

CAMEROON REPORT

Yaoundé, August 2024



















A STUDY ON THE NEEDS, CAPACITIES AND CONSTRAINTS OF THE PRIVATE SECTOR IN THE SUSTAINABLE DEVELOPMENT AREA WITH FOCUS ON THE JOB MARKET IN CAMEROON AND THE DRC

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ACRONYMS AND **ABBREVIATIONS**

Al	Artificial Intelligence				
CAMERCAP-PARC	Cameroon Policy Analysis and Research Centre				
CFA	Vocational training centre				
CFPE	Vocational Training Centre Of Excellence				
СГРМ	Vocational Skills Training Centre				
CFP	Vocational training centre				
CFPP	Private vocational training centre				
CNPS	National Social Insurance Fund				
COVID-19	Coronavirus disease 2019				
CTD	Local Authorities				
IFDD	Institut de la Francophonie pour le Développement Durable				
IFDD	Information and Communication Technology				
ICT	Information and Communication Technology				
INFFDP	Institut National des Formations des Formateurs et du Développement des Programmes				
LLC	Limited Liability Company				
MINADER	Ministry of Agriculture and Rural Development				
MINEFOP	Ministry of Employment and Vocational Training				
MINEPAT	Ministry of Economy, Programming and Regional Development				
MINEPDED	Ministry of Environment, Nature Protection and Sustainable Development				
MINEPIA	Ministry of Livestock, Fisheries and Animal Industries				
MINESUP	Ministry of Higher Education				
MINIMIDT	Ministry of Industries, Mines and Technological Development				
MINJEC	Ministry of Youth Affairs and Civic Education				
MINPMEESA	Ministry of Small and Medium-sized Enterprises, Social Economy and Handicrafts				
MINPOSTEL	Ministry of Posts and Telecommunications				
MINRESI	Ministry of Scientific Research and Innovation				

NOSO	North-West/South-West
OHADA	Organization for the Harmonisation of Business Law in Africa
PDTIE	Project for the Deployment of Environmental Technologies and Innovations for Sustainable Development and Poverty Reduction
PLC	Public Liability Company
RCCM	Trade and Personal Property Credit Register
SAR	Rural Artisanal Section and Household Section
SME	Small and Medium-sized Enterprises
VSE	Very Small Enterprise

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EXECUTIVE SUMMARY

In a country where youths aged between 15 to 34 years account for over one-third of the population and are three times more affected by unemployment than the other age groups, the creation of enterprises appear to be a good solution. Young graduates are most often attracted by employments in the public service or in public companies, which quarantee stability and security, although this sector is already overwhelmed. In disillusion, a majority of them end up with "odd jobs" in the informal sector marked by fragility and uncertainty. Those who embark in creating enterprises face numerous challenges. The risk of giving up or failing remains high because the education system does not prepare them against the realities of the job market, and even less of self-employment.

To provide solutions, the Government developed and adopted a long-term Vision in 2009 to achieve the state of an emerging country by 2035. A Growth and Employment Strategic Paper (GESP) was adopted over the period from 2010 to 2020 with a focus on major infrastructure projects and the development of public-private partnerships. The GESP hinged on three main lines: growth, employment and the improvement of governance and the strategic management of the State. The matrix of priority actions of the GESP emphasized on mobilizing foreign direct investments.

Based on the GESP, a three-year plan was developed with a global envelop of 925 billion. In this envelop, the share allocated to youths was 102 billion with the view to fostering and boosting the

economic integration of youths. To this end, three (03) major groups of activities have been carried out: (i) the civic and moral rearming of youths; (ii) the socio-professional integration of youths and (iii) the construction and equipment of multipurpose centres for the promotion of youths (CMPJ). The PTS-Jeunes was deployed in four (04) sectors: agriculture (fisheries, livestock), industries, digital economy and innovation.

After the GESP decade, the government launched the National Development Strategy (NDS30) over the period from 2020 to 2030. Its priorities also include the issue of employment and economic integration of youths. This development policy is hinged on six (06) lines, namely: (i) promoting employment in public investment projects; (ii) improving productivity, employment and incomes in the rural areas; (iii) developing VSE and SME and youth entrepreneurship in urban areas; (iv) inciting the creation and the preservation of employments in the major enterprises of the private formal sector; (v) aligning training with employment and improving the professional integration system; and (vi) regulating the job market.

In spite of these efforts by the Government to boost entrepreneurship, the mortality rate of young enterprises is still high (72.24%), according to a study by CAMERCAP-PARC). In this context, this study was conducted to assess the needs, constraints and capacities needed to develop the private sector in the area of innovation.

Based on a rational choice methodology, data were collected in 06 out of the 10 regions of Cameroon. The targets were SMEs, start-ups and services in charge of coaching young entrepreneurs.

Data analysis shows that young entrepreneurs encounter the same challenges that range from lack of funding to the inadequate commitment of the Government. In fact, 9 out of 10 young promoters of Start-ups and SMEs resort to their own capital to fund technological innovations, whereas the government has earmarked a global envelop of FCFA925 billion as part of the emergency three-year plan annexed to the GESP. The share allocated to vouths in this envelop was FCFA925 billion to foster and boost the economic integration of youths. The PTS-Jeunes was deployed in four

(04) sectors: agriculture (fisheries, livestock), industry, digital economy and innovation. The results of this study show that 77% of services have provided support to young entrepreneurs. Therefore, it is worth asking "why government's actions are inefficient?"

The evaluation of capacities required to develop entrepreneurship shows that government policies are not consistent with the needs of young entrepreneurs. Furthermore, there are also an inadequate human resources and skills

To make government actions more tangible, CAMERCAP-PARC, once again, proposes a break away approach following the triptych:

DREAM-DARE-INNOVATE

INTRODUCTION

1. Background and justification

The private sector plays a major role in sustainable development as creator of wealth, employment, and innovation. It might contribute to tackling poverty, protecting the environment and promoting human rights. However, the private sector in Cameroon is dealing with numerous needs, capacities and constraints that affect its commitment to sustainable development.

The most important needs of the Cameroonian private sector access to funding, which is inadequate and unaffordable for Small and Medium-sized Enterprises especially those involved in the green or social fields and capacity building achieved through training, guidance, support and technologies, to improve competitiveness, quality, productivity and the social and environmental responsibility enterprises, institutional support that involves simplifying administrative. tax, and customs procedures, fighting corruption, improving business climate and promoting public-private dialogue.

These needs are intrinsic to the constraints faced by the private sector at various levels, including:

- The lack of awareness, which is reflected by a poor understanding of issues, opportunities, and advantages of sustainable development, both among leaders and employees, clients, providers or investors and local authorities.
- The lack of regulation, which is reflected by the absence or the inadequacy of norms, laws, rules, incentives or sanctions that encou-

- rage or compel enterprises to adopt responsible or lasting practices.
- The lack of measures, which is reflected by the difficulty to evaluate and communicate the social and environmental impact of the private sector's activities and to report on the overall performance of enterprises.

It must be recalled that the evaluation of the GESP revealed negative returns in the area of employment, growth and poverty alleviation. In 2020, the second phase of the 2035 vision for the emergence of Cameroon, a plan contained in the NDS30, was launched. In 2018, CAMERCAP-PARC carried out studies on the "Structural transformation of the Cameroonian economy" outlining the success factors of this period through an audacious break away strategy.

The implementation of this plan met with numerous security and health glitches, including the security crisis in the North, the socio-political crisis in the NOSO regions and the COVID-19 crisis.

In this context, achieving the SDG, the AU agenda 2063 and the national plan to which Cameroon has subscribed appears to be extremely problematic. The private sector's situation is slow to improve significantly. There are persistent challenges and constraints, the main ones being the unfavourable business climate, the failure to enhance or exploit the results of researches and innovations by investors and a private sector that is further positioned towards the tertiary sector.

Innovation has become an essential factor in tackling the issues of sustainability towards improving the living conditions of the population and developing countries. Enterprises are strongly involved in this process because of the increase in competition and customer demands. Challenges related to innovations are crucial because the development of investments and activities in innovations can enable enterprises to capture market shares, increase incomes, reduce input costs and, more broadly, increase profitability (Sahut, Leroux, 2011).

In spite of the many advantages of innovation, it does not generate interest within the enterprises of developing countries as compared to those of developed countries. In Cameroon, less than 10% of SMEs have displayed technological innovation; less than 5 industrial enterprises have applied the results of researches carried out by universities and research centres in 2014 within the framework of a joint collaboration with researchers in the agriculture and agro-industrial field (CAMERCAP-PARC, 2016:13). This has a strong impact on the socio-economic integration of youths. According to the International Labor Organization, unemployment rate in Cameroon in 2021 was 6.3, and the employment rate was 39.3% among youths aged between 15 to 35 years, with 87.7% of active youths working in the informal sector, according to EESI 3/

From this perspective, in view of reversing the trend and taking advantage on successful environmental and technological innovations, CAMERCAP-PARC carried out a study from March 2023 to February 2024 on "the needs, capacities and constraints of the private sector in the sustainable development area with focus on the job market: the case of Cameroon." The case of the DRC will

be dealt with in a separate report under the coordination of CAMERCAP-PARC.

2. Objective of the study

The overall objective of the study is to enable the relationship between technological and environmental innovators and the private sector based on the assessment of needs and constraints in Cameroon and in the DRC.

Specifically, it will involve:

- Making a diagnosis of the private sector in its interaction with products from technological and environmental innovations in the 02 countries regarding the budget allocated;
- Mapping out national policies regarding youth employment in the 02 countries describing the institutions that oversee technological and environmental innovations;
- Analysing the constraints and shortcomings of the private sector in each country for an investment in knowledge and innovation on which to capitalize regarding license and collaboration convention;
- Defining mechanisms (institutional and operational including financial) for collaboration and synergy between innovators with SMEs and local authorities in order to co-build varying and sustainable solutions;
- Disseminating research and innovation results in the 02 countries to foster the creation of enterprises related to knowledge.

3. Methodology

The data of the study on the Needs, Capacities and Constraints of the private sector for the sustainable development with focus on the iob market: the case of Cameroon was collected in six (06) regions of Cameroon: Far-North, North, Centre, Littoral, West and South-West, It should be noted that the data collected in these six (06) regions out of the ten (10) in Cameroon was the outcome of a rational choice. This choice hinged on the 2021 statistical directory of the ministry of small and mediumsized enterprises in Cameroon. The six regions selected are those with a significant number of observation units

The methodology hinged on the sampling base selected (six regions). In this regard, the purpose was to collect information from 400 structures distributed as follows:

- 150 Small and Medium-sized Enterprises;
- 150 Start-ups; and
- 100 Administrations and Institutions.

The table below shows the collection targets in each survey area.

<u>Table 1</u>: Collection targets and results in the survey regions

	SME		STAR	T-UP	INSTITUTI	ONS	ТОТА	L
Regions	Targets	Outcomes	Targets	Outcomes	Targets	Outcomes	Targets	Outcomes
Centre	60	17	60	21	40	02	160	40
Littoral	30	31	30	08	20	01	80	40
West	15	53	15	58	10	10	40	121
South-West	15	28	15	33	10	05	40	66
North	15	18	15	15	10	08	40	40
Far-North	15	12	15	20	10	08	40	40
TOTAL	150	159	150	154	100	34	400	347

Source: CAMERCAP-PARC, IFDD study 2023

The collection targets have been achieved with Small and Medium-sized Enterprises and Start-ups. Out of the 100% of institutions surveyed, we received 34% response. This result can be justified by the unavailability of several officials.

CHAPTER 0:

DEFINITION OF CONCEPTS

Innovation is the permanent quest to improve what already exists as opposed to invention that aims to create something new. In the economic sphere, innovation is the development of a new product, service, manufacturing process or organization that can be directly implemented in the production system and meets the consumer's needs. It is therefore necessary to define the various concepts used in the process.

