. Food processing for VTC

ICT

- i. Computer technician FOR VTC
- ii. Software Developer for VTC
- iii. Multimedia technician for VTC
- iv. Network Administrator for VTC

Hospitality

- i. Cooking for VTC
- ii. Food and beverage For VTC
- iii. Culinary final For VTC

Technical servicing

- i. Welding for VTC
- ii. Panel Beating for VTC

- iii. Engine Mechanics for VTC
- iv. Auto electricity for VTC

Construction

- i. Domestic electrical technician for VTC
- ii. Masonry for VTC
- iii. Plumbing for VTC
- iv. Carpentry for VTC

Art and Craft

- i. Tailoring VTC

2.6. Teachers Training Colleges

The existing teachers training colleges in Rwanda specialize mainly in training teachers for general and science education. WDA is currently in the process of opening a permanent facility for Training of Trainers (TOT) for technical subjects teachers.

Teachers training in Rwanda is provided through three following types of institutions:

- i. Kigali Institute of Education (KIE)
- ii. College of Education (CoE)
- iii. Teachers Training Colleges (TTCs)

The three above mentioned institutions provide pre-service training to students which consist of initial training in relevant subject areas (mainly general and science education) and teaching methodology.

In-service training, i.e. training of trainers (TOT) is facilitated and organized through Teachers Service Commission (TSC) for primary and secondary schools teachers and head teachers. Currently it mainly focuses on English language training, Math and science teacher training, and school management for head teachers.

The main difference between the three institutions is the academic level of training they offer to trainees.

KIE specializes in training to A0 (degree level) teachers for upper secondary schools, CoE trains A1 (diploma level) teachers needed for lower secondary schools, while TTCs trains A2 (certificate level) teachers specialized for primary school teaching.

The country currently has 1 institute of education which is KIE in Gasabo district, 1 college of education which is the Rukara college of education (combined together with former Kavumu college of education) in Kayonza district, and 11 teachers training colleges distributed in different districts as follows:

Table 11. Teachers Training Colleges per district and provinces

#	TEACHERS TRAINING COLLEGE (TTC)	DISTRICIT	PROVINCE
1	TTC Save	Gisagara	Southern
2	TTC Mbuga	Nyamagabe	Southern
3	TTC Muhanga	Muhanga	Southern
4	TTC Bicumbi	Rwamagana	Eastern
5	TTC Matimba	Nyagatare	Eastern
6	TTC Zaza	Ngoma	Eastern
7	TTC Byumba	Gicumbi	Northern
8	TTC Kirambo	Burera	Northern
9	TTC Gacuba II	Rubavu	Western
10	TTC Rubengera	Karongi	Western
11	TTC Mururu	Rusizi	Western

Source: primary data

2.7. Other relevant initiatives linking TVET to the labour market

- **Akazi kanoze:** a work readiness training program designed for youth outside the school structure. The program designed by EDC (education development center) consists essentially of vocational training and entrepreneurship. The program started in 2009 and has so far trained 8,566 young people in work readiness and plans to reach out 15,000 youth by 2014. According to figures from EDC 3,230 youth have gained jobs or involved in income generating activities;

- **PSF Business Plan Competition:** the private sector federation organizes a yearly business plan competition for TVET graduates to stimulate and promote entrepreneurship or employment creation prospects. The best candidate is awarded a prize worth approximately 20,000 USD in a loan form.
- **UYS (Upgrade Your Skills):** a grant designed by GIZ to promote skills development through financing of short- term skills development projects and needs by TVET providers, private sector and the public at large.
- **SDF(Skills Development Fund):** a grant provided by the World Bank through WDA for rapid skills delivery through TVET. The fund is tendered on competitive basis and is available for public and private TVET providers as well as NGOs operating in skills development.

2.8. Main donors and their programmes related to TVET and labour market development,

Rwanda TVET sector is endowed with a number of partners from different countries. The below list is not exhaustive as TVET has been declared a top priority by the government and more support is being mobilized.

