

**Republic of Sudan
Data Collection Survey on
Youth Employment Promotion**

Final Report

July 2021

Japan International Cooperation Agency (JICA)

Koei Research & Consulting Inc.

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(Source: JICA, July 2021)

This report was prepared based on the information collected in Sudan and Japan from March to June 2021.
Disclaimer: The recommendations are suggested by the Survey Team and do not represent JICA's official cooperation strategy for the particular sector or country.

Map



Abbreviations

AfDB	African Development Bank
AI	Artificial Intelligent
AU	African Union
AWEAF	Accelerating Women Entrepreneurship and Access to Finance
BDS	Business Development Service
BDSPs	Business Development Service Providers
BMZ	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung
CBoS	Central Bank of Sudan
CBT	Comptency Based Training
CIPE	Center for International Private Enterprise
COMESA	Common Market for Eastern and Southern Africa
COVID-19	Coronavirus disease 2019
CSR	Corporate Social Responsibilities
EDIP	Enterprise Development and Investment Programme
ERP	Enterprise Resources Planning
EU	European Union
GDP	Gross Domestic Products
GEM	Global Entrepreneurship Monitor
GEMS	The Project for Strengthening the Vocational Training System targeting State Vocational Training Center, (Genuine Employable Skills)
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ICT	Information Communication Technology
IDA	International Development Association
IFC	International Finance Corporation
ILO	International Labour Organization
IoT	Internet of Things
IPSDA	Investment and Private Sector Development Agency
IPRSP	Interim Poverty Reduction Strategy Paper
ITPO	Investment and Technology Promotion Offices
JICA	Japan International Cooperation Agency
KOICA	Korea International Cooperation Agency
MFI	Microfinance Institution
MOAF	Ministry of Agriculture and Forestry
MOFEP	Ministry of Finance and Economic Planning
MOGE	Ministry of General Education
MOHE	Ministry of Higher Education and Scientific Research
MOIIC	Ministry of Investment and International Cooperation
MOLAR	Ministry of Labour and Administrative Reform
MOSD	Ministry of Social Development
MSMEs	Micro, Small and Medium Enterprises
NCTTE	National Council for Technical and Technological Education
NGO	Non-governmental Organization
NQF	National Qualification Framework
OCP	Orange Corners Program
PDM	Project Design Matrix
PPP	Public Private Partnership
PRSP	Poverty Reduction Strategy Paper
SBF (SBEF)	Sudanese Business Federation (former “Sudanese Businessmen and Employers Federation”)
SCVTA	Supreme Council for Vocational Training and Apprenticeship
SDG	Sudanese pound
SDGs	Sustainable Development Goals
SEZs	Special Economic Zones
SICU	Small Industry and Crafts Union

SMB	Scheme Management Body
SMAP-II	Project for Strengthening Peace through the Improvement of Public Services in three Darfur States (Phase 2) (SMArt Public service)
SMDC	Sudanese Microfinance Development Company
SMEs	Small and Medium Enterprises
SPS	Sanitary and Phytosanitary Measures
StCVTA	State Council for Vocational Training and Apprenticeship
TVET	Technical and Vocational Education and Training
UCC	Union of Chamber of Commerce
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
VC	Venture Capital
VTC	Vocational Technical Centre
WTO	World Trade Organization
YPC	Youth Project Commission

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Appendix 2: Youth Opinion Survey on Career (University Students)

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Chapter 1 Outline of this Survey

1.1 Background

The Republic of Sudan (hereinafter Sudan) lost 75% of its revenues from crude oil as a result of the secession of South Sudan in 2011 and has since been experiencing an economic downturn. The country's Gross Domestic Product (GDP) dropped from USD 66.4 billion in 2011 to USD 33.6 billion in 2019. The acute inflation rate recorded at 166.8% in August 2020 and the devaluation of the local currency have produced anxiety among the citizens and led to social unrest. Sudan's main industries are agriculture, livestock, and major export products include crude oil, gold, livestock products, gum Arabic, and sesame seeds.

The informal sector is 65% of the labour market, with a high proportion of unskilled workers. Even in the formal sector, 98% of companies are small and medium size enterprises (SMEs) which employ less than 49 people¹. As for the labour structure, the agricultural sector accounts for about half (48.56%) of all employment in 2008, followed by the service sector (31%) and the industrial sector (7.56%). In addition, the number of educated young people who specialize in agriculture is decreasing year by year. The knowledge and skills of young people and the demand in the labour market do not correlate.

Sudan's unemployment rate is expected to reach 25%, affected by the COVID-19 pandemic which began in 2020. The population under the age of 30 is about 70% (estimate) of the total population, and it is projected that the proportion of youth will continue to increase, but the number of unemployed young people continues to increase. Among the young population, women, people with no work experience, fresh graduates, and internally displaced persons (IDPs) have particularly low employment rates. Increase of the youth unemployment rate has become an issue of international attention, and it is considered as one of the causes of social unrest and deterioration of public security.

In Sudan, the movement toward democratisation led by the citizens, particularly youth and women accelerated from the end of 2018, which put an end to the 30-year dictatorship in April 2019. Then, the transitional government composed of both military and civilians was established in August 2019.

Although the economic turmoil continues since the period of the previous regime, and even though it is worsening due to the COVID-19 pandemic, positive improvements in some areas of the national agenda have been observed such as peace agreements with the key rebel alliances in October 2020, and the removal of Sudan from the State Sponsors of Terrorism list (SSTL) in December 2020. The country has high development potential: rich land (Africa's third largest land area, along with the River Nile) and a large market of 44 million people. One of the keys to realizing this country's potentiality is the young people. Sudan's population is young (average age is only 19.7 years), and their power is one of the

¹ ILO (2014) A Roadmap Toward a National employment Policy for Sudan

country's strengths, but their power is underutilized as obvious from the high youth unemployment rate. Might they be a catalyst for growth, or ultimately become a risk factor as their dissatisfaction grows. Solving youth employment issue is an urgent social, economic, and political challenge in Sudan. The transitional government has set a target of creating jobs for 55,000 young people and has put the youth employment promotion as a policy priority.

The African Union (AU) states that the growth of SMEs is essential to achieving the Africa's development goals. In Africa, SMEs take the core part of its economy and contribute to poverty reduction by creating jobs. Although there are many SMEs in Sudan, high labour costs and weak infrastructure and financial services are the obstacles for their growth. There is also a delay in the preparation of the legal environment for SMEs such as business contracts, registration, investment, and taxation. It is urgent to improve the supportive environment for SMEs, as their growth is indispensable for promoting youth employment.

1.2 Purpose of the Survey

This survey aims to grasp and analyze the current situation of youth employment in Sudan and the business environment of SMEs which absorb the youth as employees. It is then expected to serve for formulating the future direction of JICA's assistance that will lead to youth employment promotion in Sudan.

Considering that JICA is relatively new in the field of private sector development for youth employment in Sudan, the survey will be conducted in two stages to ensure accurate data collection and effective formulation of future assistance programs.

In the first stage (this survey), information relating to the youth employment in Sudan is collected to understand the current situation of the labour market (both demand and supply side). Also, the direction of JICA's assistance that will lead to the youth employment promotion is examined. This survey also identify some of the possible support measures. In the second stage (another contract) the support measures proposed in this survey will be verified by pilot implementation. The result will be then reviewed and analyzed, which shall determine the direction of JICA's future assistance and lead to the formation of new projects.

1.3 Survey Duration

The survey period was from March to July 2021. Initial plan included 1 trip to Sudan for field survey in May-June 2021, but it was cancelled due the COVID-19 pandemic situation. The survey was thus remotely conducted from Japan, supported by Sudanese field surveyors.

1.4 Target Area

The target area is the whole country of Sudan

1.5 Survey Team

Team members and their positions are listed below.

Table 1-1 Japanese Team Members and Positions

Position	Name	Organization
Team leader /Employment promotion	IKAWA Mariko	Koei Research and Consulting Inc. (KRC)
SMEs support (Financial service, Recruitment and Entrepreneurship (1))	KOBAYASHI Yuki	KRC
SMEs support (Financial service, Recruitment and Entrepreneurship (2))	YOKOYAMA Hitomi	KRC/ UNICO International

Table 1-2 Field Survey Team Members

Name	Key Survey Area
Abeer Omer	Field Surveyor Women and Youth
Anwar Ammar	Field Surveyor Start-up ecosystem / Banking system/ Microfinance
Nusiba Ibrahim	Field Surveyor Employment Promotion
Farouk Abdel Hamid	Field Surveyor SMEs

Chapter 2 Current Situation and Challenges of Youth Employment in Sudan

2.1 Overview of Employment Situation

A system for periodic labour force survey has not been fully established in Sudan, and so it is extremely difficult to obtain reliable statistical data on labour and the situation of the private sector. The full national population census dates back to 2008, and the most recent labour force survey is the sampling survey conducted in 2011². On the other hand, it is assumed that the labour market situation in Sudan had not changed drastically under the economic sanctions. Therefore, in this chapter, the characteristics of the employment situation in Sudan is explained mainly based on the 2011 labour force survey, while referring to the latest information when it is available.

Youth is defined as 15-35 years old in this report, following the definition of the African Youth Charter of the African Union signed by Sudan^{3,4}. The age at which youth complete their education varies due to circumstances such as delayed start of schooling and repetition of school year in Sudan. Furthermore, there is the national service, which the youth attend the public service for the period of 1-2 years after completing education⁵. The tertiary education enrollment rate has been increasing recent decades. These circumstances result in the raising of the starting working age.

On the other hand, the definition of youth is 15-24 years old in international labour force statistics, and thus, it was not possible to extract statistical data of 15-35 years old. The age grouping is indicated for all data cited in this report.

2.1.1 Stagnant Macro Economy

The Sudanese economy was growing steadily driven by the oil export started in 1998. However, the country was harshly affected by the drop of international crude oil prices in 2008, and furthermore, Sudan lost most of its oil revenue due to the secession of South Sudan in 2011⁶.

Since then, the country has been unable to earn foreign currency through exports, causing a shortage of foreign currency and the value of Sudanese pound (SDG) on the black market (the parallel rate) began to fall rapidly. The government introduced an "incentive rate" (SDG18/USD) in 2016 to promote currency exchange at banks and try to close the gap between the parallel rate and the official rate (then SDG7/USD), but this failed to stop the depreciation of the Sudanese pound and caused

² Ministry of Human Resources Development and Labour (2014), Sudan Labour Force Survey 2011 (SLFS 2011)

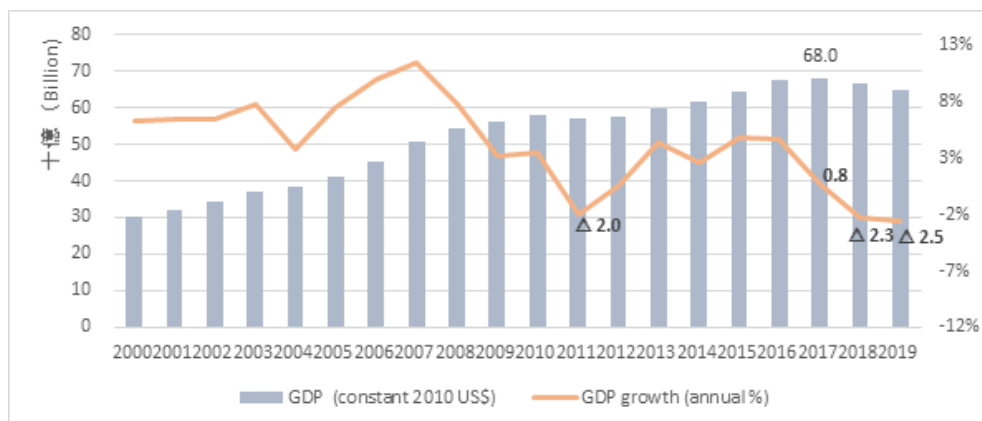
³ https://au.int/sites/default/files/treaties/7789-treaty-0033_-_african_youth_charter_e.pdf

⁴ The Target Youth is 18-35 years old who completed minimum educational level for the Ministry of Youth and Sports. Below 18 is the responsibility of Ministry of General Education (Ministry of Youth and Sports on 19 May 2021)

⁵ The National Service Act 2013 requires youth between 18-33 to attend the national service (defense force, police, governmental institutions, public development project, social service) between 12 to 24 months. National service attendance certificate was a condition for recruitment in the public office or travelling out of Sudan, which was cancelled by the Transitional Government in 2020.

⁶ World Development Indicators (Accessed on 30 April 2021) The contribution dropped largely from 21.64% in 2011 to 4.61% in 2012.

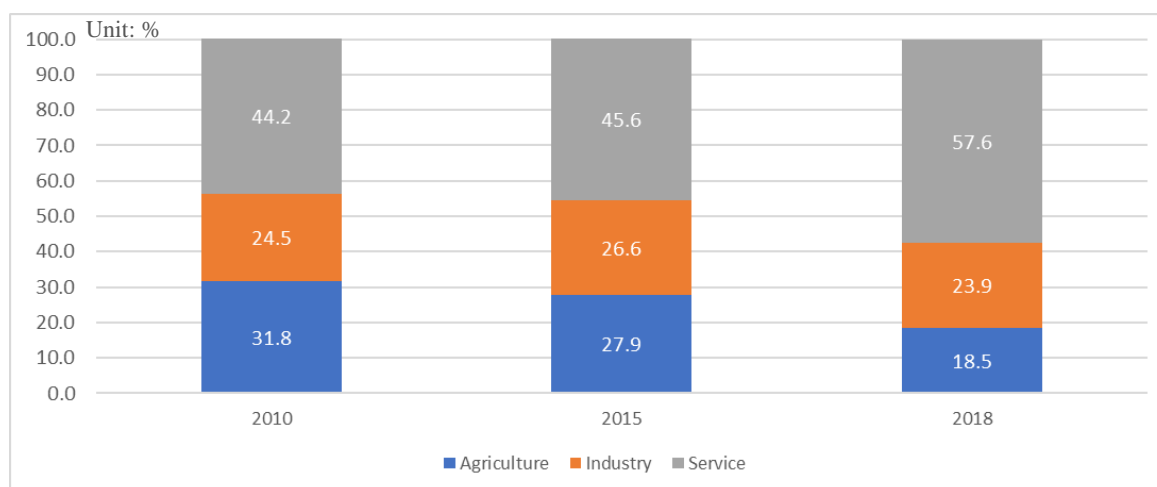
rapid inflation. The weak currency, instability and civil unrest have led to negative GDP growth for the past two years. Due to the worldwide COVID-19 pandemic, it is unlikely to expect growth in 2020.



Source: World Development Indicators/ Survey Team (Accessed on 17 February 2021)

Figure 2-1 GDP and GDP Growth Rate

The composition of GDP by industry shows that agriculture, which had accounted for about 30% of GDP in 2010, is gradually shrinking. The share of industry in GDP has remained at around 25%, while the share of the service sector has been increasing.

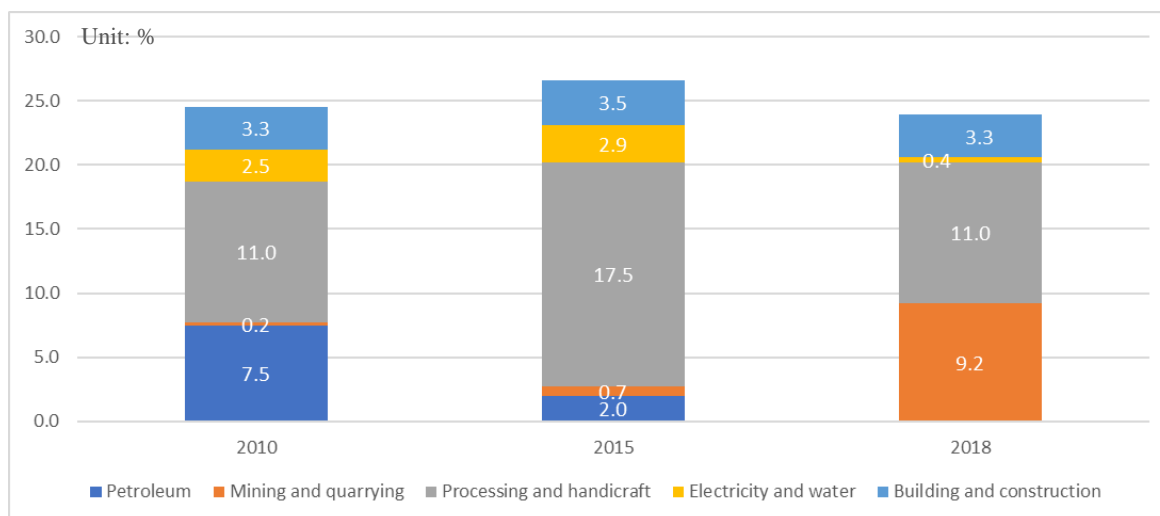


Source: Prepared by Survey Team based on Central Bank of Sudan, “Annual Report” No. 50, 55, 58

Figure 2-2 Share of GDP by Industry

The share of GDP in the industrial subsector is shown in the figure below. While the share of oil has decreased significantly, that of mineral such as gold has increased. In the processing and handicraft

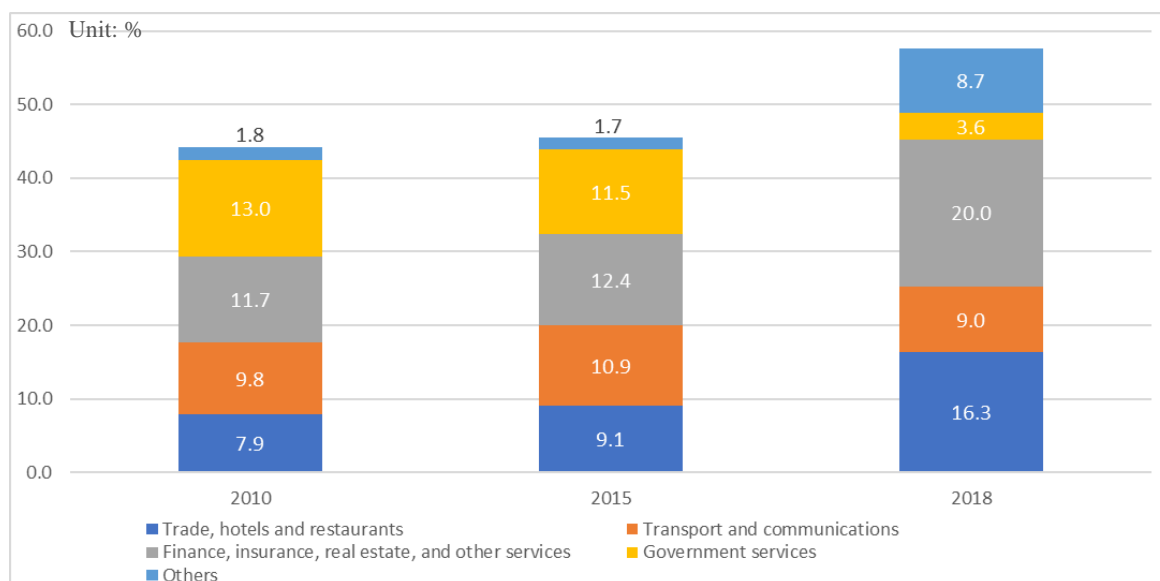
industry, sugar, cement, and pharmaceuticals are the major industries, but their production costs are rising year by year⁷.



Source: Prepared by Survey Team based on Central Bank of Sudan, “Annual Report” No. 50, 55, 58

Figure 2-3 Share of GDP in Industrial Subsectors

The share of GDP in the service subsector is shown in the figure below. There is a notable expansion of the wholesale/retail/hotel/restaurant and finance/insurance/real estate sectors.



Source: Prepared by Survey Team based on Central Bank of Sudan, “Annual Report” No. 50, 55, 58

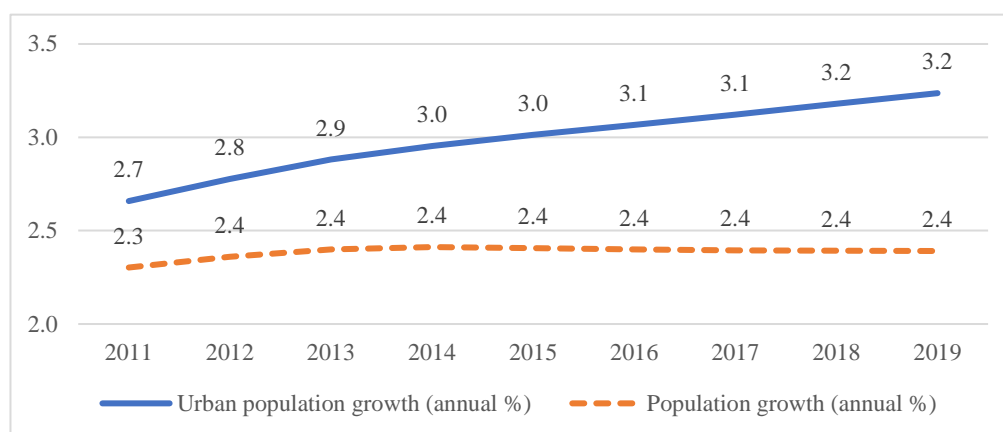
Figure 2-4 Share of GDP in Subsectors of Service

2.1.2 High Population Growth and Rapid Urbanisation

Sudan's population growth rate is high at 2.4%⁸, and the average age of population is 19.7 years⁹, making it a very young country by global standards. The urban population accounted for 35.9% of

⁷ Sugar production is decreasing due to the high production cost, according to the Central Bank of Sudan, 2018, “58th Annual Report”

the total population, while the rural population accounted for 64.1%. The urbanisation is accelerating as shown in Figure 2-5. According to the 2011 Sudan Labour Force Survey (SLFS 2011), the most urbanized area is Khartoum State, with 80.1% of the population living in cities, followed by Red Sea State (48.1%).



Source: Prepared by Survey Team World Development Indicators (Accessed on 30 April 2021)

Figure 2-5 Population Growth and Urban Population Growth

The greater part of the working age population resides in Khartoum, Gezira, and Southern Darfur States. The concentration of population in the urban areas of Khartoum State is particularly noticeable. Gezira State has the largest irrigation scheme in Sudan and is the most important agricultural region in the country¹⁰. Southern Darfur State, which is also connected to Khartoum State by rail, has a cotton textile industry and leather processing factories, and is also a key city for the production and distribution of agricultural products.

Table 2-1 Distribution of Population over 15 years old by state (%)

State	Sudan			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Northern	2.6	2.4	2.8	1.2	1.1	1.3	3.5	3.3	3.8
River Nile	4.2	4.1	4.2	3.5	3.4	3.5	4.6	4.6	4.7
Red Sea	4.3	4.4	4.3	5.7	5.7	5.7	3.5	3.6	3.3
Kassala	6.1	6.6	5.7	4.5	4.0	5.0	7.2	8.2	6.2
Gadaref	4.3	4.3	4.2	3.6	3.7	3.5	4.6	4.6	4.6
Khartoum	19.4	19.6	19.2	41.2	42.0	40.4	5.6	5.7	5.5
Gezira	12.7	12.4	12.9	6.8	6.7	7.0	16.3	15.9	16.8
White Nile	5.8	5.8	5.7	5.3	5.3	5.4	6.1	6.2	6.0
Sennar	4.3	4.5	4.2	2.6	2.6	2.5	5.5	5.7	5.3
Blue Nile	2.5	2.5	2.5	1.8	1.7	1.9	3.0	3.0	2.9
Northern Kordofan	8.9	8.6	9.1	5.5	5.5	5.4	11.0	10.6	11.5
Southern Kordofan	4.3	4.2	4.4	3.2	2.9	3.4	5.0	5.0	5.0
Northern Darfur	5.7	5.7	5.8	3.1	3.1	3.1	7.4	7.3	7.5
Western Darfur	3.4	3.1	3.6	1.9	1.9	1.8	4.3	3.9	4.8

⁸ UNFPA World Population Dashboard -Sudan <https://www.unfpa.org/data/world-population/SD> accessed on 30 April 2021

⁹ World Population Prospects 2019 <https://population.un.org/wpp/Download/Standard/Population/> accessed on 30 April 2021

¹⁰ Gezira scheme is one of the largest irrigation schemes even in the world. Goelnitza A., and Al-Saidi M., (2020), "Too big to handle, too important to abandon: Reforming Sudan's Gezira scheme" <https://www.sciencedirect.com/science/article/pii/S0378377420308052>

Southern Darfur	11.5	11.6	11.3	10.1	10.3	10.0	12.3	12.5	12.2
Sudan	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Human Resources Development and Labour (2014), Sudan Labour Force Survey 2011 (SLFS 2011)

2.1.3 Educational Disparities by Gender and Region

Primary education (8 years) is compulsory in Sudan, and the total enrolment rate is above 76% in 2017, showing improvement since 2010. As shown in the table below, the gender gap is gradually improving in primary and secondary education, and female enrollment is even slightly higher at the higher education level.

Table 2-2 Gross Enrolment Rate by Education Level (%)

Year	2010			2015		
	Total	Male	Female	Total	Male	Female
Primary	71.73	75.59	67.77	73.15	76.42	69.78
Secondary	42.52	45.52	39.45	45.62	45.97	45.27
Tertiary	15.92	14.66	17.19	16.92	16.78	17.06

Source : Prepared by Survey Team based on World Development Indicators(accessed on 30 April 2021)

Note: Data from 2010 and 2015 were used to allow comparison between the three educational level

Nevertheless, a large portion of the working-age population (46.2%) have not completed the primary education. The gap between urban and rural areas is twice as large for both males and females below primary level. Working-age population with higher education is more prevalent in urban areas, and by age group, those aged 34 and below have higher levels of education.

Table 2-3 Distribution of Labour Force by Educational Attainment by sex and locality (%)

% Level	Sudan			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Less than Primary	46.2	40.6	52.1	28.1	23.6	32.8	57.7	51.2	64.5
Completed Primary	23.7	25.6	21.7	24.8	25.7	23.9	23.0	25.6	20.3
Completed Secondary	20.8	23.8	17.7	30.6	33.8	27.3	14.6	17.5	11.5
Completed Tertiary	8.7	9.1	8.3	15.8	15.9	15.6	4.3	4.9	3.6
Others	0.5	0.8	0.3	0.7	1.0	0.3	0.4	0.7	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SLFS 2011

Table 2-4 Distribution of Labour Force by Educational Attainment by Age

% Age	Educational Attainment				
	Less than Primary	Completed Primary	Completed Secondary	Completed Tertiary	Khalwa
15-19	28.7	45.0	22.7	3.3	0.4
20-24	28.5	27.7	29.5	13.9	0.4
25-29	36.2	25.7	21.3	16.3	0.5
30-34	42.3	21.4	21.6	14.1	0.5
35-39	49.7	18.2	22.9	8.7	0.5
40-44	57.1	14.8	21.3	6.3	0.5
45-49	60.0	13.4	20.2	5.8	0.6
50-54	67.2	10.6	15.0	6.7	0.6
55-59	66.1	12.2	16.0	5.2	0.6
60-64	79.9	8.6	7.9	2.2	1.3
65+	86.8	6.8	4.4	1.4	0.6

Source: SLFS 2011

2.1.4 Current Situation of Labour Market

(1) Labour Participation

The labour participation rate of the working age population (15-65 years) is 50.5%, with a significant difference between men and women (70.8% for men and 28.9% for women). There are no obvious differences for men among the states or residential area, whereas for women, there is a noticeable differences between the very low labour participation rate in the rural areas of the Eastern Region (Red Sea, Kassala) and considerably high participation rate in rural areas of the Western Region (Darfur, Kordofan).

Table 2-5 Distribution of Labour Force by state, sex and locality (%)

State	Sudan			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Northern	41.2	71.6	13.4	46.4	77.5	19.0	40.1	70.3	12.1
River Nile	46.3	76.3	14.9	48.4	74.6	22.1	45.2	77.1	11.5
Red Sea	43.3	71.7	12.1	43.9	70.0	17.0	42.7	73.3	6.7
Kassala	45.2	75.7	8.0	44.0	75.0	18.1	45.7	75.9	2.7
Gadaref	51.6	75.3	25.9	47.6	68.3	25.1	53.6	78.8	26.3
Khartoum	46.2	66.2	24.5	46.3	64.3	27.0	45.6	74.9	12.7
Gezira	45.9	69.9	21.5	45.0	64.2	25.8	46.1	71.4	20.3
White Nile	42.9	71.4	12.1	40.7	66.6	14.3	44.1	74.0	10.9
Sennar	44.7	70.2	15.8	47.1	70.9	21.9	44.0	70.0	13.9
Blue Nile	53.6	80.0	25.4	51.3	75.7	27.9	54.6	81.6	24.3
Northern Kordofan	62.2	78.7	45.6	51.8	76.5	26.1	65.4	79.4	51.6
Southern Kordofan	58.1	75.2	40.6	54.2	73.5	36.8	59.7	75.8	42.2
Northern Darfur	51.7	60.8	42.2	49.7	62.6	36.4	52.3	60.4	43.7
Western Darfur	66.2	66.9	65.5	52.8	59.6	45.5	69.8	69.1	70.5
Southern Darfur	59.8	69.2	49.5	47.4	62.6	31.2	66.2	72.5	59.3
Sudan	50.5	70.8	28.9	46.8	66.8	26.1	52.8	73.3	30.7

Source: SLFS 2011

(2) Employment structure: shrinking agriculture and difference of employment

According to the SLFS 2011, The agricultural sector has the highest share in the labour market (percentage of workers) at 44.0%, followed by wholesale/retail and vehicle repair, transportation & storage, and manufacturing. In the urban areas, wholesale/retail and vehicle repair, transportation & storage, manufacturing, public administration and construction account for the majority of employment, while in the rural area, the agricultural sector alone accounts for 62.4%.

Table 2-6 Distribution of Employment by Industry, sex and locality (%)

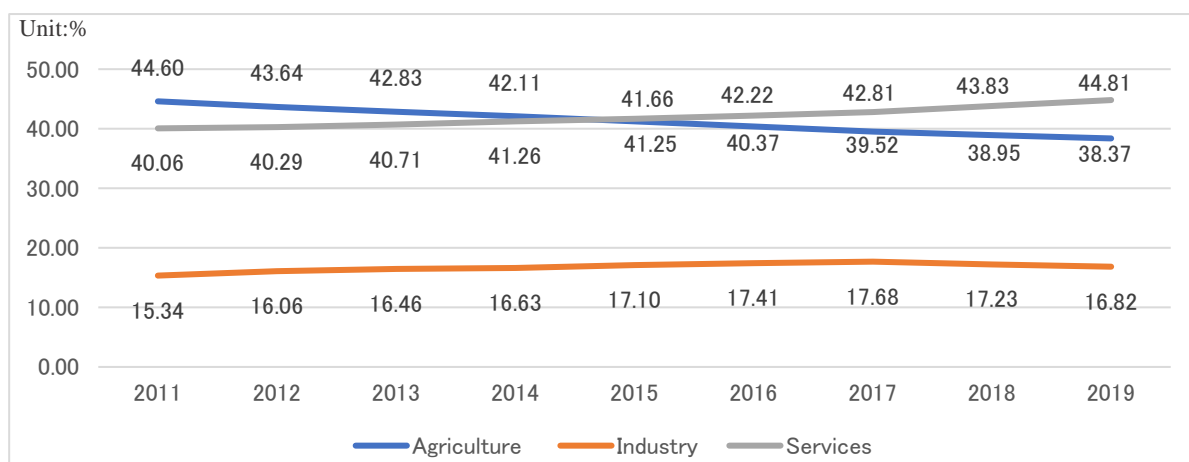
Industry	Sudan			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Agriculture ¹¹	44.0	39.4	59.3	8.5	7.8	11.4	62.4	56.8	79.0
Mining & quarrying	1.4	1.7	0.3	1.0	1.2	0.5	1.5	2.0	0.2
Manufacturing	7.7	9.1	2.9	12.7	14.5	5.1	5.1	6.1	2.0
Electricity & gas	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0
Supply of water & sewerage	0.2	0.2	0.1	0.3	0.3	0.2	0.1	0.2	0.0

¹¹ Agriculture include Agriculture, Forestry, Hunting & Fishing

Construction	5.9	7.5	0.4	9.5	11.6	0.9	4.0	5.3	0.2
Wholesale & retail trade ¹²	13.2	14.4	9.0	19.0	19.1	18.6	10.2	11.9	5.0
Transportation & storage	8.1	10.3	0.7	13.0	15.8	1.9	5.6	7.3	0.3
Accommodation & Food Service Activity	0.9	0.9	0.8	1.2	1.3	0.9	0.7	0.7	0.8
Information & communication	0.6	0.5	0.7	1.1	1.0	1.7	0.3	0.3	0.3
Financial & insurance activity	0.3	0.3	0.3	0.8	0.8	1.0	0.0	0.0	0.0
Real estate	0.2	0.3	0.0	0.6	0.7	0.0	0.1	0.1	0.0
Professional, scientific & technical activities	0.9	0.9	0.8	2.1	2.0	2.5	0.3	0.4	0.0
Administrative & support service activity	2.1	2.3	1.7	4.2	4.2	4.2	1.1	1.2	0.6
Public administration	5.4	5.9	3.9	10.9	10.8	11.4	2.5	3.1	0.7
Education	4.9	2.8	11.8	7.6	3.4	24.2	3.5	2.4	6.7
Human, health & social work	1.9	1.3	3.9	3.4	2.1	8.6	1.1	0.8	1.9
Art, entertainment & recreation	0.1	0.1	0.0	0.2	0.3	0.0	0.0	0.0	0.0
Other service activities	0.8	0.8	0.9	1.6	1.3	2.7	0.5	0.6	0.1
Activities of households as employer	0.0	0.0	0.1	0.1	0.0	0.2	0.0	0.0	0.0
Service of extra territorial organization	0.2	0.2	0.2	0.3	0.2	0.5	0.2	0.2	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Prepared by the Survey Team based on SLFS 2011
Note: highlighted are the top 3 industries for each category

However, the structure of employment by industry (ILO estimates) shows that the share of agriculture has been declining, instead, the share of services has been expanding. There has been no significant change in the share of industry. This is generally in line with the changing trend in the structure of the economy as seen in Figure 2-2. It is said that the decline in employment in agriculture sector is as a result of shortage of labourers who used to migrate seasonally from South Sudan when it was one country, and also the absorption of labourers by gold mining.



Source: World Development Indicators accessed on 1 May 2021

Figure 2-6 Employment Structure by Industry (2011-2019) ILO estimate

¹² Wholesale and retail trade include auto repair

(3) Employment Structure Largely based on Micro Enterprises

The majority of the workers are found in enterprises with three or fewer employees, and in total 84.3% of the workers are working at enterprises with nine or fewer employees. Although more than 11.7% of workers in urban areas work in establishments with more than 100 employees, still, there is a significant volume of workers (70.0%) found in enterprises with fewer than 9 employees; and the proportion of men is larger than women (Table 2-7). There is a clear sign of missing small and medium scale businesses¹³.