0.1. Technological and environmental innovation

There are many terminologies used to describe technological innovations. Many relate to ecology and environment. Since the 2019 Act, enterprises who wish to do so may embody strong values around the environment and the society. These values include the desire to develop new concepts in line with the fight against global warming, the willingness to reflect on the essential needs of consumers, the energy costs that we could do without, and the need to rethink production chains from the earliest stages, even within the enterprises themselves.

Every business, small or big, startup or multinational, use technologies to have a positive impact on the environment. Sectors are thus diverse although some are new: (i) Home automation: management of household consumption through applications; (ii) Transportation: tramways, electric or manual bicycles and scooters; (iii) Automobile: hybrid and electric vehicles; (iv) The BTP and new environment-friendly building practices, the conception of natural materials; (v) Burials: label F, environment-friendly funerals, environment-friendly components; (vi) Industry; (vii) Agriculture; (viii) Intelligent recycling; (ix) Urban planning and revegetation of cities; etc.

Technological innovation can also be defined as the creation and the application of new technologies, tools, systems and improved systems, leading to significant advances or breakthroughs in various areas. It implies mobilizing knowledge, expertise and resources to develop innovative solutions that address problems, improve efficiency, foster progress and create values.

Technological innovation plays a vital role in addressing complex social challenges. It fosters the development of solutions for access to health services, poverty alleviation, environmental sustainability, food security and disaster management. Innovations in areas such as clean energy, water purification, telemedicine and agriculture technologies help create a more sustainable innovation for the future.

0.2. Examples of technological innovation

- 1. World-Wide Web: The development of Internet and the World Wide Web has marked a new era in communication and information sharing.
- 2. Mobile technology and Smartphones;
- 3. Cloud computing: : The cloud has redesigned the way in which computer

resources are provided, accessed and used.

4. Artificial Intelligence (AI)

: The AI has experienced a ground-breaking innovation in recent years, leading to a breakthrough in various areas. This is the case in Automatic Learning, Robotics, Virtual Assistant, 3D Printing, Renewable Energies Technologies, Biotechnology and Genetic Engineering, Internet of Things (IoT), Smart Homes, Industrial IoT, Portable Devices.

Comme dans l'Apprentissage Automatique, la Robotique, l'Assistant Virtuel, l'Impression 3D; les Technologies des Énergies Renouvelables, la Biotechnologie et Ingénierie Génétique, l'Internet des Objets (IoT), Maisons Intelligentes, IoT Industriel; Dispositifs Portables.

0.3. Conceptual framework and keywords

order In to have а common understanding of the terms used in this study on "the needs, capacities and constraints of the private sector in the sustainable development area with focus on the job market: the case of Cameroon;" it will be necessary to define a few key concepts particularly regarding: technological environmental innovation, sustainable development, the private sector, the job market and capacities. Terms extensively used such as CNPS and RCCM will equally be explained.

0.3.1. Technological and environmental innovation

Innovation is the permanent quest to improve what already exists as opposed to invention that aims to create something new. Terms relating to technological innovations are numerous. Many now concern ecology and the environment.

Since the 2019 Act, technological innovation is also defined as the creation and the application of new technologies, tools, systems and improved systems, leading to significant advances or breakthroughs in various areas. It implies mobilizing knowledge, expertise and resources to develop innovative solutions that address problems, improve efficiency, foster progress and create values.

It fosters the development of solutions access to health services. poverty alleviation. environmental sustainability, food security and disaster management. Innovations in areas such as clean energy, water purification, telemedicine and agriculture technologies help create a more sustainable innovation for the future.

Hamdouch et Depret (2009, p. 130) environmental innovations define as "an alternative solution or set of solutions that help (more efficiently than existing solutions) measure, monitor, curtail, correct or even prevent damage caused to the environment and to the climate, or broadly speaking, to meet the sustainable development goals." According to the authors, environmental innovation can be technological, organizational, managerial or institutional. In our case, of course, we consider environmental innovations of technological nature.

Shrivastava (1995) identifies a number of competitive advantages related to environmental technologies: reduction of costs, increase of incomes by the extension of the market, reinforcement of ties with providers, improvement of quality, creation of a unique and

incomparable strategy, reduction of risks, social and health benefits, improvement of image, protection from regulatory uncertainties.

0.3.2 Sustainable development

This is a form of economic development that aims to align social progress with environment protection, without compromising the needs of future generations. It hinges on three pillars: economic efficiency, social equity and ecological sustainability.

0.3.3 The private sector

This is the part of economy that concerns organizations and enterprises that are not managed by the State or public bodies. The private sector mainly comprises commercial enterprises. banks. associations. cooperatives, unions, NGOs and liberal professions. The key objective of the private sector is to make money and innovate. However, it can also foster sustainable development and create jobs. The private sector is opposed to the public sector, which is mainly managed by the State and which provides general interest services such as education, health, security or justice.

0.3.4 The job market

This is the meeting place of job offers and demands. Employers propose jobs and employees or job seekers showcase their skills. The job market is influenced by many factors, such as the economic situation, demography, legislation, training, etc. The job market can be divided into various segments, according to the type of contract, line of business, qualification, localisation, etc.

0.3.5 Capacities

The African Capacity Building Foundation (ACBF), an organization that supports the continent's development by building human and institutional capacities, defines capacities as follows:

- Human capacities: "Tangible" and "intangible" skills for the implementation of development strategies at all technical levels.
- Organizational capacities:
 The capacity of organizations to efficiently carry out their missions, adapt to changes, and innovate.
- Institutional capacities:
 The political, legal, social, and cultural environments that enable or impede the operation of organizations and individuals.

To this, CAMERCAP-PARC has added the **socio-cultural ground**. According to the ACBF, capacities are essential for Africa's economic transformation, because they make it possible to conceive, implement and assess policies and programmes that meet the needs and the aspirations of African people.

0.3.6 The other concepts

The CNPS is the National Social Insurance Fund of Cameroon. It is a public establishment that guarantees the social protection of paid and independent workers, as well as their next of kin. The CNPS has several lines of benefits such as family allowances, retirement, disability and death pensions, and occupational risks.

The RCCM is the Trade and Personal Property Credit Register. It is an official directory that compiles the matriculation of natural or legal persons who are engaged in a business activity, as well as the declaration of

entrepreneurs. The RCCM is a tool that pools, updates and disseminates information on traders, companies and securities in the space of the Organization for the Harmonization of Business Law in Africa (OHADA).

0.4 Public finance for innovation

Table 2: share of funding for innovation in the budget (in 106) million

FL (in FCFA)	2019	2020	2021	2022	2023
Total budget	4 974 607	4 951 700	5 235 200	5 977 700	6 274 800
MINRESI	10 537	10 902	8 615	11 256	12 808
MINEPAT	63 401	63 559	64 783	56 995	64 233
MINJEC	15 553	23 237	20 278	23 811	26 010
MINEPDED	5 193	7 458	4 829	6 167	6 710
MINIMIDT	10 964	10 575	8 995	7 472	7 070
MINADER	79 307	90 851	73 606	86 323	117
MINEPIA	30 762	34 888	45 815	44 888	51 328
MINEFOP	17 983	19 319	19 229	21 542	25 466
MINPME	11 717	11 545	9 717	9 794	10 261
MINPOSTEL	95 435	39 193	12 471	15 411	14 748
MINESUP	59 908	65 228	61 659	61 725	73 465
MINRESI SHARE IN THE BUDGET	0.21	0.22	0.16	0.19	0.20
Other MINISTRIES concerned by innovation	8.06	7.6	6.3	5.78	4.66

Source: MINFI (finance law from 2019 to 2023)

Public funds allocated to the ministry in charge of innovation only account for 0.2% of State budget. This trend is substantially identical and small when aggregating all the other ministries managing programmes, projects, incubators or nurseries that support technological and environmental

innovations (ITE) such as MINESUP, MINPOSTEL, MINPMEESA, MINEFOP, MINEPIA, MINADER, MINMIDT and MINEPDED. These proportions have declined since the outbreak of the Covid-19, moving from 8% to nearly 5%.

Table 3: Breakdown of public and private administrations that responded according to sector of activity.

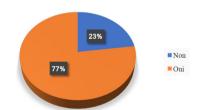
Sector of activity	Number of administrations
Education sector	5
Governance sector	20
Industries and services sector	3
Rural sector	4
Social sector	3
Total	35

Source: CAMERCAP-PARC, IFDD study 2023

The above table identifies the sector of activities in which administrations are classified. These activities range from education, governance, industries, services, the rural sector and the social sector. The governance sector is far better in terms of administrations (20 administrations).

The breakdown of administrations by sector of activities gives a snapshot of the distribution of government responsibilities in various areas. The governance sector has the highest presence whereas the industries and rural as well as social services have a less significant presence.

Figure 1: Administrations that have provided support to Youths, to SMEs and to Start-ups



Source: CAMERCAP-PARC, IFDD study 2023

The above figure shows that most of the administrations (77.1%) have provided support to youths, to SMEs and to Start-ups. This reflects their commitment towards economic and entrepreneurial development. However, it should be noted that a few administrations (23%) have not provided such a support.

This might call for a reflection on the need to improve or expand these initiatives.

Table 4: Breakdown of groups supported by public institutions in the technological innovation area

	Youths	Start-up	SME
Support provided	12 531	2 425	14 355
Support provided for technological and environmental innovation	2 447	2 213	1 253
Breakdown of youths, start-ups and SMEs in our sample that have capitalized on the support received	2447	2213	1251

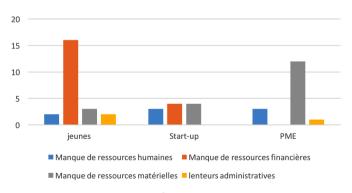
Source: CAMERCAP-PARC, IFDD study 2023

The 34 supervisory institutions that were surveyed claim to have provided support to nearly 30.000 targets in recent years. Furthermore, this table shows that less than 10% of the support granted to SMEs is related to technological and environmental innovations. This result underlines the fact that 60% of Cameroonian Startups operate in the tertiary sector and are more inclined to innovation. The monitoring-evaluation mechanism of the support provided to our sample revealed that support measures received

for technological and environmental innovation are funded at 100% by the targets. This result clearly shows the modernity level that our SMEs wish to attain and the technological innovation can enable them increase the productivity margin of the capital while reducing labour cost.

Institutions that provide support to youths, Start-ups and SMEs need to redesign the type of support measures and gear them towards innovation.

Figure 2: Constraints that impede support



Source: CAMERCAP-PARC, IFDD study 2023

There are many constraints to the support provided to the targets by institutions. The lack of human and material resources is a constraint that appears during the support of the 3 targets. This implies that these institutions do not have enough staff and equipment to enhance the support.

Across categories, young people are more affected by the lack of funding; meanwhile the SMEs already in business are more concerned by the lack of material resources or equipment. The case of start-ups is more "even" in terms of constraints in their various areas.

In an attempt to explain this constraint, let's recall that for a long time, the support provided to youths, start-ups and SMEs took place through institutional programmes and institutional agencies such as the Programme for the promotion of youth agriculture entrepreneurship (PEA-Jeunes), the Urban and ru-

ral vouth support programme (PA-JER-U), the Support programme for the creation and development of SMEs processing and conserving locally-made products (PACD/PME) and many others. This momentum has been enhanced by MINPMEESA through the implementation of enterprise incubators and the construction of the Edea national pilot nursery (PNPE). All these bodies seek to provide technical and financial support to starters entrepreneurs. Incidentally, private enterprise incubators are governed by decree No.2020/0301/ PM of 22 January 2021 laying down the conditions for accomplishing the missions of SMEs incubation structures. Despite their great number, these private structures might lack the financial means to achieve their missions

CHAPTER I:

OVERVIEW OF ENTREPRENEURSHIP IN CAMEROON

In the capitalist system, entrepreneurship is perceived as the driver of economic development.