- **Netherlands embassy**

The Netherlands cooperation through its Embassy in Rwanda is supporting skills development by financing various TVET initiatives and projects. The Embassy supported GIZ and WDA in TVET projects to the tune of 5 million Euros and 5 million Euros respectively. In other words GIZ (formerly GTZ) has been administering TVET and skills development budgets from other Europeans partners under an agreed framework between them. In 2009 the Dutch ministry of cooperation donated 4.2 million to PSF for supporting TVET in making it more responsive to labor market needs and demands. One part of the fund is being used for facilitating internship of TVET graduates in private companies while another part is used to organize 'Business Plan' competitions among TVET graduates and offering loans to best candidates for starting small businesses and entrepreneurship.

- **EDC- Akazi Kanoze**

AKAZI KANOZE is a program supported by EDC (education development center-) a US NGO in training Rwandan youth with non-formal education through market-relevant life and work readiness training and support, hands-on training opportunities. Most of its training take place outside the school structure and is implemented by local implementing agencies.

- **World Bank**

The world bank has donated a grant of 6 million dollars for skills development. The grant is managed by WDA under a fund called SDF (Skills Development Fund) and is open to public and private TVET providers and private sector for rapid skills development.

- **Japanese cooperation - JICA**

Japan has been supporting the Rwanda TVET sector for a number of years through JICA (Japan International Cooperation Agency). Since 2006 JICA is fully supporting Tumba College of Technology (TCT) in the northern province, which is a higher learning TVET institution.

- **South Korean cooperation - KOICA**

The Korean cooperation is supporting TVET through IPRC Kigali. The Cooperation channeled through KOICA (Korean International Cooperation Agency). Areas of support include curriculum development and infrastructure rehabilitation for the IPRC.

- **German cooperation -GIZ**

Among other initiatives, the German Development Cooperation (GIZ) has been supporting various TVET initiatives such as support to projects from different technical schools such as ETO Muhima in the past and ET SOS in the recent past, in addition to previously mentioned UYS fund. The UYS fund targets innovative approaches in training and skills development and is open to public and private TVET providers and private entities involved in skills development. Also GIZ in partnership with TEVSA are currently using applying a 'Roaming TOT' concept to provide a permanent ' training of trainers' facility and impact the quality of TVET in the country.

- **Belgian Cooperation**

The Belgian technical cooperation its new umbrella PAFP made of its affiliated members (APEFE, VVOB, and BTC) are supporting TVET in the southern through the IPRCs South and other 8 pilot VTCs in the Southern province. They have supported WDA in developing the new Curriculum for VTCs designed on Competency Based Training (CBT) Approach.

- **NUFFIC**

Nuffic (the Netherlands organization for international cooperation in higher education) is supporting WDA in some projects that include the development of the TVET Qualification Framework (TQF). The TQF that has been published recently and is supposed to be implemented by TVET providers from next year.

- **Chinese cooperation**

The Chinese cooperation support to TVET is through a construction of a new TVET center in the northern province which will eventually be the IPRC north. The TVET center which is valued at more than 12 million dollars is currently under construction and is expected to be completed next year.

- **Swiss cooperation - SWISSCONTACT**

The Swiss government is about to start a 12 years support project to the Rwandan TVET sector which is will be implemented through SDC (Swiss Agency for Development and Cooperation) and WDA. The project entitled 'Promoting skills development and employment creation in the great lakes' will be implemented in Rwanda by SWISSCONTACT which won the tender, starting August 2012.

2.9. Analysis of the world of work in relation with TVET sector

2.9.1. The Rwandan labour Market

The labor market in Rwanda mainly represented by the private sector is still small and relatively weak even though growth prospects could be expected as the business climate keeps improving with time, as the country keeps reforming its commercial laws making it easier to register and do business in Rwanda than in any other country in the region.

Members of the private sector which once used to be organized in 23 associations represented by the former chamber of commerce and industry are now represented by one single professional organization under the name of Private Sector Federation of Rwanda (PSF) since 1999. The federation aims at promoting and representing the interests of the entire private sector through lobbying and advocacy. PSF is organized into 10 chambers (agriculture and livestock, industry, commerce & service, tourism, financial institutions, crafts artists & artisans, liberal professionals, ICT, young entrepreneurs, young entrepreneurs) representing all its members and, conducts business promotion and development activities throughout the country, while engaging a dialogue on business improvement with government through the economic partnership forum.