In terms of place of work, in urban areas, men answered office/firm/establishment (50.4%) and no specific place (35.0%), while women answered office/firm/establishment (68.3%), no specific place (13.2%), farm (10.3%) and home (7.7%). In rural areas, men answered farm (44.4%) followed by no specific place (33.0%), while women answered farm (74.1%), office/firm/establishment (12.5%) and no specific place (10.2%)¹⁴.

Table 2-7 Number of People in Workplace, by Sex and Locality¹⁵ (%)

Size of the Workplace	Sudan			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
<3	56.9	57.9	52.9	44.5	47.0	34.4	63.3	64.0	60.8
3-4	16.9	16.7	17.6	14.0	15.1	9.2	18.4	17.5	21.1
5-9	10.5	10.2	11.3	11.5	11.1	13.3	9.9	9.7	10.4
10-19	5.5	4.8	7.9	8.9	7.1	16.2	3.7	3.5	4.4
20-29	2.2	2.1	2.6	3.9	3.5	5.8	1.3	1.3	1.3
30-39	1.7	1.4	2.7	3.4	2.6	6.5	0.9	0.8	1.1
50-99	1.1	1.2	0.8	2.1	2.1	2.2	0.6	0.7	0.2
100+	5.3	5.6	4.2	11.7	11.5	12.5	2.0	2.4	0.7

Source: SLFS 2011

(4) Labour Market Depending on the Unskilled Worker

As indicated in 2.1.3, about half of the working population in Sudan have not even completed primary education. Male workers (48.9%) and female workers (66.1%) have less than primary education, suggesting a high degree of demand for unskilled and low-paid workers in the current Sudanese job market.

Table 2-8 Distribution of employed population by educational attainment, sex and locality (%)

Level	Sudan			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Less than primary	52.9	48.9	66.1	29.7	28.5	34.5	64.9	60.1	79.2
Primary	19.4	21.7	11.7	21.4	23.2	13.9	18.4	20.9	10.8
Secondary	18.5	21.2	9.7	30.0	32.3	20.8	12.6	15.1	5.2
Tertiary	8.4	7.3	12.1	17.9	14.7	30.4	3.5	3.2	4.6
Other	0.7	0.9	0.3	1.0	1.2	0.4	0.6	0.7	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: SLFS 2011

¹³ There is no definition of Micro, Small, Medium, Large company in Sudan.

¹⁴ SLFS 2011

¹⁵ The data about the group of 40-49 members office was not listed in the original.

Looking at the proportion of workers at each occupational level¹⁶, only about 10% are engaged in Level 3-4 (occupations requiring skills above a university degree), whereas nearly 60% are in Level 1 (primary education and below). Compared to neighbouring Egypt and the global average, the current employment structure in Sudan is dominated by low-skilled workers.

Table 2-9 Distribution of Employed Population by Level of Occupation (%)

Occupation Level	Sudan	Egypt	World
Level 3-4	10.1	29.8	20.6
Level 2	31.1	43.5	41.8
Level 1	58.9	26.7	37.5

Source: Prepared by Survey Team based on ILO Stat (estimate of 2019)

The major industries which absorb a large volume of employment in Sudan (agriculture, wholesale & retail trade, manufacturing, etc.) employ a high proportion of the workers whose highest education level is primary or less. People with higher education, above secondary, tend to be hired by the sectors such as education, health and social work, and ICT.

Table 2-10 Distribution of Employed Population by Industry and Education (%)

Industry	Sudan			Distribution by Education Level				
	Total	Male	Female	Less than primary	Primary	Secondary	Tertiary	Others
Agriculture	44.0	39.4	59.3	76.4	15.5	6.7	0.8	0.6
Wholesale & retail trade	13.2	14.4	9.0	45.6	22.9	24.2	6.0	1.3
Transportation & storage	8.1	10.3	0.7	36.1	28.8	29.8	4.8	0.5
Manufacturing	7.7	9.1	2.9	42.5	27.6	23.3	5.9	0.5
Construction	5.9	7.5	0.4	34.8	31.3	27.1	4.9	1.9
Education	4.9	2.8	11.8	12.2	3.7	34.0	49.9	0.3
Health & social work	1.9	1.3	3.9	19.0	13.1	41.6	26.3	0.0
ICT	0.6	0.5	0.7	19.5	7.3	24.4	48.8	0.0
Others	13.7	14.7	11.3	-	-	-	-	-
Total	100.0	100.0	100.0	-	-	-	-	-

Source: Prepared by the Survey Team based on SLFS 2011

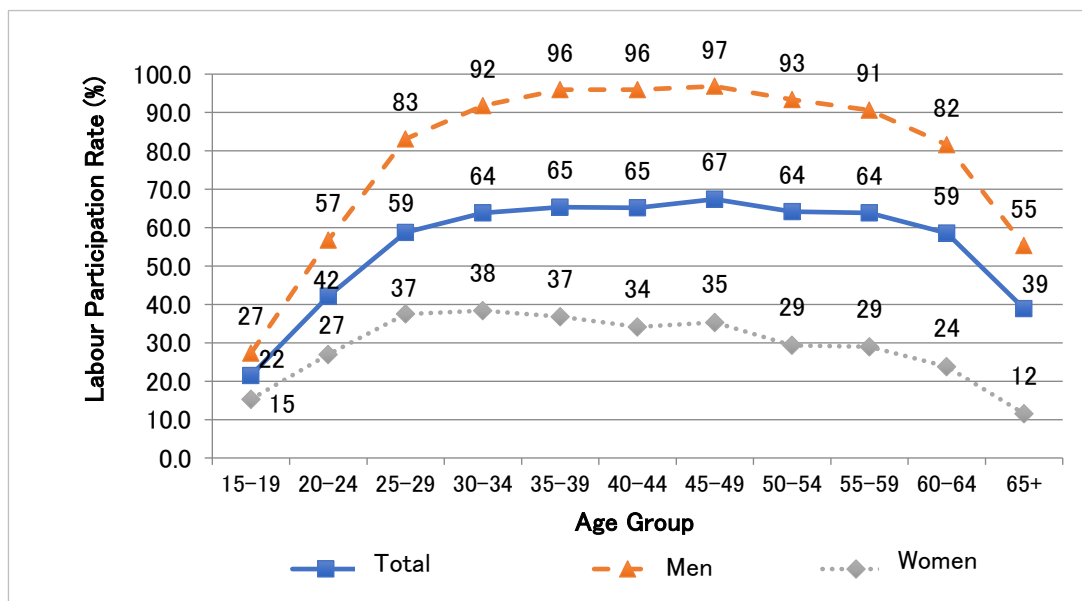
2.2 Women's Employment: labour market, labour environment, and promotion of women's economic participation

2.2.1 Characteristics of Women in Labour Market

(1) Low Labour Participation of Women

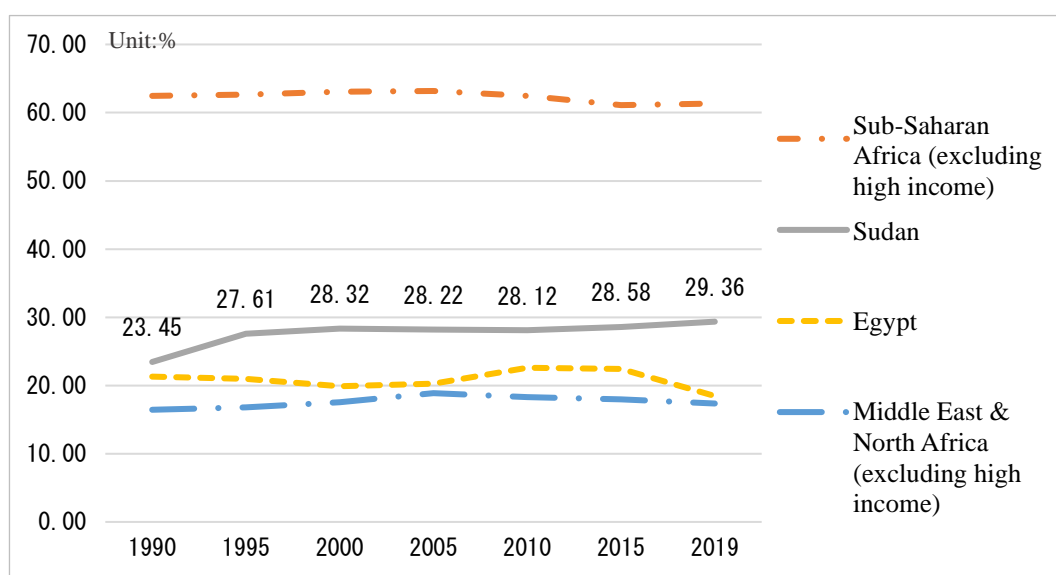
The labour participation rate for women in Sudan is 27% for 20-24 year old, which reaches the highest rate, only 38%, for 30-34 year old. The women's labour participation rate is gradually increasing and is higher compared to Middle East and North African (MENA) countries, but very low compared to sub-Saharan African countries (See Figure 2-8).

¹⁶ International Standard Classification of Occupations (ISCO)
<https://ilostat.ilo.org/resources/concepts-and-definitions/classification-occupation/>



Source: SLFS 2011

Figure 2-7 Labour Participation Rate by Sex and by Age Group



Source: Prepared by Survey Team based on World Development Indicators Accessed on 30 April 2021

Figure 2-8 Women's Labour Participation Rate (International Comparison) (%)

(2) Limited Opportunities and Entering into Informal Sector

● Women's Limited Career Choices

Women's participation in the workforce in Sudan has been low and their employment opportunities has been limited. A study of the impact of the privatisation of state enterprises which began in 1991 on women workers in urban areas shows that the implementation of this policy has led to the

dismissal of many women, many of whom have moved into the informal sector, which involves less initial investment and can be done from home¹⁷.

Agriculture is the most promising labour market for women, accounting for 59.3%, followed by education (11.8%), wholesale & retail trade (9.0%), health care, and civil service (3.9% each). In rural areas in particular, nearly 80% of women are engaged in agriculture, with about half of them as contributing family workers. On the other hand, although agriculture is also the most common industry for men (39.4%), they have relatively wide choices of occupations, including wholesale/retail/vehicle maintenance (14.4%), transportation/storage (10.3%), manufacturing (9.1%), construction (7.5%) and civil servants (5.9%) (See Table 2-6).

● Women in Informal Sector Jobs

As noted above, employment opportunities for women are limited and it is estimated that 60% of women in employment are engaged in the informal sector¹⁸. Among the informal sector, daily necessities, beauty products, perfumes and some food products are dominated by women. The street teaseller is a major women's economic activity, as it requires very little initial capital. According to a survey of teaseller in Khartoum and its suburbs conducted by the Arab NGO Network for Development, 62.2% of the respondents do not receive any support from the government or civil society, 71.2% have been involved in police crackdown campaigns on teaseller businesses, 86.5% have no insurance, and 92% do not participate in any union¹⁹. On the other hand, 57.3% of the respondents indicated that they pay some kind of fee to a government agency. It is also pointed out that these women are often subjected to sexual harassment, but no action is taken and there is no one to whom they can appeal²⁰.

The informal sector is reported to account for 60% of the Sudanese economy, and despite its importance, little is discussed about the improvement of the sector in policies²¹.

(3) Imbalance between labour demand (demand for unskilled labour and limited formal employment) and supply (labour entry of highly educated women)

As observed in 2.1.4, there is a higher demand for unskilled and low-paid labourers in the Sudanese labour market. Among women especially, 77.8% of those who are working have only completed

¹⁷ Arab NGO Network for Development (2016), Arab Watch on economic and Social Rights 2016 - Informal Labor, National Reports on Informal Labor-Sudan, (185 women in and around Khartoum city interviewed), Khalfalla, L.A. and Ahmed, E.M. (2019) Privatisation and Women's Employment Position in Sudan Women at Work in Sudan: Marital Privilege or Constitutional Right?, Social Politics 2019 Volume 26 Number 2

¹⁸ Arab NGO Network for Development (2016), Arab Watch on economic and Social Rights 2016 - Informal Labor, National Reports on Informal Labor-Sudan,

Definition of informal sector: <https://ilo.org/public/english/bureau/stat/download/papers/def.pdf>

¹⁹ Arab NGO Network for Development (2016),

²⁰ Challenge Fund for Youth Employment (2021), Scoping Report <https://fundforyouthemployment.nl/wp-content/uploads/2021/03/Scoping-Report-Sudan-2021-Challenge-Fund-for-Youth-Employment.pdf>

²¹ Sudan-African Economic Outlook 2012

primary education or less. This is especially true for rural women that nearly 80% of the women of working population has not even completed primary education.

On the other hand, the labour participation rate of women has been on the rise since 2011²² due to some socio-economic factors that promote women's participation in the labour force: education level of women is increasing²³; and rapid inflation has made women's income more important than ever for improving or sustaining the livelihood of the family.

The gap between the increasing women's labour participation and the limited access to the labour market, as well the stagnant economy is resulting in the particularly high unemployment of urban young women (74.1%)²⁴.

2.2.2 Institutional Gender Gap

According to the World Bank, with regards to legal inequalities in women's access to economic opportunities, Sudan's score is 177th out of 181 countries, indicating that women's employment is systemically more difficult than in neighboring Egypt and Ethiopia²⁵.

Table 2-11 Women, Business and the Law 2021 International Comparison

	Mobility	Work place	Pay	Marriage	Parenthood	Entrepreneurship	Asset	Pension	Score
Sudan	0	0	0	0	20	75	40	100	29.4
Egypt	50	75	0	0	20	75	40	100	45.0
Ethiopia	100	100	25	80	60	75	100	75	76.9

Source: Prepared by Survey Team based on World Bank (2021) Women, Business And The Law 2021

● The Labour Code which protect women and children also constrain women's employment

The current Labour Code, enacted in 1997, has provisions to protect the employment of women, such as prohibiting dismissal for reasons such as pregnancy, and requiring companies to grant maternity and parental leave. On the other hand, the law imposes various restrictions on women's and young people's employment to protect their health, such as prohibiting them from working in hazardous occupations, and late night work (22:00 to 06:00) except in specific occupations such as health care²⁶. Some employers argue that these restrictions are a reason to be cautious about employing women, while some women say that working at night is difficult because they have to deal with domestic work²⁷.

²² World Bank Statistics : <https://data.worldbank.org/indicator/SL.TLF.CACT.FE.ZS?locations=SD>

²³ World Development Indicators (Accessed on 26 April 2021), Labour participation rate of women with tertiary education goes up to 56.4%, while that of women with secondary education remains 21.7% and primary education 19.0%.

²⁴ SLFS (2011), Youth means 15-24 years old. Young men's unemployment rate is 38.5%. In terms of the number of the unemployed youth (15-24), it is 153 thousand for men and 130thousand for women.

²⁵ World Bank (2021) Women, Business and The Law 2021, Egypt at 170th and Ethiopia at 103rd of the rank.

²⁶ Sudan Labour Code (1997)

²⁷ World Bank (2020) Sudan: Women and Youth Employment Report

- Unfavorable inheritance rule limits women's ownership of asset and land

Although the Muslim Personal Status Law (1991) gives women the right to own property and to manage assets after marriage, it stipulates that in the event of divorce and inheritance, priority is given to male family members. This reflects the social norm between men and women, where men are responsible for family life as breadwinner and women are responsible for caring for family, and even the Law stipulate so. As a result, women are often restricted from owning land. They are often found as contributing family workers in agriculture without pay, and to be unable to provide collateral to finance to start business or to expand their businesses²⁸.

- Women's Mobility and Family Role

The Muslim Personal Status Law (1991) stipulates that women need permission of their husbands or male family members in order to work. In addition to this legal binding, even in customary practice, it is often the case that women seek permission or approval to go out of the house, or before deciding what to do. It happens that the family members and relatives restrict women to work²⁹. There is also a widespread belief that women should only work if there is an economic need. On the other hand, the idea of working for fulfilling oneself rather than for economic reasons is becoming common particularly among urban, middle-class and educated women³⁰.

2.2.3 Social and Customary Factors of Women's Employment

- Increasing Women's Social and Economic Participation

Women's labour participation rate in Sudan is higher than that of other MENA countries, and there are more women than men in higher education. Sudan has a quota system in politics, and about 30% of the parliament seats are reserved for women, making Sudan one of the most tolerant Islamic countries for women's participation in society³¹.

- Deep-rooted Gender Norms in Both Rural and Urban Settings

The World Bank's report (2020) shows that the young people in Khartoum, both men and women consider that women should be the ones to take care of the family and children. Even within the family, it is usually the female family members who are asked to help with household chores as they are considered as the only ones to do so, while male members are never asked to help. This indicates that there is an unconscious perception of fixed male and female roles³².

Due to such unconscious perception, mixed with the lower educational status and other factors, women often have lower confidence than men: According to a survey conducted to entrepreneurs,

²⁸ UNDP (2018) Gender Justice and the Law -Sudan

²⁹ Muslim Personal Status Law (1991), stipulates that wives must obey the husbands, and if she start job against the direction of husband, the husband no longer have to be responsible the wife's maintenance.

³⁰ Tonnessen, L (2019) Women at Work in Sudan: Marital Privilege or Constitutional Right?, Social Politics 2019 Volume 26 Number 2

³¹ World Bank (2020) Sudan: Women and Youth Employment Report

³² World Bank (2020) Sudan: Women and Youth Employment Report, The Muslim Personal Status Act stipulates that men are obliged to take the responsibility to feed and support the family, while women are obliged to take care of the family members.

68.7% of women said they are confident about their skills, knowledge and experience to start business, while that of male counterpart was 80.5%³³.

According to the interviews conducted in Kosti and Kassala, women expressed that they are often time pressured with many care takers' role such as cooking and caring for family, which prevent them to leave home for a long time even if there are training courses they would like to join. General perception of the attendees was that it is possible to be out of home 4 hours a day, from after breakfast until their families come home³⁴.

● Regional Differences in Working Situation of Women

Sudan has diverse cultures, and each region and ethnic group has different social norms and values. In the Northern and Eastern states, the labour participation of rural women is notably low. It is said that the ethnic groups living in these areas have social norms that do not allow women to work outside home, and a culture that values tradition and not mixing with other ethnic groups. The Western states, on the other hand, are characterised by high levels of female labour participation. In the Darfur region in particular, women can be found in a variety of industries, and even brickmaking and construction site are recognised as women's workplaces³⁵. It is said that Darfur has been always open and accepting women's economic participation coming from a strong influence of African culture. Furthermore, the impact of the conflict has also forced women to work in order to maintain the family income, as men participate in the conflict or migrate to other states in search of income and work.

2.3 Current situation and Challenge of Youth Employment

2.3.1 Precarious Employment

The vulnerability of employee's status is also a key feature of employment in Sudan: according to the SLFS (2011), 51.2% of all Sudanese workers are found to be in vulnerable employment, accounting for 47.3% of male workers and 65.9% of female workers³⁶.

Employees takes the largest share for both men and women in urban area, whereas in rural area, the own account workers³⁷ takes the biggest share for men and contributing family workers (without salary compensation) for women.

³³ 249 Startup (2021) Situation Analysis of Startups in Sudan

³⁴ GEMS Women, Business and Employment Workshop record: conducted 3 times in between June – August 2016.

³⁵ World Bank (2013) Brief Overview of Key Gender Issues -DARFUR, It is however important to note that these industries are often low skilled and low paid works.

³⁶ Precarious employment is a sum of the own account worker and contributing family worker. Figures are rounded off in the Table 2-12, and therefore differ from the sum of those indicated number.

³⁷ ILO definition: "Own-account workers are those workers who, working on their own account or with one or more partners, hold the type of jobs defined as a "self-employment jobs", and have not engaged on a continuous basis any employees to work for them." https://www.ilo.org/ilostat-files/Documents/description_STE_EN.pdf

Table 2-12 Status in Employment by sex and locality (%)

Status in Employment	Sudan			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Employees	42.3	45.5	31.6	62.0	60.6	67.8	32.2	37.2	16.8
Employers	5.7	6.8	2.1	5.9	6.9	2.0	5.6	6.7	2.1
Own account workers	39.4	41.5	32.6	30.3	30.9	27.5	44.2	47.3	34.7
Contributing family workers	12.1	5.8	33.4	1.2	1.0	2.1	17.8	8.5	46.2
Other	0.4	0.4	0.4	0.5	0.5	0.6	0.3	0.4	0.3

Source: SLFS 2011

Of those having employment, 51.4% of the are found in informal employment, with the youth (15-34) accounting for half³⁸. By industry, more than 80% of workers in the transportation & storage and construction industries are in informal employment³⁹. And of the employed population, 26.5% are modestly poor and 6.0% are poor in Sudan, indicating the seriousness of the issue of working poor⁴⁰.

Table 2-13 Informal Employment by Industry, Sex and locality (%)

Industry	Sudan			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Agriculture	48.9	42.4	63.4	35.4	35.9	34.0	49.9	42.9	65.2
Wholesale and retail	50.0	50.2	48.7	46.6	46.1	48.7	53.3	53.9	48.6
Transportation & storage	82.5	83.0	60.0	79.5	80.3	53.1	86.2	86.2	81.9
Manufacturing	53.4	54.9	38.2	52.9	53.5	46.2	54.1	56.7	29.5
Construction	82.2	82.6	58.2	76.6	77.2	43.9	89.0	89.2	80.0
ICT	43.4	47.4	33.3	33.9	42.6	14.0	63.8	56.8	86.2

Source: Prepared by Survey Team based on SLFS 2011

2.3.2 Youth Unemployment Situation

(1) Increasing Number of Youth without Jobs

According to the ILO's estimate, the unemployment rate has remained high since 2012. In 2019, the overall unemployment rate is 16.9% and the youth unemployment rate (15-24) is very high at 32.1%, almost double the overall rate. It is estimated that the actual number of unemployed people is increasing due to high population growth and the economic challenges. IMF has forecasted that Sudan's unemployment rate will rise to 25% in 2020 due to the COVID-19 pandemic. The young people in the informal employment are likely to be affected by such situation.

Table 2-14 Unemployment Rate (%)

Unemployed	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	15.2	17.4	17.5	17.5	17.4	17.3	17.2	17.0	16.9
Youth (15-24)	32.7	32.6	32.7	32.7	32.7	32.6	32.4	32.2	32.1
Youth (Male)	23.8	27.3	27.4	27.2	27.2	27.1	27.0	26.9	26.8
Youth (Female)	38.4	43.5	42.9	43.7	43.9	43.7	43.6	43.2	42.8

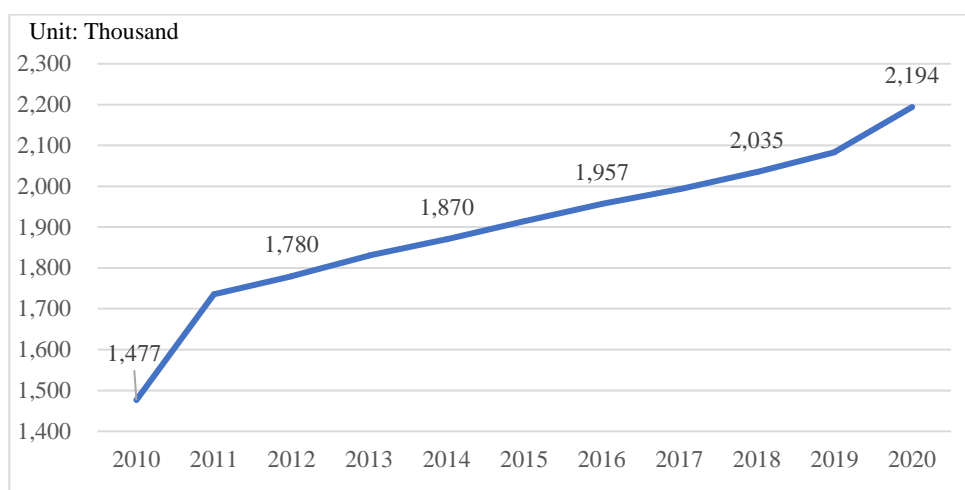
Source: Prepared by Survey Team based on ILOSTAT (ILO Estimate) accessed on 7 May 2021⁴¹

³⁸ Calculated based on the SLFS 2011. Informal employment include both employees in the informal sector and those employed informally in the formal sector (who generally do not have a formal employment contract). They often have no social security and do not file taxes.

³⁹ SLFS 2011, Among the industries, agriculture takes the largest share of the informal employment

⁴⁰ ILO Estimate, accessed on 3 May 2021, estimated value for 2019. It is said that the population who faces difficulty in their life is increasing due to acute inflation and economic situation.

⁴¹ ILO Estimate, accessed on 7 May 2021



Source: Prepared by Study Team based on ILOSTAT accessed on 7 May 2021

Figure 2-9 Number of Unemployed (15 years old and above)

(2) Prolonged Unemployment

Prolonged unemployment is also noticeable: The SLFS (2011) reported that more than half of the unemployed (57.6%) are in such status for more than a year. In urban areas in particular, 77.3% of the unemployed (men 67.9%, women 85.5%) have been unemployed for more than a year. The main reason for unemployment is there are no jobs (87.5%), while 2.6% reasoned the insufficient wage and 2.6% reasoned inconvenience of the work.

Of the youth (15-24), 28.3% (men 20.3%, women 36.8%) are NEET (not in education, employment or training)⁴². In addition, among the economically inactive population, those who have given up hope of finding a job account for 5.3%⁴³. These people can be considered as unemployed in reality, which signals the even more severe situation of unemployment among youth than what the statistics suggest.

(3) Severity of Unemployment in Urban Area

The proportion of youth unemployment is lower in rural areas, thanks to absorption in the agricultural sector, while youth unemployment concentrates in urban areas: Youth (15-24) unemployment: 49.4% in urban areas vs. 27.0% in rural areas; also among (15-34): 37.7% in urban areas vs. 23.3% in rural areas.

One of the reasons for the high youth unemployment rate in urban areas could be that the labour absorption capacity of Micro, Small and Medium Enterprises (MSMEs), which is expected to provide largest employment opportunities, is not balanced with the high population growth in urban

https://www.ilo.org/shinyapps/bulkexplorer46/?lang=en&segment=indicator&id=UNE_2EAP_SEX_AGE_RT_A&ref_area=SDN&sex=S_EX_T+SEX_M+SEX_F&classif1=AGE_YTHADULT_YGE15+AGE_YTHADULT_Y15-24+AGE_YTHADULT_YGE25&timefrom=2010&timeto=2020

⁴² Main reasons of inactivity is Full-time homemaker (45.1%) and full time student (36.4%), SLFS 2011

⁴³ SLFS 2011

areas (3.2%)⁴⁴. Another factor is that companies in Sudan place great emphasis on work experience when recruiting, making it difficult for young people to join the workforce.

Table 2-15 Unemployed by Age and Locality (%)

Age	Sudan			Urban			Rural		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
15-19	31.1	29.4	34.4	48.1	41.6	66.3	26.5	25.6	28.1
20-24	35.5	28.0	51.7	49.9	37.3	76.5	27.3	22.9	37.2
25-29	28.6	20.6	44.1	37.7	26.2	56.8	23.1	17.5	35.2
30-34	18.9	10.5	37.3	22.9	12.0	46.2	16.1	9.5	30.9
35-39	11.8	7.5	22.1	13.9	8.5	28.7	10.5	6.9	18.7
40-44	8.2	5.2	16.6	9.3	3.9	25.0	7.5	6.0	11.7
45-49	9.1	5.1	21.0	7.6	3.7	22.9	10.0	6.1	20.3
50-54	7.3	5.8	13.2	5.0	3.6	10.0	8.8	7.1	15.3
55-59	7.4	6.2	12.3	7.2	6.4	10.4	7.5	6.0	13.5
60-64	8.8	7.6	15.3	10.7	8.2	26.7	7.8	7.3	10.5
65+	8.6	8.8	6.8	8.3	8.5	6.9	8.7	9.0	6.8
Youth (15-24)	33.8	28.6	44.8	49.4	38.5	74.1	27.0	24.0	32.9
Adult (25+)	14.5	9.6	28.0	17.2	10.2	36.4	12.8	9.2	22.9
Youth (15-34)	28.4	21.5	42.8	37.7	26.7	59.9	23.3	18.6	33.2
Adult (35+)	9.1	6.5	17.8	9.4	5.8	21.7	9.0	6.8	15.5
Total	18.5	13.3	32.1	22.9	15.0	43.9	16.0	12.3	25.6

Source: Prepared by Survey Team based on SLFS 2011

● The Need for Integrated Approaches to Address Regional / State Issues

Unemployment is highest in Khartoum State (26.4%), followed by Southern Darfur State (20.9%) and Gezira State (11.0%). The education level of those unemployed also varies between states. Looking at the distribution of unemployed by the educational attainment, those who completed tertiary education takes the biggest share of unemployed (44.0%) in Khartoum, whereas it is less than primary education (54.9%) whose share is highest in Southern Darfur.

In Sudan, where each state has a different industrial structure, education situation, and cultural and social background, the promotion of youth employment requires an integral effort.

Table 2-16 Education Level and Unemployment Rate and Number by Locality

Locality	Education level	Male	Female
Rural	Secondary and above	27.2% (138 thousand)	29.2% (120 thousand)
	Primary or less	72.1% (366 thousand)	70.8% (291 thousand)
Urban	Secondary and above	62.8% (221 thousand)	72.1% (279 thousand)
	Primary or less	37.0% (130 thousand)	27.8% (118 thousand)

Source: Prepared by Survey Team based on SLFS 2011

Table 2-17 Distribution of Unemployed by State and Educational Attainment (%)

State	Distribution of Unemployed	Education Attainment (%)				
		Less than primary	Completed primary	Completed Secondary	Completed Tertiary	Other
Northern	1.8	5.6	14.5	26.8	53.0	0.0

⁴⁴ World Bank Statistics : <https://data.worldbank.org/country/sudan> Population growth in the rural area is 1.9%

River Nile	3.5	5.9	23.0	28.9	41.6	0.5
Red Sea	2.7	31.0	19.0	27.9	22.0	0.0
Kassala	3.3	45.1	25.0	15.3	14.5	0.0
Gadaref	3.9	33.0	36.6	18.0	9.7	2.7
Khartoum	26.4	6.8	16.7	32.5	44.0	0.0
Gezira	11.0	12.7	22.6	32.8	31.9	0.0
White Nile	3.3	32.0	25.3	20.7	19.0	3.1
Sennar	2.6	17.9	27.6	35.2	19.3	0.0
Blue Nile	1.0	54.9	22.2	16.5	6.3	0.0
Northern Kordofan	4.6	28.5	35.3	20.4	15.8	0.0
Southern Kordofan	3.6	51.8	23.5	19.3	5.4	0.0
Northern Darfur	8.1	55.8	21.5	11.3	11.4	0.0
Western Darfur	3.3	69.0	17.6	9.2	3.8	0.5
Southern Darfur	20.9	54.9	29.0	10.0	5.9	0.2

Source: SLFS 2011

(4) Youth's Opinion about Employment

According to the Youth Mapping Research conducted by the Ministry of Youth and Sports in 2020⁴⁵, when asked about the biggest problems faced by young people, the largest number of both men and women (men 46.1%, women 41.0%) answered "poverty and unemployment and its effects", followed by "ethnic and tribal issues" (men 12.7%) and "tribal and regional racism" (women 12.1%), confirming the high level of concern about unemployment and poverty.

To the question "What are the barriers to achieving your life goals?", the most common answer was "Lack of funds and poverty due to the economic recession"(men 45.5%, women 44.1%), followed by "Lack of goals in the first place" (men 17.9%, women 17.0%), and thirdly "Lack of training and development opportunities, role models and mentors" (men 12.2%, women 13.7%), indicating that young people feel challenged by their inability to envisage their own future.

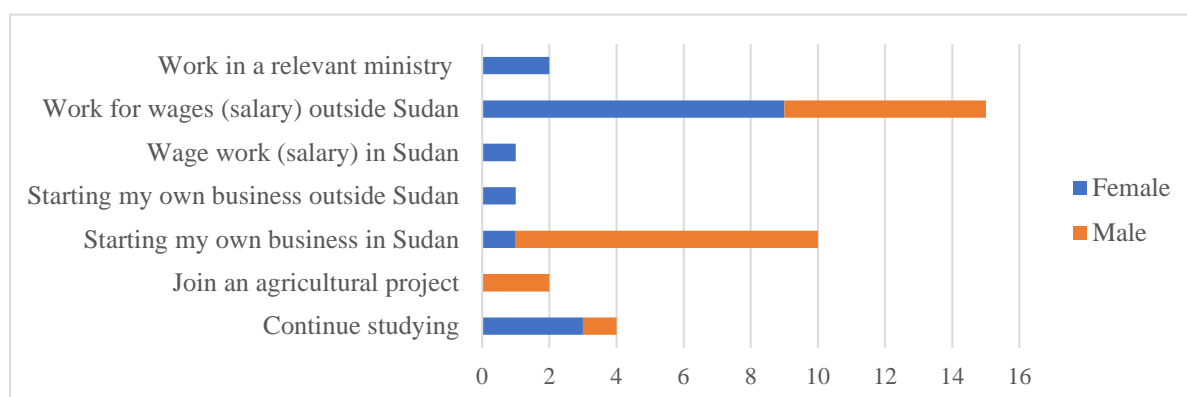
The survey team's online survey of university students and interviews with trainees of Vocational Training Centres (VTCs) confirmed that many young people have a career aspiration to work abroad to secure a good income, then to start their own business in Sudan.

Firstly, according to the online survey of university students, around 42.9% (6 men and 9 women) plan to work abroad, followed by 28.6% (9 men and 1 woman) of them considering to start their own business. Other responses included further education (1 man, 3 women), working for a relevant ministry (2 women) or working on an agricultural project (2 men)⁴⁶. Many of them gave the working environment in Sudan (lack of jobs, lack of desired jobs, etc.) and income as reasons for working

⁴⁵ Youth (18-35) in every state (state capital and locality), a total of 7,892 (4,561 men and 3,331 women) are interviewed.

⁴⁶ Online questionnaire was distributed through a university professor in June 2021. Total 35 responded (men 18 women 17). Faculty: Agriculture (12), Engineering (9), Social Science (2) and others (12). Location: Khartoum (33) and 1 each from Kassala and Gezira. Level at University: Bachelor 30 (men 17, women13), Master 5 (men 1, women 4)

abroad. In addition, some respondents (4) wanted to gain knowledge and experience that cannot be gained domestically and to use this knowledge to start a business in Sudan.



Source: Prepared by Survey Team

Figure 2-10 University Students' Career Plan after Graduation by Sex

Trainees in the 3rd year (final year) of VTC interviewed (Total 12 interviewed) are planning to "work out of Sudan (5)", "start business (4)", "continue technical college (3)", or "work in Sudan (1)" after graduation. Nine of them consider becoming an employer in 5 years after graduation⁴⁷.