The enterprise is therefore the main tool for the creation of wealth for countries. As a member of OHADA. Cameroon shares a common business and company law with other states in this space that is regulated by uniform Acts. Three uniform Acts mainly establish the rights regime of companies that operate in the OHADA space. In the context of entrepreneurship, OHADA allows the possibility of choosing between many types of companies: partnerships (P'ship), a limited liability company

(LLC), a public limited company (PLC). or a limited partnership (LP). Once created, the company can liaise with other companies to establish a joint venture (JV) or an economic interest aroup (EIG).

I.1. Mapping of Start-ups and SMEs in our sample

The enterprise mapping gives an overall and instant snapshot of elements represented. One can visualize the links of an element with the others. This picture enables an easy identification of obstacles or the critical factors of the organization.

a) The legal form

Table 5: Breakdown of start-ups and SMEs according to legal form

Longiform	Frequency (%)	
Legal form	Startup	SME
Common Initiative Group/Cooperative	14.7	13.3
LLC	36.8	53.3
PLC	3.7	5.8
Éstablishments	//	22.5
Others (Undeclared)	49.9	5
Total	100.0	100

Source: CAMERCAP-PARC, IFDD study 2023

The table highlights the various legal forms adopted by start-ups and SMEs. It shows that most of the start-ups (36%) and SMEs (53.3%) are Limited Liability Companies (LLC). It should be noted that it is the most common form of business companies. It has many advantages in that statutes are established by a private or notarized deed. The minimum amount of the social capital is CFA100,000 francs divided in equal social shares with a nominal value not lower than CFA5,000 francs¹. The conditions for ceding shares are laid down by the statutes. The LLC is comprised of one or several partners who are liable for the social debts only according to their capital input.

Furthermore, only 3.7% and 5.8% of SMEs are Public Limited Companies (PLC). It should further be noted that about half of the start-ups of our sample have not given their legal form.

b) Sector of activity

Table 6: Breakdown of start-ups and SMEs according to sector of activity

Sector of activity	Frequency (%)	
	Start-up	SME
ICT	34.6	17.5
Agro-food	22.1	30.8
Service delivery	13.2	13.3
Environment	7.4	4.2
Education	5.9	//
Energy	4.4	7.5
Manufacturing	3.7	5.8
Agriculture and livestock	3.7	9.2
ВТР	0.7	5.8
Others	4.4	5.8
Total	100	100

Source: CAMERCAP-PARC, étude IFDD 2023

LMost of the start-ups (34.6%) operate in the ICT sector. This is due to the fact that ICTs have been identified as the main driver of employment and economic growth in Cameroon. Investors use this sector as strategic entry points to capture markets in Central and Western Africa.

However, a large part of the SMEs (30.8%) are in the agro-food industry. Broadly speaking, the agro-food

industry and ICT sectors are the most representative in the SMEs and Start-ups mapping. The agro-food industry in Cameroon has significant advantages. Its urban market and its agriculture sector are expanding rapidly thanks to the current trend of promoting the made in Cameroon. A number of initiatives have been implemented to support the sector. In 2015, the AFD and the European coo-

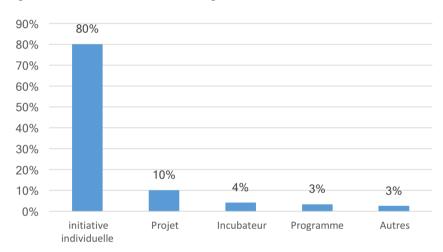
 $_1$ - Law $_1$ °2016/014 of 14 December 2016 setting the minimum share capital and the procedures for using the services of a notary in a context of the creation of an LLC.

peration and development institute (IECD) launched a project dubbed TRANSFORM. This project aims to alleviate precariousness among farmers by offering them a more stable and profitable opportunities.

The environment sector comes fourth among start-ups, meanwhile very few SMEs (4.2%) are interested in it. Start-ups are not also attracted by the BTP sector, certainly because of the equipment requirements and the need to mobilize initial investment.

c) Genesis of the creation

Figure 3: Breakdown of SMEs according to creation mode



Source: CAMERCAP-PARC, IFDD study 2023

The outcome of this study shows the weak impact of incubators existing in the country. Almost all the SMEs (80%) stem from private initiative against only 4% that stem from incubators. This result is mainly due to the fact that the practice of incubators is not widely common in our society. In addition, the Cameroonian environment is marked by a lack of trust between the population and the established institutions. Several young entrepreneurs prefer working singlehandedly because it is the only way to avoid diversion of projects.

d) Tax identity

Table 7: Breakdown of start-ups and SMEs according to existence of tax registration number (%)

	Startup	SME
YES	58	53
No	42	47
Total	100	100

Source: CAMERCAP-PARC, IFDD study 2023

Tax registration is done by obtaining a Unique Identification Number (UIN) at the taxation. The UIN, which is a reform introduced by the 2020 finance law, is a number attributed to any legal or moral person who owns a business or non-business activity in Cameroon. It enables the taxpayer to easily perform tax operations such as paying taxes and obtaining online debt clearance certificate. This number is required for all economic

formalities and transactions with all administrations, public companies and any other public or private organ. As illustrated by the above table, most start-ups (58%) and SMEs (53%) have a tax registration number.

This reflects the readiness to comply with legal requirements and the intention to regularize their activities with regards to tax obligations.

e) Tax registration number

Table 8: Breakdown of observation units according to reasons for not having a tax registration number

Raisons	Start	-up SME
Administrative complexity	51.	0 47.7
Financial reasons	32.	.7 38.0
Association status	10.	.2 //
Ignorance of the procedure	4.	1 14.3
Informal enterprise	2.0	0 //
Total	100	0.0 100.0

Source: CAMERCAP-PARC, IFDD study 2023

However 51% of start-ups and 47.7% of SMEs that claimed not having a tax registration number, state that they are facing administration complexities. Thus, several Start-ups (44.9%) and SMEs (42.9%) have pending procedures. This reason is followed by financial reasons (32.7%).

The reform of the 2020 finance law on the UIN has significantly simplified the procedure. Thus, all companies must have a tax registration number. Heads of companies who declared that the obstacle results from administrative complexities seem not to be aware of the new procedure brought in by this reform.

Table 9: Breakdown of start-ups and SMEs according to trade register ownership

_	-	
	Start-up	SME
YES	51	53
No	49	47
Total	100	100

Source: CAMERCAP-PARC, IFDD study 2023

As concern the trade register, 51% of start-ups and 53% of SMEs admitted having one. This could reflect the readiness to comply with legal requirements and the willingness to regularize their activities.

Registration in the trade register is a procedure through which a legal or

moral person is enrolled in the Trade and Personal Property Credit Register to be identified as a trader or have a legal personality. This registration is private and obligatory.

Table 10: Breakdown of observation units according to reasons for not having a trade register number (%)

Reasons	Start-up	SME
Administrative complexity	49.1	44.4
Financial reasons	30.9	38.9
Association	7.3	//
Informal enterprise	7.3	//
Ignorance of the procedure	5.5	16.7
Total	100,0	100,0

Source: CAMERCAP-PARC, IFDD study 2023

A large part of start-ups (49.1%) and SMEs (44.4%) that declared not having a trade register number, once again deplore administration complexities that maintain pending procedures.

Textbox 1: A picture of the administrative complexities in the creation process of an enterprise in Cameroon (Ref. November 2023)

According to official discourse and based on government documents (cf. www.minfi.gov.cm), "since the advent of the Centres de formalité de création des entreprises (CFCE), it is now possible to set up an enterprise just within 72 hours." The CFCE now has in the same venue the services of the registry, the National Social Insurance Fund and the Small and Medium-sized Enterprises Promotion Agency. Since 2010, Cameroon has eleven (11) CFCE in the chieftowns of Cameroon's 10 regions plus one (01). Edéa. The main purpose is to ease the creation and formalizing of enterprises, with the main ones being:

- → Chosing the legal form of the enterprise according to the OHADA nomenclature, because the first decision that entrepreneurs must make is to operate as Limited Liability Company (LLC) or to be an enterprise (ETS), etc;
- → Compiling and submitting a file. The compilation of the file changes depending on its typology. However, the main documents are the statute and bylaws of the enterprise, the certificate of nationality, and the location plan...
- Paying the various costs;
- → Obtaining the certificate of incorporation and the taxpayer's number

However, in reality, once the application has been submitted, it takes at least

72 hours to obtain a certificate of incorporation, which in reality is not the case. The average time it takes entrepreneurs to see their business come into being is 30 days. There are many reasons for this, including the time it takes to process applications, power outages, server breakdowns and many others.

As for setting up a business online, this should be done via the e-regulation platform. In reality, however, it stopped a few years ago (to precise) without proving a point. In fact, although it was presented as an «online business creation process», it was simply a pre-registration with a view to completing the process at the local CFCE later on and obtaining the certificate. Moreover, this pre-registration only concerned 3 cities (Yaoundé, Douala and Garoua).

f) Social security

Table 11: Breakdown of observation units according to CNPS registration ownership

	Startup	PME
YES	28	53
NO	72	47
Total	100	100

Source: CAMERCAP-PARC, IFDD study 2023

The CNPS registration is the administrative operation that certifies the enrolment of the employer at the CNPS. It takes place in a social insurance centre and culminates with the attribution of a security number. This registration grants a social security to employees and allows them and their legal beneficiaries (partner(s), descendants and legitimate children) to receive social benefits provided by the social insurance regime managed by the CNPS. Among all the companies registered at the CNPS, only 28% start-ups and 53% SMEs have a registration. Several companies do not meet the CNPS requirements.

Table 12: Breakdown of observations units according to reasons for not having a CNPS registration

Raisons	Startup	PME
Association	49.4	//
Administrative complexity	36.1	62.5
Ignorance of the procedure	6.0	2.5
Informal enterprise	4.8	10.0
Financial reasons	3.6	25.0
Total	100.0	100.0

Source: CAMERCAP-PARC, IFDD study 2023

As a matter of fact, most start-ups that declared not having a CNPS registration number have the statute of association while 36.1% of these start-ups and 62.5% of SMEs without CNPS registration deplore administrative complexities. Indeed, the law does not require associations to have a CNPS registration number. However, the other legal form of companies must get their employees registered.

CHAPTER II:

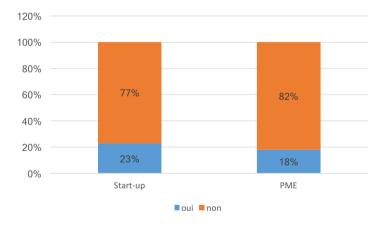
SUPPORT TO TECHNOLOGICAL AND ENVIRONMENTAL INNOVATIONS

Enterprises in Cameroon do not have adequate access to funding, which restricts their subsequent emergence and development. Self-funding and informal savings and credit cooperatives are their main funding sources. Access to formal funding is still weak. The financial system is underdeveloped and proposes few funding tools. However, a lot of initiatives have been implemented to provide different kinds of support to young entrepreneurs.

II.1. Institutional support

To address the lack of support experienced by young entrepreneurs, the State and development partners are struggling to assist through a number of initiatives. This assistance is done in many forms: technical and financial support, material input, tax waiver etc.

Figure 4: Breakdown of units that have received support for the production of technological and environmental innovation



Source: CAMERCAP-PARC, IFDD study 2023

Support in its various forms in the production of technological and environmental innovations appears to be very insignificant among start-ups and SMEs. In fact, only 23% of start-ups and 18% of SMEs claim to have received support. This support is of various types and origins. In terms of nature, the most common form of support for start-ups is tax exemption, followed by financial support. In addition, the majority of start-ups received support from international organisations/development partners and the government.

Table 13:: Type of support received by start-ups and SMEs (%)

Type of support	Start-up	SME
Material support	28.57	22.04
Technical supervision	28.57	54.60
Financial support	42.86	23.36
Total	100.00	100.00

Source: CAMERCAP-PARC, étude IFDD 2023

While we must understand and affirm the need to provide support for the production of ITE by SMEs/Start-ups, there is often the tendency to forget/ignore support for their use, i.e. a better adoption of these ITE in the production process as tools or indirect consumption. We have examined this aspect below.