The federation aspires to be more involved and consulted in skills development initiatives including TVET financing and feels that the existing collaboration with the public sector in TVET is not enough for a successful implementation of TVET policy. It however, seems to consider their involvement in TVET as a support to the training sector rather than a necessity and recommends that the government should initiate a local permanent forum where the public and private sector would meet and address issues regarding skills development.

The public sector on the other hand represented by the Workforce Development Authority (WDA) recognizes the necessity of involving the private sector in TVET and has since initiated sector skills councils so far in two sectors namely construction and hospitality (though not in collaboration with PSF) which will improve the involvement of the private sector in implementation of TVET policy.

The informal sector on a separate side employs a big part of the population and, is widely recognized as part of the TVET sector by the authority and stakeholders, albeit its integration or involvement in the system is still minimal due probably to the fact that the TVET authority is still relatively new and facing many other bigger challenges such as increasing access and quality, organizing training of trainers, etc.

Overall, the link between the labor market represented by the private sector and TVET cannot be overemphasized as they respectively represent the demand and the supply sides of the labor market. This link, though, needs to be strengthened through continuous interaction between the two sides to ensure the training offer is relevant to the labor market needs and the private sector gets qualified manpower.

2.9.2. TVET providers

TVET provision is facilitated by public and private institutions which in most cases measure their output by school results rather than by employments access by graduates. The link between the school and the industry is still low and often limited to sporadic industrial attachment which is even a luxury for most remote TVET providers, still falls short of the requirements to establish a permanent or strong link between the two sides. The current internship or industrial attachment system seems to operate in a loose way rather than being a documented or structured system. It has been observed that very few training providers have signed agreements linking them with private sector actors.

The state of training providers on the other hand, most of them in poor condition, leave no much space for improvement in devising strategies for approaching the private sector. The need for improvement of infrastructure and facilities as well as trainers' living conditions for most TVET providers is visible. There is also need for innovative partnerships to be designed and initiated between the two sides and, the supply side i.e. the TVET providers need not to wait the demand side, i.e. the private sector, to approach them, but rather aggressively engage them through design of projects of mutual interest, capable of attracting the private sector.

2.9.3. TVET quality and relevance

Big improvements have been realized, especially with regard to IPRC even though only two of them are so far operational with IPRC West slowly rising up. The standards observed at IPRC Kigali are good enough and may be responding to the quality expected by the labor market expectations to a good extent. The center is well equipped, and has qualified trainers who from time to time also benefit from internally organized TOT sessions. The IPRC Equipments are utilized to a good level, and most, if not all students undergo an industrial attachment program before completing their course. The center is using a CBT (competence based training) curriculum it has developed with participation of private sector, and its trainers have been trained on the use of the CBT model.

However, this is not yet the case in majority of TVET training centers. Though WDA has developed CBT curriculums that are currently being utilized by TVET providers, most schools have adopted the new curricula without any induction program for the trainers/teachers, which may consequently jeopardize the expected results from the new training approach. Most private TVET providers are poorly equipped and have difficulties hiring qualified trainers on a permanent basis. The general observation is that majority of TVET providers, which unfortunately are private, are still struggling in their effort to offer what would called “relevant and quality TVET” and seem to be providing more theoretical rather than practical training to their learners.

2.9.4. Dilemma between Skills shortage and limited opportunities

In view of the above observations, one important query that arises is to establish the overriding challenge facing the TVET system and that makes it not to effectively deliver, i.e. not able to achieve its main objective which is employment creation. Are skills shortages the most important problem affecting the sector or is lack of enough employment opportunities a hidden challenge that discourages efforts?

The answer to this important question may be found in yearly statistics produced by relevant authorities and employers as seen in the below pages:

Table 12. Number of Establishments by Size and Classification

	Micro (1-3)	Small (4-30)	Med (31-100)	Large (101+)
Private	111,176	7,440	421	100
Public	25	28	15	4
Mixed	14	24	3	5
Non Profit	3,125	1,069	60	1
Total	114,329	8,548	513	106

Source: establishment census 2011, Analytical report, MINICOM, NISR, MIFOTRA & PSF, p.37

As shown in the above table an overwhelming majority of establishment (businesses) in Rwanda are of micro size employing not more than 3 people. The implication is that such establishment may not be able to employ a big number of TVET graduates yearly produced by the system regardless of the quality of their training.