2.4 Youth Employment Policy, Measures and Implementing Agencies

2.4.1 National Policy, Strategy and Programs

The Transitional Government recognises the role of youth and women in leading the civil revolution and is strongly committed to ensuring that the voices of youth and women are reflected in the politics. The Transitional Government's policy documents set the empowerment of youth and women as a government's key objective and outline initiatives towards achieving it. Among them are the establishment of new vocational training institutions and the provision of employment-oriented technical and vocational education and training (TVET). Below is a summary of the policies and programmes that are specifically related to the youth employment promotion.

(1) General Framework for the Programme of the Transitional Government

Ministry of Cabinet Affairs published the General Framework for the Programme of the Transitional Government, which sets out 10 priority programmes. Three of them are directly related to employment promotion: (1) Addressing the economic crisis and establishing the bases of sustainable development, (2) Ensuring the promotion of the rights of women in all areas and their equitable representation in the structures of governance, and (3) Enhancing the role of youth of both sexes and expanding their opportunities in all areas.

⁴⁷ Kassala and Kosti VTC trainees in the 3rd year (in In-Plant Training) are interviewed by phone.

Table 2-18 Areas Addressed among 10 Priority Programmes of the General Framework for the Programme of the Transitional Government

Area	Description
Addressing the economic crisis and establishing the bases of sustainable development	<ul style="list-style-type: none"> • Creating a suitable environment for medium, small and micro enterprises (MSMEs) and securing technical and financial support for them, thereby moving towards regulating the informal sector. • Reviewing the Bank of Sudan Act, emphasizing the Bank's independence and applying the global standards of the banking system. • Attending to entrepreneurship, innovation and the development of small and medium industries.
Ensuring the promotion of the rights of women in all areas and their equitable representation in the structures of governance	<ul style="list-style-type: none"> • Establishing and activating the Commission for Women and Gender Justice, as well as by setting strategies, policies and mechanisms for integrating gender in all areas. • Encouraging positive public discourse towards women's issues, especially through the mass media. • Empowering women via access to economic and administrative resources, including financing and building productive and knowledge capacities. • Ensuring the principle of equal opportunities in all sectors, empowering women economically and providing decent work opportunities in all fields.
Enhancing the role of youth of both sexes and expanding their opportunities in all areas	<ul style="list-style-type: none"> • Developing a general policy for youth and translating it into action programmes and creating an enabling environment for them to engage in societal, economic and political work, and emphasizing their participation in the formulation and implementation of plans and programmes. • Conducting a youth survey to create a database to identify their organizational and economic needs. • Attending to, and supporting, youth initiatives in entrepreneurship, creativity and innovation. • Focusing on building the capacity of youth to supply the labour market with a qualified, skilled and trained workforce. • Developing a youth employment policy and encouraging entrepreneurship by ensuring decent work conditions for youth of both sexes.

Source: Survey Team

(2) The Three-year Program for Stability and Economic Development 2021-2023

The Ministry of Finance and Economic Planning (MOFEP) issued the “The Three-year Program for Stability and Economic Development 2023-2021” which set 8 axes: Macroeconomy, Governance, Agriculture & Livestock and Forestry, Industry, Mining and Trade, Infrastructure, Labour and Social Development, Environment, and Peace. Among them, employment and social development issues specify three aspects of: (1) Social development and education, (2) unemployment, (3) women. Concerned ministries are expected to implement this program, according to their mandate.

Table 2-19 Areas Relating to the Employment Promotion for Youth and Women of the Three-Year Program for Stability and Economic Development 2021-2023

Priority Area	Contents
Social Development ⁴⁸ -Education	<ul style="list-style-type: none"> • Increase budget of general education (Share of GDP: 0.07% (2017)→3% (2020/21)→4-6% (2030)) and higher education (0.03% (2017)→1.5%(2020/21)), • Increase pre-school attendance and enrollment in primary, secondary and tertiary education. • Doubling the absorption of youth in public universities and TVET by using two

⁴⁸ Social Development Axis include health, education, nutrition, water and sanitation, social security and protection, and poverty alleviation.

	cycle system and establishing new institutions.
Addressing Unemployment	<ul style="list-style-type: none"> Promote large national projects in the fields of agriculture and urban development in urban and rural areas, and encourage manufacturing industries, aiming to absorb 300,000 workers annually during the transitional period 2021-2023 Promote the culture of self-employment among youth, Conduct periodic national survey of the labour market
Women	<ul style="list-style-type: none"> Working to review legislation and laws that discriminate against women and enact legislation that encourages women's participation in development, including access to resources. The formation of the Women and Equality Commission stipulated in the constitutional document. Ratification of international conventions and treaties to promote the rights of women and girls.

Source: Survey Team

(3) The Ministry of Finance and Economic Planning (MOFEP) “20 Priority Projects”

MOFEP has set out a proposal to the Friends of Sudan on 20 priority projects⁴⁹ to address urgent issues such as inflation, deteriorating public services and youth unemployment, with an idea of creating 55,000 youth employment opportunities over three years. While many of the initiatives have indirect linkage to employment opportunities, such as adding value to agricultural and livestock products and restoring security and livelihoods in conflict-affected areas, two projects are directly related to promoting youth employment.

Table 2-20 Areas Related to Youth Employment of the 20 priority Projects

Project Name	Project Description
Creating Market for Jobs and Products	<ul style="list-style-type: none"> Country Private Sector Diagnostics Identification of investment and job creation markets and review of current investment regulations, to lay the foundation for establishing a suitable private sector ecosystem, Establishing Investment and Private Sector Development Authority
Enhancing the Capacity of Youth	<ul style="list-style-type: none"> Adopt the German model for vocational education and training Establish TVET institutions country wide, focusing on rural areas and adjacent to agriculture and industrial centres. Provide training programs to enhance opportunities for youth in the labour market

Source: Survey Team

2.4.2 Relevant Ministries’ Policies relating to Employment Promotion and its Activities

This section explains the relevant ministries’ activities under the above overarching policies.

(1) Ministry of Labour and Administrative Reform: Labour Policy

The Ministry of Labour and Administrative Reform (MOLAR) is working on the developing the national employment policy supported by ILO. It started under the lead of the former Minister of Labour and Social Development, an initial kick-off meeting was held in December 2020. Since

⁴⁹ Government of Sudan, 20 Priority Projects -A Proposal for the Friends of Sudan, A circulated handout of the Government of Sudan in November 2019

January 2021, a labour market sampling survey has been carried out by telephone, but the survey has been prolonged due to the COVID-19 pandemic⁵⁰.

MOLAR aims to promote all types of employment, not only in the civil service but also in private companies and abroad, and acts as a supervisory body for the formulation and implementation of policies to this end. Protection of workers' rights and training for civil servants also fall under the Ministry's jurisdiction.

Every state has a labour office under the state government, with key role of protection of workers' rights and arbitration of conflict related to employment. The state's labour office issues a registration card to the graduates who wish to work as public officers or at the state owned companies, and keeps track of the trends of job applicants. When there is a vacancy, the labour office would facilitate the process through the Selection Committee.

Among the planned projects, MOLAR in cooperation with ILO is preparing to implement an employment intensive infrastructure project in the Mayo area, south of Khartoum, which aims to rehabilitate the water facility, road, and schools, through which, local youth will be trained and hired to be engaged in the infrastructure rehabilitation work.

The following two authorities are those which have direct roles in promoting youth employment under MOLAR.

① National Bureau for Graduate Employment

National Bureau for Graduate Employment was established in 2016 to help graduates employment and provide them with the training they need⁵¹. The bureau has its office in each state, provides technical training to unemployed youth and runs incubators on technology, agriculture, industry, services, and social media. Currently, in collaboration with the Enable Youth Program implemented by the African Development Bank (AfDB), the Bureau works to promote youth's participation in agricultural production through its agricultural incubator in Soba in Khartoum.

② Supreme Council for Vocational Training and Apprenticeship (SCVTA)

Supreme Council for Vocational Training and Apprenticeship (SCVTA) was established in 2001 to supervise any vocational training including training at private and public companies. SCVTA mainly manage and provides vocational training services through VTCs (both public and private). SCVTA is working with various partners to provide vocational training to the people who need it including

⁵⁰ Interview with ILO Consultant on 1 May 2021

⁵¹ A Higher committee to implement "Self-Employment Project" was established in 1998 under the Ministry of Labour, which is the beginning of the bureau. After several structural changes, the Law of the National Bureau for the Graduate Employment was approved in 2016, which legalized the establishment of the National Bureau for Graduate Employment (Interview with National Bureau for Graduate Employment on 7 June 2021)

refugees and host communities in different parts of Sudan, particularly in conflict affected areas like Darfur and Eastern part of Sudan⁵².

(2) Ministry of Social Development: Women's Empowerment Policy

The Ministry of Social Development (MOSD) is one of the oldest among the governmental organisations and its responsibilities cover (i) poverty alleviation, (ii) women, (iii) family and children, (iv) microfinance, (v) social development, and (vi) vulnerable population (orphans, the elderly and the disabled). Under the Ministry are the Zakat Fund, the National Pension and Insurance Fund, the Health Insurance Fund, the Humanitarian Aid Commission, the Saving and Social Development Bank, the Family Bank, the National Population Fund, the National Council for the People with Disability and National Authority for Prosthetics and Orthotics.

The Government of Sudan issued a National Policy on Women's Empowerment in 2007⁵³, and one of its focus areas is women's work and economic empowerment. Although the policy was later revised in 2017, the proposed revised policy has not been approved to date. According to the 2021 annual plan of the Department of Women and Family Affairs of the MOSD, it is planned to conduct several consultation workshops for the approval of the women's empowerment policy, conduct awareness-raising activities on the COVID-19 for women workers, hold monthly meetings with relevant ministries and quarterly meetings with the state level, and promote women's participation to achieve sustainable development through their economic and social empowerment⁵⁴.

The Women's Economic Empowerment Unit is set up under the Department of Women and Family Affairs, and it used to support rural women for their economic empowerment. The target was selected through the Women's Unions, in collaboration with the Central Bank of Sudan and the Ministry of Agriculture. The challenge was that these initiatives were more about political empowerment rather than economic, and the evaluation of the impact was not adequately measured based on the Bank's financial reports alone⁵⁵.

The MOSD is collecting information on women's MSMEs with the support of Common Market for Eastern and Southern Africa (COMESA). The MOSD has also launched a government-funded project called "Shamil", which aims at the economic empowerment of rural women by building their capacity through provision of training and financial support.

⁵² Major partners are such as GIZ, UNIDO, UNESCO, ILO, KOICA, EU and JICA.

⁵³ Then under the Ministry of Social Welfare, Women and Child Affairs

⁵⁴ Ministry of Social Development on 23 June 2021

⁵⁵ Ministry of Social Development on 23 June 2021

Furthermore, the MOSD is preparing to implement the Accelerating Women Entrepreneurship and Access to Finance (AWEAF) Project in Khartoum and Red Sea State in collaboration with the AfDB⁵⁶.

(3) Ministry of Youth and Sports: Youth Policy

After the civil revolution, the Ministry of Youth and Sports organised Youth Economic Conferences, Peace Week and conducted Youth Mapping Research in order to reflect the views of young people in its policies⁵⁷. Although the COVID-19 Pandemic delayed the development of the policy, it is now under discussion with the support of UNESCO, UNFPA, other international and national experts, and civil society organisations such as the Youth Forum⁵⁸.

One of the current activities is the entrepreneurship programme in cooperation with the AfDB is implemented in the states of Kassala, Gadaref, Blue Nile and Southern Kordofan. The Poverty Alleviation Unit of the Ministry of Youth and Sports is supporting a program to improve production and consumption through the Youth Productive Cooperative in cooperation with the Ministry of Agriculture and Forestry. Currently 300 people are involved in agricultural production.

The Ministry of Youth and Sports has 32 Youth Training Centres in each state and intend to use these centres to provide technical and handicraft training, but due to lack of budget and the deteriorating facilities' situation, very little is actually being done⁵⁹.

(4) Youth Projects Commission

Youth Projects Commission (YPC) is a new commission established in 2021 under the Sovereignty Council to promote youths' access to necessary business support, including the business registration⁶⁰, matching with funding partners, and capacity development opportunities. The YPC does not finance directly to the youth business entities to implement their business plans, but help matching them with the funding partners (private sector or development partners)⁶¹. This activity is aiming at developing key economic sectors and creating jobs leveraging the vitality of the youth. The YPC considers mining, agriculture, tourism and industry to be the four key sectors of intervention, and it is hoped that the entry of youth-led entities into these sectors will have an economic impact by strengthening the sectors and improving the balance of trade through increased exports.

The activities have just started, and there is no headquarter office yet. YPC is currently in the process of visiting each state to grasp the current situation. The first step is to set up a committee with the

⁵⁶ Ministry of Social Development on 23 June 2021

⁵⁷ Ministry of Youth and Sports (2021) A report of the first transition period September 2019- February 2021 (Arabic)

⁵⁸ Interview with Ministry of Youth and Sports on 19 May 2021

⁵⁹ Interview with Ministry of Youth and Sports on 19 May 2021, There are 32 Youth Training Centers all over the country and the ownership is the State Government due to decentralization.

⁶⁰ Interview with Youth Projects Commission on 19 May 2021, the YPC is considering promoting measures such as exemption of registration cost and non-financial subsidy of 15-20% of cost.

⁶¹ Interview with Youth Projects Commission on 19 May 2021, the YPC considers that the procedure is too complicated for the government to make contract directly with the business entities, thus their role is limited to facilitation to access to funding partners.

Khartoum State Government and implement the "Khartoum Model" on a pilot basis. For Khartoum State, the YPC-Khartoum considers tourism, agriculture, and livestock as key focus areas, and started to conduct a situation survey on unemployed youth. So far, arable land in the northern Bahari and western part of Omdurman are under discussion for the project sites⁶².

2.4.3 Laws on Employment

There are laws concerning employment which includes, the Labour Code (1997), the Minimum Wages Act (1974) and the Social Insurance Act (1990). These laws have not been updated and does not meet the current economic and labour environment.

● Further Needs for Protecting Workers' Rights

Although Sudan has ratified various ILO recommendations, they have not been well reflected in legislation thus unable to appropriately protect the workers' rights⁶³. For example, despite that Sudan ratified the ILO recommendations on child labour, and the Labour Code explicitly prohibits the employment of young population less than 15 years old, there is no age limitation written for the training (apprenticeship). It is said that this could provide a loophole to the child labour⁶⁴. It has also been pointed out that maternity leave is stipulated as eight weeks in the Labour Code, which is short compared to the ILO's standard of fourteen weeks⁶⁵.

The Government of Sudan had restricted the formation of trade unions, that should carry out negotiations on such workers' rights. It is only in March 2021, that the Government of Sudan ratified the ILO Recommendations and the Sudanese Trade Unions Law was enacted in June 2021⁶⁶.

● Labour Laws that Discourage Full-time Employment

There are issues of labour laws from the employer's point of view. As described earlier, there are restrictions on hiring staff for certain types of work based on gender. In addition, a fixed term contract shall be limited to two years and shall not be renewed more than once with the same employer. The second renewal of the contract will be considered then as indefinite term contract⁶⁷.

In addition, the Social Insurance Act stipulates that companies, regardless of size, are obliged to pay the Social Insurance Fund (25% of salary (8% employee's contribution, 17% employer's contribution)), and the Minimum Wages Act instructs that salaries must rise by at least 5% every

⁶² Interview with Youth Projects Commission on 19 May 2021

⁶³ ILO (2021) Application of International Labour Standards 2021

⁶⁴ Save the Children (2006) Children's Rights in the Sudan –an Analysis Based on the CRC Reports

⁶⁵ UNDP (2018) Sudan Gender Justice & The Law

⁶⁶ Republic of the Sudan, The Council of Ministers' website: http://www.sudan.gov.sd/index.php/en/home/news_details/3137 (Accessed on 29 June 2021)

⁶⁷ Africa Legal Network (2015) Investment Guide Sudan

year⁶⁸. Some employers argue that the conditions are so unfavourable for the employers' side that they are unable to increase their workforce⁶⁹.

At the occasion of the workshop on promoting youth and women's employment organised by the World Bank on 29 June 2021, the Undersecretary of the MOLAR mentioned that the Labour Code needs to be reviewed, but no specific timeframe was given.

⁶⁸ UNCTAD (2015) Investment Policy Reviews -Sudan

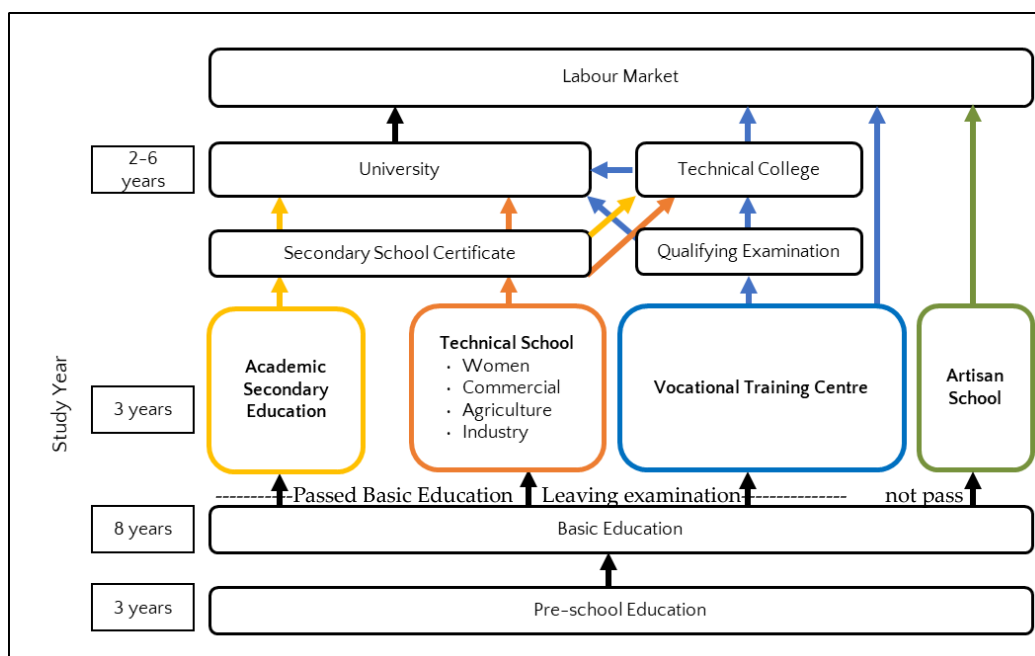
⁶⁹ Interview with Aspalta Group on 12 June 2021

Chapter 3 Current Situation and Challenge of Labour Supply

3.1 Education and TVET as Labour Development System

In the Sudanese education system, students take an examination at the end of their eight years of primary education. After passing this examination, students can proceed to Academic Secondary Education, Technical Secondary School (TSS), or Vocational Training Centres (VTC). The academic pathway to university is also open after these schools.

On the other hand, those who have not passed the examination can continue to the Artisan School (two years), but there is no pathway from the Artisan School to higher education. In reality, apprenticeships system also plays an important role, albeit mostly informal, as an absorber of young people out of the schooling path.



Source: SCVTA (2021) Handbook of Vocational Training System In Sudan

Figure 3-1 Education System in Sudan

3.1.1 TVET Institutions at Secondary Education Level

The Technical and Vocational Education and Training (TVET) sector in Sudan is managed by five bodies: the Ministry of Higher Education and Scientific Researches, the Ministry of General Education (MOGE), the Supreme Council for Vocational Training and Apprenticeship (SCVTA) under the Ministry of Labour and Administrative Reforms (MOLAR), and the National Council for Technical and Technological Education (NCTTE) under the Cabinet of Ministries Office.

(1) Technical Secondary School and Artisan School under Ministry of General Education

There are a total of 192 TSS in all the states, yet this is still less than 4% of the total number of secondary schools in Sudan⁷⁰. There are 5 types of TSS that are: industrial, commercial, home economics (for women only), and agricultural. Artisan schools is also supervised by the Directorate of Technical Education of the MOGE.

Industrial schools offer courses in auto mechanics, welding, metalwork, carpentry (furniture), electricity, construction, plumbing, water supply and sewerage, air conditioning and refrigeration, appliance repair, computers, etc. Agricultural secondary schools offer courses in agriculture and animal husbandry. Curricula of technical education are fully revised in 2017, and it is in use. Students in the TSS are required to attend internship during the summer holiday in the 2nd year and 3rd year of education, except the 1st year.

Table 3-1 Technical Secondary School by State (2017)

State	Industrial	Commercial	Home economics	Agricultural	Artisanal	Total
Northern	2	3	0	1	3	9
River Nile	4	3	2	0	8	17
Red Sea	1	2	0	0	2	5
Kassala	3	2	1	2	4	12
Gadaref	1	6	2	1	4	14
Khartoum	7	3	2	0	14	26
Gezira	5	7	0	1	15	28
White Nile	3	5	2	1	14	25
Sennar	3	2	0	0	4	9
Blue Nile	1	2	0	0	2	5
Northern Kordofan	4	4	3	1	0	12
Southern Kordofan	1	0	0	0	1	2
Western Kordofan	2	2	0	0	0	4
Northern Darfur	3	4	2	0	2	11
Western Darfur	1	2	0	0	0	3
Southern Darfur	3	2	1	0	2	8
Eastern Darfur	1	0	0	0	1	2
Central Darfur	0	0	0	0	0	0
Total	45	49	15	7	76	192

Source: UNESCO (2019) Country Background Report

There are 26,738 students in TSS and Artisan School in 2017, and 8,500 took the secondary school leaving examination⁷¹.

⁷⁰ UNESCO (2019) Country Background Report.

According to the MOGE, there are 52 industrial, 54 commercial, 10 agricultural, 18 home economics and 76 vocational schools. There is one industrial school in Central Darfur as well. Some of them are established supported by the African Development Bank. Since the MOGE's annual report was not available, considering the consistency of this chapter, UNESCO's data is used. Interview with MOGE on 5 June 2021

⁷¹ Federal Ministry of Education (2019) General Education Sector Strategic Plan (2018/19 – 2022/23) indicates that the number of students enrolled in TSS are 31,000 in 2018/19, which represents only 3% of all the enrolled students of secondary education.

Table 3-2 Number of Students Enrolled in TSS (2017)

Sex	Industrial	Commercial	Home economics	Agricultural	Artisan	Total
Male	14,811	3,154	-	522	695	19,182
Female	7	5,359	1,699	30	461	7,556
Total	14,818	8,513	1,699	552	1,156	26,738
Share in TSS	55.4%	31.8%	6.3%	2%	4.3%	100%

Source: UNESCO (2019) Country Background Report

The share of students in industrial schools was: 39.5% for auto mechanics, 32.6% for electricity, and 18.5% for air conditioning and refrigeration. The share of students in artisan school was 30.1% for auto mechanics, 27.6% electricity, and 19.2% for commercial. No girl students were found in auto mechanics, electricity nor air conditioning and refrigeration⁷².

(2) VTC under SCVTA /Ministry of Labour and Administrative Reform

Vocational Training and Apprenticeship Act (2001) stipulates Vocational Training as below, and established SCVTA, which is the responsible authority for developing vocational training policy, develop and approve training curriculum and administer the trade test in Sudan.

Definition of Vocational Training (Vocational Training and Apprenticeship Act 2001):

Systematic training that aims at providing the necessary, skills, knowledge and attitudes required for productive employment in any of the fields of the economic activity. It includes, initial training, up-grading training, and the retraining provided in any enterprise or a public institute or a vocational training centre established by, the government or, a public enterprise or the private sector.

There are 35 VTCs using the curricula approved by SCVTA, and among them, 21 VTCs (60.0%) is located in Khartoum State and 5 VTCs (14.3%) are in Gezira State. Of the 18 states in Sudan, public VTCs are established only in 8 states.

Table 3-3 Number of VTC by State and Ownership

Ownership State	VTCs using the approved curricula SCVTA				
	SCVTA	State	MOHE	Other Ministry	Private
River Nile					1
Red Sea			1		1
Kassala		1			
Gadaref		1			
Khartoum	5	5		2	9
Gezira	1		2	1	1
White Nile		1			
Northern Kordofan		1			1
Southern Darfur			1		
Total (35)	6	9	4	3	13

Source: SCVTA (2021) Handbook of Vocational Training System In Sudan

Of those VTCs, there are 30 VTCs (public 17, private 13) that offer "3-Year Apprenticeship Diploma Course" and "1-Year Apprenticeship Diploma Course"⁷³. Those who graduated the "3-Year

⁷² UNESCO (2016) TVET Policy Review: Sudan

⁷³ The course was developed and piloted in 2020 in cooperation with GIZ, and approved by SCVTA in the same year. The course does not

Apprenticeship Diploma Course" can proceed to the higher education. As the course title indicates, the curriculum includes the In-Plant Training (apprenticeship) period at the end of the course (last 1 year for the 3-Year course and 3 month for the 1-Year course).

Other 5 VTCs are called "Vocational Training and Entrepreneurship Centre (VTEC)", run and operated by the Khartoum State. These 5 VTECs are using the Competency Based Training curriculum, developed supported by UNIDO.

Trades covered by these 30 VTCs and 5 VTECSs are listed in the table below, and there is a clear bias towards auto mechanics, general electricity, metalwork, refrigeration and air conditioning.

Table 3-4 Trades and Number of VTC/VTEC for Each Trade

Trade	Subjects	Number
Metal	Milling machines, Maintenance fitting, Turning, Sheet Metal Works, Welding	15
General Electricity	Household connections, Motor winding, Control circuits, Maintenance of electrical appliances, Programmed logic control (PLC)	22
Auto Mechanics	Mechanics Diesel, Electric cars, General Mechanics, Agricultural machines	35
Refrigeration	Central air conditioning, Automobile air conditioning, Refrigeration and air conditioning	13
Carpentry	Carpentry machinery, Turning (wood), Furniture, Decoration, Carpentry (architectural)	2
Buildings	Drawing (architectural), Construction works, Tiles and plastering	1
Sanitary Structures	Pipe fittings, Drainage, Sewage connections	1
Tailoring	Design, Cutting, Sewing, Embroidery, Needlework, Textile printing	1
Electronics	Maintenance of radio & television, Industrial electronics, Maintenance of typewriting equipment	1
Technical Drawing	Technical drawing, Mechanical drawing, Architectural drawing	1
Computer	Computer science, Internet, Maintenance, Networks	2
Food industry	Extraction of dairy products and their manufacture, Manufacture and preservation of the pastry and desserts	1
Tourism	Hotel reception, Bed making, Table setting	1
Leather	Shoes, Bags, etc	1
Agriculture	Agriculture, Animal production	1

Source: Prepared by Survey Team based on UNESCO (2019) Country Background Report and SCVTA (2021, unpublished) Annual Performance Report

(3) Career and Employment After Secondary Level TVET Graduation

A tracer survey of graduates of Khartoum's industrial secondary school, artisan school and VTC conducted by ILO in 2016 shows that more than half of the graduates are in employment⁷⁴.

require primary education leaving certificate to enable access by the refugees and internally displaced persons (IDPs).

⁷⁴ ILO (2016) A Tracer Study of Technical Vocational Education and Training Institute Graduates in Khartoum State, The survey was conducted in Khartoum targeting the graduate who took the exam in 2011. The survey limitation mentioned in the report includes: The survey cannot be used to generalize the TVET graduates' situation because of the limited target (only 2011 graduates and Khartoum) and the difficulty to access trainees because many of their contacts were unreachable.

Table 3-5 Employment Rate among the Sample Graduate of the Secondary Level TVET

	Number of respondents	Employed	Ratio
TSS (Boys)	77	55	71.4%
TSS (Girls)	2	0	0.0%
Artisan School	46	27	58.7%
VTC	218	117	53.7%
Total	343	199	58.0%

Source: Prepared by Survey Team based on ILO (2016) A Tracer Study of Technical Vocational Education and Training Institute Graduates in Khartoum State

According to a follow-up survey conducted by JICA's Project for Strengthening the Vocational Training System Targeting the State Vocational Training Centres (GEMS) for the graduates of a Public VTC (Kosti VTC) in White Nile State, 38.7% were in the National Service, 35.5% were unemployed and only 17.7% were employed, one year after graduation⁷⁵. For those trainees who are in their second year after graduation, 35.3% continued to tertiary education and 33.3% were in the National Service, which indicates that a certain number of young people entering the VTC have the intention to continue studying.

Among those who joined the National Service, some mentioned that they were assigned to work in a maintenance section of the National Defense Force, but not always the case to work in a workplace relevant to their trained skills.

Table 3-6 Kosti VTC Graduates' Situation 1 Year and 2 Years After Graduation

Graduate Year	2014 (2 nd year after graduation)		2015 (1 st year after graduation)		
	Current Status	Number (Total: 51)	Ratio	Number (Total: 62)	Ratio
Employer		2	3.9%	1	1.6%
Employee		12	23.5%	11	17.7%
Helping Family		-	-	2	3.2%
Students at College		18	35.3%	2	3.2%
Unemployed		2	3.9%	22	35.5%
National Service		17	33.3%	24	38.7%

Source: Prepared by Survey Team based on the Tracer Survey conducted by GEMS in September 2016
Note: Only boys, since there was no girl trainees

Regarding the scale of workplace, 10 of the 2015 graduates work in “companies with 9 or less employees” and 1 in a “company with 49 or more employees”. For the graduates of 2014, 6 works in the cement or sugar factory which are the “companies with 49 or more employees”, and only 2 work in “companies with 9 or less employees”.

Since the National Service Certificate and the VTC Certificate were requirement for employment in public institutions and large government-funded companies, the procedure for employment in these large companies cannot start immediately after graduation. This can be a reason for the case that employment in large companies tends to increase in the second year after graduation.

⁷⁵ GEMS survey targeted two previous years graduates and the survey was done by phone by the staff of VTC.

It is possible that participation in the National Service and their willingness to continue education may have influenced their subsequent career paths also for the graduates of TSS and Artisan School, although this cannot be confirmed since the report of ILO (2016) did not include answers other than employment.

3.1.2 Tertiary Education and Human Resource Development

(1) Technical College (Ministry of Higher Education and Scientific Researches)

There are 38 Technical Colleges in total both public and private, and allocated in every state.

Table 3-7 Field and Subjects Taught at Technical College

Field	Courses
Engineering	<ul style="list-style-type: none"> • Construction, Irrigation and Drainage, Sewage, Roads and Bridges, Buildings and Quantification, Environmental Engineering, Water Engineering • Internal Electrical Connections, Electrical Networks, Electronic Devices, Computer Maintenance, Computer Networks, Medical Equipment, Communications, Maintenance of Electrical Equipment and Machines • Cars, Heat Capacity, Aircraft Engines, Agricultural Machinery, Heavy Machinery, Cooling and Air Conditioning, Welding and Ironworking Foundries, Machining, Oil and Mining • Drilling, Oil Refining, Machinery, Mining, Oil Transport, Oil Pipelines. • Tricot, Pigments & Printing, Textiles, Spinning & Weaving Machines, Knitting Machines • Food Processing, Pharmaceutical Manufacturing, Leather Technology, Plastic, Oil Manufacturing, Sugar Technology
Health	<ul style="list-style-type: none"> • Medical Lab, Cardiology, Optics, Radiology, Anesthesia, Mouth Health, General Health, Nursing, Artificial Limbs, Physical Therapy
Agriculture	<ul style="list-style-type: none"> • Agricultural Mechanization, Crop Production, Horticulture, Crop Protection, Forestry, Food Technology, Animal Health, Animal Production, Soil, Desertification and Environment, Pasture
Commercial	<ul style="list-style-type: none"> • Accounting, Management Business, Computer Applications, Kindergarten, Applied Statistics

Source: UNESCO (2019) Country Background Report

According to UNESCO (2020), although various courses are available, the number of students enrolled in technical colleges does not go beyond half of the colleges' capacity. It happens that some courses are not open due to insufficient number of students registered, attributing to the negative perception that studying at a technical college does not lead to acquisition of competence⁷⁶.

(2) University (Ministry of Higher Education and Scientific Researches)

There are 55 universities (public and private) in the country, and 28 of them are in Khartoum, although every state has at least one⁷⁷. The number of students in the public and private universities and colleges are as shown below.

⁷⁶ UNESCO (2020) Draft National TVET Strategy for Sudan

⁷⁷ M. M. Beshir et al (2020) Higher Education and Scientific Research in Sudan: Current status and future direction, *African Journal of Rural Development*, Vol. 5 (1): January-March 2020: pp.115-146.

Table 3-8 The Number of Students registered in Public and Private Universities and Colleges 2017/18

Public and Private	BSc		Diploma	
	Male	Female	Male	Female
Governmental Universities & Technical Colleges	233,805	270,335	51,962	41,301
Private Universities & Colleges	51,043	49,933	6,354	4,983
Total	284,848	320,268	58,316	46,284

Source: Central Bank of Sudan (2018) Annual Report

Universities provide education and research in various fields such as humanities, agriculture, engineering, etc. In Sudan, universities are perceived as research institutions rather than institutions to prepare for employment. According to an interview with a professor from the Department of Agriculture at a public university in Khartoum, there are no special career support programs, but there are events where university students invite neighboring farmers to share their knowledge about agricultural techniques in cooperation with private companies. There have been some cases where students have secured employment through such opportunities.

Several universities have also set up institutions to encourage entrepreneurship with a support of UNIDO (see details in Chapter 4). It seems that there is a growing movement of university-based entrepreneurship centres.

3.1.3 Internship and Vocational Training in Private Sector

(1) Internship and Apprenticeship

Internship and apprenticeship are commonly found training systems for youth in Sudan.

According to the ILO's survey of small and micro enterprises in Khartoum and Darfur, apprentices are employed in various industries such as automotive, welding and carpentry⁷⁸. According to the interviews with 135 apprentices and 144 Micro, Small and Medium Enterprises (MSMEs) in Khartoum, all apprentices are males under 30 years old, and 70% are under 22 years old. In terms of education level, 49% of the apprentices have completed primary education, 36% have less than primary education, 12% have secondary education and 3% have tertiary education, indicating that the apprenticeship serves as a sort of safety net for those who do not have academic attainment. Apprenticeships are often kinship-based and are generally informal and without contracts.

In consideration of the importance of apprenticeships for the vulnerable youth without education background, JICA's Project for Strengthening Peace through Improved Public Services in Three Darfur States (SMAP-II) worked to improve the business practice and apprenticeship system with 120 MSMEs in the Darfur States. Business training focusing on the human resource development

⁷⁸ ILO (2013) Skills Development in Sudan The Formal and the Informal Reality and ILO (2014) Report of the Empirical Research on: Informal Apprenticeship For Darfur States

and technical training were provided including methodologies for staff training. As many as 91.7% (out of 60 companies) concluded apprenticeship contract, and 35.0% (of the 120 companies) increased staff (apprentice and skilled workers) as their business grew. Some reported that the apprentices graduated and started their own business hiring some staff.