The support received by SMEs for the use of technological and environmental innovations have not had a significant impact on them. Indeed, only a small proportion of the SMEs (22%) believe that the support received have enabled them to use technological and environmental innovation in their enterprises. This support is diverse. As concern the type, the most frequent with our SMEs is technical/training support (thus underlining the fact that they greatly need expertise, advice or skilled labour), material support, etc.

The main support received by Startups and SMEs is financial support that includes tax exonerations and financial subsidies.

Regarding exonerations, enterprises are discharged from business license for 1 year during the creation process at the Centre des Formalités de Creation d'Entreprises (CFCE). As for subsidies, they are of various types.

According to a schedule or in response to a need, the various ministries grant funding to these enterprises. In terms of examples, we may refer to the Government's reaction in the management of the Covid-19 pandemic that shook Cameroonian companies. In this regard, the Ministry of Small and Medium-sized Enterprises, Social Economy and Handicraft allocated the sum of CFA1.5 billion francs in 2020 to provide assistance to SMEs with a high potential.

Furthermore, technical assistance include capacity building through training sessions, seminars and workshops

Results show that 42.86% of startups received financial support against 23.36% of SMEs. Meanwhile, more SMEs (54.60%) received technical assistance than Start-ups (28.57%). This trend can be justified by the fact that start-ups need funding at the inception phase, however small. SMEs, on the other hand, certainly need funding, but are more inclined to receiving technical support to enable them better manage their assets and give them access to more substantial funding such as bank loans because. as we all know, very few of our SMEs are creditworthy.

Table 14: Classement des sources d'accompagnement pour les start-up et pour les PME

Type d'accompagnement	Start-up	PME
Fond propre	54,44	18,34
Crédit	15,56	5,92
État et ONG	15,56	57,99
Financement participatif	12,78	17,75
Dons	1,67	0,00
Total	100,00	100,00

Source: CAMERCAP-PARC, étude IFDD 2023

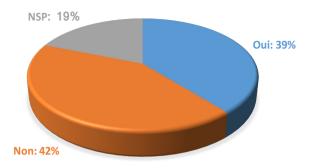
The participation of various stakeholders in funding technological environmental innovations appears to be fairly negligible for start-ups. However, those who are more involved in the funding of technological environmental and innovation of start-ups international organizations followed by enterprises in the sector and the State

The above table shows the preference of support type by our start-ups and our SMEs for innovation. More than half of the Start-ups interviewed prefer funding their innovation projects themselves. This suggests the level of freedom and the leeway they want to have. However, it poses a huge problem because innovation is costly and private means are often not enough to achieve them. This is the reason behind the increasing mortality rate of private projects that we have been witnessing.

In addition, less than 2% of Startups are requesting funding through donations. These statistics are not far from those of SMEs. Apparently, none of the SMEs interviewed request support through donations whereas more than half of them request support by the State, TFPs or NGOs. The latter are more reliable and do not ask for a collateral. However, this support is not enough to satisfy all the SMEs involved in technological and environmental innovation.

These statements are illustrated by the percentage of ministries interviewed on the existence of a funding subhead in their department for the production and dissemination of technological and environmental innovations.

Figure 5: Existence of a funding subhead within administrations



NSP: do not know

Source: CAMERCAP-PARC, étude IFDD 2023

Few administrations (39%) claim that there are subheads to fund technological and environmental innovations.

Table 15: Effective sources of support to finance innovations

Type of funding	Start-up	SME
Private investments	34.71	14.14
Loan	15.70	19.37
Technical and Financial Partners	23.97	5.76
State	9.92	10.47
Own funds	15.70	50.26
Total	100.00	100.00

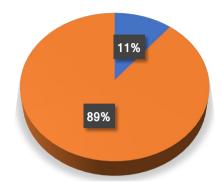
Source: CAMERCAP-PARC, IFDD study 2023

Beyond their ambitions, a fact emerges concerning our survey target. The main funding sources of innovations for start-ups are private investments (34.71%). They include joint funding as the tendency is to coalesce in order to generate an idea. Cameroonian start-ups are also demonstrating innovation in the quest for funding. Some resort to Crow funding or to Business Angels which are fundraising methods via dedicated platforms. TFPs on their part contribute to innovation in 23.97% of start-ups. International

organizations and NGOs have realized that innovation can help to improve everyday life and to adapt to a rapidly changing environment.

In addition, 15.70% resort to conventional loans via banks and 15.70% use their own funds. On the contrary, half of the promoters resort to their own funds to finance innovation in SMEs, 19.37% resort to loans via banks and tontines and 14.14 are partners.

Figure 6: Impact of the support received on the production of technological and environmental innovations desired by SMEs

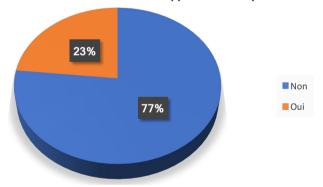


Source: CAMERCAP-PARC, IFDD study 2023

Half of the SMEs (89%) claim that the support received has had a significant impact on the production of the desired technological and environmental innovations. These enterprises have successfully made improvements in these areas thanks to the support or assistance received. However, only

11% of SMEs claim that the support received have enabled their enterprise to produce the desired technological and environmental innovations. This suggests that according to the latter, the support did not achieve the expected results in terms of technological and environmental development.

Figure 7: Breakdown of SMEs that have received support for the exploitation of innovations



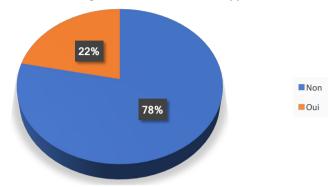
Source: CAMERCAP-PARC, IFDD study 2023

There is a great disparity in the support of SMEs for the exploitation of innovations. While a fairly weak minority of SMEs (23%) received a specific support to exploit new technologies and innovations in their

activities, the great majority of SMEs (77%) has not received any support. This suggest that these SMEs can face challenges in adopting and exploiting new technologies to improve their competitiveness and drive their growth

because the absence of support can slow down their capacity to innovate, to adapt to technological changes and to tap from the opportunities brought by innovations.

Figure 8: Breakdown of SMEs according to the relevance of the support received



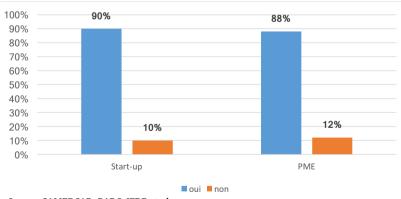
Source: CAMERCAP-PARC, IFDD study 2023

II.2. Funding

The challenges encountered by young entrepreneurs to fund their activities stem from their inability to establish a relationship with banks. The latter are more reluctant to grant

loans to the private sector. There are many reasons behind this situation: non-payment is the main financial difficulties met by young enterprises, with the State often topping the list of debtors.

 $\label{eq:Figure 9:Breakdown of units using their own funds to finance their technological innovations \\ \textbf{production}$

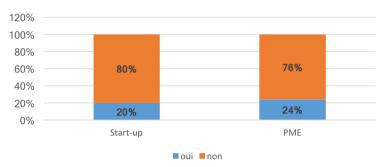


Source: CAMERCAP-PARC, IFDD study 2023

Almost all the start-ups (90%) and SMEs (88%) funded the production of their technological and environmental innovation with their own funds. This

could be justified by a limited access to bank loan or even the fact that investors see it as high risk. Young enterprises encounter challenges not only to enter the bond market and the international capital market but also their slow increase of turnover as per the characteristics of tax regimes. There is also their inadequate participation in financial circuits and the concern about the presence of personal guarantees.

Figure 10: Breakdown of units that have funded the production of their technological and environmental innovations through joint funding

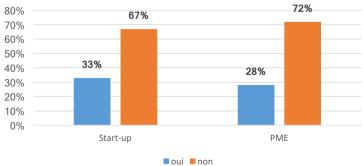


Source: CAMERCAP-PARC, IFDD study 2023

Overall, only 20% of start-ups and 24% of SMEs used joint funding to finance the production of their technological and environmental innovation. This statistic is still weak; it suggests that the success of joint funding often depends on the capacity of a start-up or an SME to mobilize its current network and call the public's attention. At the inception phase, enterprises may have a limited network and a reduced visibility. This can further

complicate the collection of funds via joint funding platforms. The other reason might be the complexity of communication. Indeed, technological and environmental innovations can be in the form of complex projects to explain to potential donors on joint funding platforms. This can reduce the interest and the understanding of potential donors and limit the ability of start-ups to collect funds via joint funding.

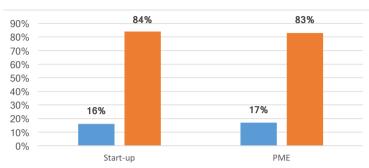
Figure 11: Breakdown of units that have funded the production of their technological and environmental innovation through a loan



Source: CAMERCAP-PARC, étude IFDD 2023

The above figure shows that 33% of start-ups and 28% of SMEs that financed the production of their technological and environmental innovation used loans.

Figure 12: Breakdown of start-ups that have funded the production of their technological and environmental innovation through financial subsidies



Source: CAMERCAP-PARC, IFDD study 2023

Generally, it appears that subsidies for start-ups and SMEs are almost equal. Only 16% of start-ups and 17% of SMEs financed their innovation and their development through subsidies. Indeed, funding bodies that grant technological subsidies often have rigorous selection processes for the appraisal of proposals. They may consider criteria such as business potential, technical innovation, environmental impact and economic sustainability. This can justify the low percentage.

On the other hand, financial subsidies specially dedicated to technological enterprises can be limited in number and scope. States and funding bodies often grant subsidies as part of special programmes focused on sectors or fields of specific interest. Start-ups must therefore meet stringent criteria to be selected, and the process is highly competitive. It therefore shows that 6 out of 10 start-ups did not chose this type of funding.

Table 16: Breakdown of start-ups according to their appraisal of funding for the production of technological and environmental innovations

	Start-ups	SME		
Very adequate	10,3	1,8		
Adequate	2,2	5,3		
Inadequate	24,3	31		
Very inadequate	46,3	46,9		
NSP	16,9	15		

Source: CAMERCAP-PARC, IFDD study 2023

The above table gives a better perception of what the start-ups and SMEs think about the funds they have received to produce technological and environmental innovations. It clearly shows that more than 4 start-ups and 4 SMEs out of 10 claim that this funding is very inadequate. The Cameroonian government could encourage partnerships by offering tax incentives, acceleration programmes or special support initiatives to start-ups. Development partners on their

part could for instance carry out an in-depth assessment of the financial needs of start-ups. This will imply analysing costs related to technological developments, trials, research and development, intellectual property, commercialization or manufacturing. Furthermore, start-ups on their part could look for additional funding

sources to add to existing resources. Start-ups should equally ensure that they have adequate skills in financial management. This includes an efficient management of budget, search for appropriate funding, negotiation with investors, follow-up of expenditures and long-term financial programming.

Table 17: Breakdown of start-ups according to their possible sources to finance their needs

Funding sources	Number	Frequency
Sale proceeds	7	5,1
Joint funding	14	10,3
Own funds	18	13,2
Others	41	30,1
Donors	56	41,2
Total	136	100,0

Source: CCAMERCAP-PARC, IFDD study 2023

The data in this table clearly reveals that start-ups have many funding sources. The most solicited sources by start-ups are funding from donors which represent 41.2%. The dependence of start-ups on funding from donors might be due to the fact that donors, particularly development bodies, often have a particular interest for technological innovation and the social or environmental impact. They

can be more inclined to funding startups that propose innovative solutions to social or environmental problems or those that have the potential of driving growth and creating jobs. Donors can offer more than mere funding. They can equally provide support, business coaching, training, networking opportunities, and foster contacts with other key players of the business world.