Table 13. Establishments by Economic Sector and Province

Economic Sector	Kigali	North	East	South	West	Total	%
Agriculture, forestry & fishing	75	212	69	88	231	675	0.5
Mining & quarrying	11	12	11	5	11	50	0.0
Manufacturing	798	891	985	945	940	4,559	3,7
Utilities	134	61	64	69	32	360	0.3
Construction	88	5	2	4	8	107	0.1
Wholesale & retail trade	18,649	9,401	11,350	12,602	12,637	64,639	52.3
Accommodation & food	3,661	8,084	6,617	7,111	7,832	33,305	27.0
Information & communication	227	65	91	87	88	558	0.5
Financial & insurance	203	162	178	185	242	970	0.8
Professional services	2,419	989	684	621	798	5,511	4.5
Health & Education	540	147	191	207	186	1271	1.0
Other Services	2,372	2,046	2,363	1,979	2,761	11,521	9.3

Source: establishment census 2011, Analytical report, MINICOM, NISR, MIFOTRA & PSF, p.30

Table 7 speaks of the economic sector predominantly led by wholesale and retail trade which in reality consist of small shops employing a small number of people who may not necessarily need a good education background. The number of establishments in most of the twelve priority sectors set by the TVET authority indicates that a lot of efforts need to be done to ensure graduates have good chances of securing employment at the end of their training.

Table 14. Total Employees by Establishment size and province

Province	Size of Establishment (Number of Employees)				Total
	Micro (1-3)	Small (4-30)	Med (31-100)	Large (101+)	
Kigali City	34,306	25,445	10,079	12,645	82,475
Northern	27,026	9,712	3,361	8,759	48,858
Eastern	26,405	8,201	1,901	915	37,422
Southern	27,416	12,847	5,833	4,896	50,992
Western	29,397	11,519	3,439	17,844	62,199
Total	144,550	67,724	24,613	45,059	281,946
	(51.3%)	(24.0%)	(8.7%)	(16.0%)	

Source: establishment census 2011, Analytical report, MINICOM, NISR, MIFOTRA & PSF, p.36

A look at the above table shows again that majority of employees are employed in micro –enterprises which are one of good ways of starting-up a business and strengthening private sector. Their capacity to expand and absorb TVET graduates cannot be taken for granted. Hence the same challenge of low employment sector facing TVET graduates even though they may be well trained.

2.9.5. Entrepreneurship and self employment

The above observations call for urgent and appropriate strategies for entrepreneurship training and support mechanisms for business start-ups, to enable TVET graduates to be entrepreneurs and job creators rather than job seekers. This tells us that though the major challenge to create employment is known to be skills shortages, the small size of the local labour market should not be ignored, as skilled people without job prospects may easily constitute a threat to the existing social order.

2.9.6. TVET contribution to the labour market demands

- **Improve links with labour market:** the arrangement of the linkage between TVET and industry at the moment is limited mostly to industrial attachment. Arrangements should be made to establish a more sustainable relationship through effective communication and setting up projects of mutual benefit to all parties.
- **Quality and relevant training:** this can be strengthened through continuous training of trainers (TOT) and exchange programs,

continuous review of curricula to respond to changing labour market expectations, updating equipments and materials, and skills competitions, rewarding creative and innovative TVET projects that respond to industrial challenges.

- **Upgrading skills of employees:** refresher courses responding to the changing needs of employees may be organized to update them to the new technological changes and labour market realities.
- **Research and development:** the labour market evolves quite rapidly rendering some skills obsolete. TVET can play an important role in carrying out research to establish the new type of skills required by the market and developing curricula to implement the training.