According to a company survey conducted by GEMS, 9 out of 10 companies said they receive the interns, and if the government would encourage internship, they would support such decision⁷⁹. MTN Sudan, for example, publicly announce application for interns. After selection, the MTN Sudan takes the intern for 1 year. If the intern showed his/her fitness to work, they will be hired as employees⁸⁰.

(2) Vocational Training Service by Company

Training centres run by companies and NGOs are also an important source of training services in Sudan. There are 38 centres registered to the SCVTA in accordance with the provisions of the Vocational Training and Apprenticeship Act, most of them are in Khartoum (33 centres)⁸¹.

These training centres include the Sayga Bakery Development Centre (baking, confectionery and cooking courses) run by the DAL Group's flour milling company, the LG Academy (air conditioning maintenance) run by the CTC Group, and the Painting Training Centre run by Al Mohandis Paints, a paint company, and they are proactively providing training services.

These large companies provide training services as part of their corporate social responsibility (CSR), marketing and branding strategies for their products. The Sayga Bakery Development Centre, for example, actively provides training for small bakers in the townships, and for women directly in rural areas with mobile cooking trucks. The LG Academy of CTC Group also provides training to prepare needed technicians for their business, for its own technical staff, and also for the non-CTC workers.

(3) Training Services by Development Partners in collaboration with NGO

There are many Non-Governmental Organisations (NGOs) in Sudan such as Sudanese Organisation for Research and Development (SORD), HOPE Sudan, Save the Children etc, who provide vocational training (soap making, leather products, welding, etc) to their target beneficiaries to improve their livelihood with various partners. For example, SORD partners with UNHCR to outreach to the rural women. SORD Kassala office (covering 3 Eastern states) invite trainers from Khartoum on leather products, give training to the beneficiaries, provide start-up kits, and mentoring and counseling support till the beneficiaries actually start business. It usually goes about 9 months.

⁷⁹ Sudanjob Research/GEMS (2020) Stakeholders' Opinion Survey on Youth Employment and Vocational Training , 10 companies in Khartoum: (size of company: more than 1,000: 3, more than 50: 5, less than 49: 2). One who does not accept internship as policy is one from the less than 49 size.

⁸⁰ Interview with MTN Sudan on 25 May 2021

⁸¹ Others are in Northern (2), River Nile, Gezira (1), White Nile (1).

SMAP-II cooperated with the NGO, Women's Union and provided a 3-months food processing training, entrepreneurship, internship, and start-up kits. Three months after the training, a follow-up consultive workshop was conducted to encourage and boost their motivation⁸². The end-line study showed 90% of women started business within 6 months after completion of training.

3.2 Issues of TVET in Promotion Employment

3.2.1 Policy Priority and Resource Allocation

(1) Needs for TVET System Reform

The Government of Sudan, in its National Comprehensive Strategy for 1992-20, made the strengthening of technical universities a key policy priority, and sought to rapidly expand the number of higher technical education institutions by transforming some existing institutions into universities and colleges⁸³. However, it has been difficult for the colleges to maintain the quality of education due to unavailability of quality teachers, difficulty in maintaining the educational infrastructure under the constraints of budget.

Since 2013, ILO and UNDP have been supporting the development of the employment policy and ILO had supported the development of the TVET policy. The work toward employment policy has been suspended for a while and restarted after the revolution in 2020. As for the TVET policy, although it was approved by the cabinet in 2013, it has not been implemented (no regulations as such were made) because the five agencies involved in the implementation of the policy were not in full agreement with the policy. TVET sector is still running without policy to date.

(2) Insufficient Resource Allocation

The overall budget for education in 2012 was 2.7% of GDP, which is very low compared to 4.0% the average of Arab countries. Furthermore, in terms of the budget execution rate, SCVTA reports that only half of the budget is executed. The MOGE has applied for a budget of SDG 370 million for 2021, but only SDG 90 million have been approved and it is not clear whether they will actually be executed. Universities under the Ministry of Higher Education and Scientific Researches have also reported that they have been operating at a deficit⁸⁴.

There are few large companies and the state government has limited tax revenue outside Khartoum State. The state owned TVET institutions (TSS, Artisan School and VTC) claims that they cannot even cover the costs of minimum training.

⁸² 80% of the beneficiaries were those who were affected by the conflict in the state

⁸³ UNESCO (2016) TVET Policy Review, The Governmental policy and the decentralization policy actually encouraged the state government to convert the VTCs into college since this will relieve them from financial obligation.

⁸⁴ Interview with MOGE on 5 June 2021 and University of Sudan Science and Technology on 6 June 2021

In theory, TVET institutions has heavy duty equipment such as lathes and welding machines and they could generate income by manufacturing and selling products to cover their operating costs. However, the TVET intuitions are reluctant to do so since the generated income goes directly to the Ministry of Finance and Economic Planning, not knowing if the money will be returned to the institution's operation⁸⁵.

(3) Obsolete Facilities and Equipment

All levels of the educational institutions are facing the problem of old and outdated facilities and equipment. At the interview, MOGE indicated that the government budget, especially the development budget, is almost non-existent. Especially for technical education, which requires machines and tools for practical training, the existing equipment have not been updated for a long time. No development budget for facility and machine rehabilitation was approved for 2021, and thus no other ways but seeking for the donors' support. Although the curricula was revised in 2017, some subject cannot be taught practically without necessary equipment. Some TVET institutions are using the machines since 1970s till now. Some equipment necessary for TVET are very expensive and they cannot afford to finance them when even the recurrent budget is not enough. The economic sanctions made it also difficult to secure quality equipment and spare parts for the training

(4) Challenges of Securing Quality Teachers / Trainers

Teachers in TVET schools also have few "vocational training" opportunities of their own, which makes it difficult for teachers to maintain and improve their technical level. Training of teachers (TOT) is mostly dependent on support from development partners.

To become teachers of TSS, the applicants must have a Diploma in Education. For the VTC trainers, the minimum educational requirement is to have a Technical Diploma. However, there are many VTC trainers who only graduated from VTCs. Without trainers' license system, keeping the quality of trainers is not easy for the institutions.

The opportunity for in-service training for teachers is very limited. For MOGE there was no teacher training centre for the technical skills until now. Currently, there is a development project in Northern Kordofan, White Nile and Khartoum State to establish dedicated TOT centre for technical teachers supported by the AfDB⁸⁶. On the other hand, SCVTA has the Institute of Training of Trainers and Supervisors in Khartoum, whose budget can cover only one course for the newly hired a year. State VTCs have no chance to access to such training course, and TOT must be considered with the state government budget.

⁸⁵ GEMS interview with VTC staff in Kassala and Kosti and Gadaref Artisan School. Some state owned TVET institutions have negotiated with the State Ministry of Finance (SMOF) to allow them to use certain percentage of income, while some portion goes to the SMOF.

⁸⁶ Interview with MOGE on 5 June 2021, There are TOT center for any teachers in every state.

3.2.2 Access to TVET

(1) Challenges of Formal Training Education

The Draft Poverty Reduction Strategy Paper (PRSP) (2021), points out that the challenges to employment include the scarcity of jobs, a competitive environment due to the influx of people into urban areas, as well as biased recruitment based on politics, ethnicity and affiliation, and inadequate education and training for the young people. It also noted that people with disabilities in particular face difficulties in accessing education and employment. Furthermore, TVET institutions in Sudan are heavily skewed towards so-called "male occupations", thus women have limited options (commerce or home economics, unless taking up in "male occupations"), and limited access due to small number of training institutions.

According to UNESCO⁸⁷, the enrolment rate in TVET schools at the secondary level has been remaining low, at around 2-4% in Sudan, while the rate is much higher in neighbouring countries like Egypt, 46.88% (men: 51.3%, women: 42%, 2018) and in Ethiopia 44.26% (men: 41.4%, women: 47.3%, 2015).

Table 3-9 TVET Enrolment Rate At Secondary Level (%)

	2011	2012	2013	2014	2015	2016	2017	2018
Men	5.2	4.4	3.7	3.6	5.2	4.8	3.6	7.3
Women	1.2	1.5	2.2	1.4	2.6	1.2	1.1	1.3
Total	3.26	3.04	2.94	2.57	3.92	2.99	2.33	4.19

Source: UNESCO Statistics

In TSS and VTCs, there is a distorted focus on auto mechanics, general electricity and metalwork. Despite that the policy emphasises the importance of the agriculture and the direction toward increase of agricultural productivity, there are few TSS and VTC that teach agriculture related subjects. TVET schools are not marketing these agriculture-related institutions. This situation hints at the lack of coordination at the policy level, between the economic/industrial development and human resource development contributing to it.

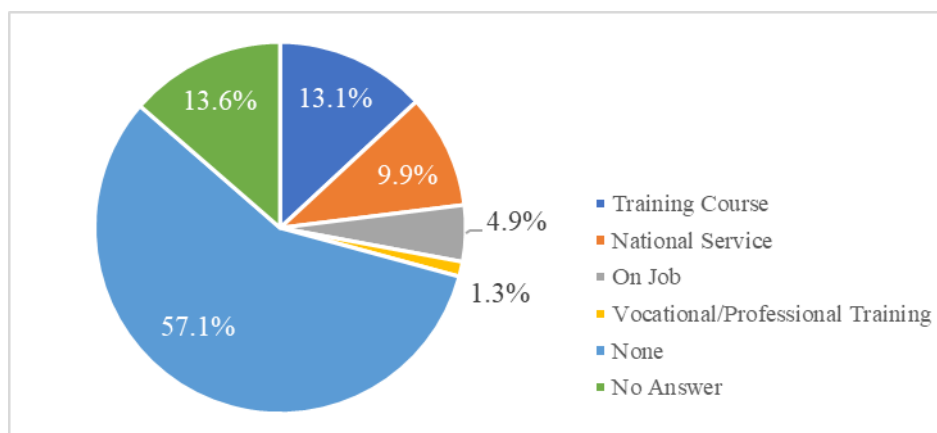
Although the technical colleges are running with few students, TSS and VTCs seem to be slightly popular, possibly as one of the pathways to proceed to higher education after graduation. According to SCVTA, some VTCs are receiving applications for more than double its capacity⁸⁸.

Labour Force Survey 2011 illustrated the means which the unemployed people took for their training, according to the results, Training Course (13.1%), National Service (9.9%), On the Job (4.9%),

⁸⁷ <http://uis.unesco.org/en/country/sd?theme=education-and-literacy> (accessed on 25 June 2021)

⁸⁸ JICA(2018) Ex-Post Project Evaluation 2016: Package I-7 (Sudan, South Sudan, Rwanda) . Note: Interview by GEMS with Agricultural VTC on 24 November 2019, Agricultural VTC was established in Gezira State in 2017. According to the VTC, the number of trainees is decreasing. Probably the location (far from capital city), and the dormitory closure due to lack of operational budget to hire dormitory warden. Also, since their "equipment" are animals, the lack of operational cost makes it difficult to feed them.

Vocational/Professional Training (1.3%) and None (57.1%) was the largest, indicating the limited access to the unemployed youth to retrain for new career.



Source: SLFS 2011

Figure 3-2 Types of Training Undertaken by Unemployed (%)

(2) Challenges of Training at Workplace

Companies are practically the largest training providers in the Sudanese vocational training market, but government action on internships and apprenticeships at private sector also lags behind.

ILO (2014) points out that in order to promote youth employment, it is important of the government to recognise and support apprenticeships as part of vocational training even the informal ones, and to qualify skills acquired through apprenticeships (experience based skills acquisition) so as to facilitate workers to change occupations or move up in the labour market⁸⁹.

SCVTA has issued guidelines on apprenticeship system and developed training courses for the host companies supported by JICA SMAP-II, but the lack of budget and human resources makes it difficult for the SCVTA to continue on its own. It is hoped that the ongoing efforts for developing TVET policy supported by UNESCO, and the national employment policy supported by ILO would include the promotion of apprenticeship and internship and eventually budget will be allocated to encourage these workplace based training modes.

3.2.3 Training Contents Mismatching to Employer Needs

ILO (2016) indicates that there is a need of introductory or additional skills training for the TVET graduates.

Table 3-10 Opinion of the Employers on Additional Training of TVET Graduate

Opinion of Employers on additional training	Ratio by TVET Institution		
	VTC	TSS	Artisan school
Normally they are fully prepared to do the work well	7	3	1
They need only an introductory training	33	13	12
They need to learn additional skills	21	24	24

⁸⁹ ILO (2014) A Roadmap toward a National Employment Policy for Sudan

They need serious skills upgrading to start working	17	6	6
They need completely new training	6	6	7
No response	16	48	50

ILO (2016) A Tracer Study of Technical Vocational Education and Training Institute Graduates in Khartoum State

Specific skills indicated by the employers are: How to do high quality and better paid work (14.4%), Practical use of machines and equipment (10.9%), Computers (10.5%), Practical use of working tools (9.5%). In addition, some pointed out soft skills (communication, discipline and accuracy at work), and English to read catalog and manuals.

Private companies recruiting technical positions point out that there is a shortage of "skilled workers". Although the low-skilled workers are available, there is a lack of mid-level workers, and they expect TVET schools to train the mid-level workers, who not only have the technical skills, but also English and soft skills including work attitude, trained from a young age⁹⁰.

Ideally, the MOGE and SCVTA, which are responsible for curriculum development, should have regular consultation on the skills that employers expect from TVET graduates, and the curriculum should be revised on a regular basis based on their input. However, in reality, private sector has never heard of SCVTA, showing the lack of communication between SCVTA and the private sector⁹¹. The companies recommend that SCVTA needs to be more proactive in communicating with industry, update training equipment and facilities, incorporate soft skills into the curriculum, strengthen practical training, and improve industry needs and the talent pool (information on qualified technicians).

3.2.4 Insufficient Skills Qualification System

The lack of a well-developed qualification system for workers, which is supposed to prevent nepotism and mismatches in skill levels and to serve as a guide to fair and competence based recruitment, is another factor contributing to the mismatching in employment. Currently, the only qualification system in Sudan is the one linked to the education examination, as shown in the table below.

Table 3-11 Qualification System in Sudan

Occupation	Qualification	Remaks
Skilled Labour	VTC Certificate	Based on skills and competencies
Technician	TSS Certificate	At least 3 years of technical education
Technologist	Bachelor of Technology	Fresh graduates of technological college

Source: NCTTE (2015)

On the other hand, although there is no industry- or technology-specific skills qualification system, there is a trade test administered by SCVTA. This is a system for recognising the skills acquired by

⁹⁰ Interview with Union of Chamber of Commerce on 24 June 2021, Aspalta Group on 12 June 2021, DAL Engineering on 15 June 2021, and others

⁹¹ Sudanjob Research/GEMS (2020) Stakeholders' Opinion Survey on Youth Employment and Vocational Training

workers through their working experience, and the test is available to any workers with minimum two years' work experience. As shown in the table below, the certification is linked to the grade of civil servant, and thus the trade test certification can lead to employment in the civil service.

Table 3-12 Grades of the Trade Test

Civil Servants Grade	Post	Education and experience/ Eligibility/Expected Tasks
Grade 11	Supervisor	Under the direction of the factory manager, s/he is responsible for the overall management of her/his department.
Grade 12	Foreman	18 years' experience. Responsible for management tasks such as work allocation and instructions, worker management and quality control.
Grade 14	Skilled labour	VTC (3-year diploma) level, or 14 years' experience, supervise the workers below grade 15
Grade 15	Semi-skilled labour	TSS level, or 12 years' experience. Not responsible of quality control
Grade 16	Limited-skilled labour	Primary school level. Performs simple tasks under Grade 4-5's supervision

Source: SCVTA (2021) Handbook of Vocational Training System In Sudan

The trade test is an important national certification mechanism, especially for those seeking employment in the civil service, in large companies such as sugar factories, and for those seeking for opportunities outside Sudan.

Yet challenges remain. Firstly, there is the issue of access. Only public VTCs in 8 states administer the test. The residents in the other 10 states must travel to the nearest public VTC to sit for the examination. Then there is the issue of test management. There is no national standardised questions or list of equipment and materials required to conduct the test, so VTC instructors have to rely on their experience and intuition to make decisions⁹². In some cases, candidates have to bring their own test equipment if the trade is not taught at the testing VTC.

Currently, UNESCO is working to develop the National Qualifications Framework and GIZ is working on piloting the Trade Test for some trades.

3.2.5 Lack of Support in Transition from School to Work

(1) Lack of Employment Placement System

Information on vacancies for civil servants and state-owned enterprises is published through the labour offices in each state, then the selection is carried out by the Selection Committee. The labour office also support those who wish to work out of Sudan. Although the service is useful, in the context of reduced recruitment of civil servants and the state-owned companies, there is little

⁹² SCVTA (2021) Handbook of Vocational Training System in Sudan, Originally the Trade Test was developed supported by ILO in the 1970s. There was a detailed examinations regulation with criteria for passing each skills. Since decentralization of testing, the regulations have fallen out of use.

information available at the labour office. Private companies usually do not post information at the labour office, and this makes it difficult for the job seekers to know which companies are hiring.

Private job-matching services, such as Sudanjob (2006) and Orooma (2017), have started to fill these gaps, posting vacancies of companies and organisations. There are other recruitment agencies including consultation and headhunting, but these services are mainly used by aid agencies, NGOs and large companies, with few job advertisements for small and micro employers, the dominant group of the labour market⁹³. In addition, most of the registered job seekers are the university graduates. The two job matching companies interviewed said that information on the labour market, both on the demand side and the supply side, were inadequate and that they were working to improve this through their business and consultation with both sides.

It is often seen in any reports talking on the Sudanese labour market that "nepotism/wasta" persists in Sudan and that this is detrimental to employment. On one side, all the companies and job-matching companies interviewed said that the private sector is only concerned about hiring best workers, and that referrals can be an effective recruitment instrument if they can bring a good candidate. However, none of them said that Wasta would be the final criterion for recruitment⁹⁴. When the number of job opening is limited, and the information is not open (or there is no place to open the vacancy), referral is a very useful and practical option for the employers. On the other hand, MSMEs owners tend to hire based on kinship and referral from friends⁹⁵. Whether it is simply due to the lack of job seekers' information, or Wasta, they need further investigation.

(2) Efforts and Issues at Educational Institutions

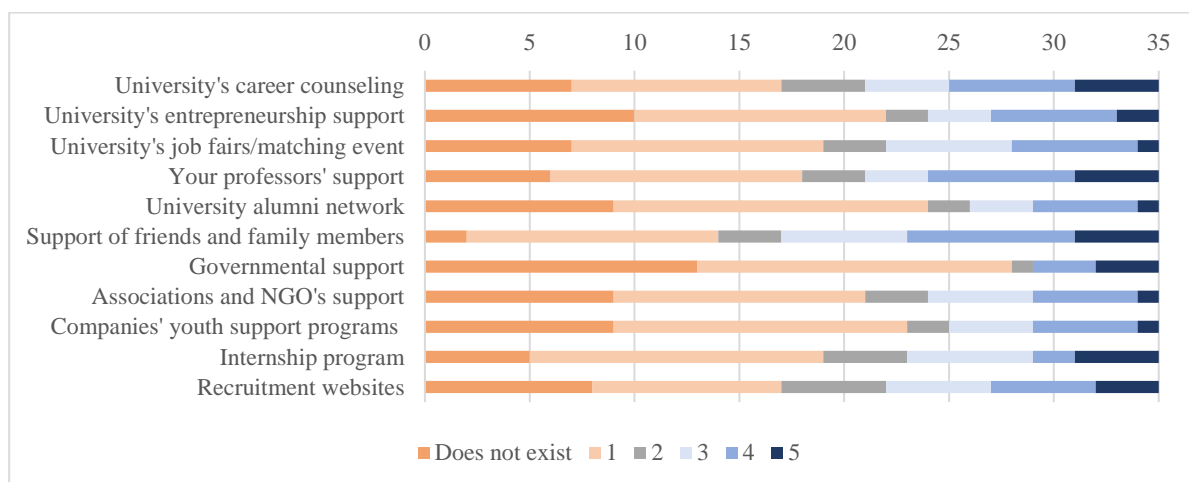
According to the online survey to university students conducted by the Survey Team, with regard to career support, there is a relatively high frequency for "there is support from family and friends networks, from professors", and "from career consultation from universities", but the majority of respondents in almost all options answered "such support does not exist" in the first place, otherwise, "it is not available to them"⁹⁶. This shows that there is not enough supportive environment to help university students make a smooth transition from "school to work".

⁹³ Interview with Orooma on 2 June 2021, TSS and VTC graduates who are registered in the job matching system is 10-15% of the job seekers.

⁹⁴ Interview with Orooma on 2 June 2021, There are two types of Wasta. One type is strict recruitment only from the kinship or friends, and another is only for referral. The latter is probably the majority.

⁹⁵ ILO (2013) Skills Development in Sudan The Formal and the Informal Reality, ILO (2014) Report of the Empirical Research on: Informal Apprenticeship for Darfur States

⁹⁶ Family and Friends' network (51.42%/ 18 persons) only got more than half positive responses. This is probably the most accessible entry point for jobs



Note: 1= It is not available for me, 5= it is available/ Unit: Number of respondents
Source: Survey Team

Figure 3-3 Career Support Available to University Students

The Ahfad University, a private woman only university, conducts Job Fair every year and have very positive results⁹⁷. No public universities interviewed through this survey indicated if they conduct a similar event.

○ Career Support at Ahfad University

Ahfad University runs a School to Work Bridging Programme. All students undergo a career guidance and career development course and a compulsory internship programme. Visits to companies in the neighbourhood are organised to prepare students for employment.

Since 2013, the school has been organising Job Fairs, which include motivational speeches by prominent graduates, workshops on CV writing and interviewing, seminars on how to find a job, as well as company job stands. The number of participating companies is increasing every year (from 10 in 2013 to 33 in 2020).

Ahfad University has also set up an alumni office to enhance communication between graduates and students for consultation and to serve as role models.

University students who responded to the online survey suggested some measures to improve the unemployment rate such as: support for starting a business (including financial support) (10 students), practical training and on-the-job training opportunities that would be useful in the workplace (10 students), and projects that would employ young people (8 students) and mentorship (7 students).

According to ILO (2016), 78% of secondary level TVET graduates are employed in fields other than their major at school. As for the university students who responded to the online survey, 68.6% (men 13, women 11) said they expect to work in the field related to their major, and 31.4% (men 5, women 6) suggested there is more than 50% of possibility of not working in the area of their major.

⁹⁷ Interview with Ahfad University on 31 May 2021

This suggests the issue of the mismatch between the industries' needs and curriculum as described in 3.2.3, as well as the lack of a bridge from school to work.

VTC staff indicated that it is difficult for VTC to provide job placement support without additional allowances because VTC is a training provider and job placement is not part of their job description⁹⁸. The VTC's apprenticeship diploma courses include in-plant training, which has led to employment in some cases⁹⁹. However, with a limited number of companies willing to accept trainees, it is not always possible to ensure the best match with the trainees' career aspirations.

Considering that nearly 10% unemployed persons said that the National Service was their skills training opportunity (Figure 3-2), and 30-40% of the VTC graduates were found in the National Service after graduation (Table 3-6), it could be assumed that the National Service is actually playing a key role in preventing unemployment immediately after graduation, as well as acting as a bridge to employment.

(3) Efforts and Issues on the Employers Side

The private sector, which absorbs jobs, also has its own agenda. According to interviews with job matching companies, it is a trend of the only the last one to two years that companies are more interested in recruitment. According to the Sudanese Business Federation (SBF) and companies interviewed, more companies have recognised the importance of recruiting and training human resources after the civil revolution, and it seems that the recruitment is increasingly based on ability rather than gender or Wasta. This argument confirms the perceptions of job matching companies.

In Sudan, the growth of the private sector had been slowed down under long economic sanctions. Apart from a few large companies, most of the businesses are MSMEs, and moreover, the informal sector is said to be the most predominant in the labour market. They are often unaware of the importance of job advertising and recruitment and cannot afford the advertisement cost.

In addition, few companies, even large ones, can write their recruitment requirements and TORs properly, and in a number of cases the job advertisements mention gender and age rather than the skills required, indicating that it is important to raise awareness of the companies¹⁰⁰.

(4) Efforts and Issues on the Youth side

Job-matching companies and interviews with companies indicated the issues around young people's attitudes toward joining the labour market¹⁰¹.

⁹⁸ Voices of the SCVTA and VTC staff during the workshop conducted by GEMS in March 2021.

⁹⁹ ILO (2016) A Tracer Study Of Technical Vocational Education And Training Institute Graduates In Khartoum State

¹⁰⁰ Interview with Sudanjob on 8 June 2021

¹⁰¹ Interview with 249 Startups on 28 March 2021, Orooma on 2 June 2021, Golden Arrow on 3 June 2021, Fandora 8 June 2021, Sudanjob on 8 June 2021, Construction company on 12 June 2012, Monjid on 16 June 2021, etc.

For the university graduates, their voices are: many youth consider that they will work as “manager” immediately after graduation, they expect a very high salary immediately after joining a company, they apply to a post that has no relevance to their experience or major, they tend to seek for white collar jobs and not work with their hands, even if they are graduates of technical university, etc. For the VTC/TSS graduates, the company commented on the attitude aspect that: they don’t come on time, and they work 2-3 days to fill their pocket and stop coming another 2-3 days.

The private sector puts several screening process, including a probation period such as internships and further training on attitude etc., in order to prevent mismatch in recruitment. On the other hand, MSMEs usually do not have a capacity to do so. MSMEs used to provide training through internship etc., but they are finding it difficult since they have to concentrate on surviving in the business, rather than putting cost and time on recruitment.

It is also said that such attitude is partly due to the overwhelming expectations of family members, as parents tend to lay down the boundaries for their children. In some cases, when they start a business, their relatives dismiss such idea, saying that they will fail anyway, or that they will only become the joke of the world. Young men, in particular, feel the pressure and expectations of society and their families to support the family finances. It is natural for them to feel that they want to earn as much as possible as soon as possible.

Chapter 4 Small and Medium Enterprises and the Business Ecosystem

4.1 Current Situation and Challenges of Small and Medium Enterprises (SMEs)¹⁰²

4.1.1 Definition of Micro, Small and Medium Enterprises (MSMEs)

As there is no policy and legislation on micro, small and medium enterprises (MSMEs) and entrepreneurs in Sudan, there is no definition of them. The table below shows the definition adopted by the ILO report in 2014 and the definition adopted by the World Bank Enterprise Survey in 2020.

Table 4-1 Tentative Definition of Micro, Small and Medium Enterprise in Sudan -employee definition

Definition by	Microenterprise	Small Enterprise	Medium Enterprise	Large Enterprise
ILO Report of 2014 (Working Definition by the General Federation of Sudanese Employers and the Central Bank of Sudan)	1-2	3-6 Manufacturing 1-9	- Manufacturing 10-49	- Manufacturing 50 and over
World Bank Enterprise Survey 2020	1-4	5-19	20-99	100 and over

On the other hand, in terms of entrepreneurs, 249Startups, an entrepreneurship incubator, defines a Sudanese start-up as an enterprise that is less than three years old and aims to be a fast-growing, innovative business with the objective of social impact (job creation or income generation).

4.1.2 The Status of MSMEs and Entrepreneurs and Their Employment.

It is estimated that 98% of formally registered enterprises in Sudan are MSMEs, while 65% of the labour force works in the informal sector¹⁰³. As there is no regular MSME survey covering the whole of Sudan, we will substitute here the analysis from the reports of the 2014 ILO survey, the 2018 GEM survey and the 2020 World Bank survey (Khartoum State only).

(1) ILO survey 2014

According to the 2014 ILO survey (see table below), 98% of the total number of enterprises in Sudan are MSMEs, and out of those, 75% are micro enterprises with about 2 employees, and only 2% are medium enterprises with between 6 and 49 employees.

Table 4-2 Number and Percentage of Enterprises by Size

Size of enterprise	Percentage of total MSMEs (number)	Total number of MSMEs	Number of employees	Number of enterprises
Micro enterprise	75%	600,000	Average of 2	98%
Small enterprise	23%		Less than 6	
Medium enterprise	2%		Less than 50	
Large enterprise	-	-	100 and over	2%

Source : ILO (2014) A Roadmap Toward a National Employment Policy for Sudan

¹⁰² In this report, SMEs and MSMEs are used interchangeably, assuming that SMEs embrace microenterprises as well.

¹⁰³ UNDP (2020) COVID-19 Socio-Economic Impact Assessment in Sudan

This implies that the job market in Sudan is growing more through the creation of a large number of entrepreneurs than through the growth of enterprises.

The same ILO survey also classified the informal sector in Khartoum into two categories: subsistence enterprises and informal but small enterprises (unofficial small enterprises), and analysed the employment absorption potential. The table below summarises the results and concludes that the latter have the potential to expand their employment absorption capacity, but they are fewer in number.

Table 4-3 Comparison of Subsistence Enterprise and Unofficial Small Enterprise

Characteristics	Subsistence enterprises	Unofficial small enterprises
Degree of informality	<ul style="list-style-type: none"> · 100 percent informal · Highly stagnant towards formalization 	<ul style="list-style-type: none"> · High proportion of sales undeclared · Workers not registered · A combination of formal & informal elements.
Type of activity	<ul style="list-style-type: none"> · Single street vendors · Home-based unincorporated small- scale activities & crafts. · Outdoor automotive maintenance services. · Home based credit retail of commodities. · Traditional food-making and beverages. 	<ul style="list-style-type: none"> · Small carpentry workshops · Bakeries · Cereals grinding and packing. · Home based Garments manufacturing. · Pottery making.
Technology	<ul style="list-style-type: none"> · Highly labour-intensive · Use of rudimentary equipment 	<ul style="list-style-type: none"> · Relatively labour-intensive · Use of modern equipment
Owner profile	<ul style="list-style-type: none"> · Poor · Low education · Low level of skills · Not business-oriented 	<ul style="list-style-type: none"> · Poor and not poor · Well-educated · High level of skills · Business-oriented
Markets	<ul style="list-style-type: none"> · Low barriers to entry · Highly competitive · Sell to local market · Sell to low-income final consumers 	<ul style="list-style-type: none"> · Face low barriers to market entry · Highly competitive · Have some product differentiation · Have some linkages with formal enterprises
Finance needs	<ul style="list-style-type: none"> · Working capital 	<ul style="list-style-type: none"> · Working capital · Investment capital · Supplier credit · Investment in Equipment
Other needs	<ul style="list-style-type: none"> · Personal insurance · Social protection 	<ul style="list-style-type: none"> · Personal needs · Business needs · Insurance
Other characteristics	<ul style="list-style-type: none"> · Least dynamic · Completely informal · Stagnant to formalization 	<ul style="list-style-type: none"> · Relatively dynamic and less stagnant to formalization

(2) 2018 GEM Entrepreneurship Survey

According to the sample survey of entrepreneurs by the 2018 Global Entrepreneurship Monitor (GEM), 69% of all entrepreneurs are at the business idea stage and have not opened a business. This means that at this stage, no jobs are being created. Opening a business (starting a business) would create employment for at least one entrepreneur, but at this stage there are no employees. As shown in the table below, 70%

of those who have been operating for less than 3.5 years have no employees, whereas 66% of those who have been operating for more than 3.5 years have 1-5 employees and 12% have 6-19 employees. It can be assumed that the continuity of the company is important in order to absorb more jobs.

Table 4-4 Start-up Stage and Number of Employees in Sudan

Employee (number of person)	0	1-5	6-19	20 and over
Businesses that have been operating for less than 3.5 years	70.50%	17.00%	10.80%	1.80%
Business more than 3.5 years old	17.70%	66.30%	11.80%	4.10%

Source: GEM (2018)

In the same survey, the characteristics of entrepreneurs are summarized as follows:

<p><GEM survey of entrepreneur status></p> <p>(Based on a survey of 2,000 randomly selected adults aged 18-64 and a survey of 36 experts)</p> <ol style="list-style-type: none"> i. The general image of entrepreneurship is high: ideal career choice (79%), high status and respected (78%). ii. Self-image is also high: 75% have the necessary knowledge and skills, but 35% are too afraid of failure to start a business. iii. In terms of the stage of entrepreneurship, 69% are at the business idea (potential business) stage, 22% at the nascent and new business stage and 10% at the established business stage. iv. The closure rate is 17% (possibly including conversion to other businesses). Reasons for closure: lack of financial resources 23%, family/personal reasons 23%, low profit margins 20%. v. Entrepreneurship can be divided into two main types: necessity-driven entrepreneurs and opportunity-driven entrepreneurs. The former is more common among women. vi. Most enterprises are in the consumer-oriented service sector, started and managed by a single entrepreneur and employing several people. vii. Total Early Stage Activity (TEA) job creation: none (8.7%), 1-5 (55.9%), 6-19 (23.6%), and 20+ (11.8%). 9.96% expect job growth within 5 years. viii. Employment creation in Established Business (EB): None (8.3%), 1-5 (63.5%), 6-19 (17.7%), 20+ (10.5%). 10.81% expect employment growth within 5 years. ix. Moderate level of technology use (63% of early stage businesses, 76% of established firms, including 1-5 years of new technology use), and it is expected to increase its use. x. Typical entrepreneur: 34 years old at start-up, male, took 5 years to reach an established business. He has a primary education (1st stage level), a moderate income, is self-employed and has a family of six. xi. Characteristics of Sudan: Family informal finance supports start-up capital. 18% of adults have supported start-up capital. xii. 9.3% of adults are involved in family businesses, 6% are family owned and managed businesses, of which 68% are male entrepreneurs, 81% have completed upper secondary education and have high income levels. Family businesses are more common in Blue Nile State (16%) and less common in Khartoum State (6%). Consumer businesses account for 53% of all businesses, with low levels of technology use and innovation. xiii. 6% of adults have a flexible part-time job using digital platforms (Facebook, WhatsApp). xiv. Digitisation has not progressed yet.

(3) 2020 World Bank Khartoum State Enterprise Survey

This is a COVID-19 impact study on formal enterprises conducted by the World Bank in Khartoum State in August 2020¹⁰⁴ :

- Most of the few large enterprises are state-owned enterprises, mostly located in Khartoum State, and engaged in trade and manufacturing and processing industries.
- In terms of the number of enterprises by size, 70% were micro enterprises (less than 5 employees), 21% were small enterprises (5-19 employees), 5% were medium enterprises (20-99 employees) and 2% were large enterprises (100 and over employees).
- In terms of industry, 60% were in distribution, 33% in other services (transport, storage, electricity, gas, water, etc.), 6% in manufacturing and 1% in agriculture.
- The impact of COVID-19:
 - During the COVID-19 lockdown period, small enterprises were the most affected with 45% closing, while medium enterprises closed 35%, large enterprises 30% and micro enterprises 24%.
 - By industry, the manufacturing sector was the most affected, with 49% of businesses closing, while 48% of other services and 17% of distribution businesses closed.
 - Sales compared to the previous year decreased 83% in the manufacturing sector, 68% in the distribution sector and 81% in the other service sector, and by size of business, micro, small and large businesses decreased their sales over 80% compared to the previous year.
 - In response to the fall in sales, companies laid off employees (8%), reduced salaries (7%) and reduced working hours (5%). They also experienced reduced demand for their products (87%), reduced supply of raw materials (72%), reduced cash flow (50%) and reduced access to financial services (50%).
 - Although 11% of all companies have started or increased their use of the internet in order to cope with COVID-19, the increase shows significant difference by company size, as 25% of large companies have increased their use of the internet, compared to 3% of micro (3% started, 8% increased the use), small (2% started, 5% increased) and medium (7% started, 7% increased) companies.