CHAPTER III:

EMPLOYABILITY WITHIN SMEs & STARTUPS

Today, some believe that technological innovations are responsible for the decline of employment while others see them as a lever for the creation of quality jobs. In the early 2000, the wave of transformations induced by digital technologies had an impact on a great number of professions. Lowskilled jobs are no longer the only ones threatened.

Youth employment is a jigsaw puzzle, irrespective of the economic area and the country's development level. Like many other countries, Cameroon is experiencing an increase in the demand for sustainable and decent jobs. To address this issue, the Government relies on entrepreneurship as a cyclical and sustainable solution.

This chapter will carry out a sociodemographic and qualitative analysis of the job offer as emerged from our study.

III.1. Socio-demographic situation of jobs within Start-ups and SMEs

It is widely admitted that entrepreneurship is an opportunity for job creation and youth integration. This option is preferred by young people in Cameroon to circumvent the job market-related constraints. However, the results presented in this section show that much remains to be done.

Broadly speaking, the recruitment by the economic units of our sample barely follows the formal circuit. Generally, one reverts to a friend, a brother or a relative. With a turnover ranging between 1 million to less than 30 million, these units offer barely competitive salaries, yet they are the ones that make things happen in the job market. Over 98% of the national economy is made up of SMEs, SMI and Start-ups. An ongoing and systematic employability would make it possible to reduce unemployment in the country.

Table 18: Breakdown of jobs according to gender

	Start-up	SME
Women	45	43
Men	55	57
Total	100	100

Source: CAMERCAP-PARC, IFDD study 2023

This table shows that the employment level of women and men is almost the same for start-ups and SMEs.

Table 19 : **Breakdown of jobs according to age bracket**

	Start-up	SME
]-;15[5	2
[15; 35 [83	65
[35; + [12	33
Total	100	100

Source: CAMERCAP-PARC, IFDD study 2023

With regards to the age of employees, results reveal that Start-ups and SMEs recruit people aged between 15 and 35 years. People aged less than 15² years are recruited in the Far-North where youths are less educated and often confined to farming and breeding.

 $^{{\}bf 2}$ – The legal age to work in Cameroon is 15 years and above

Table 20 : Share of jobs according to job profile

	Start-up	PME
Paid worker	46.51	64.39
Volunteers	43.41	27.27
Family help	10.08	8.33
Total	100	100

Source: CAMERCAP-PARC, IFDD study 2023

This table speaks volumes about the stability level of SMEs as compared to that of Start-ups. SMEs resort less to family help and volunteers than Start-ups. The latter are often constrained by financial means and lack of organization. As a result, they recruit low-cost and unskilled labour, hence the need to resort to almost free volunteers and family help (53.49%), in order to reduce charges and be able to make profit.

III.2. Quality of job offer

Today, job opportunities have further become diversified and multi-faceted. The tendency for New Information and Communication Technologies to be the sole recruiters of skills in technological innovation has been reversed. Enterprises, in all sectors, are now looking for professionals with expertise in software development, cybersecurity, artificial intelligence, digital development, digital marketing etc.

What skills do jobseekers have to meet the demands of technological innovation?

Table 21: Number of Vocational Training Centres (CFP) according to teaching order from 2020 to 20211

	Public			Pri	vate	Total		
Teaching	CFPM	CFPR	CFPE	INFFDP	SAR/SM	Denominational	La Lay ïc	
Number	1	5	3	1	288	174	1289	1761

Source : annuaire statistique MINEFOP 2021

The above table presents the offer of the Vocational Training Centre (CFP) in 2021. It shows that across the national territory, there are 1761 CFP including 298 public centres and 1463 private centres. Besides, over 96% of the public CFPs are the Rural Artisanal Section and Household Section (SAM) that provide training in crafts trades such as tailoring, hairdressing, mechanics and housekeeping jobs in which technological skills is almost non-existent.

Table 22: Breakdown of jobs according to diplomas

	With vocational training		Without voca	tional training
	Start-up	PME	PME Start-up	
Bacc +5	77	220	221	94
Bacc +3	88	242	143	57
Васс	62	129	22	65
Probatoire	15	34	35	8
BEPC	80	56	11	22
CEP	35	28	2	23
No diploma	//	//	10	116
Total	357	709	444	385

Source: CAMERCAP-PARC, IFDD study 2023

Concerning our sample, it emerges that 56% of employees have received vocational training while 44% have not. Furthermore, most of the jobs are provided by SMEs (709) with the requirement of vocational training. It shows that SMEs give a high consideration to vocational training as compared to Start-ups. It is also worth noting that SMEs have more jobs without vocational training. A basic analysis has revealed that these jobs have been provided by agriculture and agro-food cooperatives, and such jobs are most often temporary (manpower is only needed during the planting and harvesting periods).

Although Start-ups do not insist on the requirement of vocational training, they however emphasize on certificates. Over 80% of Start-ups employees who have not received vocational training have BACC+3 and BACC+5. One may think that Start-ups, which are in the heart of technological innovation, employ unskilled persons to develop their technological projects. But the reason is different. This result reflects the current trend observed

among young graduates, which is "self-training". It is now common to see young people undergoing online training through YouTube video, tutorials, and non-certified online training in order to fit into the job market. Young people are becoming self-educated and it is now common to see a modern language graduate becoming a digital marketer or a graduate in management developing skills in solar panel installation.

Technological innovation has quite often been tagged as being responsible for the decline of employments whereas with technological innovation, the job market is in constant gestation. Although some young people have managed to adapt themselves through self-training, it would be a good idea to ensure that the training offer (through CFP) takes into account the changes and matches the increasing technological employment offer.

III.3. Technological and environmental innovation as the driver of job creation

Although the private sector has been known as a driver of growth, from the PRSP then the GESP and now reaffirmed in the NDS30, several difficulties and constraints are lingering, especially the negative business climate, including in areas such as digital economy and green employments known as catalyst sectors. This is even more visible in the sub-sector of SMEs and Start-ups operating in ITE.

As a matter of fact, some challenges and constraints are still persisting, including:

- Access to funding, which is still inadequate and costly to SMEs, especially those in the green or social sectors.
- Capacity building through training, advising, support and technology transfer in order to improve competitiveness, quality, productivity as well as the social and environmental responsibility of companies.
- Institutional support, which involves simplifying administrative, tax and customs procedures; fighting corruption, improving the business climate and promoting public-private dialogue, are some of the most important needs of the Cameroonian private sector.
- The lack of awareness, reflected by an inadequate knowledge of stakes, opportunities and sustainable development benefits by managers, employees, clients, suppliers or investors or local authorities

- The lack of regulation, reflected by the absence or the inadequacy of norms, laws, rules, incentives or sanctions that encourage or compel companies to adopt responsible and sustainable practices.
- The lack of measure, reflected by the inability to assess and report the social and environmental impact of private sector activities, and to report on the overall performance of companies.

An analysis of the link between technological and environmental innovation and job creation within SMEs and Start-ups makes it possible to identify the most promising sectors and the company models that create more jobs, analyse the profiles of positions created, their breakdown into skilled and unskilled jobs and work conditions. It equally makes it possible to assess the role of institutions (incubators, accelerators, universities) in providing support to these innovative companies, thereby meeting the country's employment challenges..

III.3.1. Structure of jobs

The analysis of employment structure by institutional sector shows a predominance of the non-agriculture informal sector (52%) with one person out of two employed. This sector is followed by the agriculture informal sector (34.7%). The formal private and public only employs 5.1% and 8.2% of persons respectively (EESI, 2021, P39).

So, what is the quality and number of jobs created by SMEs and Start-ups in the technological and environmental innovation sector, and how can public

policies regarding green jobs sustain this dynamic to meet sustainable development challenges and create decent jobs in Cameroon?

The funding of innovative projects, especially those relating to the environment, is a major challenge. Banks and investors are often reluctant to take risks on long-term projects that have a high initial impact. It is worth noting the lack of infrastructure to sustain/support start-ups, particularly the availability of energy, the limited access to broadband Internet in some regions and the deteriorated road infrastructure that hamper innovative technological development.

As concerns the absorption capacity. the Cameroonian industrial fabric is not readily prepared to absorb technological innovations. There is a growing need for training and transfer of skills. Although awareness and environment protection is intensifying. it is still inadequate to generate a sustained demand for products and eco-friendly services.

Broadly speaking, innovation essentially risky. Many projects do not take shape or abort before their due date. Equally, technologies are fastchanging, which can make investments outdated in a very short time. The fact that the culture and the instinct of intellectual property protection is still weak in Cameroon can hinder innovation.

III.3.2. Profile of the jobs identified (created or made available)

Table 23: Breakdown of SMEs and start-ups according to sector of activities (%)

Sector of activity	SME	Startup
Sector of activity	5.73	3.07
Manufacturing	//	5.38
Education	9.01	3.84
Agriculture and livestock	30.32	22.30
Agro-food	5.73	0.76
ВТР	7.37	4.61
Energy	4.09	6.92
Environment	14.75	13.07
Service delivery	17.21	33.84
ICT	5.73	6.15
Others	100	100

It is widely admitted that entrepreneurship is an opportunity for job creation and youth integration. This option is highly appreciated by youths in Cameroon to evade the constraints of job market. However, the results presented in this section show that much remains to be done.

Table 24: Breakdown of units according to the gender of employees

Classes of number of employees	Number of units employing women		Number of units employing men		Total
	Start-up	SME	Start-up	SME	
[0;3[50	48	66	31	195
[3;6[42	34	38	36	150
[6 ; 11[20	21	10	22	73
[11 ; 21[13	1	6	17	37
[21 ; 51[1	2	2	3	8

Source: CAMERCAP-PARC, IFDD study 2023

The majority of start-ups employ 116 or 50 women and 66 men and SMEs employ 79 or 48 women and 31 men. As the number of employees is increasing, the number of companies is decreasing. This suggests that start-ups and SMEs are very small companies.

Table 25: Breakdown of start-ups according to the profile of employees

Classes of number of paid workers	Number of start-ups employing paid wor- kers	Number of start- ups employing volunteers	Number of start- ups employing family helps
[1;3[19	28	12
[3;6[22	25	6
[6 ; 11[13	10	1
[11 ; 21[11	5	
[21 ; 51[5		

Source: CAMERCAP-PARC, IFDD study 2023

In view of the analysis on employability, only 5 start-ups employ over 20 paid workers. The majority of start-ups that employ paid workers (22) claim to have a number of employees ranging between 3 and 6. Furthermore, 28 start-ups claim to have a number of volunteers ranging between 1 and 3. Conversely, the number of companies with family assistance is significantly weak across all categories.

III.3.3. Role of support institutions

The support of institutions aims to make an individual (or a team) the bearer of an autonomous idea and foster the sustainability of the body by making it financially strong. In this regard, it is admitted that a young company that benefits from support from institutions is more sustainable that others. However, much remains to be done.

Table 26: Breakdown of administrations that have provided support according to sector of activity

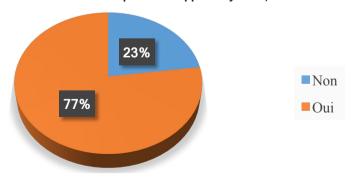
Secteurs d'activité	Nombre d'administration	Fréquence
Secteur de l'éducation	5	14,3
Secteur de la gouvernance	20	57,1
Secteur des industries et services	3	8,6
Secteur rural	4	11,4
Secteur social	3	8,6
Total	35	100,0

Source: CAMERCAP-PARC, étude IFDD 2023

The above table identifies the sectors of activities in which administrations are classified. These sectors range from education, governance, industries, services, the rural sector and the social sector. The governance sector is better off in terms of administrations (20 administrations)

This breakdown of administrations by sector of activity makes it possible to visualize the breakdown of government responsibility in various areas. The governance sector is the most represented meanwhile the industries, services, rural and social sectors have a less important presence.

Figure 13: Administrations that have provided support to youths, SMEs and start-ups



The analysis of the above figure shows that most administrations (77.1%) have provided support to young people, SMEs and start-ups. This reflects their commitment towards the economic and entrepreneurial development.