2.9.7. Key opportunities for the Learn4Work programme to focus on

- **Agricultural sector Value chain :** the problem in the food security value chain in Rwanda is less associated with production but more with post harvest management and market access. Learn4Work can intervene in food processing and conservation and enhancing market access through TVET.
- **Implementation of the new CBT Curricula:** trainers lack the expertise to provide practical orientation to trainees in the new CBT curricula. They therefore need to be upgraded in order to deliver this curricula in a relevant manner to respond to market needs. Learn4Work can come in to facilitate the training of trainers to cope with the challenges of implementing the CBT curricula.
- **Improving links between TVET and labour market:** the linkage between TVET and industry can be strengthened by establishing a coordination desk that engages both TVET and the industry to establish opportunities for collaboration and provide appropriate two-way feedback. Learn4Work can also set up a

framework for joint collaboration and strengthened links between TVET and the labour market.

- **Entrepreneurship strategies:** many actors are already involved in providing entrepreneurship training and seed capital for start-up businesses, but the problem of youth unemployment still persists. Learn4Work can come up with innovative entrepreneurship strategies to address this issue.

2.9.8. SWOT Analysis of the Rwandan TVET system

Strengths

- **Infrastructure:** the state of TVET infrastructure in Rwanda is good on average from both public and private schools.
- **Quality of curricula:** the quality of curricula is generally good and has been recently updated to CBT (competence based training).
- **Demand of private sectors for TVET graduates:** the demand of labor market for TVET graduates is good and growing with economic growth. The sector is using foreign labor due to lack of sufficient local skills in some fields.
- **Entrepreneurship:** entrepreneurship is one of the good subjects introduced into the TVET curriculum to empower TVET graduates with skills to start a business and make a living as the private sector and the government may not be able to absorb all available human resources.

Weaknesses

- **Equipment/materials:** equipments and training materials are some of the biggest challenges in most TVET providers in general and in private providers in particular.
- **Quality of teachers:** the quality of trainers may be perhaps the biggest challenge in the whole sector as even those who have

been trained (recycled) and endowed with experience do not want to make a career in the profession. There is no technical teachers training institute in the country.

- **Teachers working conditions:** the remuneration of teachers is a bit low and one of factors reducing the motivation of competent trainers who often turn schools into a transit place while constantly looking for greener pastures. the turnover rate of technical teachers is high especially in urban schools.
- **Labor market/industry relevance:** TVET system is progressively becoming more relevant to labor market needs in some fields such as construction and hotel and tourism industries. But there is a lack of needs assessment in the different economic sectors.
- **Management of TVET institutions:** the management of public and private TVET institutions is still wanting as most leadership of such institutions does not efficiently or creatively use the available resources or readily exploit rising opportunities.
- **Informal sector:** the informal sector is one of the biggest employer in the country and has more to do with TVET than with other sectors. The attention and support extended to this sector is not good enough. Because of this the sector is virtually not at all involved in various skills development efforts and initiatives being taking place in the country. Consequently, the level of their skills and the quality of their services and products remain low as they are not aware of available numerous opportunities for skills development. Foreign technicians and artisans are more and more on demand as a result. Some of the areas of support by Learn4Work in this sector could be found in the many Automotive garages and aesthetic and beauty salons scattered around the country and in Kigali city in particular, in constant shortage of needed skills as explained in previous sections.

Opportunities

- **Political will:** Rwanda has a strong political will in promoting skills development and, TVET is one of the country's top priorities.

- Many development partners involved in the sector: TVET sector in Rwanda is endowed with several donor agencies who support sector's projects and initiatives.
- Change in the mindset of the population: although TVET perception is not yet very positive, progress can be seen in change of mentality from the general public towards TVET as more training centers are opening and enrollment improving.
- Willingness of different actors to enhance the efficiency of the sector: several interventions by various actors (such as private sector, government agencies, and partners) in the sector demonstrate a willingness to improve.

Threats

- Poor perception: public TVET image has been slowly improving compared to the last years. However, if more efforts are not made towards changing this trend, a great while of resources could be wasted.
- Few job opportunities: more people are being trained and skill gaps reducing. Nevertheless, the local industrial base is still low with very limited job opportunities. Job creation strategies and entrepreneurship should be given the highest priority.
- Poor remuneration of trainers: TVET trainers remuneration is still one of the impediments affecting the training quality. This challenge needs to be addressed to ensure stability of trainers and sustainability of TVET provision.