(4) Examples of Employment Growth through Innovative Business Models

There are examples of young entrepreneurs expanding their employment by applying an Uber-type business model using ICT. Monjid¹⁰⁵ is a start-up company established in August 2019, which adopts Uber-type business model that employs car maintenance graduates from vocational schools and provides car mechanics service on the street via phone and app, for customers who need repairs. It was started by

¹⁰⁴ World Bank (2020) Effects of COVID-19 on Sudanese Enterprises. The number of companies surveyed was 489. As the survey was conducted only in Khartoum State, the number of agricultural enterprises is small. Informal enterprises and women-owned enterprises are not included. The number of women-owned SMEs is 14% of the total, according to the 2019 IMF survey.

¹⁰⁵ Interview with 249Startups on 28 March 2021 and "Monjid: an Uber for breakdown assistance" <https://www.netherlandsworldwide.nl/latest/news/2020/01/14/monjid-an-uber-for-breakdown-assistance> (accessed on 10 May 2021).

two students of the Sudan University of Science and Technology, aged 22 and 24, with incubation support from the Orange Corners Program at 249Startups. After opening their business, they realized that vocational school graduates had technical skills but no soft skills, and that the community had a poor image of them. So Monjid developed its own manual and trained them using it, supplied them with maintenance equipment and made them wear uniforms printed Monjid name. These activities resulted in gaining the trust of customers and making the graduates proud of themselves. There are now 12 registered Monjid mechanics¹⁰⁶. The company started under the COVID-19 lockdown environment, so there was initially no demand found for car servicing. Then it persuaded Nefeidi (a large logistics company) to provide free motorbikes and oil to them, and it built up a track record of doing social work by servicing the vehicles of medical personnel for free. The company started with a funding of USD1,000 provided by Orange Corners Program startup loan and repaid it in six months, and then received a seed funding investment of several hundred thousand US dollars from Globetech in the UAE.

In addition, Tirhal¹⁰⁷, the Sudanese version of Uber, founded in September 2016, employs 150 permanent and 200 fixed-term employees at its head office, as well as 70,000 registered drivers per year, out of which, 20,000 are active on a monthly basis. Like Monjid, the service relies more on telephone than app, due to the instability of the internet, so it employs 200 people for call centre and customer service. Initially, many drivers had other jobs and driving Tirhal as sideline, but recently some have reinvested the profits from the Tirhal service in their vehicles, making the driving business their main source of income. There are also others who have invested in vehicles, which they rent out to drivers as a source of income. Tirhal has lost 55% of the ride-sharing market due to the impact of COVID-19 and the removal of fuel subsidies, but they are trying to overcome this by expanding their food delivery services. The company also provides courier services and is planning to expand into other parts of the country and the Middle East and North Africa region, while aiming to diversify into Tuktuk and donkey cart ridesharing and public transport provision. The founder, who has now stepped down from his role as President and remains as a board member of Tirhar, is a serial entrepreneur who has started an e-payment platform (BushraPay, with 6 employees) and a pharmacy vending and emergency delivery platform (Orderpharma, with 18 employees) that connects 20 companies and 1,000 pharmacies. He is also preparing to launch an Orderpharma offshoot, Legit, which will connect private customers with pharmacies, and Garib, a simple delivery service.

(5) The case of Micro, Small and Medium Enterprises

The nine MSMEs interviewed for this survey¹⁰⁸ highlighted the constant instability of the economic environment, including price volatility due to the persistent fluctuation of exchange rate and the

¹⁰⁶ Interview with Monjid on 6 June 2021. They plan to increase mechanics up to 50 by October 2021. Currently Monjid itself employs 24 including those who works for 24-hour call centre.

¹⁰⁷ The paragraph is based on the interview with Tirhal on 17 June 2021.

¹⁰⁸ The interview was conducted with the following MSMEs in June 2021 (the World Bank number of employee definition): 5 medium enterprise

withdrawal of fuel subsidies, as well as persistently high inflation rates, as the biggest common challenge to staying in business. One of the companies, Aspalta Group Company Limited¹⁰⁹, is a 35-year-old construction company that mainly undertakes project-based work for large companies on a subcontract basis. The company employs between 5 and 15 people. Its most recent work was in Darfur, where it was involved in the construction of 17 water points, schools and hospitals, employing 4,500 people on a fixed-term basis, of which 1,500 were skilled workers and 3,000 were unskilled women. According to a CEO (a former chairperson of the construction industry association), he cannot grow his company because it would incur more taxes and neither can he maintain more number of permanent workers¹¹⁰ because it would increase the burden on the company. So that is why he resorted not to expand his company size and remain working on a project basis.

This survey team also conducted an online survey of the presidents (all with at least a university degree and two are women) of 10 member companies of the SBF's Youth Department (three medium enterprises, four small enterprises and three micro enterprises)¹¹¹. According to the results, 9 of them had obtained their start-up capital from family and friends, except for one who had received investment from a private company; 7 had taken more than 12 months to get their business to establish; and 6 had given up on their business at least once in the past. In terms of preferred business support services, 9 said networking and 8 said finance. Recommendations for government include registration and tax incentives for start-ups and small businesses, simplification of procedures, training opportunities and financial support for youth.

(6) Summary

In Sudan, apart from the obvious large enterprises, there is often a mixed picture of MSMEs, entrepreneurs, sole proprietors and start-ups with innovative business models, such as Monjid. However, this may also be due to the absence of SME policies, including the definition of enterprise size, and entrepreneurship development policies, as well as the lack of periodic enterprise surveys. The details of the challenges faced by MSMEs and entrepreneurs vary according to industry, size, orientation and generation of management. Hiring and staffing needs are not just about hiring the best and most experienced people, but also about a strategy to avoid compliance with strict labour law which is imposing very demanding conditions to companies, and they resort to hiring on a contract basis.

(Marawi in wholesale glossary business, Rosewind in wheat farming, trading, and export, Intelligent Orientation Co. Ltd. in electromechanical installation, distribution, maintenance, and training, DAL Medical in pharmaceuticals, Italian Tourism Co. Ltd. a tour operator and travel agency), 2 small enterprises (Aspalta Group in construction, Bayader Flour Milling), 2 microenterprises (Alrawda Travel and Tourism Agency, and Samakak Aleina in online sea food delivery).

¹⁰⁹ The paragraph is based on the interview with Aspalta Group on 12 June 2021.

¹¹⁰ Current labour laws are protective to the workers, and we cannot make a long term contract with the condition.

¹¹¹ The online survey results are in Appendix 3.

4.1.3 Challenges for MSMEs and Entrepreneurs

(1) Overview of the Challenges

From the above, in order to increase the employment absorption capacity of MSMEs as a whole, it is important to deal with a macro level such as effecting policy and law reform such as the amendment of Labour Law, and at micro level, firstly to increase the number of entrepreneurs who move from the business idea stage to the start-up stage. After that, it is necessary to keep the business going and to avoid discontinuing the business¹¹². In order to analyze these requirements, the challenges faced by MSMEs and entrepreneurs are extracted from a number of reports and publications as described below.

First, **the 2018 GEM Survey** examines the constraints to transitioning from an idea to start a business, what is needed to keep a business going, and the reasons for business discontinuation, as shown in the table below. The direction of support proposed in this survey could be to mitigate or remove these constraints.

Table 4-5 Constraints to Starting a Business in Sudan and the Support Needed for Entrepreneurs

Constraints to starting a business	What is needed to sustain a business	Reasons for discontinuing a business
1. Government policy (71%)	1. Financial support (39%)	1. Lack of funds (23%)
2. Financial support (52%)	2. Education and training (27%)	2. Family/personal reasons (23%)
3. Access to infrastructure (26%)	3. Government policy (24%)	3. Low profit margins (20%)
4. Openness of the domestic market (23%)	4. Entrepreneurial ability (24%)	-
5. Cultural and social values (16%)	5. R&D transfer (21%)	-
6. Economic situation (16%)	-	-

Source : GEM (2018) Sudan National Report

According to **the presentation by the Minister of Finance in November 2020**, the challenges for SMEs are as follows:

- ① Access to finance
- ② Cost of Doing Business is high
- ③ Limited linkages between SMEs and larger companies

According to **the analysis of 249Startups in 2021**, the challenges for start-ups are as follows:

- ① Procedures such as registration at the time of setting up a company are not harmonised and are time consuming
- ② Access to finance is not easy
- ③ Taxation system is complex and not harmonised at federal, state and municipal levels, sometimes arbitrarily imposed
- ④ Availability of skilled human resources

¹¹² According to the 2018 GEM survey, the closure rate is 17%, and according to an interview with 249Startups in March 2021, businesses do not last long in Sudan and many are closed within 3-6 months.

According to the interviews conducted with the Small Industry and Crafts Union (SICU)¹¹³ of the Sudanese Business Federation (SBF) in April 2021, the challenges for small enterprises are as follows:

- ① Poor quality of final products
- ② There is no law defining small enterprises and both large and small enterprises are legally treated the same, with no preferential treatment for small enterprises
- ③ No industry-specific licensing system
- ④ Many workers are not officially registered

In the following section, we will describe in detail some of the common and representative aspects of the challenges and constraints mentioned above.

(2) Access to Funds and Finance

As financial support needs are high on the lists above, according to the presentation by the Minister of Finance in November 2020, the causes of SMEs' financial access problems are as follows

- The financial sector's reluctance to take risks and to offers few products for SMEs
- SMEs have no collateral and no financial transaction information that banks can refer to
- The absence of venture capital to invest in early stage start-ups

On the other hand, the results of the World Bank's August 2020 Khartoum State Enterprise Survey also shows that under the COVID-19 crisis, the top five requests to the government are all for support to improve liquidity (subsidies, tax exemptions/reductions, tax deferrals, new credit and rent deferrals). It is clear that they wanted measures to deal with the financial challenges of paying salaries, insurance premiums, rent, loans and bills¹¹⁴. The COVID-19 lockdown has forced many micro, small and medium enterprises and informal sector workers to shut down, and inflation has hit them hard, reducing their real incomes and affecting their ability to pay salaries, rent and pay off loans¹¹⁵. In contrast, according to 249Startups, there was no government support for entrepreneurs during the COVID-19 crisis, and no direct financial support, tax relief or loans for those who lost their jobs.

It has been pointed out that the existing microfinance system, with a ceiling of SDG 300,000 (about USD 660), is not sufficient for entrepreneurs and SMEs¹¹⁶.

(3) Legal System and Taxation System

The Sudanese Company Registration Act and Tax Act do not distinguish between large companies and MSMEs or start-ups, and there is no preferential treatment for the latter two. The registration process is

¹¹³ According to the interview in June 2021, the SBF-Small Industry and Crafts Union's name is in the course of changing to Small, Medium, Micro Enterprise and Handicraft Unit. In this report, SICU is used throughout.

¹¹⁴ World Bank (2020) Effects of COVID-19 on Sudanese Enterprises.

¹¹⁵ UNDP (2020) COVID-19 Socio-Economic Impact Assessment in Sudan

¹¹⁶ The interview with Monjid on 16 June 2021 revealed that their start-up capital was USD1,000 and the interview with Tirhal on 17 June 2021 revealed that they spent USD20,000 for start-up capital.

cumbersome, and the tax laws are not well known. 249Startups' research¹¹⁷ has revealed the following specific situations.

For example, if you want to register a company in Darfur, you can do it in the provinces as a sole proprietor or limited registration, but to register as a full Limited Liability Company, you have to come to Khartoum. However, we do not feel that there is any advantage in going that far to register a company.

The reasons for not paying tax are that they don't see the benefit of doing so, they don't have trust in the government or civil servants (subjective and corrupt), the tax system is not transparent and tax rates are determined subjectively (an official comes to your office and says you have a computer, so how much tax you pay). The tax rate may be set somewhere officially, but it is not followed at all in practice.

At 249Startups, we teach people to be ethical and pay taxes. However, when you go to a law firm to register a business, it often happens that you are charged SDG 50,000 to register your company, but the Commercial Registrar under the Ministry of Justice actually requires only SDG 3,000. The registration tax varies depending on the channel through which you request the procedure and the person who deals with you at the office. We cannot blame the law firms for this. There is a situation where both registered firms and legal professionals have no choice but to operate without skills and knowledge under opaque rules. In addition, the business environment is not good and law firms have no choice but to make money through these registration procedures.

(4) Recruitment

According to a survey by 249Startups, when it comes to staffing, the lack of guidance from the hiring company to the employees, not planning the right scope of work and lack of training opportunities are the reasons for the lack of motivation on the part of the employees.

JICA's supporting experience¹¹⁸ revealed that one of the reasons why MSMEs are unable to grow is that business is at a low level of equilibrium, with labour supply and demand matched by companies offering low quality (cheap) products and services, with low quality (cheap) labour. For example, according to the Darfur Socio-Economic Survey 2015 (JICA/IOM), only 5% of companies selected human resources as a constraint to business expansion. On the part of young employees, many also state that there are no particular skills that they lack for their jobs. JICA's work has shown that breaking this equilibrium can be done by changing employers' attitudes towards overall management and human resource management. In the project in Darfur, 75% of the 120 companies increased their turnover and 35% hired new employees as a result of the training provided to employers (business and labour laws) and technical training to employees. The common changes observed in the companies that grew were the provision of training for

¹¹⁷ 249Startups (2021) Situation Analysis of Startups in Sudan 2021

¹¹⁸ The Project for Strengthening Peace through the Improvement of Public Services in three Darfur States' experience working with MSMEs in the three Darfur States.

employees and the expansion of business networks with other companies. In particular, MSMEs that have established partnerships with large companies in Khartoum, for example to supply parts, have grown significantly.

On the other hand, with regard to the perceptions of companies regarding securing human resources, a survey of companies conducted by GEMS in March 2020¹¹⁹ showed the results below. Although there are some cases where vocational training schemes have led to employment, there are also cases where the employment conditions of the companies do not match the expectations of the youth and they leave or migrate abroad.

- Young people leave because of low salary levels (90%) and migration (33%).
- Most companies recently accepted internship (90%)
- Half of the companies have hired young people from VTCs
- All companies say that vocational training helps to reduce unemployment
- 90% of the companies provide in-house training or participate in external training.
- All companies are struggling to find well-trained and skilled technicians.

4.2 Policy, legislation and environment for MSMEs and entrepreneurship development

4.2.1 MSMEs and Entrepreneurship Development Policy in the Government Development Plan

Sudan never had a MSME and entrepreneurship development policy, but has been working on entrepreneurship development since 2010, when UNIDO provided support.

The need to encourage the private sector was first recognized by the leaders of the transitional government, and the Ministry of Finance and Economic Planning (MOFEP) who prepared a list of 20 priority projects for the Friends of Sudan, with "creating jobs and markets for products" as the 15th project. It also aims to improve on the World Bank Doing Business Index, which ranks Sudan the 171st out of 190 countries in 2020.

The Draft Poverty Reduction Strategy Paper (PRSP) 2021-2023, dated 28 February 2021¹²⁰ lists "Inclusive Economic Growth", as the second out of five pillars¹²¹, as shown in the table below, which includes SME support schemes and measures to improve access to finance.

Table 4-6 Summary of the Draft Poverty Reduction Strategy Paper(2021-2023)

Pillar 2: Fostering Inclusive Economic Growth		
Area/Sector	Objectives and targets	Policy measures/programs
Agriculture	Achieve inclusive socioeconomic development led by a	Short term: <ul style="list-style-type: none"> • Data and information: complete the agricultural census • Attracting FDI into the agriculture sector to improve supply

¹¹⁹ Sudanjob Research/GEMS (2020) Stakeholders' Opinion Survey on Youth Employment and Vocational Training

¹²⁰ This is a condition for obtaining debt cancellation status under the Heavily Indebted Poor Countries (HIPC) Initiative. An earlier version was the Interim PRSP of 2012 (Interim PRSP).

¹²¹ Pillar 1: Promoting Macroeconomic Stability, Pillar 3: Boosting Human and Social Development, Pillar 4: Promoting Peace, Pillar 5: Strengthening Governance and Institutional Capacity.

	robust agricultural sector that supports small producers, increased production, exports, and employment particularly for youth, and reduces poverty.	<p>chains and enhance value addition to several key agricultural products.</p> <p>Short to Medium term:</p> <ul style="list-style-type: none"> Enhance access to credit: raise the capital of the Agriculture Bank of Sudan, develop new relevant financial products and direct the bulk of its financial resources to small producers. <p>Medium term:</p> <ul style="list-style-type: none"> Increase productivity: Improved input supply, invest in research, extension and technology transfer, and strengthen the Plant Protection Department. Rehabilitate production infrastructure: (i) rehabilitate the irrigated schemes infrastructure including removal of accumulated siltation from the canals, (ii) support water harvesting infrastructure in rainfed sector, (iii) invest in infrastructure for livestock disease control, and (iv) rehabilitate the gum Arabic belt. Improve access to markets: increased rail and roads connectivity through investment & rehabilitation and maintenance of existing infrastructure. Institutional reforms: (i) review all laws and regulations of the agriculture sector; and (ii) reform the ministry of agriculture and livestock and its affiliated corporations.
Enabling Environment for Private Sector-led Growth	Promote the private sector to become innovative, productive and competitive and a source of inclusive growth and employment	<p>Short term</p> <ul style="list-style-type: none"> Design enterprise support schemes (e.g. deferral of payments, restructuring loans) to help SMEs cope with COVID-19 Improve economic certainty and predictability (reduce inflation and exchange rate fluctuating). Related to pillar 1 Reform the regulatory environment for doing business, putting priority on trading across borders; access to credit; paying taxes, and protecting minority investors. Strengthen the capacity and empowering the recently created Investment and Private Sector Development Authority <p>Medium term</p> <ul style="list-style-type: none"> Address the large presence of state-owned enterprises and the adverse impact of crowding out private investment¹²² Increase financial inclusion and improve access to finance
Natural Resources and the Environment	To meet the SDGs and ensure environmental sustainability through addressing challenges related to environmental degradation and climate change with negative impact on food security and incomes to the rural population that depend on agriculture and where poverty remains high.	<p>Short term</p> <ul style="list-style-type: none"> Create an enabling regulatory, institutional and policy framework for environment protection to stop the degradation of natural resources, land and forests Develop a national strategy to address desertification Strengthen international cooperation in the area of environment and climate change <p>Medium term</p> <ul style="list-style-type: none"> Strengthen the resilience of communities in the face of climate change

¹²² The Transitional Government announced that it will liquidate or privatise 650 state owned firms in June 2020. (<https://financialpost.com/pm/business-pmn/sudan-approves-plan-to-liquidate-privatize-state-firms>). The privatization of state and public firms has been a national policy since 1992 according to the Investment Policy Review in Sudan by UNCTAD (2015).

Infrastructure services for recovery and growth	Rehabilitate and expand infrastructure services to recover production costs and improve competitiveness	<p>Short term</p> <ul style="list-style-type: none"> • Improve governance along the transport corridors by eliminating the numerous check points • Diversify energy resources to reduce overall cost of generation, giving priority to solar and wind energy <p>Short to Medium Term</p> <ul style="list-style-type: none"> • Create opportunities to engage the private sector in infrastructure and introduce viable PPPs to finance infrastructure investments (energy, roads). <p>Medium Term</p> <ul style="list-style-type: none"> • Develop a network of rural feeder roads, linking production areas to markets and improve maintenance of existing roads.
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Source : Extraction from Annex1 Policy Matrix of the Draft Poverty Reduction Strategy Paper (2021-2023)

In addition to this, there is information that the Government is developing an entrepreneurship development strategy.

4.2.2 Role and budget of relevant ministries and agencies

Ministries with jurisdiction over MSMEs and entrepreneurship affairs include the Ministry of Industry, the Ministry of Investment and International Cooperation (MOIIC), MOFEP, the Ministry of Agriculture and the Central Bank of Sudan (CBoS).

The Ministry of Industry has a Small and Medium Enterprises Unit, whose Year 2020 Plan was to revitalise micro-enterprises and cooperatives as a response to the economic crisis, and whose Year 2021 Plan aims to develop policies to increase access to finance for microenterprises, promote forward and backward linkages of microenterprises and cottage industries with medium and large enterprises, create employment, and reduce poverty. According to interviews with the Unit, support for women's cottage industries (sesame oil pressing, food processing, etc.) is being provided to the women's section of the SBF-SICU. In 2021, the Ministry planned to implement Entrepreneurship Promotion Programme (consisted of training, qualifications, formation of associations, support for ownership of means of production) for youth and women in seven states severely affected by the civil war¹²³. However, the Ministry was only approved SDG 50 million against the 2021 budget request of SDG 300 million, of which SDG 3 million is for the above programme, and only SDG 1.47 million has been disbursed for the programme.

On the other hand, in December 2019, the Investment and Private Sector Development Agency (IPSDA) was established under MOFEP to consolidate the roles over the private sector scattered among the Ministry of Industry, the Ministry of Investment, and the Ministry of Social Development and Labour as a one-stop shop, and to be responsible for the development of MSMEs and entrepreneurship. In February 2021, IPSDA was upgraded to MOIIC, which shall continue with IPSDA's strategy, annual plan and 160 staff, of whom, 80 are professionals but the budget size was yet to be confirmed¹²⁴. For the time being, it

¹²³ Interview with SME Unit of the Ministry of Industry on 26 May 2021. The former Ministry of Industry and Trade was separated in February 2021.

¹²⁴ According to the interview with MOIIC on 30 March 2021. That time MOII had just gone through restructuring after becoming a ministry

is preparing an investment map, and hopes to receive support for the establishment of the organisational structure necessary to attract foreign investment, the ability to conclude bilateral investment agreements, and the budget and capacity building for the preparation of an investment map¹²⁵. It is not clear at the time of this report whether the planned Entrepreneurship Unit will be under MOIIC or the MOFEP¹²⁶, while it is planned to be set up with the support of UNIDO experts¹²⁷. It needs to be confirmed which ministry will take the lead in developing MSMEs and entrepreneurs, if JICA is to proceed with its cooperation in this area.

4.2.3 Legal system

As a result of a stakeholder's workshop held in 2020, it was concluded that a strategy, legislation and financial support for MSMEs and entrepreneurs are required. Since then MOFEP has set up a committee for these three areas, and is working with the Ministry of Labour and Administrative Reform and Ministry of Industry to draft them, with the aim of completing them by the end of 2021¹²⁸.

In terms of investment, the 1999 Investment Law was replaced by the 2013 Investment Encouragement Act (IEA), which established a one-stop shop for investors and provides for exemptions from VAT and customs duties for national strategic projects. In addition, in 2019, the transitional government added preferential treatment and tax exemptions through a Constitutional Decree¹²⁹, but from April 2020, customs exemptions have been temporarily suspended by a decision of the Supreme Committee for Economic Emergency¹³⁰. Currently most of the foreign direct investments are from China and Arab countries¹³¹. At the Paris Conference held in May 2021, the Investment Encouragement Law of 2021 and the Public-Private Partnership (PPP) Law of 2021 were announced, which also identified SMEs, entrepreneurs and youth, as well as labour capacity building for the fourth industrial revolution, as areas for investment. Although detailed regulations are waited for practical application of the Laws, this is a sign of the government's will for attracting domestic and foreign investment in SMEs and youth employment.

The tax system includes corporate income tax, personal income tax, real estate rental tax, capital gains tax, interest and royalty withholding tax, consumption tax and stamp duty¹³². In addition to federal taxation,

from IPSDA in February 2021.

¹²⁵ Interview with MOIIC on 30 March 2021. The investment map was in progress and the process requires USD4-5 million.

¹²⁶ According to the interview with the World Bank on 30 May 2021, it is probably MOIIC which shall lead the policy.

¹²⁷ It was discussed to obtain a support from Mr. Ameer, UNIDO Expert.

¹²⁸ According to the interview with MOIIC on 30 March 2021, all the three committees are led by Dr. Hiba Amohamed Ali Ahmed, ex Minister of Finance supported by advisors from the three ministries.

¹²⁹ Sudan Ministry of Finance and Economic Planning (2019) Implementation of Istanbul Plan of Action for Least Developed Countries (IPoA) 2011-2020 Sudan National Report

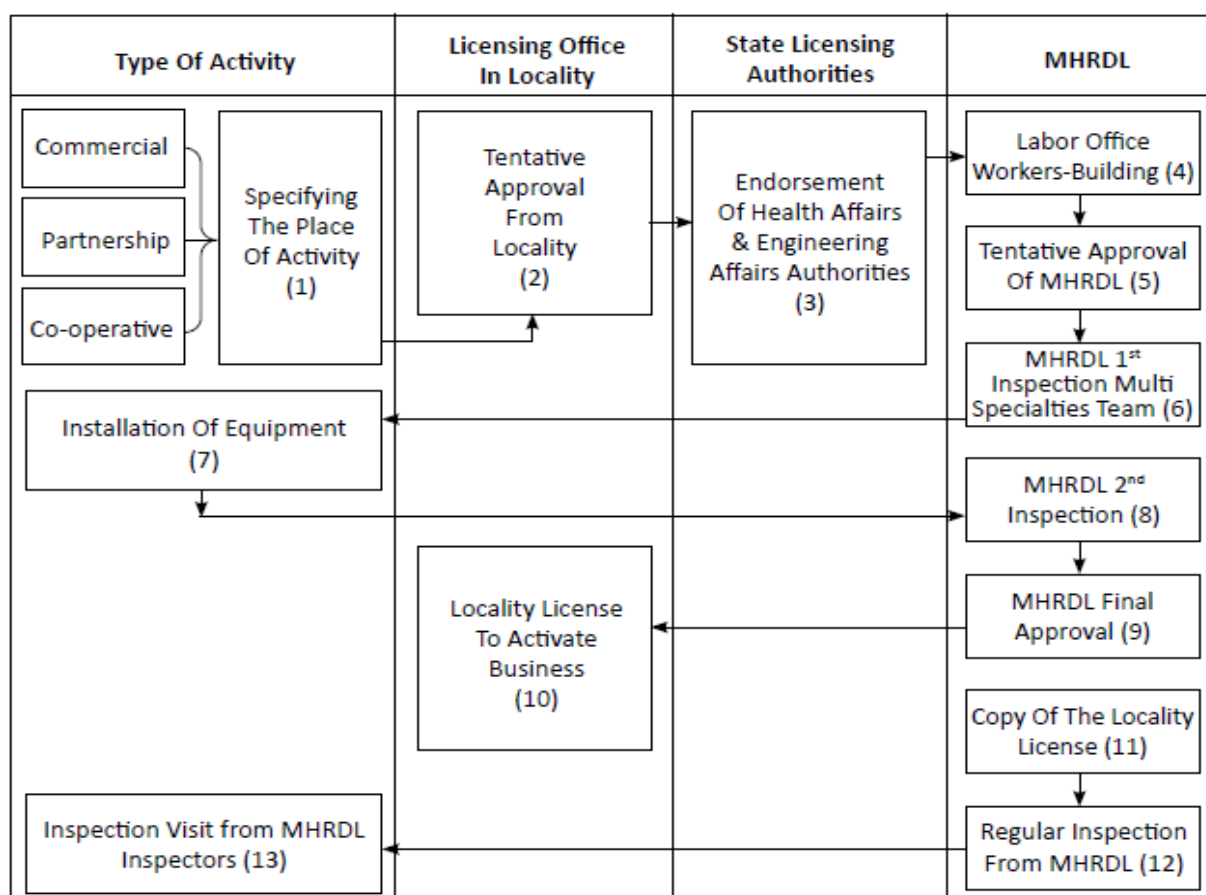
¹³⁰ <https://www.jetro.go.jp/biznews/2021/03/74762380b296c9f1.html>

¹³¹ UNDP (2020) COVID-19 Socio-Economic Impact Assessment in Sudan

¹³² Sudan Investment Guide 2016

state governments also have the power to levy taxes, and there is a lack of harmonisation of tax systems between different levels of government and ministries, which became a burden on companies¹³³.

The registration of companies is carried out at the Commercial Registry (located in major cities) under the Ministry of Justice, in accordance with the Company Act 2015. A business license must be obtained from the federal government, the state government and/or, in some cases, the municipalities. Licenses in accordance with hygiene and safety standards are obtained from municipalities, and compliance rates are high. Investment licenses are obtained from the federal government in accordance with the State Investment Promotion Act 2013. The following diagram shows the establishment registration process as of 2014.



Source: ILO (2014) A Roadmap toward a National Employment Policy for Sudan

Figure 4-1 Company Registration Process

¹³³ DFID Business Environment Reform Facility (2016) Diagnostic Review of Business Environment Constraints: Sudan

Other forms of business organisation and their relevant legislation are shown in the table below.

Table 4-7 Business forms and related legislation

Type	Law	Number of registrations	Remarks
Sole Proprietorship	1931 Business Law	5,003,000	-
Cooperative	1952 Cooperative Law	10,000 (2005)	80% is consumer cooperatives. There are also a traditional mutual aid cooperative (Nafir) and a cooperative which involves raising money for a social event (Kashif).
NGO	No legal basis	15,000 registered under the Humanitarian Aid Commission (2015)	Number of all NGOs, presumably including business and social enterprises, but their numbers are not known.

Source : British Council Sudan (2020) The State of Social Enterprise in Sudan

Regarding the land tenure system, 95% of the land in Sudan is owned by the government and 5% is privately owned, mostly on the banks of the Nile. According to the Unregistered Land Act of 1970 and the Investment Promotion Act of 2013, unregistered land can be allocated to investors by the federal government without consulting local communities. This may affect access to land for small-holder farmers¹³⁴.

According to Transparency International's Corruption Perceptions Index 2019, Sudan is ranked 173/180 in the world, and 47th in sub-Saharan Africa. In sub-Saharan Africa, the country ranks 47th out of 49 countries, with the bottom three countries being, from the bottom, Somalia 9/100 points, South Sudan 12/100 points and Sudan 16/100 points. The government plans to draft an anti-corruption law to cope with the situation.

4.2.4 Environment: electricity and internet

The electrification rate in 2018 was 59.8%¹³⁵ and electricity lines do not reach rural areas and electricity supply is erratic. As of 2016, the agro-processing industry relies on diesel power¹³⁶, but the removal of subsidies on fuel has led to high fuel prices, which have hit the industry hard.

The internet has seen an increase in penetration in recent years. For more information, please refer to Chapter 5 on the ICT industry.

4.3 Business ecosystem for MSMEs and entrepreneurship

4.3.1 BDS Provider Institutions

According to a survey conducted by 249Startups¹³⁷, the top choice of entrepreneurs to look for business

¹³⁴ DFID Business Environment Reform Facility (2016) Diagnostic Review of Business Environment Constraints: Sudan

¹³⁵ <https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=SD>

¹³⁶ DFID Business Environment Reform Facility (2016) Diagnostic Review of Business Environment Constraints: Sudan

¹³⁷ 249Startups (2021) Situation Analysis of Startups in Sudan 2021

support is other entrepreneurs (35%). The SBF's Youth Department also stated that there is a demand for experience sharing and training for member business owners by department leaders. The role of intermediary organisations of entrepreneurs and businesses such as the SBF and the Social Enterprise Sudan Association (listed below) as BDS providers is likely to grow.

(1) Sudanese Business Federation (SBF)

As Sudanese law requires all formal enterprises to be members of the SBF, the government's dialogue with the private sector has historically been through the SBF¹³⁸. The SBF has improved its operation with the replacement of Steering Committee members after the revolution in December 2019. The influence of big business has been diluted. The name was changed from the Sudanese Businessmen and Employment Federation (SBEF) to SBF, and the Youth Department of the Secretariat has been very active¹³⁹.

Overview of the Youth Department at the SBF Secretariat

(Based on interviews with Mr. Ahmed Sayed, Head of the Youth Department on 6 June 2021 and Mr. Hatim Mubarak Hassan, Member of the Department on 4 June 2021)

- The SBF Secretariat's Youth Department was established in 2010-2011 when the British Council's Mashrouy started and the Department has been mainly promoting the activities of the Mashrouy.
- After the revolution in 2018, a group of youth entrepreneurs from within and outside SBF came together to draw up a new vision to advocate and implement youth rights in the new Sudan. In doing so, they decided to come together under the SBF with a new leader in office. The Youth Department has been actively involved in this process, working with the international community, development partners, the private sector, the government and the CBoS, to develop policies and strategies for the new Sudanese state. If these strategies are implemented, they will have a direct impact on employment, attract investment and build new relationships with the international community.
- As concrete measures, we are lobbying for: (i) the establishment of a public-private investment fund to invest in young entrepreneurs according to their nature of business; (ii) the addition of a category of start-ups, entrepreneurs and small businesses to the Companies Registration Act; (iii) the introduction of a tax system for the loss-making period immediately after starting a business (iv) improving the investment environment by creating a single window for entrepreneurial investment; (v) improving patent and copyright laws to protect innovation and business ideas; and (vi) allocating 30% of public procurement to youth start-ups and small businesses.
- The Youth Department is also leading the reform process within the SBF, developing new policies and plans and introducing a new logo. In the long term, it plans to renovate its small research centre and turn it into a business centre for entrepreneurship and innovation, where training will take place and a space will be created for entrepreneurs to meet and build networks. We also plan to hold training sessions awaited by members

¹³⁸ DFID Business Environment Reform Facility (2016) Diagnostic Review of Business Environment Constraints: Sudan. According to the interview with the representative of Youth Department, SBF on 6 June 2021, part of the registration fees paid by companies to the government is returned to the SBF.

¹³⁹ Interview with MOIIC on 30 March 2021. A formalization process of the change of name is underway from the former SBEF to SBF.

conducted by the department leaders ourselves as lecturers.

- Since there are departments under the Youth Department in charge of training, innovation and entrepreneurship, we are considering including entrepreneurship and innovation in the department name. There is also a Women's Department in the SBF Secretariat, and we are discussing the possibility of coordinating with that section to create a Youth and Women's Department in the secretariat.
- The number of registered members of the Youth Department is 141 companies, but there are about 220 group members on WhatsApp nationwide. Due to the impact of COVID-19, men have gone abroad to work, and the ratio of women is a little higher. Some of them have closed their businesses, but we are trying to understand the situation by conducting an online survey. Eventually, we plan to create a database of our members so that we can identify our member companies.
- Currently there is no membership fee for the Youth Department, but there is a membership fee for joining the SBF, which is discounted for small businesses.
- Youth entrepreneurs have a wide range of businesses, but they can be divided into two groups: those who have inherited a business from a family member and those who have started their own business.