Meanwhile, it is worth noting that a few administrations (23%) have not provided such a support, which could require a reflection on the need to improve or expand these initiatives.

Table 27 : Breakdown of administrations according to number of units supported over the last 5 years

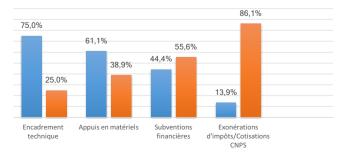
Number of units supported	Number of administrations that have supported youths	Number of administrations that have supported start-up	Number of administrations that have supported SMEs
[0;10[19	24	24
[10 ; 100[8	9	7
[100 ; 500[5	1	1
1000 et +	3	1	3
Total	35	35	35

Source: CAMERCAP-PARC, IFDD study 2023

The above table reveals the breakdown of administrations based on the intensity of their support to young people, start-ups and SMEs. For instance, 19 administrations have supported between 0 to 9 young people, 24 administrations have supported between 0 to 9 start-ups, and 24 administrations have supported between 0 to 9 SMEs.

From these figures, it may be noted that a majority of the administrations seem to have supported a significantly small number of units in each category. However, there are a few exceptions, particularly in the **1000 and** + category where some administrations have supported a significantly greater number of units.

Figure 14: Type of support granted by administrations to start-ups and SMEs



■Oui ■Non

This figure gives an overview of the most common forms of support provided by administrations to sustain young people, start-ups and SMEs. It highlights the importance of technical supervision as the preferred means of support, but equally shows the diversity of approaches adopted to meet the specific needs of these companies.

The most promising sectors in terms of job creation identified in the NDS30 and adjacent sector plans concern the following areas:

a) Renewable energies:

- <u>Solar</u>: Solar panels installation, energy production, off-grid solar solutions development.
- Hydropower: Constructing small hydropower plants, maintenance and management.
- <u>Biomass</u>: Producing biogas from agricultural waste, using biomass for cooking.
- Smart agriculture: Using drones, sensors and software to enhance agricultural productions.
- b) Agro-ecology: Developing sustainable agriculture practices, promoting agroforestry.
- Creating local value chains, enhancing agricultural products.
- Waste management: Recycling: Collecting, sorting and enhancing waste.
- Waste water treatment: Creating water treatment plans.

c) Eco-tourism:

- Developing Eco lodges: Building eco-friendly housings.
- Organizing sustainable tourist <u>routes</u>: Promoting national parks and natural reserves.
- d) Information and Communication Technologies (ICT):
- <u>Digital farming solutions:</u>
 Developing mobile applications for farmers.
- Online platforms for the marketing of local products: Creating online markets for producers.
- Mobile payment solutions: Facilitating financial transactions in the rural areas.

In this context, the factors that can foster job creation identified by the study, presented in order, are:

- Vocational training through the creation of training programmes that meet the need of the market
- 2. Incentive for entrepreneurship by providing support to young entrepreneurs and to start-ups
- Public-private partnerships through cooperation between the government, companies and civil society organizations
- 4. Access to funding in order to facilitate access to loans for environmental projects
- 5. Awareness on environmental challenges: Promoting a culture of protecting the environment.

To conclude, the study has led to the following proposals in order to boost employment in ITE by SMEs and Start-ups, without claiming to be exhaustive:

- Multiply funding mechanisms adapted to innovative projects such as start-up funds, incubators and accelerators
- Further invest for CTD, in basic infrastructures (electricity, Internet, roads) to facilitate the development of green technologies
- Introduce a clear and enticing regulatory framework to foster innovation and investment
- Align the education system to the needs of the market and develop vocational training programmes in the green technology area (our breakaway strategy in the education system).

- Carry out awareness campaigns to promote eco-friendly behaviours and the consumption of local products
- Encourage researchdevelopment of new technologies adapted to the Cameroonian context
- Develop and encourage partnerships between the public sector, the private sector and universities to facilitate the transfer of technology and the creation of innovative companies.

All in all, technological and environmental innovation is a challenge that must be met following a multidimensional approach to enhance its job creation potential.

CHAPTER IV:

THE INNOVATION MARKET IN CAMEROON

Today, innovation is perceived as a key element of the competitive advantage of companies. According to the OECD Oslo handbook (2005), innovation is understood as the creation of a product, a service, a new or significantly improved process, a new marketing method or a new organizational method in the company's practices. Its process is subdivided into many stages: research and development (R&D), pre-marketing, industrialization, commissioning, growth, maturity and decline stage.

IV.1. Innovations product available in the market

Despite the restricted means, young Cameroonians have started securing a place in the highly confidential world of innovation. Pragmatically, Cameroonian entrepreneurs have opted for the resolution of local problems. Many projects have emerged in agriculture, health, transportation or energy, and are a pledge for the future of the country's economy. Without trying to be exhaustive, we have identified a few innovation products that make the country move.

Mapping of few technological and environmental innovations

As part of the project for the deployment of technologies and environmental innovations for sustainable development and poverty reduction (PDTE), through which this study is carried out, many partner institutions have obtained significant

results in the ITE area. These results cover a variety of fields and areas ranging from processes, products themselves, marketing, etc. In this regard, an exhibition will take place in Yaoundé in December 2024.

IV.2 Popularization of technological and environmental innovation products

In Cameroon, a majority of the population does not yet give a prominent place to innovation out of ignorance. Thus, social progress is slowed down and the percentage of Cameroonians who are interested in research and its results is still small.

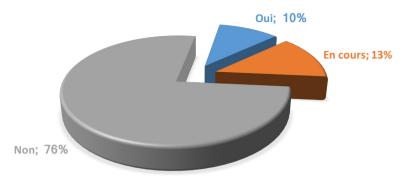
Table 28: Breakdown of start-ups according to their number of products on the market

Products	Number of start-ups
[0;3[79
[3;6[29
[6;9[6
[12;15[1
Total	115

Source: CAMERCAP-PARC, IFDD study 2023

In view of this table, the majority of start-ups surveyed claim that they have less than 3 products on the market. Besides, looking into the protection of their products on the market, it emerges that only 10% of start-ups are protected by author's rights.

Figure 15: Breakdown of start-ups according to the fact that their products are covered by author's right protection



Source: CAMERCAP-PARC, IFDD study 2023

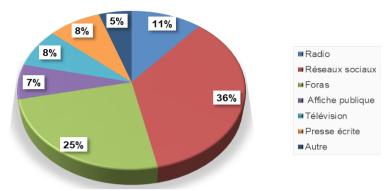
Among the start-ups that claimed not having author's rights protection, a majority said it is due to the high cost of the procedures. This reason is followed by ignorance of procedures.

The table below shows that start-ups use many types of intellectual protections to secure their products on the market. Licenses, certificates, industrial designs and patterns appear to be the most preferred, whereas other types of protections are equally used depending on the specific needs of each start-ups and the nature of their products.

Table 29: Breakdown of start-ups according to number of products and type of protection

Nombre de prod				prod	uits
Type of protection	1	2	3	4	Total
Patent(s)	12	3	2	0	17
Certificate(s)	5	3	1	0	9
Industrial design (s) or model(s)			2	1	2
International registration(s) under the Madrid Protocol		0	2	0	2
Geographic indication		0	2	0	3
Brand(s)	4	0	2	0	6
Utility model(s)	1	0	1	0	2
Business name	7	0	2	0	9
Plant(s) variety rights	0	0	1	0	1
Others	0	0	1	0	1

Figure 16: Main media used by start-ups to promote their products



Source: CAMERCAP-PARC, IFDD study 2023

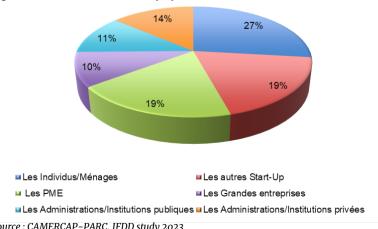
To advertise their products, start-ups resort to different communication strategies. Digital channels. particularly social media and forums, are preferred because of their scope, their audience and their potentially low cost. Although some conventional media such as radio, television, print media and public posters are used, they however seem to be less attractive to start-ups but are still relevant for some, perhaps due to the high cost and the inability to precisely

target their audience. The variety of media used reflects the efforts of start-ups to effectively reach their public and promote their products.

IV.3. Market shares of products

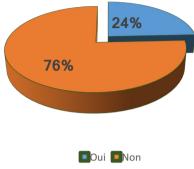
Routine and inertia that have gained ground in Cameroon are mainly caused by the lack of know-how. Innovation obviously requires a sense of creativity but also the existence of a market.

Figure 17: Main users of start-ups products



The analysis of the main users of start-ups' products on the market reveals that the majority of these users are SMEs followed by other start-ups and administrations/private institutions.

Figure 18: Breakdown of start-ups according to existence of mutual collaboration



Source: CAMERCAP-PARC, IFDD study 2023

It emerges from the above figure that only a minority (24%) of Start-ups have a mutual cooperation convention. This may suggest that there is a tough competition between start-ups due to the fact they are working in the same sectors. and thus are afraid of losing market shares if they collaborate. This result can equally be explained by the lack of collaboration platforms between start-ups.

Table 30: Breakdown of start-ups according to areas of mutual collaboration

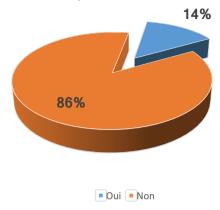
Field of collaboration	Frequency	Percentage
Funding	3	8,1
Research and Development	14	37,8
Service delivery	20	54,1
Total	37	100,0

Source: CAMERCAP-PARC, IFDD study 2023

The previous table highlights the fact that Start-ups that have a mutual collaboration convention apply it in different areas. It emerges that the preferred area (54.1%) of collaboration is service delivery; this could suggest the complementarity and interdependence between start-

ups. It should however be noted that the research and development field occupies a prominent place (37.8%) in the conventions signed between startups. Lastly, the funding field tails the list with 8.1% of conventions signed between Start-ups.

Figure 19: Breakdown of start-ups that have a collaboration convention with SMEs



Source: CAMERCAP-PARC, IFDD study 2023

The above figure shows that a small number of Start-Ups (14%) have a collaboration convention with SMEs. This might illustrate the fact that Start-ups are less inclined to trust their predecessors. These collaboration conventions concern different areas.

More than half of the conventions with SMEs are signed in the service delivery domain. The other areas also include research and development and supply of material/equipment/inputs, each representing slightly over 20% of the signed conventions.

Table 31: Breakdown of start-ups according to area of collaboration with SMEs

Field of collaboration	Number	Frequency
Supply of material/equipment/input	4	21,1
Research and Development	5	26,3
Service delivery	10	52,6
Total	19	100,0

CHAPTER V:

THE CONSTRAINTS FACED BY THE PRIVATE SECTOR IN THE AREA OF INNOVATION DEVELOPMENT

Under-development in Cameroon cannot be considered as fatalism because the country is endowed with many assets that can boost innovation. The country has an agro-ecological diversity, a common border with all the other CEMAC countries with a seafront. However, the 3.8% growth

from 2016 to 2019 has been driven by services, private consumption and public investment. The contribution of foreign trade has been negative. It is therefore important to overcome the obstacles faced by the private sector in order to develop these potentials.

V.1. Difficulties encountered by start-ups and SMEs

Table 32: Breakdown of start-ups according to difficulties encountered in the production of technological and environmental innovations

Types of difficulties	1st	2nd	3rd	4rd	5th	6th
Funding difficulties	42	24	22	5	2	2
Infrastructure/equipment/input problems	34	34	27	25	9	2
Technical support/training problems	12	16	4	2	4	5
Unskilled HR	11	9	12	3	2	1
Weak state involvement	7	4	7	3	2	
Communication/marketing problems	6	7	8	9	5	3
Collaboration among players	1	3	5	4	5	1

Source: CAMERCAP-PARC, IFDD study 2023

As part of their technological and environmental innovation production activities, start-ups face various difficulties, with the main ones including:

 Lack of funding: Innovative companies are unable to access funding for their needs and projects. This is because the existing institutional or noninstitutional windows have established protocols and procedures that can influence the functioning of innovative start-ups. They have to deal with competition by established players, the mistrust of investors, and the weakness of the local financial market.