Part 3. Potential organizations for local coordination of Learn4Work

- Private Sector Federation (PSF): as a representative of the private sector, PSF is one of the key players that may host the L4W coordination. PSF is a well established institution with enough infrastructure and office space for the project coordination. The federation however seems to be more profit oriented and is not focused on TVET and job creation.
- WDA: as the TVET authority, WDA will be in a good position to host the coordination office. A few development partners have some of its personnel deployed within WDA offices on a permanent or part time basis. The fact that it's still relatively new and busy building-up its structure, may not be an advantage.
- IPRC Kigali: a public TVET institution that currently stand to be a model TVET school. Its autonomy in hosting the coordination office is yet to be determined
- Swisscontact: a Swiss non-government organization from Switzerland selected to implement the SDC support to TVET Rwanda. As a new player into the TVET sector, effective November 2012, the organization could be one of the potential partners in the event L4W plans to have a completely fresh start.
- SDEEP: a local NGO founded by independent TVET professionals with long experience in TVET. The organization is still new and in official registration process and not yet so much not known in the TVET circle. Its members are among the well knowledgeable in the sector and form part of main TVET players. The NGO may be of reference only in case the coordination office needs to operate in a most neutral, challenging and innovative environment.

Reference List

- Government of Rwanda, Ministry of Agriculture and Animal Husbandry (MINAGRI), (2008), *A Revised Tea Strategy for Rwanda (Transforming Rwanda's Tea)*, Kigali
- Government of Rwanda, Ministry of Agriculture and Animal Husbandry (MINAGRI), (2008), *Crop Intensification Program (CIP)*, Kigali
- Government of Rwanda, Ministry of Agriculture and Animal Husbandry (MINAGRI), (2011), *National Rice Development Strategy (2011 – 2018)*, Kigali
- Government of Rwanda, Ministry of Agriculture and Animal Husbandry (MINAGRI), (2010), *Agriculture Mechanization Strategy*, Kigali
- Government of Rwanda, Ministry of Agriculture and Animal Husbandry (MINAGRI), (2011), *National Post Harvest Staple Crops Strategies*, Kigali
- Government of Rwanda, Ministry of Agriculture and Animal Husbandry (MINAGRI), (2009), *Coffee strategy (2009 – 2012)*, Kigali
- Government of Rwanda, Ministry of Agriculture and Animal Husbandry (MINAGRI), (2006), *Rwanda Horticulture Strategy*, Kigali
- Government of Rwanda, Ministry of Education, (2008), *Concept Paper on Integrated Technical and Vocational Education Training (TVET)*, Kigali
- Government of Rwanda, Ministry of Education, (2008), *Concept Paper on Integrated Polytechnic Regional Centers (IPRC)*, Kigali
- Government of Rwanda, Ministry of Education, (2008), *Technical and Vocational Education Training (TVET) Policy*, Kigali
- Government of Rwanda, Ministry of Education, (2009), *Education Sector Strategic Plan (ESSP) 2010-2015*, Kigali
- Government of Rwanda, Ministry of Education, (2011), *Education Statistics 2011*, Kigali

Government of Rwanda, Ministry of Finance and Economic Planning (MINECOFIN), (2007), *Economic Development and Poverty Reduction Strategy (EDPRS) 2008-2012*, Kigali

Government of Rwanda, Ministry of Finance, (2002), *Vision 2020 Document*, Kigali

Government of Rwanda, Ministry of Gender and Family Promotion (MIGEPROF), *National Gender Policy*, Kigali

Government of Rwanda, Ministry of Local Government, Good Governance, Community Development and Social Affairs (MINALOC) and Ministry of Finance and Economic Planning (MINECOFIN), (2006), *Fiscal and Financial Decentralization Policy*, Kigali

Government of Rwanda, Ministry of Trade and Industry, Ministry of Public Service, National Institute of Statistics of Rwanda and Private Sector Federation (2011), *Establishment Census, 2011*, Kigali