The SBF has five federations of chambers of commerce and industry (agriculture and livestock, industry, commerce, small business and transport) covering 14 states. The exact number of member companies is not known, and a survey of member companies is currently being carried out under the auspices of Center for International Private Enterprise (CIPE). The SBF's Secretary General also has Women's Department for women business owners¹⁴⁰. Member companies pay membership fees to their chambers, and the activities of the SBF secretariat are financed by the contributions from the five chambers of commerce and industry, as well as a return on the registration fees received from the government. The outlines of each federation are as follows.

Small Industry and Crafts Union in Sudan (SICU) has a membership of companies with 3 to 9 employees. SICU has a representative office and 32 departments in Khartoum, with state offices, 375,000 registered workshops and 1,500,000 members¹⁴¹, according to some sources, 52,000¹⁴², pending the results of a survey of member companies currently being conducted by CIPE. SICU has 34 sectoral federations, including auto repair, leather, knitting, furniture and agricultural machinery¹⁴³. The SICU's objectives are to: 1) restore confidence in local products and explore export possibilities; 2) run working groups to create employment opportunities for young people and university graduates and absorb unemployment; 3)

¹⁴⁰ Interview with CIPE on 1 April 2021

¹⁴¹ According to <http://sudabiz.org/>. On the other hand, as of March 2021, according to CIPE, the total number of member firms in the SBF is estimated to be 1.0-1.5 million, and the exact figure is expected to be confirmed by a CIPE-supported survey of firms.

¹⁴² Interview with SICU on 7 June 2021.

¹⁴³ From sudabiz.org: Plumbing, Car paint, Blacksmithing, welding, frigate, Lathing, electricity of cars, General electricity, Mechanics, Pumps maintenance, Maintenance of electrons, Carpentry, Design and stitching, Manufacture of bricks, blocks and interlocks, Ivory, ceramics and folklore industry, Cooling and conditioning, Metal Forming, Agate industry, Manufacturing and forming aluminum, Punchers, The raw leather industry, Generation and maintenance workshops for generators, Leather industries, Knitwear, Manufacture of trays and mattress upholstery, Plumbing, Carpets and furniture workshop, Popular sweets, Plaster casting and decoration (sculpture), Dyeing workshops, handicrafts, Manufacture of agricultural equipment, Manufacture of trolleys, and Illuminated signs

transfer technology and localisation; and 4) encourage entrepreneurs and patent holders. SICU has its own Training and Capacity Development Committee with trainers to provide training to SMEs, but so far it has only provided training when commissioned by external agencies such as JICA, GIZ, the Ministry of Industry and SCVTA¹⁴⁴. On the other hand, the Federation has also been involved in setting up bakeries for its members through its own sponsorship and bank loans¹⁴⁵.

The Union of Chambers of Commerce is divided into the following chambers: 1) Export Chambers (industry sectors: metals, livestock, meat, fruit and vegetables, leather and wildlife, oil seeds, gum Arabic, sorghum and animal feed); 2) Import Chambers (industry sectors: electrical appliances, motor vehicles, spare parts, foodstuffs, medicines and cosmetics, safety and fire extinguishers, tiles and sanitary ware, tyres); 3) Economic Services Chamber (sectors: marketing and distribution, recruitment, travel, advertising, auctions, conference events, offices, foreign exchange, quarrying, customs clearance), 4) ICT Chambers (sectors: Zain agents, computer information technology, MTN agents), 5) Health, Education and Training Chambers (sectors: training centres), 6) Building and Engineering Chamber (construction, electronic machinery, infrastructure construction), and 7) State Chamber. The Chamber has an annual budget of SDG 400 million, with membership fees of SDG 25,000 for trade-related companies and SDG 10,000 for other companies, as well as the fee for issuing certificates of origin¹⁴⁶. It has an IT office, an information office and a business registration office, where SBF members are also registered. This affects its power relationship with the Secretary General¹⁴⁷. However, the Foreign Affairs Officer has indicated that from now on, the Federation will use the revenue it collects to provide export promotion events and training to its member companies as customers¹⁴⁸.

Under the Union of Chambers of Agriculture and Livestock, there are (1) Agriculture Chamber (agricultural investment, agricultural services, forest and gum Arabic, horticultural crops) and (2) Livestock Production Chamber (livestock, meat and slaughter, dairy products, poultry farming, production inputs, fisheries).

Under the Union of Chambers of Industry, there are chambers of food industry, petroleum soap industry, leather and footwear industry, printing, packaging and publishing industry, textile industry, engineering industry, pharmaceutical aromatherapy and cosmetics industry, flour milling and animal products industry, petrochemical energy and mining industry.

¹⁴⁴ Interview with SCIU on 1 June 2021.

¹⁴⁵ Interview with BDS consultant Mr. Mohamed Elamin Gasim Elzubei on 19 May 2021.

¹⁴⁶ Interview with the Union of Chambers of Commerce on 24 June 2021.

¹⁴⁷ Interview with CIPE on 1 April 2021.

¹⁴⁸ Interview with the Union of Chambers of Commerce on 24 June 2021.

(2) Social Enterprise Sudan Association¹⁴⁹

The association was founded and registered in 2019 by a group of social entrepreneurs and has 34 members. In addition to educating and promoting the social enterprise concept externally and networking, they provide training on social entrepreneurship at the request of development partners such as the British Council, UNICEF and the EU.

(3) Micro Finance Institutions (MFI)

In addition to finance, microfinance institutions also provide business development services to their clients. For example, Family Bank, with support from UNIDO, established the National Centre for Entrepreneurship to provide training opportunities for start-ups and youth entrepreneurs (151 training courses for 4,020 entrepreneurs in 2015-2019), as well as accounting and technical skills training for clients whom they decide to provide microfinance¹⁵⁰. The Ebdaa Bank provides business management and financial literacy training¹⁵¹. The Agriculture Bank of Sudan outsources trainers and conducts management skills, financial literacy and market development training only when donor funding is available¹⁵².

(4) Individual BDS Consultants

There are a small number of individual consultants who provide advice to SMEs, but it is difficult for them to be self-sustaining solely relying on the orders from SMEs. They often assist SMEs in preparing business plans for borrowing from financial institutions, but they are also employed by development partner projects as trainers to teach entrepreneurship, financial management and business plan preparation¹⁵³.

4.3.2 Entrepreneurship Development and Incubation Institutions

The following table summarises the main entrepreneurial development and incubation institutions in existence.

Table 4-8 Major Incubation Institutions

Name	Established Year	Outline (They are in Khartoum unless otherwise mentioned)
Innovation and Entrepreneurship Community (IEC)	2013	<ul style="list-style-type: none"> • In 2013, a group of entrepreneurs came together to establish the Institute of Electrical and Electronics Engineers (IEEE) Sudan Entrepreneurship Centre, which became the IEC the following year. • It is also involved in co-working space management and community awareness. • Since 2014, it has been involved in the following incubation projects: <ul style="list-style-type: none"> - Start-up Weekend Khartoum - Get in the Ring (GITR)

¹⁴⁹ Interview with Social Enterprise Sudan Association on 3 June 2021.

¹⁵⁰ Interview with Family Bank on 19 May 2021.

¹⁵¹ Interview with Ebdaa bank on 20 May 2021.

¹⁵² Interview with Agriculture Bank of Sudan on 24 May 2021.

¹⁵³ Interview with Mr. Mohamed Elamin Gasim Elzubei on 19 May 2021, and with PCT on 29 May 2021.

Name	Established Year	Outline (They are in Khartoum unless otherwise mentioned)
		<ul style="list-style-type: none"> - The Future Argo Challenge - Global Entrepreneurship Week (GEW) : Networking event held every year
Impact Hub Khartoum (IHK)	2016	<ul style="list-style-type: none"> • Co-working space and innovation lab. • 15 staff members (3 men, 12 women). • 80 entrepreneurs aged between 20 and 45 are members. • Incubation and accelerator programmes for start-ups with a social and environmental impact in the agribusiness sector. Female leaders who have held key positions in large companies and female ICT experts are training teachers. • In addition to Impact Hub Global, it is a member of several regional and global networks, including the Middle East and North Africa (MENA) based Digital Arabia Network, Rwanda-based Transform Africa and India-based Sankalp. • It works with the Ministry of ICT, the Social Security and Investment Agency (SSIA) and the Agricultural Research Centre (ARC). • It plans to set up a Hub in Gadaref in mid-2022 to support agricultural Startups.
Sumakers Lab	2016	<ul style="list-style-type: none"> • It has a science lab and manufacturing equipment. • Organising tech training and workshops for youth.
Green Space	2016	<ul style="list-style-type: none"> • Co-working space for NGOs and volunteer groups.
Technopole, University of Khartoum	2016	<ul style="list-style-type: none"> • An incubator established in the Faculty of Engineering at the University of Khartoum. • Supported by Bank of Khartoum, Islamic Development Bank, UNIDO and Arab Regional Center for Entrepreneurship Investment Training. • Most recently, a Technology Incubation Program has been implemented with the support of the African Development Bank (AfDB) and the Korean aid authorities. It targets Rwanda and Sudan and takes a gender approach in the cross-sector of agriculture and technology. 6 months incubation and mentoring (online) by lecturers from Frankfurt School of Management University, and 6 months post-incubation (judicial support from 249Startups and mentorship).
Entrepreneurship Centre, University of Khartoum	2018	<ul style="list-style-type: none"> • Established at the School of Management, University of Khartoum. • Organising the British Council's Social Entrepreneurship Development Course.
249Startups	2018	<ul style="list-style-type: none"> • Although registered as a private company, 249Startups is essentially a social enterprise, which means that its income comes from various training and incubation programmes funded by donors and private companies. (249Startups itself is not funded by them.) The training design is carried out by 249Startups, and donors provide the necessary logistical support and training outside the country. • 1) Research (market research, financial barriers, skills development and employment, income generation, etc., not only in Khartoum but also in Kassala, Darfur States, etc.), 2) Start-up (stage) support, 3) Learning support, 4) Market creation and market access support, 5) Growth stage support (equity investment support). • In two years, the project has trained more than 60 entrepreneurs and created a total of 500 jobs. In terms of sectors, 70% are in agriculture, the rest in health, education, general industry (manufacturing, light industry such as leather, etc.), etc. • The following programmes have been implemented: <ul style="list-style-type: none"> - Orange Corners Incubation Program / Empower Her - Tech Incubation Program (AfDB, 12 months incubation of agricultural

Name	Established Year	Outline (They are in Khartoum unless otherwise mentioned)
		<ul style="list-style-type: none"> technology) - Start-up Sudan · A three-month training programme for university graduates on the skills needed by companies, to help them enter the workforce. · Involved in the preparation of the GEM2021 report. · Conducted a survey of “Situation Analysis of Startups in Sudan 2021” commissioned by JICA · Recently launched the Sudan Angel Investors Network.
Sharezone	2019	<ul style="list-style-type: none"> · It works with start-ups, SMEs and creative projects in Alfashir, Northern Darfur.
Comboni Innovation and Entrepreneurship Center (CIEC)	2019	<ul style="list-style-type: none"> · An incubator institution set up by the Comboni College of Science and Technology with the support of the Japanese company JTI and the Italian Ministry of the Interior. · It offers a 6-month programme of technical and business training and mentorship, mainly for Refugees and IDPs.
Savannah	2020	<ul style="list-style-type: none"> · Implementing the Mastercard Foundation's Skills Training Transformation Program. · Facilitating the return of Sudanese diaspora, training youth to start their own businesses (effective use of start-up funds), attracting seed funds for start-ups.
Entrepreneurship Centre	Not known	<ul style="list-style-type: none"> · Hub by the Ministry of Youth supported by UNDP in Genina, in a remote location. · Entrepreneurship education, business establishment and management, social entrepreneurship, entrepreneurial research.

Source : 249Startups (2021) Situation Analysis of Startups in Sudan 2021 and Interview on 28 March 2021, Interview with Impact Hub Khartoum on 30 May 2021, Interview with Entrepreneurship Centre, University of Khartoum on 26 May 2021, and website of above institutions

249Startups and Impact Hub Khartoum mentioned that they themselves are still searching for a way to stabilize their management in terms of financial sustainability, because currently they rely on the funding for incubation programmes and events.

The following are examples of the relationship between each entrepreneurial development and incubation institution and its stakeholders, taken from the 249Startups 2021 Report.

(1) Entrepreneurship Development and Incubation Programmes

The following are examples of entrepreneurship development and incubation programmes run by entrepreneurship development and incubation institutions

Sudan Startup Weekend Programme

This is a programme organised by a Seattle-based non-profit organisation that runs in 200 cities around the world. It is run by the youth themselves and involves a weekend of pitching business ideas, forming teams and starting ventures. Many startups and ventures have been created, many of them tech companies.

Orange Corner Programme

A programme supported by the Dutch government and run by 249Startups. During this period, the participants (Incubatees) will have free access to the internet and offices, and will be provided with

business training (in the areas of education, fintech, health, agriculture, etc.), legal training, accounting training, etc. For the third batch of intake, from a pool of 1,000 applicants, only 20 was selected to participate in the programme with scholarships. After completing the programme, 249 Startups will continue to provide post-incubation support by offering office space to them.

Darfuria Mentoring Program

Sharezone in Northern Darfur provides 3 months of mentoring programme for women entrepreneurs to women (including IDPs) aged 20-25 in Darfur¹⁵⁴.

(2) Private Sector

With the support of the Dutch government, private companies such as Hagger Group, Nefeidi Group, Say Group, Tirhal and United Capital Bank (UCB) are supporting the provision and management of post-incubation for graduates of the Orange Corner Programme, an entrepreneurship development programme. These include the cost of training, electricity and space. While this is a CSR initiative at the moment, companies see the value of support in terms of access to talent and the opportunity to invest early in promising businesses and markets. The investment value of the programme graduates as start-ups is still small and has not reached a level where these large Sudanese companies would consider them purely for investment or M&A, rather than CSR.

MTN, a telecoms company, is running an incubation programme for graduates who majored in artificial intelligence (AI), and its third intake will focus on female tech start-ups, called Women in AI¹⁵⁵.

4.3.3 Higher Education Institutions as Entrepreneurial Developers and Incubators

The table below shows the universities involved in entrepreneurship development and incubation. The Government has introduced entrepreneurship courses into university curricula, with the help of the British Council around 2017. UNIDO also assisted in the establishment of university-based incubation institutions.

Table 4-9 Status of Entrepreneurship Education at Higher Education Institutions

Name	Place	Outline
University of Khartoum	Khartoum	<ul style="list-style-type: none"> • With the support of UNIDO, 90% of the teaching staff have taken TOT in entrepreneurship education. • In the School of Management in BSc curriculum, entrepreneurship is a compulsory subject in the third year, and entrepreneurship training is provided in the fourth year to equip students with the necessary knowledge and skills to start their own business, even if they cannot find a job. Some students and graduates have started their own businesses during their studies. • Entrepreneurship education is a minor major of the MBA. • There is an Incubation Centre in the School of Engineering and an Entrepreneurship Centre in the School of Management.

¹⁵⁴ <http://sharezone.sd/> (accessed on 11 May 2021)

¹⁵⁵ Interview with MTN on 25 May 2021

		<ul style="list-style-type: none"> · It runs the British Council's Social Entrepreneurship Programme. · Supporting entrepreneurship education in Bakhat Elrida University, Imam Elmahdi and Omdurman Islamic University.
University of Medical Sciences and Technology	Khartoum	<ul style="list-style-type: none"> · Teaching entrepreneurship subject in the final year at the Faculty of Business Administration. · Introduced the Global MBA in Impact Entrepreneurship (1 year) with the support of the Italian Embassy; implemented the E4impact (Entrepreneurship x Medical Science) programme; 50% Sudanese and 50% online training by Universita Cattolica del Sacro Cuore, an Italian partner. Students on this course are already entrepreneurs or have a business idea.
Sudan University of Science and Technology	Khartoum	<ul style="list-style-type: none"> · With the support of UNIDO, the entrepreneurship module is compulsory. · In addition to encouraging social entrepreneurship, the university has incubator projects in leather, cement, poultry farming and furniture, and was due to be upgraded to a centre, but in recent years the university itself has been burdened with debt and has been forced to raise fees. · However, it does run the International Entrepreneurship Conference with Zoom and the British Council's Social Entrepreneurship Programme.
Ahfad University for Women	Omdurman	<ul style="list-style-type: none"> · The TOT was supported by UNIDO. · An entrepreneurship module is compulsory for third year students in the School of Management. · An annual entrepreneurial event is held for current and former students, and private companies are invited to provide financial and non-financial support.
Al Neeilain University	Khartoum	<ul style="list-style-type: none"> · Impact Hub teams up with the University to run the Hult Prize, a business competition tackling global issues.
Al Ryada College	Khartoum	<ul style="list-style-type: none"> · Entrepreneurship education encompasses social entrepreneurship.

Source : 249Startups (2021) JICA Report and Interview with UNIDO Consultant on 27 March 2021, University of Khartoum on 26 May 2021, University of Medical Sciences and Technology on 17 June 2021, Sudan University of Sciences and Technology on 6 June 2021, and Ahfad University for Women on 31 May 2021.

In addition, the government has set up the National Graduate Bureau for Graduate Employment to promote the employment of university graduates, which has 14 incubators in 8 states, 1 in Khartoum, 3 in Gazira, 4 in Nile, 1 in Kassala, 2 in Gadaref, 1 in Northern Darfur, 1 in Sennar, and 1 in Western Kordofan.

There is also the National Centre for Research and the Management Development Centre, but their links with MSMEs and entrepreneurs need to be confirmed.

4.3.4 Financial Institutions

The establishment of the Microfinance (MF) Unit in the CBoS in 2007, with the support of the World Bank, has prepared the ground for banks and MF institutions to become a source of finance for MSMEs and entrepreneurs. On the other hand, informal family finance is common for entrepreneurs to finance their start-ups.

The informal economy accounts for a large proportion in Sudan and a parallel market with the black market continues in terms of foreign exchange, partly due to the illegal export of gold¹⁵⁶. To curb exchange rate volatility, the CBoS devalued the official rate of the Sudanese pound (SDG) against the US dollar from SDG55 to SDG375 on 21 February 2021 and adopted a managed float system moving from the fixed exchange rate, following a devaluation in March 2020, in order to stabilise the currency and stop food prices rising¹⁵⁷. However, soaring prices of daily necessities have led to inflation of 379% as of May 2021, affecting the livelihoods and businesses of citizens¹⁵⁸.

In this context, financial institutions have also been reluctant to provide loans. There is also little incentive for individuals and businesses to save, and MSMEs are increasingly relying on informal finance from family and friends. Business owners have turned to value chain finance, negotiating accounts receivable and payable terms with their suppliers and customers to manage their cash flow, while high interest money lenders have also emerged¹⁵⁹. As a source of funding for entrepreneurs, there seems to be a strong need for venture capital and subsidies, which have no repayment obligations, but the former has taxation problems and the latter is difficult to realise due to a lack of government funding. Seed money and bank loan guarantees supported by development partners are, however, available¹⁶⁰. It should be noted that the World Bank is planning to support the development of a National Financial Inclusion Strategy¹⁶¹.

(1) Banks and MFIs

Sudan's financial system is dominated by 35 banks¹⁶², which have operated in compliance with Islamic financial principles since 1983, and half of the banking sector's assets are held by state banks¹⁶³. Until the lifting of US economic sanctions, the country was isolated from global financial markets and had a low level of financial intermediation, so risks were generally low. Most bank branches are located in Khartoum, and according to the World Bank's 2014 Global Findex Database, 15% of the population aged 15 and over hold bank accounts, 8% hold deposits in formal financial institutions, and 4% borrow.

The challenges of the financial market include the following points¹⁶⁴.

- The financial infrastructure is underdeveloped
- Lack of a modern credit information system
- No electronic collateral system for movable assets

¹⁵⁶ Farouck Kambareesi (2021) Monetary Policy and Exchange Rate Reform (presentation at Sudanese Private Sector Forum (PSF) on 26 May)

¹⁵⁷ <https://www.reuters.com/article/us-sudan-economy-idUSKBN2AL06P> (9 July 2021)

¹⁵⁸ <https://www.reuters.com/article/sudan-inflation-idAFL2N2NW11X> (9 July 2021)

¹⁵⁹ Interview with UNIDO on 28 June 2021

¹⁶⁰ The Dutch government's Orange Corner Innovation Fund provides seed money and the AfDB's Enable Youth Program provides entrepreneurial loans.

¹⁶¹ World Bank (2020) Re-engagement Note

¹⁶² <https://cbos.gov.sd/en/content/operating-banks-sudan>

¹⁶³ Leading Edge Sudan 2019

¹⁶⁴ Sudan Ministry of Finance and Economic Planning (2019) Implementation of Istanbul Plan of Action for Least Developed Countries (IPoA) 2011-2020 Sudan National Report

- There are few correspondent banks
- Banks are under-capitalised
- Digital financial services are in their infancy.

In 2009, in order to improve access to finance for the population, the World Bank, through its cooperation, requested the CBoS, to allocate 12% of the total loans of commercial banks to microfinance, which became national policy. In return, the CBoS provided preferential treatment for reserve requirements of the financial institutions, but the actual allocation was less than 5%¹⁶⁵. Then, in 2018, the government directed that 15% of loans be allocated to microfinance and SMEs, but the actual allocation was less than 6%¹⁶⁶. Furthermore, in response to the COVID-19 crises, the government directed commercial banks to make concessional terms and conditions to company loanees, such as deferment of loan repayments, but this was not known by the companies and it has not been used much¹⁶⁷.

Microfinance in Sudan is provided by 30 commercial banks and 46 non-bank MFIs, including non-profit organisations, charity foundations, social enterprises and the Zakat Chamber. 26 of the MFIs are located in Khartoum State. As of the end of 2019, the cumulative number of beneficiaries of microfinance was 2.7 million. The maximum amount of microfinance is SDG300,000, and the higher amount is small enterprise finance with amounts ranging from SDG 300,000 to 1,500,000.

According to the Microfinance Unit of CBoS, financial education is necessary because the people do not have a culture of repayment of loans and repayment is delayed, but the actual default rate is not known. CBoS tried to use the framework of microfinance, which was originally introduced for the poor, to address the funding needs of SMEs after 2018, but the loan allocation to SMEs did not increase. CBoS and financial institutions cited the following as challenges: limited financial product lineups, insufficient capacity for staff to conduct a due-diligence of SMEs, high operational costs, absence of a credit bureau, lack of collateral by clients, unregistered business by clients, and lack of clarity on the distinction between microfinance and SME finance. Once formal SME policy and related legislation is established and definitions are clarified, the development of financial products for SMEs could be promoted. For the time being, the CBoS has introduced a new policy to enable financial institutions to manage the microfinance allocation of their portfolios in 2021¹⁶⁸.

The table below shows the stakeholders and their roles in relation to microfinance.

¹⁶⁵ Sudan Ministry of Finance and Economic Planning (2019) Implementation of Istanbul Plan of Action for Least Developed Countries (IPoA) 2011-2020 Sudan National Report, World Bank implemented the Sudan Microfinance Development Facility Project from 2007 to 2013.

¹⁶⁶ World Bank (2020) Effects of COVID-19 on Sudanese Enterprises.

¹⁶⁷ World Bank (2020) Effects of COVID-19 on Sudanese Enterprises. According to the 5-Year Programme for Economic Reform (2015-19), Microfinance is located under one of the key areas of Work, Employment, and Microfinance. In addition to the 12% quota on bank loans, the Savings and Social Development Bank (SSDB) has increased its capital (from SDG 130 million to SDG 500 million) and increased its microfinance resources to promote microfinance lending. On the other hand, it was planned to increase microfinance resources in rural areas. Awareness raising on microfinance in rural areas was also planned.

¹⁶⁸ Interview with the Central Bank of Sudan on 18 May 2021. The survey team obtained an Arabic annual policy.

Table 4-10 Microfinance Stakeholders and their Roles

Name	Role
Microfinance Unit of CBoS	<ul style="list-style-type: none"> • Regulation, supervision and promotion of microfinance • Promotion of microfinance by banks • Resolving guarantee issues • Promotion of wholesale finance, intermediation and support services for microfinance
Sudanese Microfinance Development Company (SMDC)	<ul style="list-style-type: none"> • Established in 2008 with investments of 99% from the CBoS and 1% from the Ministry of Finance. • Investment and financing for MFIs • Technical assistance to the microfinance sector • Raising apex funds (resources for several MFIs) from development partners and institutional investors. In fact, USD10 million from a multi-donor trust fund and the same amount from CBoS as a counter-fund were invested¹⁶⁹. • Provision of IT services
Microfinance Guarantee Agency (Taysier)	<ul style="list-style-type: none"> • Government agency providing guarantees to small and medium MFIs when they borrow bank loans, established in 2013 and operational since 2016.
MFI	<ul style="list-style-type: none"> • Agricultural Bank of Sudan (ABS) (MF development, rural finance and agricultural loans for IFAD and women) • IRADA Microfinance Company of Bank of Khartoum (many branches, it comes the second after ABS in agricultural lending) • Ebdaa Bank for Microfinance (Bahraini bank specialising in MFI, specialising in women) • Family Bank (focuses on non-financial services with UNIDO support) • Savings and Social Development Bank (SSDB) (provides funds from the Qatari foundation Silatech to support youth employment) • SIMI MFI • AI-METHAL Co. • Industrial Development Bank
Microfinance Provider NGO	<ul style="list-style-type: none"> • Wad El Bahir Development Association (WEBDA) • Sudanese Business Women Development Centre (SBWDC) *Also providing non-financial support services • Bitmakaly Women Empowerment Organisation (WEO) *Also providing non-financial support services • Business & Professional Women Voluntary Organisation (BPWVO) • Azza Women Association (AWA)
Others	<p>Collaboration with CBoS by:</p> <ul style="list-style-type: none"> • AfDB • Arab Development Fund • Islamic Development Bank (IDB) <p>Collaboration with Government of Sudan:</p> <ul style="list-style-type: none"> • UN Agencies(UNDP, IFAD, etc.)

Source : EU (2021) Employment and Entrepreneurship Development for Migrant Youth, Refugees, Asylum Seekers and Host Communities (EEDK-RDPP) in Khartoum State, Sudan, presentation made at Microfinance Stakeholders Workshop held on 29 March 2021

SMDCs were established as part of the World Bank's 2007-2013 microfinance project, but an end-of-project evaluation of the cooperation concluded that management and staff were not retained during the project period and that the differences in roles between the SMDCs and the CBoS microfinance unit remained unclear. However, the evaluation at the end of the project concluded that management and staff had not been established during the project period and that the demarcation of roles

¹⁶⁹ <http://smdf.sd/>

between SMDC and CBoS microfinance unit remained unclear¹⁷⁰. The SMDC is currently awaiting the appointment of a new management team.

(2) Venture Capital and Investors

Sudan has the Khartoum Stock Exchange (KSE), which has 67 listed companies with a market capitalisation of SDG8,105,360.500 and is a member of the Arab Federation of Stock Exchanges¹⁷¹.

Sudan does not have a legislative framework that provides an environment for venture capital (VC) and angel investment. In addition, there are no tax treaties in place to attract VCs from outside the country, so the double taxation barrier is an obstacle to investment. The only VC firm is Anafi Venture Capital, which was established in 2016 as a joint venture by large Sudanese companies such as Nefeidi Group, Elbarbary Multi Activities, Moez Ali and Darwish Bros. It has not invested in startups due to the lack of a suitable tax system for venture capital, but rather provides mentoring for entrepreneurial development¹⁷². At the end of 2020, Angel Investor Networks was launched by 249Startups, but it is yet to make investment into startups¹⁷³.

On the other hand, in Dubai, there is GlobeTech, a company started by the Sudanese diaspora, which has invested a six-digit seed fund in Sudanese startup, Monjid in 2020¹⁷⁴.

Major investment funds currently available in Sudan are from the development partners as listed below.

Table 4-11 Outline of Investment Funds

Name	Established Year	Outline
Orange Corners Innovation Fund (OCIF)	2020	A fund of €50,000 is an initiative of the Dutch Ministry of Foreign Affairs. Entrepreneurs will receive a monthly stipend, and a budget for developing seed prototype and financial assistance for expansion phase. The expansion fund is awarded to entrepreneurs (Incubatees) who achieve the milestones set by the Orange Corners Program. The fund is managed by United Capital Bank and 249Startups.
Enable Youth Program Fund	2016	As part of the Enable Youth Sudan programme, it aims to create business opportunities and decent work in the agricultural value chain for priority crops.
Challenge Fund for Youth Employment	2020	It is supported by the Dutch Ministry of Foreign Affairs. At least 100,000 Euro matching fund per project is provided for business ideas that create at least 250 youth jobs (new jobs, job matching, improvement of employment conditions). They will also provide technical assistance to selected projects.
Africa Enterprise Challenge Fund	2008	A UK grant to support private companies promoting agricultural technologies and services to improve the incomes of small farmers.

Source: Interview with Dutch Embassy on 9 June 2021, Enable Youth Program Fund on 31 May 2021 and 3 June 2021, AfDB on 10 June 2021, <https://fundforyouthemployment.nl/wp-content/uploads/2021/02/CFYE-Sudan-Webinar-Slides.pdf>, and 249Startups (2021) Situation Analysis of Startups in Sudan 2021.

¹⁷⁰ World Bank (2015) Complete Report of Sudan Microfinance Development Facility (SMDF) Project

¹⁷¹ <http://kse.com.sd/Default.aspx> (accessed on 10 May 2021)

¹⁷² <https://www.apollo.io/companies/ANAFI-Capital-Partners/5da28925a1994e0001430ae0?chart=count> (checked on 10 May 2021) and Interview with Mr. Darwish, Challenge Fund for Youth Development on 3 June 2021

¹⁷³ Interview with Mr. Darwish, Challenge Fund for Youth Development on 3 June 2021

¹⁷⁴ <https://sw-ke.facebook.com/OrangeCornersSD/posts/sudans-monjid-raises-six-figures-seed-investment-for-its-roadside-assistance-pla/963975814077306/>

There is also a move by the CBoS, universities and some commercial banks to set up a fund to absorb the first losses of entrepreneurs¹⁷⁵.

(3) Mobile Money

In Sudan, 50% of the population had transferred or received money transfers using a mobile phone, whereas 15% had a bank account in 2014¹⁷⁶. In the past, more than 80% of people used mobile phone units as a substitute for mobile money, but due to the problem of not being able to trace the actual movement of money as it does not go through banks, the government imposed restrictions on the use of units as a substitute for mobile money three years ago¹⁷⁷.

Currently, CBoS is supporting mobile money, and mobile money apps developed by banks such as BANKAK (Bank of Khartoum) are in widespread use. In addition, in 2020, subsidies from the Sudan Family Support Program (SFSP) were paid by bank e-Wallet and telecommunication company's mobile money¹⁷⁸.

The table below shows a comparison of financial services provided by the telecommunication company and the bank according to MTN¹⁷⁹.

Table 4-12 Comparison of Financial Services provided by Telecommunication Company and Bank

Item	Telecommunication Company Insights (Mobile Money)	Bank Insights
Number of companies	3 operators since 1998	39 banks since 1913
Users	Mobile user's penetration: · About 32 million users · Unique users are about 17 million	Bank accounts: About 4 million account About <1.5 million citizens
Outreach	Total number of telecom POS: 50,000 in urban and rural areas	Total number of Bank branches: About 1,700 ATMs + 830 branches mainly in urban areas
Access Issue	Smartphone penetration is about 30% * MTN Mobile Amwal service is a low-cost service that does not require an internet connection or a smartphone.	About >90% from monetary value is outside the banking system

Source : Prepared by Survey Team based on the interview with MTN on 25 May 2021

Until now, mobile money from telecommunication companies has been provided through the CBoS's electronic banking system, in conjunction with partner banks as Financial Service Providers, and the telecommunication companies have provided services to users as Customer Service Providers. However, under new CBoS rules, telecommunication companies will now be able to set up a separate fintech

¹⁷⁵ Interview with MOIIC on 30 March 2021. Al-Baraka Bank has the Entrepreneur Unit.

¹⁷⁶ World Bank Global Findex Database (https://globalfindex.worldbank.org/#data_sec_focus). The latest data for Sudan is of 2014.

¹⁷⁷ Interview with 249Startups on 28 March 2021.

¹⁷⁸ Ministry of Finance and Economic Planning Facebook (checked on 23 May 2021). Banks are Khartoum Bank, Saudi Sudanese Bank, Family Bank, Farmer Commercial Bank, Savings and Social Development Bank, Telecommunication companies are Zain, MT Anne, and SUDANI.

¹⁷⁹ Interview with MTN on 25 May 2021. The company, which has its headquarters in South Africa, states that, in the case of Sudan, the penetration of mobile money is still low and there is still room for growth. The company also offers SME-in-Box, a service package for SMEs.

company and obtain a Payment Service Provider license, which will allow them to offer payment and domestic and international remittance services without going through a financial institution¹⁸⁰.

¹⁸⁰ Interview with MTN on 25 May 2021.

Chapter 5 Youth Employment Promotion by Economic Sector

This chapter outlines the general situation of the economic sector and its growth potential, the current status of the subsector, the current status and challenges of enterprises as a whole, including small and medium-sized enterprises (SMEs), labour demand, human resources and skill needs, and the possibility of securing human resources in the sectors where employment of youth is expected to be promoted.

5.1 Understanding of the Prospective Economic Sectors for Promoting Employment

To begin with, the following approaches are utilized to develop a hypothesis on the new dimension of employment promotion, within potential economic sectors.

5.1.1 Prioritized Economic Sectors in Government Policies

The “General Framework for the Programme of the Transitional Government” presented by the Ministry of Cabinet Affairs indicates “Addressing the economic crisis and establishing the bases of sustainable development” as one of the priority programmes, out of 10 programs. It emphasizes the development of highly productive areas such as agriculture and livestock, especially focusing on value-added chains of meats, leather, oilseeds, gum Arabic¹⁸¹.

5.1.2 Economic Sectors with Potential Growth

On another aspect, there are the following two analyses on growth potential targeting all the economic sectors in Sudan.

Firstly, the economic report by African Development Bank (AfDB), published in 2018, analyses the growth potential of the economic subsectors through criterion of low-level capital requirement in production and domestic or regional markets. It identifies priority subsectors using the following criteria: 1) Production requires low level of capital and significant domestic or regional market, 2) Domestic production does not require significant electricity or high transport costs, 3) Sudan’s factor endowment is well-suited for production. The following are identified as priority subsectors; Agriculture (Agribusiness), Manufacturing (Leather and leather product, assembly of vehicles, Apparel and clothing, and shoes). In addition to the above, tourism and light manufacturing related to tourism is indicated as one of the promising subsectors.