 Lack of skills: Innovative SMEs/start-ups need skilled personnel that is trained in new technologies, management strategies, quality norms, etc. They are struggling with training deficit, brain drain and the high cost of labour. Most often, these young sprouts launch their activities singlehandedly.

Lack of infrastructures : Innovative enterprises encounter issues of access to energy, broadband Internet, transportation, and public services. These infrastructures are essential for the development and distribution of their innovations.

 Inadequate institutional support: Innovative enterprises are not adequately supported and encouraged by public services, as there is no clear and consistent policy on innovation. They also face the complexity and the cumbersomeness of administrative, tax, and regulatory procedures.

These constraints slow down the innovation potential of the Cameroonian private sector, which yet could contribute to the diversification, the competitiveness, and the growth of the country's economy.

Table 33: Breakdown of support by order of importance

Support received	Number	Frequency
Equipment/infrastructure support	3	13.6
Technical support	5	22.7
Financial support	14	63.6
Total	22	100.0

Source: CAMERCAP-PARC, IFDD study 2023

To produce technological and environmental innovation, start-ups deem that among all the support received, financial support is the most significant, followed by technical, equipment and infrastructural support.

V.2. Analysis of needs, constraints and capacities of start-ups in the production of technological and environmental innovations

The National Development Strategy 2020-2030 (NDS30) takes into account the need to develop new growth sources, around the emergence

of the private sector as the driver of economic growth by targeting strategic sectors that can -stand competition at the global level. In this vision, the private sector growth will drive economic transformation around nine priority sectors of industry, services and the development of agriculture. In this regard, it is important to assess all the capacities needed by the private sector to achieve sustainable development.

Priority needs identified

Table 34: Breakdown of units according to needs and objectives

Type of needs	To ensure production		To upgrade products		To ensure product accessibility		
	Start-up	SME	Start-up	SME	Start-up	SME	
Support for communication	1	1	4	11	27	37	
Support for training	1	11	8	13	2	2	
Administrative support	2	10	3	5	1	3	
Technical support	5	23	15	23	9	21	
Need in HR	5	21	14	16	1	3	
Equipment/infrastructure support	49	79	0	32	20	26	
Financial need	62	65	17	21	11	15	
Collaboration need	0	4	8	7	11	21	

Source: CAMERCAP-PARC, IFDD study 2023

Looking into the needs, it emerges that to produce technological and environmental innovations, 62 start-ups express financial need and 79 SMEs the need in material support (equipment and infrastructures). Furthermore, to upgrade technological and environmental innovation products, the problem faced by start-ups is the financial need while SMEs need support. However, to make their technological and environmental products accessible, start-ups and SMEs express a strong need for guidance in communication.

Major constraints identified

Table 35: Breakdown of units according to constraints and objectives

TYPE OF CONSTRAINTS	To fund the activity		To popularize the products		To distribute the products	
	Start-up	SME	Start-up	SME	Start-up	SME
Lack of advert/communication	1	6	33	47	4	4
Lack of skilled HR	2	6	7	21	8	3
Inadequate equipment/infrastructure	5	15	12	15	20	26
Lack of collaboration/ partnership	7	35	10	30	20	22
Difficulty to access funding	70	117	22	14	10	2
Competitive market	0	4	3	5	4	3

Start-ups and SMEs encounter many constraints. We have classified these constraints in three groups: funding, dissemination of products and distribution

Regarding funding, the main constraint that start-ups and SMEs still face is access. However, the Government has promised to carry out several actions to provide support to young entrepreneurs, but the reality and the results show that these initiatives are not yet bearing fruits.

Dissemination is a key element in the production of innovations. After the production. proceeds be promoted and then marketed. Meanwhile, the biggest challenges encountered by young people are related to communication deficit. Advertisement spaces are not free, so these young entrepreneurs face difficulties to popularize their products. It should be noted that even in the social media, a good popularization must be done on pages that have a significant number of subscribers, and which are paid. Besides, the use of entrepreneurs' private pages equally needs payment to boost the post.

Regarding the distribution of products, the lack of infrastructures is among the main constraints. It must be noted that the distribution of products requires some logistic that many young entrepreneurs do not have because of inadequate funding.

These constraints include:

Digital transformation: SMEs and startups need to adapt to new technologies and new consumption patterns, which requires a greater connectivity, a better service quality, a greater data security, etc. They also need to deal with competition from international players who have more resources and expertise in the digital area.

Ecological transition: SMEs and startups need to factor environmental and social issues into their strategy and management, in order to reduce their impact on the planet and meet the needs of clients and stakeholders. and comply with norms and applicable regulations. They also need to innovate in order to propose sustainable and responsible solutions. Although the private sector and local governments are including sustainable development issues in their programming, it is still at the stage of slogans and is not yet materialized in the activities implemented, even less in the support for technological and environmental innovation.

Health crisis: SMEs and start-ups need to deal with the consequences of the Covid-19 pandemic which curtailed their activities, cash flow, return, and solvency. They also need to adapt to prevention and protection methods, as well as to the behavioural change of consumers.

These constraints require the sense of adaptation, innovation and resilience from SMEs and start-ups in Cameroon, which can rely on the entrepreneurship ecosystem made up of incubators, accelerators, hubs, co-working spaces, associations and online platforms.

Les capacités requises

Conformément à ses missions parmi lesquelles, renforcer les mécanismes de soutien à l'emploi des jeunes, entrepreneuriat privé et les mécanismes innovants, le centre, à travers cette étude, définit les capacités requises pour le secteur privé dans le cadre du développement durable.

Table 36: Capacities required for private sector development

	Startup	PME
Human capacities	Inadequate human resources both in size and skills	Inadequate human resources both in size and skills
Organiztional capacities	Less efficient organization in carrying out activities	Less efficient organization in carrying out activities
Institutional capacities	Lack of legal instruments necessary for the supervision of Start-up	Lack of cohésion between funding policies and the need of entrepreneurs
Socio-cultural anchorage	Inadequate sense of entrepreneurship in the Cameroonian society	Inadequate sense of entrepreneurship in the Cameroonian society

Source: CAMERCAP-PARC, IFDD study 2023

Regarding capacities, start-ups and SMEs have pretty much the same limitations, ranging from the culture of entrepreneurship to issues pertaining to the organization of the private sector and work within companies. The reason and the repercussion of this situation is that Cameroon has held a poor position in the doing business ranking for several years. It is obvious that the ease of doing business in the country is not very flattering, and this cannot incite young entrepreneurs to create companies. According to a study conducted by CAMERCAP-PARC (2016), approximately 72.24% of companies close down within five years after they are created.

They also face many capacity challenges such as:

1- Institutional capacities

Institutional capacities for the development of start-ups and SMEs in Cameroon refer to all the resources, skills, bodies, norms and policies that foster the creation, growth and competitiveness of small and medium-sized enterprises in the country. These capacities can be

analysed at various levels:

- The macro-economic level, which concerns the general context in which start-ups and SMEs operate, including political stability, legal security, quality of infrastructures, business climate, taxation, etc.
- This level greatly relies on the actions of public authorities who need to create enabling conditions for entrepreneurship and innovation. Security crises are rocking 3 regions of the country. Although the government is creating dialogue frameworks to improve the business climate such as the Cameroon Business Forum and the CFCE, the Doing Business ranking has dropped to the 167th position in 2020 out of 190 countries.
- The mid-economic level, which concerns the special support provided to start-ups and SMEs, including funding, guidance, training, advice, promotion, This networking. etc. level participation implies the players of the entrepreneurial

ecosystem such as banks, financial institutions, incubators, accelerators, hubs, co-working spaces, corporate associations, joint funding platforms, etc. Their contribution to the actions of start-ups is still inadequate. Most often, commercial banks require collateral that the young sprouts do not have.

The micro-economic level, which concerns the internal capacities of start-ups and SMEs, including financial. human. material. organizational technological. resources etc. This level greatly relies on the vision, strategy, management, performance, and innovation of managers employees of start-ups and SMEs. These strategies are not often visible, reflecting the presence of innovators in exhibitions and fairs. Moving from the stage of fairs to industrial production is a real stalemate.

Start-ups and SMEs in Cameroon are facing several institutional difficulties that impede their establishment and development. These difficulties include:

- The complexity and cumbersomeness of administrative procedures, which dissuade entrepreneurs and expose them to corruption, harassment, and delays;
- The lack of legal security and author's rights protection, which dwindle the confidence of investors and partners, and restricts access to loans and markets;
- The lack of quality infrastructures, including in the area of transportation, communication,

- energy and water, which blows up production and distribution costs and impinge on the competitiveness of products;
- The inadequate public support to start-ups and SMEs, which is reflected by the lack of funding, training, advice, promotion, networking, and innovation;
- The lack of harmonization and coordination of policies and programmes on behalf of startups and SMEs, which results in a fragmentation of efforts, a duplication of actions, and the inefficacy of results.

These institutional difficulties beg for a deep and comprehensive reform of the framework for establishment of start-ups and SMEs in Cameroon, to create an enabling environment for entrepreneurship and innovation. Institutional capacities for developing start-ups and SMEs in Cameroon are therefore the results of the interaction between these various levels, which must be consistent and complementary. They enable start-ups and SMEs to efficiently contribute to the country's growth and sustainable development.

2- Organizational capacities

- <u>Lack of funding</u>: Cameroonian start-ups often struggle to find funding sources for their needs and their projects. They have to deal with competition from established players, the wariness of investors and the weakness of the local financial market.
- <u>Lack of infrastructures</u>:
 Cameroonian start-ups are facing issues of access to broadband Internet, energy, transportation and public services. These

- infrastructures are important for the development and the dissemination of their innovations
- Lack of mentorship and support: Cameroonian start-ups need quality support and guidance to build their capacities, approve their ideas, have access to networks and markets, and to comply with norms and regulations
- The issue of products' packaging/ conditioning also needs to be addressed

To overcome these challenges, Cameroonian start-ups can rely on the emergence of a dynamic entrepreneurial ecosystem made of incubators, accelerators, hubs, coworking spaces, associations and online platforms.

There are several means, through which a start-up in Cameroon can receive funding, including:

- Local financial institutions: Startups can request loans from banks and savings cooperatives which offer reimbursement conditions and varying interest rates. To obtain a loan, they are generally required to present a strong business plan and good collateral.
- Joint funding platforms: Startups can resort to online platforms like Kickstarter, Indiegogo, KisskissBankBank, Ulule or Jumpstart, through which funds are raised from the general public in exchange for compensations. The project must be innovative, attractive, and credible in order to convince the donors.
- Support programmes: Start-ups can receive assistance from the Ministry of Small and Medium-

- sized Enterprises, Social Economy and Craft (MINPMEESA), which proposes capital funds, incubation centres, subsidies and tax credits to sustain innovative projects
- Private investors: Start-ups can seek the attention of business angels, investment funds or partner companies which can bring capital, skills and network. They must have a growth potential, a solid team and a clear vision to woe investors..

3- Human capacities

The issue of quality and production with skills that are adapted to the respect of norms is a big human capacities challenge. The packaging and conditioning of products are important stages for start-ups and SMEs in Cameroon because they have an influence on the quality, preservation, distribution and perception of products by consumers. However, these stages also have challenges such as:

- The cost of packaging and conditioning material and equipment, which can be out of the reach of small enterprises which do not have adequate financial resources.
- The respect of norms and health, environmental and commercial regulations, which vary according to local, national and international markets.
- Adapting to the needs and preferences of clients who can request personalized, ecofriendly, attractive, educational and practical packaging and conditioning.
- Innovation and differentiation which can enable start-ups

and SMEs to stand out of competition and create an added value.