¹⁸¹ General Framework for the Programme of the Transitional Government, 2019

Table 5-1 Priority Subsector Identification Using the Three Criteria

Industry	Subsector	Criterion 1	Criterion 2	Criterion 3	Decision
		Production requires low level of capital and significant domestic or regional market	Domestic production does not require significant electricity or high transport costs	Sudan's factor endowment is well-suited for production	Selected as priority sector or not
Agriculture	Agribusiness: Animal husbandry, meat preparation, dairy production, cereals and cereal production, sugar, coffee, animal feed, animal oil, processed vegetable oil	Yes	Yes	Yes	Yes
Manufacturing	Textile fibers, crude fertilizer, mineral and metal ores, scrap metal	No	No	No	No
	Chemicals, plastic, fertilizers, perfume, chemical materials/products	No	No	No	No
	Hide, skin, fur, leather manufactures, rubber, paper board	Yes	Yes	Yes	Yes
	Textile yarn, fabric, articles; iron and steel, non-ferrous metals	No	No	No	No
	Assembly operation of bicycles, other road vehicles, other machinery	Yes (assembly only)	Yes (assembly only)	Yes (assembly only)	Yes (assembly only)
	Apparel and clothing, travel goods, handbags	Yes	Yes	Yes	Yes
	Footwear	Yes	Yes	Yes	Yes
Construction	Building fixtures	Yes	Yes	Yes	Yes
Mining/Natural Resources	Petroleum and refined products, natural gas	No	No	No	Depends on free trade with South Sudan

Source: AfDB (2018) Economic Report: After Two Decades of "Solitude"

Secondly, to focus on growth potential of economic sectors that can target the global market as well as domestic and regional market, the following analysis by JICA (2012) will also be referred. According to the survey by JICA, the following table shows sectors and products with export growth potential.

Table 5-2 Sectors and Products with Export Growth Potential

Agricultural / Livestock Product	Gum Arabic, Sesame, Cotton, Karkade (Hibiscus), Fresh Vegetable/Fruit, Sheep/Goat, Camel
Agricultural Processing Product	Edible Oil, Sugar, Beef
Mining Product	Gold
Industrial Product	Juice, Cotton Yarn/Cotton Cloth, Leather, Reinforcing Steel, Water Pipe (Construction

	material), Cosmetics / Food Product / Medical Product, and other (Utilizing Gum Arabic, Sugar Syrup, utilizing fruit flavor)
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Source: JICA (2012) Data Collection Survey on Trade and Investment in Sudan

5.1.3 Targeted Economic Sectors in the Survey

Based on the above analysis, the following are the prioritized and the targeted economic sectors in the survey.

Table 5-3 Prioritized and Target Sectors for the Survey

Sector	Priority Sector of the Sudanese Government	Domestic market / low level of capital (AfDB)	Export Growth Potential(JICA)	Sectors pre-selected by JICA	Target sector for the survey
Agriculture	⊙	○	○	○	○
Manufacturing	⊙	○	○	○	○
Mining			○		
Automobile Maintenance				○	○
ICT				○	○
Construction/Manufacturing of Construction Materials		○		○	○
Other (Tourism)		○			○

Source: Survey Team

In the selected economic sectors with growth potential, the survey analyses various challenges that Sudan is facing in promoting export, such as lack of production technologies and low quality, to consider necessary support, if the sector has high potential of export.

According to the International Standard Industrial Classification of All Economic Activities by United Nations, unprocessed milk is categorized in agriculture sector, whereas processed milk, dairy products, meat, and leather is categorized as manufacturing sector. In this survey, milk and meat is categorized in agriculture sector as livestock products. The leather will be categorized in manufacturing¹⁸².

5.1.4 The Possible Impact on Youth Employment Promotion

The analysis is conducted based on two hypothesis concerning targeted economic sectors and the impact on youth employment promotion.

Firstly, the impact on youth employment promotion is considered larger in labour intensive, so-called blue-collar jobs¹⁸³. Apprenticeship has been one of the important working styles of blue-collar jobs in Sudan, and as discussed earlier, it is considered as one of the important methodologies to promote employment, the combination of blue-collar job and apprenticeship will be analyzed in the survey.

¹⁸² Department of Economic & Social affairs, United Nations (2008) International Standard Industrial Classification of All Economic Activities: Revision 4. Sudanese industry classification was not obtained during this survey.

¹⁸³ Within the paid workforce in enterprises, the "blue collar labourers" indicates field workers mainly in production field area of manufacturing, construction, and mining. The jobs are manual labour directly involved in production. (Encyclopedia Nipponica)

Secondly, it is considered that the emerging new business models utilizing ICT are giving impact to employment in recent years, and Sudan is also experiencing the change in employment through utilisation of ICT and digitalisation. The new business models will enhance of the capacity of SMEs indirectly by ICT and encourage entrepreneurship. In addition, the existing businesses, such as manufacturing, can change their business into innovative business models utilizing ICT. In this regard, ICT is considered as cross-sectoral theme and its impact on youth employment promotion is analyzed.

5.2 Agriculture

5.2.1 Policies

(1) Policies

Agriculture is treated as a priority economic sector in various policies in Sudan. In 2008, the Executive Programme for the Agricultural Revival (EPAR) (2008-2011) was formed targeting promotion of agriculture export, poverty reduction, food self-sufficiency. The program prioritizes at construction of dam and irrigation and irrigation canal, increase of cultivated land, increase of horticultural production.

In Comprehensive Africa Agriculture Development Programme (CAADP) of AUDA-NEPAD (African Union Development Agency-New Partnership for Africa’s Development)¹⁸⁴ targets 6% annual growth in Agriculture in GDP. To achieve this goal, The Sudan National Agriculture Investment Plan (SUDNAIP:2016-2020)¹⁸⁵ was formed to transform the agricultural sector from a traditional subsistence sector into a modern sector that contributes to reducing poverty, economic growth, and increasing foreign exchange earnings, in light of sustainable management of natural resources. It indicates the allocation of at least 10% of national budget to the agriculture sector and states the following six goals.

Table 5-4 Sudan’s National Agriculture Investment Plan (SUDNAIP:2016-2020)

- | |
|--|
| <ul style="list-style-type: none"> (1) Promotion of exports of crops and livestock with a view to safeguarding against the risks (2) Increasing productivity and efficiency at the production and processing stages (3) Realization of food security and nutrition (4) Reducing rural poverty by 50% by 2020, generation of job opportunities, especially for youth and women, and increasing per capita income (5) Achievement of a regionally balanced sector and economic growth in order to encourage settlement in the rural areas (6) Development and protection of natural resources to ensure its renewal and sustainability |
|--|

Source: Sudan’s National Agriculture Investment Plan (SUDNAIP:2016-2020)

In addition to the above, the Ministry of Finance and Economic Planning (MOFEP)’s Three-year Program for Stability and Economic Development (2021-2023) under the transitional government put “Agriculture, Livestock and Forests” as one of the six axes. This that aim to reform and develop policies for the promotion the agriculture and natural resources sector, which includes the general policy framework and its comprehensive management, coordination of activities between the agriculture, livestock, and natural

¹⁸⁴ Sudan participated in 2013. The progress is updated on its website. <https://www.nepad.org/caadp/countries/sudan>

¹⁸⁵ Sudan’s National Agriculture Investment Plan <http://www.fao.org/faolex/results/details/es/c/LEX-FAOC201214/>

resources sector, enhancing linkage between productivity and research and development, management of a system of monitoring, follow-up, and evaluation, and management information systems including sharing knowledge and statistics, and adopting decentralisation in agricultural work. The following table shows some of the important targets.

Table 5-5 The Three-Year Program, Axis of Agriculture, Livestock and Forests (MOFEP)

	Axis	Contents
1	Agriculture, Livestock and Forests	<ul style="list-style-type: none"> Developing the policy framework, regulations and database systems to achieve sustainable agricultural development. Irrigated and Rain-fed Sectors – Planning (Provide improved seeds, supplementary irrigation in the traditional rain-fed sector distributed over the various states to implement a practical demonstration program for technology packages, rehabilitation of irrigation projects, electrification of projects and supplementary irrigation) Horticultural Production (The development of export horticultural production: hibiscus, senna, dates, bananas, mango, onions and cut flowers) Production and Export of Forest Products
2	Developing Support Services and Establishing Agricultural Knowledge and Information Networks	<ul style="list-style-type: none"> Agricultural Extension and Technology Transfer The Comprehensive Agricultural Census Land Degradation and Providing Agricultural Soil Data in Sudan
3	International Relations, Investment and Strategic Partnerships	<ul style="list-style-type: none"> Strengthening and developing approaches to cooperation with international and regional organisations to attract financial and technical support, build capacities. Preparing the agricultural sector to face the effects of joining regional blocs and the World Trade Organisation Coordination and follow-up of foreign technical aid programs and projects funded by states and international financing institutions
4	Agricultural Industrialization, Value Chain Development, Agricultural Marketing and Forestry Products	<ul style="list-style-type: none"> Developing integrated and compact food chains and creating sustainable economic and growing agricultural industrialization led by the private sector and strategic partnerships. Creating financial portfolio to sponsor small industries, especially leather and oil industry. Youth employment in microfinance projects in the fields of oil mills, tanning, mills, rotary farming and horticulture
5	Addressing Issues of Agricultural Lands and the Protection and Development of Natural Resources	<ul style="list-style-type: none"> The Map of Optimal Land Use in Sudan Land Tenure Reform to encourage Agricultural Investment. Soil Conservation and Land Reclamation of Irrigated Projects, Nile Bank Erosion and Combating Desertification Sustainable Forest Resource Management
6	Achieving Food Security and Nutrition and Implementing Quality Control and Safety Measures	<ul style="list-style-type: none"> Building the resilience of families, communities, and farming systems Improving livelihoods and food and nutritional security for small-scale producers and fishers in the agriculture and livestock sectors Empowering rural women and expanding the Special Program for Food Security

Source: Ministry of Finance and Economic Planning, The Three-Year Program for Stability and Economic Development 2021-2023

The 20 Priority Projects of MOFEP have presented to Friends of Sudan shows 6 projects under “Agriculture (Sorghum) Value Added” sector, that are 1) Enhancing the Value Added of Meat Production, 2) Increasing the Value Added of Sorghum (Focus on Sorghum bread production. Adopt integrated market solutions), 3) Enhancing the Use of Water Resources, 4) Increasing the Value Added of Oil Seeds,

5) Increasing the Value Added of Sorghum (Intensify R&D), 6) Increasing the Value Added of Gum Arabic.

In relation to “ICT in Agriculture: Connecting Smallholders to Knowledge, Networks, and Institutions” which the World Bank promotes, the Sudan E-Agriculture Strategy and Action Plan (2018-2022) was formulated to enhance ICT utilisation in Agriculture sector. The plan presents specific approaches on developing environment and infrastructure to utilize ICT in agriculture, leveraging human and financial resources, and enhancing effective linkage¹⁸⁶.

(2) Activities According to Agriculture Policies

Under the above mentioned policies and strategies, One of the main goals of the Ministry of Agriculture and Forestry (MOAF) is to increase productivity and encourage exports by providing agricultural inputs such as technical support, improved seeds, and fertilizers. Although there is no agricultural plan focused specifically on rain-fed agriculture, accounts for about 90.4%¹⁸⁷ of cultivated area, which is the largest agriculture sector in Sudan, the Ministry provides technically integrated solutions, fertilizers, and manage agricultural activities regulations in the 18 states.

Also, the MOAF is represented by the delegates from each state, and annual meetings with state ministers to present agricultural development of each state is being held. The staff of state ministries are appointed by the state ministers, not by the federal ministry¹⁸⁸.

The MOAF has partnerships with international organisations, such as the FAO and UNIDO, receiving technical and capacity building support, and implements ENABLE Youth Program in partnership with AfDB¹⁸⁹. In addition, the Agricultural Research Authority under the MOAF is responsible for research and development for agriculture promotion. In agricultural development in Sudan, enhancing the irrigation scheme for productivity improvement is the key activity, and there are large scale irrigation schemes in Gezira, Rahad, Suki, and New Halfa.

There are other major agricultural development projects by the MOAF. In 2010, Amtaar Investment Company was launched as a joint venture between Jenaan Investment of UAE and the Sudanese government. The company invested in large scale infrastructure projects such as roads, warehouses, irrigation, wells, power network, and implementing cattle fattening project by cultivating animal feed¹⁹⁰.

The Sudanese government also work on the increasing self sufficiency of rice under the Coalition for African Rice Development (CARD) initiative¹⁹¹. In addition, it conducts value chain development program of sesame and groundnut in Northern Kordofan, in partnership with IFAD (International Fund

¹⁸⁶ MOAF (2017) Sudan E-Agriculture Strategy and Action Plan (2018-2022) <http://extwprlegs1.fao.org/docs/pdf/sud201587E.pdf>

¹⁸⁷ FAO (2020) Special Report: 2019 FAO Crop and Food Supply Assessment Mission (CFSAM) to the Sudan

¹⁸⁸ Interview with MOAF on 24 May 2021

¹⁸⁹ https://www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Sudan1_-_Approved_ENABLE_Youth.pdf

¹⁹⁰ <http://www.amtaar.com/>

¹⁹¹ National Rice Development Strategy (NRD) https://www.riceforafrica.net/images/countries/NRDS_rev/sudan_nrds2.pdf

for Agricultural Development)¹⁹² and Agricultural Research Authority provides improved seeds. On the other hand, under the Interim Poverty Reduction Strategy Papers (IPRSP) 2013, The Integrated Solutions Program for Small Producers has been implemented, providing agricultural machinery, fertilizers, and pesticides in all states, which resulted in an improvement of productivity¹⁹³.

As seen from the above, the agricultural development in Sudan is being implemented, focusing on gum Arabic, sorghum, sesame, groundnut, and other oil seed crops as well as horticulture products, in cooperation with overseas assistance.

Furthermore, in response to the global context of improving productivity and efficiency through ICT utilisation and digitalisation, Sudan also states and implements strategies in relation to ICT in agriculture. ICT in agriculture covers a broad range of services, such as application on smartphone devices, network and information services, as well as agritech (described in detail hereinafter). Since there are already various movements towards ICT utilisation in agriculture, an integrated and strategic effort by both government and private sector are expected.

The Technology Transfer and Extension Administration (TTEA) under MOAF operates Sudanese Agricultural Extension Site which enables agricultural workers such as farmers and private enterprises to access technical information¹⁹⁴. Also, there is an agricultural market information system, Food and Agriculture Realtime Messaging and Reporting System (FARMERS)¹⁹⁵. This trend shows some changes from traditional methodologies in agriculture.

5.2.2 Overview of the Agriculture Sector

The utilisation of rich arable land and the River Nile is critical for Sudan considering its food security. The large irrigated areas extending around the Nile river valley which enables intensive agriculture even though 90% of Sudan's area is classified as arid. Between 2009 and 2013, the largest share of agricultural GDP was derived from livestock production (47%), with large-scale irrigation (28%), traditional rain-fed farming (15%), forest products (7%), and semi-mechanized farming (3%), and the irrigation is crucial for agricultural production¹⁹⁶. The agricultural land is categorized mainly in the following 3 areas; 1) Irrigated agriculture (including large national irrigation schemes and small-scale irrigation along the banks of the Nile and its tributaries), covers 9.7% of cultivated land, 2) Semi mechanized rainfed agriculture, 38.6%, and 3) Traditional rainfed agriculture, 51.8%¹⁹⁷.

¹⁹² Integrated Agriculture and Marketing Development Project <https://www.ifad.org/en/web/operations/-/project/2000001517>

¹⁹³ Interview with MOAF on 24 May 2021

¹⁹⁴ The Sudanese Agricultural Extension Site (<http://www.ttea.gov.sd>) Also, there is an ICT program such as SIFSIA (The Sudan Institutional Capacity Programme: Food Security Information for Action by FAO), which is an agriculture market information system, and other ICT programs related to various agriculture and food security database. <http://www.fao.org/sudanfoodsecurity/sifsia-home/sifsia-overview/en/http://farmers.sd/Welcome.aspx>

¹⁹⁶ World Bank (2020) Agriculture Value Chain Analysis

¹⁹⁷ FAO (2020) Special Report: 2019 FAO Crop and Food Supply Assessment Mission (CFSAM) to the Sudan

With only under 23%¹⁹⁸ of arable land being cultivated, the growth potential of agriculture sector is high. However, there are various challenges such as low productivity, underdeveloped value chain, lack of value-added products, and untapped market. In addition, there is a lack of labour force in agriculture, due to the decline in the migrant population from South Sudan, which had been a major source of labour for agricultural production, and the migration of the labour to the mining industry¹⁹⁹, it is becoming difficult to secure labour, and many farmers who had been engaged in labour intensive agriculture are now required to rapidly mechanize the farms²⁰⁰.

Agriculture has comparatively high potential of crop production and livestock, and value-added production, and there will be a large impact on employment through value chain development. Agriculture, including livestock sector that plays central role in labour and employment absorption, especially for the youth in rural area. Further, inward investment, which the transitional government is heavily promoting will enable vast increase in youth employment opportunity especially in agriculture sector.

The following section shows production situation and challenges based on agriculture products and livestock products.

(1) Agricultural Products

The following table shows major agriculture products in Sudan.

Table 5-6 Agriculture Production Portfolio in Sudan

Category	Agricultural Products
Cereals	Sorghum, Millet, Wheat, Rice and Maize
Oilseeds	Sesame, Groundnuts and Sunflowers
Industrial crops	Cotton and Sugarcane
Fodder crops	Alfalfa, Fodder Sorghum and Rhodes grass
Pulses	Broad beans and Pigeon peas
Horticultural crops	Okra, Onions, Tomatoes, Citrus, Mango, etc.

Source: FAO (2019), Special Report: 2019 FAO Crop And Food Supply Assessment Mission (CFSAM) To The Sudan

Also, the following table shows production of some of the main crops.

Table 5-7 Production of the Main Crops (thousand metric tons)

Year	Industrial Crops	Staple Food Crops			Oil Seeds		
	Cotton	Sorghum	Millet	Wheat	Groundnut	Sesame	Sunflower
2016/2017	170	6,441	1,457	563	1,826	525	87
2017/2018	508	3,904	878	463	1,668	782	153

Source: Central Bank of Sudan (2018) 58th Annual Report 2018

The production of cotton increased by 198.8% from 170,000 tons in 2016/2017 season to 508,000 tons in 2017/2018 season, and the cultivated land also increased by 158.1%. The oil seed production such as

¹⁹⁸ World Bank (2020) Agriculture Value Chain Analysis

¹⁹⁹ Interview with PACT on 25 May 2021

²⁰⁰ JICA (2012) Data collection survey on agricultural sector in the Republic of Sudan, Final Report

sesame, sunflower is also increasing²⁰¹. However, the statistics shows some decrease in production of other crops. In Sudan, which relies on imports for much of its food, increased production of wheat is a particular challenge from the perspective of food security, and there are also high expectations for the use of sorghum, which has a high production output.

Sesame seeds, a major cash crop in Sudan, was cultivated on over 2.77 million ha of land (World Bank 2017), and in 2018, Sudan produced 782,000 tons of sesame seeds which reached approximately 10.3% of the total sesame seed production worldwide. Sudan is the fourth largest sesame seed producer after Myanmar, India, and China. The states of Gadaref, Northern Kordofan, and Blue Nile devotes around 77% of the cultivated land in sesame seed farming. Sesame seed is an important export cash crop in Sudan and it exported 704,000 tons worth 576 million USD in 2018²⁰².

In Sudan, there are two types of sesame seed farming; semi-mechanized rain-fed farming and traditional rain-fed farming, and the production share are 62%, 38% respectively. Semi-mechanized rain-fed farming is generally operated by large scale farmers and companies with large investment²⁰³.

The following table shows major export performance of crop products²⁰⁴. The largest share in value in 2019 (January to September) is sesame seeds (USD 495 million) followed by groundnut (USD 155 million), cotton (USD 124 million), gum Arabic (USD 82 million).

Table 5-8 Export Performance of Crop Products, 2018 and 2019

Crops/Product	2018		2018*		2019*	
	Weight (tonnes)	Value ('000 USD)	Weight (tonnes)	Value ('000 USD)	Weight (tonnes)	Value ('000 USD)
Cotton (bales)	111,134	159,481	77,892	111,859	88,660	124,823
Gum Arabic	76,394	112,766	55,939	81,543	64,598	82,169
Sesame	704,568	576,155	396,239	370,692	390,826	495,509
Sugar	1,206	2,003	-	-	6,473	2,738
Groundnuts	80,768	59,846	59,620	43,532	230,438	155,198
Sorghum	141,152	27,149	118,979	23,159	153,246	32,649
Hibiscus flowers	12,568	15,461	9,626	11,993	6,713	7,934
Watermelon Seeds	92,220	61,324	74,149	49,335	60,830	38,208

Source: FAO (2019), Special Report: 2019 FAO Crop And Food Supply Assessment Mission (CFSAM) To The Sudan

*1 January - 30 September

As shown in the following figure, the majority of export from Sudan are unprocessed agricultural products whereas majority of imports are in semi- or fully processed form. Among the export items,

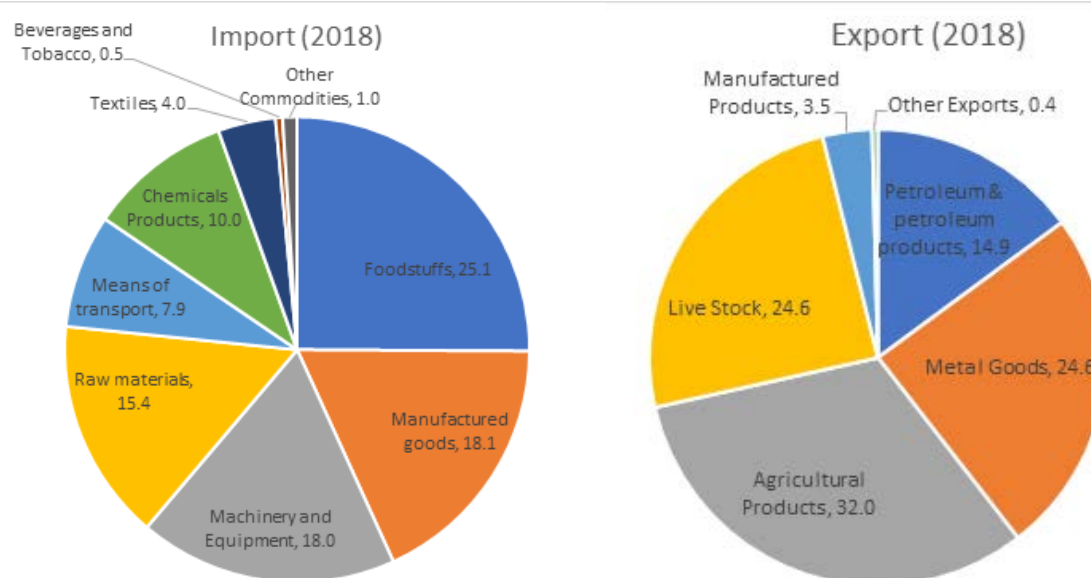
²⁰¹ Central Bank of Sudan (2018) 58th Annual Report 2018

²⁰² The major export destinations of sesame seeds are China, Japan, Turkey, South Korea, and Vietnam. Although there is a high potential to reach Japanese market, the sesame seed in Sudan does not meet the standard of SPS (Sanitary and Phytosanitary Measures) and the market is still underdeveloped.

²⁰³ World Bank (2020) Agriculture Value Chain Analysis The higher quality white sesame seeds are used mainly for direct consumption, and lower quality red sesame seeds are processed to oil, with by product sesame for animal feed, or processed into a sweet confectionary product, and has wider variety of production.

²⁰⁴ Export Chamber of Sudanese Business Federation (SBF) has each unit of mineral, oilseeds, horticulture (fruits & vegetables), livestock, meat, leather, sorghum & animal feed, hibiscus & melon, and gum Arabic.

agricultural products are mainly sesame, cotton, gum Arabic and other agricultural products, while livestock include sheep, camels, cattle and goats. The breakdown of livestock exports is described in the next section. Manufactured Products include livestock feed, edible oil, and sugar. Among imported items, foodstuffs includes wheat and flour.



Source: Central Bank of Sudan 58th Annual Report 2018

Figure 5-1 Import and Export of Major Commodity

Although there is a growth potential of utilisation of agricultural land and improvement of productivity, value addition of the agricultural products is the key to the economic growth of Sudan. It is expected that promoting domestic and global market expansion of horticulture and livestock (meat and leather) are some of the most important key factors to Sudan’s economic growth.

(2) Livestock

The livestock sector contributes to Sudan’s GDP by 19.4% and it is an important source of livelihood for at least 26 million people and contributes largely to Sudan’s foreign currency earnings²⁰⁵. Livestock subsector enjoys steady economic share compared to other sector, and there is potential for employment increase. The situation of the subsectors is described below.

● Meat

Livestock exports have a large share in the export of Sudan, and it reached a total of USD 855.8 million in 2018²⁰⁶. As shown in the table below, the largest value of export is sheep (USD 373 million), followed by camel (USD 119 million), cattle (USD 53 million), goat (USD 11 million) for 2019.

²⁰⁵ World Bank (2020) Agriculture Value Chain Analysis

²⁰⁶ World Bank (2020) Agriculture Value Chain Analysis

Table 5-9 Exports of Live Animals and Hides and Skins, 2018 and 2019

Livestock	January-September 2018		January-September 2019	
	Quantity (heads)	Value ('000 USD)	Quantity (heads)	Value ('000 USD)
Sheep	2,663,664	337,258	2,854,741	373,496
Goat	178,237	13,151	112,452	11,986
Cattle	61,563	38,360	65,169	53,483
Camel	141,902	156,707	90,173	119,439
Leather	-	12,349	-	7,687
Meat (ton)	12,091	50,500	-	36,219

Source: FAO (2019), Special Report: 2019 FAO Crop And Food Supply Assessment Mission (CFSAM) To The Sudan

However, the main production method of livestock industry is nomadic pastoralism, and productivity is generally low due to the movement of animals from one pasture to another. In addition, due to the lack of slaughtering and meat processing facilities, meat processing and production has been limited, with only traditional meat processing methods being used to distribute meat to local markets. As a result, exports of processed meat products with high added value and export potential have been limited²⁰⁷.

In consideration of the situation, the transitional government is focusing on value-added chains of processed meat for export²⁰⁸.

Also, there are indications that the domestic market for meat is also growing, and that domestic meat processing and cold chains need to be improved²⁰⁹.

● Dairy Product

All over the country, livestock is widely owned, and milk production and sales are one of the key factors. Milk is contributing significantly to the livelihood of rural farms as important source of cash income. Milk is mainly produced by nomadic pastoral and seminomadic agropastoral systems. Although milk is widely produced in a traditional mode in rural areas, there are some modern commercial dairy farms existing around urban centers where it is competitive with the traditional milk producers and distributors. Around 98% of the milk produced in Sudan is loose (unprocessed) and only 2% is processed²¹⁰.

Sudan has one of the largest livestock inventories in Africa, but the milk production is underdeveloped compared to other countries. Sudan still depends on imports to meet its domestic demand for milk despite having twice as many cattle as Kenya.

The production of milk is increasing from 4.3 million tons in 2011 reaching 4.62 million tons in 2019²¹¹. The major sources of milk production are cow (64%) and goat (25%). The production of cow milk is lower compared to Egypt and Kenya, and that of goat milk is lower than Ethiopia and Kenya²¹².

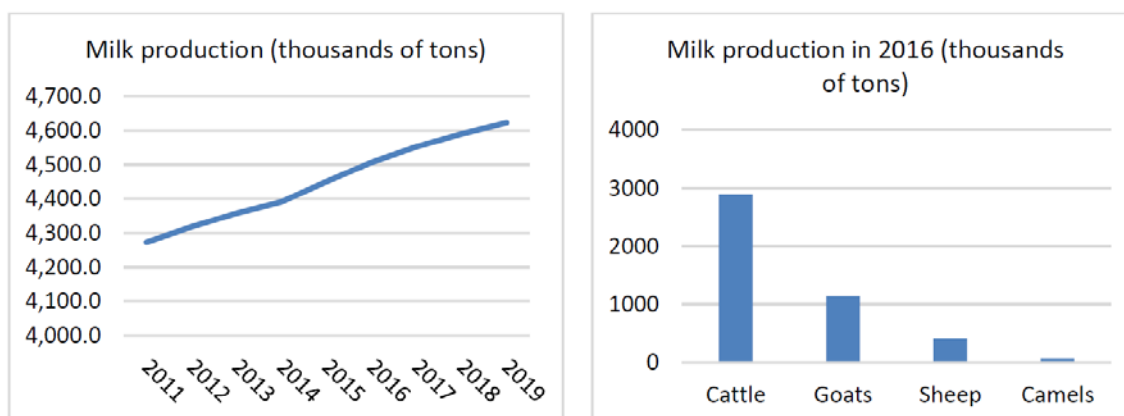
²⁰⁷ World Bank (2020) Agriculture Value Chain Analysis Most raised livestock are goat, sheep, cattle, camel. In 2019, the number of production is sheep 40 million, cattle 31 million, goat 32 million, and camel 4.8 million.

²⁰⁸ Ministry of Cabinet Affairs (2019) General Framework for the Programme of the Transitional Government

²⁰⁹ World Bank (2020) Agriculture Value Chain Analysis

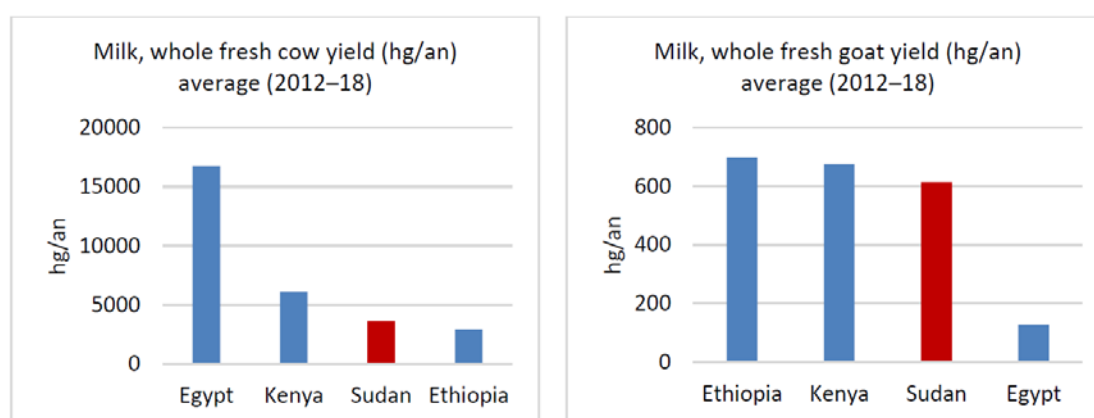
²¹⁰ World Bank (2020) Agriculture Value Chain Analysis

²¹¹ World Bank (2020) Agriculture Value Chain Analysis



Source: World Bank (2020) Agriculture Value Chain Analysis

Figure 5-2 Milk production in Sudan



Source: World Bank (2020) Agriculture Value Chain Analysis

Figure 5-3 Milk yield levels in Sudan (cow, goat)

The underdeveloped cold chain is also a major challenge in dairy production. Since Sudan has a tradition of daily production, it is a pressing issue to improve production technology and facility, as well as storage and transport facility, by investing in infrastructure to improve production environment.

5.2.3 Situation of Agribusiness

(1) Agricultural Products

● The status of cultivated land

Sudanese agribusiness is mainly based on the following categories of cultivated land.

- 1) Irrigated agriculture, which includes:
- Large national irrigation schemes (Gezira, Suki, New Halfa and Rahad) using river flow from the Nile and its tributaries.
 - Large spate irrigation schemes (Gash and Tokar) using seasonal floods.

²¹² Sudanese cattle breed such as Kenana is found in between River Nile and Blue Nile states around mid-south area, and Butana is found in central Sudan and has potential high milk production. Baggara breed is said to have lower milk production potential. "On farm characterization of Butana and Kenana cattle breed production systems in Sudan" 2016, and World Bank (2020) Agriculture Value Chain Analysis

- Small-scale irrigation along the banks of the Nile and its tributaries.
- 2) Semi mechanized rainfed agriculture
- 3) Traditional rainfed agriculture

Source: FAO (2019), Special Report: 2019 FAO Crop And Food Supply Assessment Mission (CFSAM) To The Sudan

1) Irrigated Agriculture

The area under irrigation in the Sudan is estimated at about 1.68 million ha (4 million feddans). It consists of large scale mechanized federal schemes account for about 1.26 million ha (3 million feddans), including the largest scale Gezira Scheme approximately 1 million ha (2.38 million feddans). The yield expectations of irrigated agriculture sector are more reliable, compared to semi mechanized rainfed agriculture and traditional rainfed agriculture, as it is the main user of imported agricultural inputs. However, the irrigation scheme is underutilized, due to the poor maintenance and silting up of canals, the shortage of efficient modern pumps and the adoption of traditional agricultural practices²¹³.

Large scale irrigation schemes have been national owned, but because of the structural adjustment programs of the World Bank in 80s and 90s and decentralisation trend, some of the irrigation schemes have shifted ownership to each state. Some remained as national owned due to the lack of budget of the states. In Sudan, there are nearly 100 Scheme Management Body (SMB) in responsible for the management of irrigation schemes. In River Nile State, there are 38 SMBs and the public servant staff are assigned state government staff. In addition, there are staff such as gate keepers to control the gate, inspector, pump operator, as well as other administrative staff such as accountant. The larger SMBs have around 15 staff employed²¹⁴. The local farmers around irrigation schemes will conclude contract with SMB to acquire water right. Due to land inheritance and succession of farmers, there is an issue of land being subdivided into smaller and smaller areas as it is inherited²¹⁵.

In recent years, there are investment projects by foreign large-scale enterprises, operating large scale production of animal feed, such as alfalfa and Rhodes grass for exporting to gulf countries. Such project has improved production by highly mechanized technology and by irrigation schemes such as center pivot and producing high quality products. There are large-scale foreign investments such as above mentioned Amtaar Investment Company in irrigated agriculture.

2) Semi Mechanized Rainfed Agriculture

The agriculture of rainfed agriculture area has largely been relying on manual labours, although combined harvesting is becoming less rare. In the semi mechanized rainfed agricultural land, mechanisation is usually limited to land preparation and seeding and other operations including harvesting is usually carried out manually.

²¹³ FAO (2019), Special Report: 2019 FAO Crop And Food Supply Assessment Mission (CFSAM) To The Sudan

²¹⁴ Interview with expert Mr. Koga, Capacity Development Project for Irrigation Scheme Management in River Nile State on 30April 2021

²¹⁵ Interview with expert Mr. Koga, Capacity Development Project for Irrigation Scheme Management in River Nile State on 30April 2021

Semi mechanized rainfed agriculture is practiced in vast land of 6.7 million ha and receives more than 500 mm of rainfall annually on average. The area runs through the granary area of Kassala, Gadaref, Blue Nile, Sennar, White Nile and Southern Kordofan States with sorghum accounting for about 80% of the cultivated land and producing around 45% of the country's requirements. Other crops in this area are sesame, sunflowers, millet, and cotton.