4- Socio-cultural anchorage

Loan repayment is a major problem for start-ups and SMEs in Cameroon as they can easily find themselves in a situation of over-indebtedness, payment default or bankruptcy. According to a World Bank study, the recovery rate of credits in Cameroon was 28.9% in 2019, ranking the country at the 164th position out of 190 countries. The reasons behind this situation are manifold, but we can cite a few of them:

- i. Information asymmetry: Startups and SMEs are often unable to provide reliable and clear information on their financial situation, their activity, their market and their growth potential. It makes it difficult for lenders to assess risks and may impose excessive collateral, high interest rates or stringent repayment conditions.
- ii. The coast of the loan: Start-ups and SMEs are subjected to high funding costs, which restrict their profit and their repayment capacity. These costs include administrative charges, commissions, taxes, penalties, default taxes and collateral charges.
- iii. The economic and social context: Start-ups and SMEs are subjected to the caprices of the market, demand fluctuation, competition, external chocks, political and security crises, natural disasters, social conflicts etc. These elements can have an impact on their turnover, cash flow, profit, and solvency.

avoid Tο the loan repayment decadence. start-ups and SMEs in Cameroon need to adopt a strict financial management, their funding sources, reinforce competitiveness. innovate and understand the need of the market. They can also receive assistance from players of the entrepreneurial ecosystem such as incubators. accelerators, hubs, joint funding platforms, corporate associations, etc. These players can offer the following consultancy, services: training. mentorship, networking, loan access facilitation, etc.

CONCLUSION

Looking into the proposals made start-ups to improve production and the popularization of technological and environmental innovations developed youths, start-ups and SMEs, emerges that start-ups mostly want financial support followed by the need for collaboration/ partnership development and the desire for technical assistance and infrastructures/equipment support.

At the end of the previous analyses, the study culminated in a few recommendations that will enable stakeholders to boost jobs in the ITE area:

- → With respect to the State and public and private institutions in charge of providing support to young people
- Assurer une meilleure coordination Provide a better coordination and effective government synergy during the implementation of policies. Indeed, besides Ministries that support start-ups and SMEs (MINPMEESA, MINJEC, MINADER, MINRESI...), many public institutions support the targets. Furthermore, this support is not coordinated and less oriented towards technological and environmental innovations.
- Focus on priority sectors and innovative enterprises while providing the support; the government directives outlined in the National Development Strategy should be the compass of all the support in general and the technological and environmental innovations in particular;
- Create, improve and empower technological support

- infrastructures: the lack of material support is one of the constraints that restricts support for the targets;
- Take into account technological and environmental changes in the training offers proposed in public and private training centres.

→ With respect to Start-ups and SMEs

- Modernize company management mechanisms in order to enable access to bank funding because, as we all know, beyond the lack of guarantee, the failure to keep account books is also an issue that prevents Start-ups and SMEs from having access to various funding;
- Resorting to innovative funding and building the capacities and skills that are required to have access to such funding;
- Developing a cluster system in order to share experience on technological and environmental innovations while developing a wide network of companies that propose innovative and environmental technological solutions;
- Improve competitiveness in order to conquer sub-regional and African markets within the AfCFTA./-

Innovation in the organizational capacities: The ranking index of the potential of SMEs/Start-ups: The GROWTH POTENTIAL RATING INDEX(GPR INDEX)

The GPR Index is intended and ambitions to be an innovative and original tool to evaluate and rank the growth potential of SMEs, VSE, and Start-ups. It is a composite indicator that combines different approaches such as the analysis of capacities, the financial analysis, and the market analysis, in the current and future trends. The aim is to emphasize on the growth potential of these structures, in the short and medium terms, at that very moment.

The GPR Index aims to help and foster the meeting between SME/VSE & Start-ups seeking for various support (see the study) on the one hand, and on the other hand providers of solutions (funding, capacity building and various partnership) depending on the area of competence, in order to develop the many and great business opportunities, nipped in the bud due to lack of support. In fact, according to national and continental statistics, the mortality rate of SMEs/VSE and Start-ups is approximately 80% before 5 years.

Furthermore, most often than not, the clear will to provide funding and establish partnerships with these young enterprises is impeded by the lack of credible and objective information on the true potential of the targeted enterprises, which can enable an informed decision based on facts. This index will be used to significantly reduce the information imbalance between promoters who need funding or are looking for partnerships, and on the other hand, the various partners of the development community and conventional and alternative donors, local governments, national and international organisms, enterprises (local or foreign) looking for joint venture.

Its goal is to help facilitate the mobilization of funds that is necessary to fund SME, VSE and Start-up. It will also help facilitate cooperation between local and/or foreign enterprises that seek joint-venture partnerships or any other type of cooperation.

Also, the index will serve as incitement to an organization and for more rigorous organization and management, taking into account the current problems of sustainable, inclusive growth and environmental issues., because the funding and partnerships will depend on them.

The GPR Index was developed by a young Cameroonian with the technical assistance of CAMERCAP-PARC. Its launching and trial kicked off in January 2024 and will span throughout the year, to be eventually improved and corrected.

INDICATIVE BIBLIOGRAPHY

- Caisse Nationale de Prévoyance Sociale (CNPS). Registration, available at https://www.cnps.cm/index.php/fr/employeur/regles-generales/immatriculation. consulted on 22 December 2023
- 2. CAMERCAP-PARC (2018). Evaluation des besoins en renforcement des capacites en vue de la transformation economique du Cameroun
- 3. CAMERCAP-PARC (2016). Suivi de la demographie des petites et movennes entreprises au Cameroun, suivi de la demographie des petites et moyennes entreprises au cameroun.
- 4. CAMERCAP-PARC (2016). Profils et preferences des jeunes
- 5. CAMERCAP-PARC (2023), Which school for Cameroon's emergence? The urgent need to break away, act 2: research-development programmes in curricula to address the daily challenges of Cameroonians
- Depret, MH et Hamdouch, A. (2009). Quelles politiques de l'innovation et de l'environnement pour quelle dynamique d'innovation environnementale ?. Dans Innovations 2009/1 (n° 29), pages 127 to 147.
- 7. Directorate General for Taxation (2020). Online registration, available at https:// www.impots.cm/en/node/662, consulted on 22 December 2023.
- 8. EMPLOYMENT IN CAMEROON, Key factors for preference-based employment policy approach
- 9. Government of Cameroon (2010). Growth and Employment Strategic Paper (GESP).
- 10. Government of Cameroon (2020). National Development Strategy 2020-2030 (NDS30).
- 11. Keynes, J.M. (1930). Economic Possibilities for our Grandchildren, in Essays in Persuasion (New York: Harcourt Brace, 1932), 358-373.
- 12. OECD (2005), Oslo Manuel,
- 13. OHADA (2014). Uniform Act revised relating to the Law on commercial companies and economic interest groups, available at https://www.ohada.com/textes-ohada/ actes-uniformes.html, consulted on 21 December 2023.
- 14. Sahut, J.M et Leroux, E. (2011). Innovation, TIC & Entrepreneuriat, Management & Avenir 2011/2 (n° 42), pages 183 to 186.
- 15. Shrivastava, P. (1995). The Role of Corporations in Achieving Ecological Sustainability, The Academy of Management Review, Vol. 20, No. 4 (Oct., 1995), pp. 936-960 (25 pages).

APPENDICES

KEY MESSAGES OF THE STUDY, CAMEROON COMPONENT

MESSAGE 1: From innovation to industrialization for mass consumption

In other words: from knowledge to power, what are the key capacities and skills that must be developed to structurally transform the economies (African) of Cameroon and the DRC?

Recap: how can we move from technological and environmental innovations to mass consumption products? Beside exhibitions and trade fairs, how can we enable the consumer to easily find ITE products?

MESSAGE 2: An inventor or an innovator is not necessarily an entrepreneur

((very few can become one). It is important to create a permanent market (physical and/or online) for invention and innovation products (to enable business connections between inventors/innovators and entrepreneurs).

The risk is in trying to turn an innovator/inventor (by force or at all cost) into an entrepreneur, which explains the high failure rate. It can be turned into a fullfledge profession (limited to this segment)

Example in the case of music: an author (writes the text), a composer (conceives the melody with notes), an arranger harmonizes the sound, an interpreter puts in the voice, a director, a producer, a broadcaster, a rights administrator, etc. complete the picture.

And there is, of course, a musical...and film industry market.

Conclusion 1: In addition to trade fairs and exhibitions, we believe that it would be useful to create a permanent meeting place for inventors (holders of knowledge) and entrepreneurs (those with sense and spirit), in association with other partners who can provide support (funding, institutional, etc.).

Products to trade on this market: patents and licences, prototypes and models, authors' rights, etc.

The innovation/invention sector can be organized (in cluster) according to the innovation level: processes, product (prototype or sample), mass production, conditioning, marketing, distribution, etc.

Requirement: A legal supervision by an institution in charge of managing author's and intellectual property rights. Such a role is played by AIPO.

MESSAGE 3: R&D-I in Cameroonian companies

It has been demonstrated for a long time that R&D-I is the driver of growth in modern economies. This explains the place of this sector in the budget of States and companies in the developed and emergent world. In this regard. what is the amount of efforts dedicated to R&D-I in Cameroon and in the DRC? How many big and medium-sized enterprises in Cameroon have a R&D-I departments? Results are not encouraging beyond words. The results, effects and impacts are still to be proven in Cameroon and in the DRC, as well as in the rest of sub-Saharan Africa (aside South Africa).

Proposal 1. We dare think and dream of creating a fund to finance the R&D-I by the private sector (employers' union) and which will be managed by the private sector or a foundation (OSC). And going back to MESSAGE.

MESSAGE 4: Intermediation seems to dominate ICT start-ups in Cameroon.

Most start-ups touted and advertised in the ICT field in Cameroon operate in applications development. Yet, an application is by definition and by design an intermediation service that links a transmitter (producer) and a receiver (client). Intermediation can only be possible if the two entry and exit links are ready to perform the transaction (existence of a real offer and a demand that is expressed and feasible).

Proposal 2: Intermediation start-ups therefore need to fit into a sector, an existing or yet to be created cluster, to develop their potential and grow.

MESSAGE 5: THINK BIG!

In principle, not all applications are destined to develop independently and sustainably over time and space. History shows that in this digital era, large firms absorb small ones that have potential (for growth and/or development). This is the case of Microsoft³ which has built its strategy on buying out and absorbing its competitors in various sectors of the computer and electronic games industry. Hewlet Packard (HP) has done the same in office equipment and supplies.

Proposal 3: Encourage the integration of start-ups belonging to a sector or industry to create a company with significant critical mass, rather than supporting small, isolated development efforts. One word: THINK BIG!

^{3 -} See https://fr.wikipedia.org/wiki/Liste des regroupements et des acquisitions par Microsoft

Since 1987, Microsoft has bought and integrated with full rights nearly 210 companies worldwide. Excluding shareholdings in other companies that have retained their corporate names.

Conclusion 2. Advantages to start-ups should therefore be time-limited.

The private sector (to a lesser extent with the support of the state in terms of legislation and regulation) should be able to give a boost, to create a champion who can integrate the start-ups.

By definition, a start-up must be limited in time. A start-up is not a life endeavour. Either it is developed into an SME/GE, or it is merged and integrated into a larger, long-term business.

MESSAGE 6: Develop the young entrepreneur's guides

In order to anticipate the constraints and difficulties identified by young SME and start-up promoters, we thought it would be a good idea to revisit (update) and design manuals, booklets and memos for young promoters by sector, activity, product or service. A collection of solutions to FAQs and other recurring challenges overcome by those who have succeeded (mentoring).

MESSAGE 7: Socio-cultural anchorage of R&D-I products

Encourage the central or local public administration and the private sector to take ownership and capitalise on the ITEs. A competition at local and/or national level on the number of innovations/inventions that have been the subject of productive capitalisation per year can be organised and awarded.