Some of the semi mechanized sectors are very large even above 50,000 ha, though due to the erratic nature of rainfall, the productivity is relatively low²¹⁶.

3) Traditional Rainfed Agriculture

The traditional rainfed sector covers about 9 million ha and operated by the largest number of farmers. The sector consists of small family units farming from 2 to 50 ha for both income and subsistence. On the larger units, there is a certain level of mechanisation, but most operations are carried out manually. The traditional sector predominates in the west of the country, in Darfur and in much of Kordofan State, where the main cereal crops are millet and sorghum. Yields are especially vulnerable to unfavorable rainfall. Other important crops in this area include groundnuts, sesame, hibiscus, watermelon, and gum Arabic²¹⁷.

Agriculture is a seasonal job, and the majority of farmers are engaged in other informal jobs or SMEs during 3 to 4 months off season²¹⁸. SBF-SICU provides information sharing services on productivity and new technology, as well as loans for the farmers in collaboration with agricultural bank to enable using of tractors to improve productivity. Many of the farmers are uneducated and require simple information sharing. Each state have cooperatives of individual agriculture products and working in collaboration.

There is lack of market information and insufficient information on agricultural extension service that are also blocking the improvement of productivity by the small-scale producers.

● Challenges Toward Vitalization of Agriculture Analyzed by Agricultural Value Chain (Horticulture)
To realize value-addition of agriculture products and vitalize agriculture, overall intervention in value chain, including infrastructure, foreign direct investment, private investment, and public financing, is crucial. The wide range of climate conditions in Sudan enables variety of horticultural products and Sudan has growth potential. Promoting of value chain will result in increase of GDP contribution of agriculture sector and will enhance employment.

Variety of horticulture products are produced in the irrigated areas and southern states with higher rainfall²¹⁹. However, with the exception of mangoes, many horticultural crops have low productivity,

²¹⁶ FAO (2019), Special Report: 2019 FAO Crop And Food Supply Assessment Mission (CFSAM) To The Sudan

²¹⁷ FAO (2019), Special Report: 2019 FAO Crop And Food Supply Assessment Mission (CFSAM) To The Sudan

²¹⁸ This is one of the reasons that most of the Sudanese economy is informal, SMEs, handcraft business owners. Interview with SICU on 7 June 2021

²¹⁹ Major fruits are: Apple, banana, citrus, dates, grape, guava, mango, pineapple, strawberry, sweet potato, orange, watermelon. Major

often due to lack of agricultural inputs or lack of knowledge on how to improve productivity. In addition, post-harvest loss is a serious problem and cold chain, storage facilities, processing facilities are underdeveloped.

According to the case in River Nile State, there are rich production of fruits but because of the lack of cool storage facilities, the producers are forced to go and sell their products as soon as possible during the harvest season. This prevents the producers to wait for higher selling price, and there is a need of introducing cool storage facilities²²⁰. On the other hand, although there is no accurate data, some of the SMEs are processing the horticulture products and selling in domestic market, and some are even exporting the products²²¹.

In oil crop production in rural areas, purchasing of oil pressing machines are difficult in terms of cost in many cases, and it is important to develop market. The possible approach will be to promote certain areas as a production area of specific horticulture products, starting from establishing small-scale processing facilities²²².

Especially for the export-oriented horticulture products, it is important to analyze the value-chain, and to support agriculture input, productivity technology improvement, logistics, cold chain, as well as to meet the standard of WTO/SPS²²³. Also, technical support for quality control at harvesting, including selection and packaging, are another important factor other than cool storage facility²²⁴.

Another form of agribusiness is the collaboration of medium sized or large-scale enterprises with agriculture cooperatives or small-scale farmers. This also contributes to farmers' income, and it also accompanies with agricultural input such as fertilizer and seed, and technical support, to increase productivity and quality.

(2) Livestock

● Meat

The livestock marketing system in Sudan involves many small-scale players. In terms of value chain, the pastoralists and smallholder farmers sell livestock to local traders at the village level. Local traders transport the purchased livestock to the major livestock markets and sell it to brokers. The brokers then sell the livestock to the domestic meat processors and exporters (private or governmental).

vegetables are: Cucumber, eggplant, okra, onion, potato, pumpkin, tomato.

²²⁰ Interview with expert Mr. Koga, Capacity Development Project for Irrigation Scheme Management in River Nile State on 30April 2021

²²¹ Export Development and Logistics Group (EDLG) (World Bank (2020) Agriculture Value Chain Analysis)

²²² Interview with expert Mr. Koga, Capacity Development Project for Irrigation Scheme Management in River Nile State on 30April 2021

In this project, fruits are produced whole year and Winter crop was mainly wheat. The field was not being used during the Summer time, so they started to grow sesame and groundnut as cash crop. It realized cash income enabling them to create the cycle of utilizing the income to buy seeds for the next season's wheat production.

²²³ An agreement on how governments can apply food safety and animal and plant health measures (sanitary and phytosanitary or SPS measures) sets out the basic rules in the WTO. https://www.wto.org/english/tratop_e/sps_e/sps_e.htm

²²⁴ An agriculture cooperative in River Nile state which is working on export, are exporting onion and potato to Saudi Arabia and Kuwait. Also, seedless grapefruit is said to be potentially competitive in global market. Interview with expert Mr. Koga, Capacity Development Project for Irrigation Scheme Management in River Nile State on 30April 2021

According to an estimate in 2017, in Sudan, there were 186 exporters comprising 122 exporters of live animals and 64 exporters of meat including companies, commercial firms, and licensed individuals. Within the 122 live animal exporters, there were 53 exporters of sheep, 16 of goats, 2 of cattle, and 51 of camels. Among the 64 meat exporters, there were 22 exporters of sheep meat, 20 of beef, 18 of goat meat, and 4 of camel meat and 13 veterinary quarantines for meat export²²⁵.

● Dairy Product

The large milk processing companies have their own modern large-scale production farms with up to a few thousand milking cattle and operate their own production, processing, and sales supply chain.

1) Large-scale Producers

Focusing on large-scale producers, out of a total of 15 dairy companies, with capacity ranging from 10 tons to 800 tons, located in the urban centers in Khartoum, Gezira, Kordofan, and River Nile, only 6 are functional²²⁶. Such large-scale milk processing plants operate their own modern large-scale dairy farms with imported high-productive Holstein Friesians dairy cattle, modern high-capacity milking equipment, and climate-controlled cattle housing. These companies procure milk from their own or select commercial dairy farms usually with more than 100 cows. The largest dairy company in the country CAPO²²⁷ of DAL group, has its own modern dairy farm of 6,600 cattle. CAPO also purchases milk from other dairy farms and runs a network of 22 milk collection centers, of which 60% are in Khartoum area. CAPO uses advanced dairy farming practices including artificial insemination (AI) techniques for breeding, milking machines, cooling facilities, cold chain infrastructure for transport. CAPO also offer 6 months advance payment to milk sellers to ensure stable supply of high-quality fresh milk, and the advanced payments prevents them to sell their products to other buyers.

2) Small-scale Producers

Besides the large-scale farms, there are several farms with 100 to 1,000 milking cows. Around Khartoum there also large dairy settlements with hundreds of dairy farms grouped together with 10 to 25 thousand cattle per settlement. The average farmer on such a settlement owns 30 to 50 head of dairy cows²²⁸.

Most of the smallholder dairy farmers graze their cattle on communal pastures or pay a fee to landowners, who allow them to feed their cattle on the landowners' cropland. However, such feed normally lacks protein content which is important to increase milk productivity and it affects quality of milk production. The commercial feed available in Sudan is mostly low in protein content which is not effective in improving milk productivity. There are only 3 to 4 companies that produce quality concentrated feed. The

²²⁵ World Bank (2020) Agriculture Value Chain Analysis

²²⁶ World Bank (2020) Agriculture Value Chain Analysis

²²⁷ There are also companies such as; Faapy Food, The Northern Gezira Dairy Unit (Joint Venture of Arab Authority for Agricultural Investment and Development and Sudanese government). There are also milk processing companies such as Premier Dairy, Best (Moawia Elberier Group), Al Rawabi Dairy.

²²⁸ The Friesian (2016) Dairy quick scan Sudan, the Netherlands

commercial farms have contractual arrangements with these feed-producing companies and procure most of the produced feed. Other concentrated feed is sold through auctions²²⁹. In the rural areas, dairy product such as white cheese, braided cheese, and ghee are produced in traditional processing system especially in White Nile, Gezira, Sennar, Darfur, Kordofan, and Blue Nile States.

● Challenges of Dairy Product Value Chain

The majority of dairy product subsector consists of small-scale producers, and such nomadic producers and small-scale farmers are dominantly using traditional production method. Low level of knowledge and skills, along with lack of vaccination and disease control, low quality grazing, lack of quality feed, delay in mechanization are the challenges of the production stage of dairy products.

In addition, underdeveloped cold chain infrastructure, even the producer with over 1,000 cattle lacks with cool storage, requires closer physical location of producers and consumers. Also, processing technology of dairy product by small-scale farmers are insufficient which leads to limitation of production or the loss of produced milk.

As in meat processing, the underdevelopment of the cold chain is an issue in dairy production as well. Since the production of milk and dairy is a traditional subsector, the product is stable and will reach broader market once storage facility and transportation facility are installed.

5.2.4 Challenges in Agribusiness and Human Resources Needs

(1) Agricultural Products

● Lack of Labour Force

In the farms larger than middle scale, the immigrant labour has been employed during the high agricultural seasons to operate in labour intensive style. In the recent years, especially after the secession of South Sudan, the labourers mainly from South Sudan have decreased and, in addition, large number of workers in agriculture are shifting to mining industry because of the gold rush, making it difficult to secure labourers in farms. Mining is an all-year-round business while agriculture requires seasonal labour, along with the good income of mining, worsening the lack of labour in agriculture²³⁰.

The lack of labour leads to higher demand in leasing service of agricultural machinery by the farmers. The agricultural mechanization promoting division of the state ministry of agriculture and irrigation in the River Nile State has provided machinery leasing with operators. This shows the high demand of mechanization²³¹.

²²⁹ World Bank (2020) Agriculture Value Chain Analysis

²³⁰ Interview with PACT on 25 May 2021

²³¹ JICA (2012) Data collection survey in agriculture sector, the Republic of Sudan, Final Report

● Human Resources Needs

Firstly, promoting modernization of agriculture is indispensable for improvement of productivity. The sector is dominated by traditional way of agribusiness, which leads to the needs of human resources or companies, that can support farmers from the management aspect of agricultural business, it has been pointed out that there is a need for farmer support by personnel and companies that provide a wide range of support from efficient agricultural methods to marketing²³². Also, the number of graduates from agricultural university that work in agribusiness are decreasing, which is a great loss in human resource²³³. Sudan has several agricultural and veterinarian universities, but there are no practical dairy schools to teach practical and operational issues. Even those who graduated from specific courses lack in practical skills and are in need of dairy farming business knowledge training courses²³⁴.

5.3 Manufacturing

5.3.1 Policies

In the Three-year Program for Stability and Economic Development (2021-2023) under the transitional government, states the development of industrial sector by increasing industrial products for export, developing foreign and domestic trade by upgrading the infrastructure, strengthening partnership relations with the private sector, and strengthening Sudan's position in regional and international trade. The following table shows its key items.

Table 5-10 The Three-year Program of MOFEP (Industry, Mining and Trade)

Item	Contents
Public Policies	<ul style="list-style-type: none"> Promoting comprehensive and sustainable industrialization through the establishment and development of manufacturing industries in the areas of raw materials production; Focusing on food processing, leather manufacturing and gum Arabic Building self-capacities in the field of industrialization of agricultural and livestock production inputs, and provision of production inputs; Introducing modern technology in manufacturing
Trade	<ul style="list-style-type: none"> Increasing production and exports and creating added value A project to enhance the competitiveness of Sudanese commodities
Fighting Corruption	<ul style="list-style-type: none"> A draft amendment to the Register of Exporters and Importers Law The Electronic Network Project (e-government)
Abolishing Laws Restricting Freedoms	<ul style="list-style-type: none"> Amending the cooperative sector law to contribute to raising the economic cooperative activity
Guaranteeing and Promoting Women's Rights	<ul style="list-style-type: none"> Establishing women's associations at the level of the states of Sudan A project to support women entrepreneurs Creating microfinance portfolios to finance small-scale women producers
Setting up a Program to Reform the State Apparatus	<ul style="list-style-type: none"> Building institutional and human capacities in terms of qualification and training
Promoting the role of youth of both genders: expanding	<ul style="list-style-type: none"> Youth training, Women training; Research Center Incubator for Innovation and Entrepreneurship;

²³² Interview with Businessmen and Employer Federation Agriculture union, White Nile state, GEMS on 13 October 2016

²³³ Interview with Move Technology on 3 April 2021

²³⁴ The Friesian (2016) Dairy quick scan Sudan, Netherlands

their opportunities in all social, political and economic fields	<ul style="list-style-type: none"> • Business advisory unit; • Establishing programs ensuring the inclusion of young men and women in the business community
Investment	<ul style="list-style-type: none"> • Encouraging industrial investments and directing them to the field of export by granting them more advantages, especially in the field of income taxation; • Promote and develop the small-scale industries and crafts sector, improve its products, and integrate its informal activities into the formal sector.
Raising Human Capacities	<ul style="list-style-type: none"> • Encouraging the establishment of specialized research centers, enhancing the existing ones, and linking scientific research with manufacturing and industry; • Paying attention to technical and practical education and capacity-building, with a focus on technical areas, promoting individual and unique skills, and encouraging entrepreneurship.

Source: Ministry of Finance and Economic Planning, The Three-Year Program for Stability and Economic Development 2021-2023

Also, in the Plan for the Year 2020, the Ministry of Industry and Trade plans the following main projects in upgrading of regulations that affect economic activities (commerce and industry) and on the development of domestic products.

Table 5-11 Industrial Development and Industrial Production Project in the Plan for the Year 2020, Ministry of Industry and Trade

Industrial Development	Industrial Production
1) Solar powered electrical station 2) establishment of the Leather Industries Complex in Southern Darfur State -Nyala 3) Establishment of milk production facilities in Northern Kordofan 4) Fisheries production complex-White Nile State 5) Kaya Sugar factory 6) Establish leather complex in Khartoum State 7) cooperative local made products Crafts complex 8) Improve small producers 9) Improve infrastructure for industrial areas 10) Licensing of industrial investment	1) Work on providing energy materials to the industrial sector and production supplies 2) Establish a database on the size of production inputs, spare parts and auxiliary inputs 3) Issuing a certificate of origin for industrial products

Source: The Republic of the Sudan, Ministry of Industry and Trade, Plan For the Year 2020

5.3.2 Overview of the Manufacturing Sector

The growth of manufacturing sector in Sudan has been relatively slow. The sector contributed 11% of GDP in 2011 but decreased to 3% in 2016. The industrial sector accounts for around 8% of employment²³⁵.

In manufacturing sector, there are a wide variety of subsectors such as fast-moving-consumer-goods such as food processing, beverages, packaging, as well as assembly of home electrical appliances such as electrical hardware, TV, and refrigerator. There is no public data of the breakdown of specific subsectors in manufacturing²³⁶.

²³⁵ AfDB (2018) "Economic Report: After Two Decades of 'Solitude'"

²³⁶ Currently, UNIDO is implementing Industry Diagnostic, and the World Bank is implementing Private Sector Diagnostics. The launch of the report from these projects are expected soon.

Currently, small and micro enterprises, sole proprietor and informal sector covers a large portion of the industry, and it is estimated that SMEs also consists of the majority of manufacturing sector. According to SBF-SICU, the subsector is categorized as shown in the table below²³⁷. It is said that the registered members of SICU total approximately 52,000, though there is no clear statistics of breakdown, and since there are huge number of informal businesses, the data does not reflect the full picture.

Table 5-12 Subsector of SMEs (SBF-SICU)

1.	<u>Food and Beverage</u>
2.	<u>Industry Textile Industry</u>
3.	<u>Metal forming (turning, blacksmithing, plumbing...etc.)</u>
4.	<u>Nonmetallic mineral products (lime, marble, tiles...)</u>
5.	<u>Manufacture of wooden furniture, sawing wood and folklore products</u>
6.	<u>Manufacturing metal furniture</u>
7.	<u>Tanning, preparing leather, manufacturing leather products and shoes</u>
8.	<u>Manufacturing chemicals and chemical products</u>
9.	<u>Foundries</u> and engineering workshops, manufacture
10.	Maintenance of radio and television equipment
11.	Manufacture and maintenance of vehicles, trailers, and semi-trailers
12.	Manufacture and maintenance of transport equipment
13.	Printing, publishing, and packaging industry
14.	Manufacture and maintenance of machinery
15.	Unclassified

Note: Underlined items are categorized as manufacturing
Source: SBF SICU

According to AfDB’s report, Sudan is distant from major global cities and analyses on skill and investment level which shows that the products such as “Low-skill labour-intensive tradables” and “Commodity based regional processing” are suitable. The former are textile, clothing, leather manufacturing, furniture, other manufacturing, light manufacturing (apparel, toys, jewelry, sports products), and the latter are mainly food processing, wood crafting, paper products, metal assembly and metal products, and non metal mineral products, rubber and plastic products.

Based on this understanding, the survey focuses on agricultural processing product and light manufacturing, as subsectors with large percentage of SMEs within manufacturing and potential effect in employment promotion.

(1) Agricultural Processing Product

Value-added agricultural processing products can be a key leading factor of economic development in Sudan. The agricultural processing covers a wide variety of subsectors such as sugar producing, food and beverages, textile and sewing, leather products, edible oil processing, and flour milling.

As indicated in its contribution to GDP, agricultural processing sector is underdeveloped. The lack of cross sectoral coordination (holistic policy and measure of value chain) is considered as one of the

²³⁷ Sudanese Business Federation (2020) Small Medium Micro and Hand Craft Unit Worksheet t, according to SICU, the biggest challenge is undeveloped statistical data. In this regard, the SICU is currently working on data collection project. Also, according to the SICU, many of the SMEs cannot afford to register as a member of SBF, so currently they only register whenever they can pay the fee.

reasons for this²³⁸. Furthermore, the increasing of production capacity and standardization of quality are also another challenges of SMEs that consists majority of the sector.

The market potential of processed products of gum Arabic is high. Sesame oil and sesame paste, sweets have high domestic demand and are prospective products. Because of its high nutritional value, groundnut is considered important by UNICEF and FAO as a medical dietary supplement for malnutrition, and there is great potential for high value-added products²³⁹.

Sudan has the second largest livestock inventory in Africa, after Ethiopia²⁴⁰.

Small-scale dairy product processing is a traditional industry in Sudan, and it is rich in raw material. Since there is a high demand, there are projects that supports production of dairy products such as cottage cheese and aged cheese, targeting women's groups to improve quality and productivity using simple methods²⁴¹.

The major challenges of SMEs in production of Agricultural Processing Product are; small size of the capital limits expansion of production, low quality due to low production technology, difficulties in market development²⁴².

In recent years, the industry has experienced change through introduction of new production technology and utilisation of digital technology, especially by the large-scale companies. There are also positive shift such as 1) Expansion of the agricultural area by introducing modern irrigation mechanisms and technologies, enabling an increase in production and a diversification of crops, 2) Surge of consumption, and this is reflected in the change in eating pattern and living behavior, 3) Increasing the capital accumulation of the merchant class and farmers. On the other hand, there are negative changes in the industry; 1) the number of traditional manufacturers has decreased (such as the manufacture of simple technologies, waterwheels, agricultural tools), 2) Many producers lost their professions and trades and switched to other economic activities, 3) The loss of the financial positions of families and economic groups that they had enjoyed for successive generations, 4) The emergence of brokers²⁴³.

(2) Light Manufacturing

Apart from agriculture processing products, some of the major subsectors are leather and leather products, textile, clothing, wood manufacturing (furniture, fixture), and assembly of machines.

Leather and leather products is an important sector for export. However, the quality improvement of the products for export is the largest challenge. The main reasons of the low quality are quality loss because

²³⁸ World Bank (2020) Agriculture Value Chain Analysis

²³⁹ Interview with EU on 15 June 2021

²⁴⁰ World Bank (2020) Agriculture Value Chain Analysis

²⁴¹ JICA (2012) Data collection survey on agricultural sector in the Republic of Sudan, Final Report, White Nile state investment commission / investment opportunities (2016), interview with White Nile state women's business association on 19 October 2016

²⁴² Sudanese Business Federation (2020) Small Medium Micro and Hand Craft Unit Worksheet

²⁴³ Sudanese Business Federation (2020) Small Medium Micro and Hand Craft Unit Worksheet

of the diseases of livestock, poor processing technology at slaughterhouse, which result in low quality. The quality improvement of skin and leather is one of the major challenges in light manufacturing subsector.

The export value of leather is USD 7.6 million. (see Table 5-9) Since it is important to have sufficient livestock management, as well as and slaughter treatment technology, leather processing technology, to produce high quality leather, a comprehensive improvement starting from rearing management.

Leather industry has potential for large impact on employment, by enhancing value chain development from production to manufacturing of leather product and strengthened as export product. Although, as mentioned in the section on agriculture sector, the quality of the leather currently being produced is low. In addition, the low quality and slow improvement of technology, and low management skills in production of leather product, leading to low competitiveness coupled with flooding of market by East Asian products²⁴⁴. There was only a small investment in non-footwear leather products. On the other hand, the production of leather products such as tanned leather, shoes, has been identified as a priority area by the government, and future investment is expected in this area.

Textile and clothing are also an important sector as cotton production had been historically important. The government implemented a rehabilitation programme for three textile factories in White Nile State (Kosti, Dewam) and River Nile State (Shandi) at a cost of USD3 million and with the support of investors from Turkey and Qatar²⁴⁵. It is also said that Sudan now imports more than 90 % of its needs of fabric and cloth from outside countries such as China, India, Pakistan and Egypt. This is a direct result of shortage in the raw materials and stoppage of big number of textile factories. Furthermore, there are the industrial chemistry schools graduate textile engineers without job opportunities in their field in Sudan²⁴⁶. In general, textile industry if a labour-intensive sector, and once the lifting of the economic sanction removes limitation, the technological support and investment including finance will realize the expansion into global markets. This may result in the promotion of employment.

There is a trend of mechanization in manufacturing sector such as wood craft (furniture, fixture), machine assembly, but most of the SMEs are working manually. Today, the use of computer in designing and cutting is becoming a major process in cutting wood for manufacturing, though most of the SMEs either don't have knowledge in it or lacks in capital for investing in such technology.

²⁴⁴ <https://allpi.int/members-profile-2/sudan>

²⁴⁵ Leading Edge Sudan 2019

²⁴⁶ TagElsir M. et al, (2016), last update on December 2020, "Impacts of Government Policies in Textile Industries in Sudan"

5.3.3 The Situation of Companies

(1) Agricultural Processing Product

According to the report by the World Bank, the number of major agriculture processing SMEs are as follows:

Table 5-13 Major Agricultural Processing and Agro-Food Business by SMEs

■ Bakery (Estimated 4,200 micro, small, and medium enterprises (MSMEs) in Khartoum)
■ Confectionary (number unknown)
■ Edible Oil processing (Estimated 250 processors around the country)
■ Animal Feed (Estimated 27 forage manufacturing plants)
■ Livestock rearing and transport, meat and poultry processing (Estimated 3–4 medium to large companies in meat processing, with numerous smaller butcheries and processors around the country and an estimated 20 leather tanneries around the country)
■ Fresh fruits and vegetable packaging and transport (5 fruit-exporting SMEs)
■ Fruits and vegetable processing (Juices, jams, and other shelf-stable products, such as canning)
■ Other (Cotton ginning, Gum Arabic processing and exports, and agricultural inputs distribution)

Source: Agriculture Value Chain Analysis, World Bank

Most of the gum Arabic players are small-scale except 10 gum Arabic processors falls under the category of medium-size and 4 are relatively large-size operations²⁴⁷. The sesame seed processing sector is dominated by 2–3 large corporations operating in the capital Khartoum, while SMEs serve rural areas. The cost of processing and packaging of the product is high for SMEs and it is difficult for them to produce high quality packaged products.

Manufacturer of food product, Al Moshrega Food Industry has 1 production site and 3 storage warehouses in Khartoum. The company produces sesame products such as Tahina (sesame paste), and Tahniya (sweets made by mixing sugar and fat to sesame), biscuit, sesame oil, for domestic market. The company also exports sesame oil which makes most of the company's profit²⁴⁸.

● The Trend of Digitization

There are a lot of challenges in terms of digitization of the agriculture processing companies.

The use of ICT and modern technology in large-scale companies are relatively advanced. Technologies such as camera monitoring system and productivity improvement using computer-controlled management are incorporated into production lines. The production management, processing, packaging, inventory control, delivery control is implemented by using Enterprise Resources Planning (ERP) system, in several companies. Also, internal communication is done by internal email system. In food and beverage

²⁴⁷ Afritec, Nopec Co., DAL Group, Fair Factory for Manufacturing and Packing Organic Gum Arabic (FOGA). There are 2 companies including DAL group that are producing spray dried powder of gum Arabic and those companies only use the product to produce their own manufacturing products or sells to specific partner companies. There is potential of domestic and export market, but no other companies are entering this area, so the potential of processing gum Arabic may result in impacting employment. (World Bank (2020) Agriculture Value Chain Analysis)

²⁴⁸ Interview with Al Moshrega Food Industry on 7 June 2021

manufacturing sector, the technology advances very fast and whenever they installed new software or hardware, they need training course for the employees²⁴⁹.

● Challenges of the Sector

The unstable currency exchange rate is a sector wide major challenge of the industry. The unstable currency result in a high production cost, and may lead inflation and result in downturn in consumption. Also, to deal with COVID-19, a large scale food processing company Green Food is implementing new sanitation rules at the plant, though it is challenging to keep the plant sterilized, and keeping up to agreed production rates²⁵⁰.

Also, it is pointed out that the competitors are increasing in food and beverages subsector. The food and beverage industry continues to attract new businesses because of its low entry barriers. Competition is growing because of globalisation, resulting in more variety in products and lower operating margins in many product categories²⁵¹. Saeed food of Saeed group has been a large force in the industry with keeping high quality production. In 2002, it received ISO:9001:2000 Quality Management System certification.

● Specific Challenges in Agriculture Processing (Flour Milling)

Agro-processed products are a potential economic growth driver, but some agro-products are affected by complex regulations²⁵².

While the government has policies to improve self-sufficiency of the wheat production in terms of food security, there are many governmental regulations in the flour milling business, such as limitation of production, depositing at agriculture bank, with uncertain procedure, and the government controls and approves every flour sale. This makes it difficult for newcomers to enter the business in flour milling²⁵³.

There are only 4 Khartoum based flour mills allowed to operate flour productions receiving government subsidy. Any other companies wishing to sell flour are supposed to sell at commercial price with unsubsidized flour. The unsubsidized flour is sold mainly outside Khartoum, but since Khartoum has 80% share of retail market of flour, the subsidy makes it difficult to unlock the retail market.

This creates a monopolistic market of flour in Khartoum and prohibits newcomers to grow and enter the market. To overcome this situation and win the market share, one of the companies is dedicated to

²⁴⁹ Interview with Al Moshrega on 7 June 2021, Araak Group on 7 June 2021, Green Food on 16 June 2021, Saeed Food on 15 June 2021

²⁵⁰ Interview with Green Good on 16 June 2021

²⁵¹ Interview with Saeed Food on 15 June 2021

²⁵² controlling food prices (for example, wheat and fuel subsidies), protecting local business (for example, import bans on food items), maintaining food security (for example, export bans on sorghum) World Bank (2020) Agriculture Value Chain Analysis

²⁵³ Interview with Rosewind on 14 June 2021

branding, marketing, and marketing as well as having an efficient, and technologically proficient staff who bring new young ideas of increasing customer clientele²⁵⁴.

Wheat farming medium sized company Rosewind, operating in White Nile State, partners with local farmers including small scale farmers. The company provides all the raw material and machinery to prepare the land needed for the farmer to maximize the efficiency and receives profit share. Technical support is provided all season, and with a management team on site during wheat planting season.²⁵⁵

(2) Light Manufacturing

According to SBF, the business areas of the members are Car-tin smithing, Car painting, Blacksmithing, Fitting, Turning, General Electricity, Auto mechanics, Pump maintenance, Electronics maintenance, Carpentry, Sewing and Tailoring, Manufacture of bricks, blocks and interlocks. The variety indicates that the small scale enterprises are strong and wide supporting industry²⁵⁶.

In leather production, there are total of 195 slaughter facilities in Sudan, and there are few tanneries. Most of these tanneries produce intermediate products of a low added value for export, and few tanneries produce finished leather for shoe uppers²⁵⁷.

There are 3 large-scale companies, 10 Small and medium scale companies, 400 workshops and around 3,000 artisans in the leather production sector, and most of their production is shoes²⁵⁸.

Within the small-scale to medium scale manufacturing, although they are in manufacturing of metal fabrication, welding, and making furniture, there are cases that the designer and employees do not have sufficient understanding of technical drawing, and the production is operated with uncertain measurement and specification²⁵⁹.

Furthermore, even though some companies are employing foreign engineers with high technical skills, the technology is not transferred to Sudanese²⁶⁰. Also, most of the workplaces lack basic understanding of tidying up and be organized.

● Challenges in the Economic Sector

The challenge of light manufacturing is, in common with agriculture processing, unstable power supply and changing exchange rate. Also, insufficiency due to the conjunction of customs (Port Sudan) was

²⁵⁴ Interview with Bayader Flour Milling on 14 June 2021

²⁵⁵ Interview with Rosewind on 14 June 2021

²⁵⁶ Interview with Small Industry and Craft Union, SBF on 1 April 2021

²⁵⁷ International Trade Centre, et al. (2010), Promoting Regional Trade in Leather and Leather Products “Programme for Building African Capacity for Trade (PACT II) LEATHER” Supply and Demand Survey on The Leather industry in Sudan

²⁵⁸ JICA (2012) Data Collection Survey on Trade and Investment in Sudan. According to Africa Leather and Leather Products Institute (ALLPI), there are Factories: 20 / SMES: 35 / Workshops: 730 / Artisan factories: 330 in footwear production.

²⁵⁹ Interview with manufacturer (GEMS) on 26 October 2016

²⁶⁰ Interview with Formatya Factory (manufacturer: furniture and cooking utensils, metal fabrication, welding, sheet metal fabrication) (GEMS) on 5 October 2016

suggested by a company which imports raw materials. Also, due to COVID-19, there was a delay in receiving raw materials and the cost of the raw material and shipping have increased²⁶¹.

5.3.4 Challenges of Companies and Human Resources Needs

(1) Agricultural Processing Products

● Recruiting Process and Human Resources Needs

To be employed at agricultural processing companies, some mentioned that they require graduate students of vocational training centers as well as someone with food engineering skill. On the other hand, a flour milling company pointed out that there is no vocational training school that can teach flour milling, and the large-scale flour milling companies are recruiting professionals who studied in Egypt or Turkey²⁶².

Large-scale companies mostly use job matching services such as Orooma, and also posts job advertisement on their corporate website and on SNS (mostly Facebook). Several companies have internal recruitment system. Recruiting process of some of the companies interviewed are described below.

Al Moshrega employs via public recruiting and accepts recommendations.

Araak Group (beverage) opened their own website to find talented human resource and works on capacity building of internal staff and has internal recruitment system.

Saeed Food requires at least 2 to 3 years of experience in factory floor operating and production line, and requires university degree (including management, operation area). In case of fresh graduates, experience I operation and training are required.

Green Food considers recruiting is a challenge. Especially, securing employees to cover expansion of business is difficult. One of the reasons is the lack of human resources with specific technological skill background. They recruit university graduates and requires technical skills and working experiences for the factory engineers. They put up advertisements and selects by interviews²⁶³.

According to the interview, most of the companies in need of employees with technical skills requires university graduate certificate and working experiences.

● Human Resources Development and Training

Many companies prioritize on internal training. Saeed Food give training for the employees by software provides and provides occasional ERP system trainings when necessary. Also, the employees participate in conferences and workshops abroad to learn and know about the global trend.

²⁶¹ Interview with The Middle East Packaging Factory on 8 June 2021, Saeed Food on 15 June 2021

²⁶² GEMS (2021) COVID-19 Impact Survey

²⁶³ Interview with Al Moshrega on 9 June 2021, Araak Group on 7 June 2021, Green Food 16 June 2021, Saeed Food on 15 June 2021

Al Moshrega provides internal training for the employees and is currently planning to expand the market, which requires external training in the near future. Araak Group has internal recruiting process and provides inhouse training for internal recruiting and specific jobs. They also have unpaid internship program in several departments. The program does not guarantee a full-time position, however there are chances for the interns to be offered full-time job according to their performance and relevant job opening. Green food provides new employees with training during the probationary period. It was pointed out that there are few opportunities of external training and Green food or other large-scale companies are providing the “external training” for other companies²⁶⁴.

● Gender Balance in Recruitment

Almost all the companies interviewed replied that they do not discriminate on gender in recruiting employees. Each company had actually more men than women, due to the unbalance of population as there are more male job seekers. Eventually the gender ratio of most of the companies are unbalanced. However, there are some companies actively promoting appointment of women. In Araak Group, the gender balance is being considered and they assess the employees based on skills, qualifications and performance. There is a chance for women to take on challenging roles²⁶⁵.

(2) Light Manufacturing

Human resources required in the light manufacturing sector include graduates of technical training schools (welding industry), graduates of technical training schools who can read English catalogs and manuals (refrigerator manufacturing), people with communication and computer skills and electrical engineers (sewing industry), people with knowledge of mathematics, engineering knowledge (solar systems), and others. This shows that companies are looking for employees who already have the skills rather than spending time training them²⁶⁶.

For example, to cope with the situation where the number of human resources with knowledge of drafting, which is important in the manufacturing sector, is limited, it is necessary to strengthen technical capabilities in some way, either by hiring skilled personnel or by hiring foreign engineers and transferring technology to the Sudanese. It is also important to improve the technical skills of both designers and workers to increase productivity and improve quality.

The manufacturing sector requires a wide range of skills (especially engineering), but recently, electrical engineers and computer skills have become a common issue in the subsector due to the mechanization of manufacturing.

²⁶⁴ Interview with Al Moshrega on 9 June 2021, Araak Group on 7 June 2021, Saeed Food on 15 June 2021

²⁶⁵ Interview with Araak Group on 7 June 2021

²⁶⁶ GEMS (2021) COVID-19 Impact Survey

In general, the textile subsector covers chemical fiber manufacturing, textile manufacturing, garment manufacturing, wholesale, and retail of textiles, etc. Therefore, there are many employment opportunities from upstream to downstream of the industry.

● Recruiting Process, Human Resource Needs, and Human Resource Development

Packaging manufacturer Middle East packaging factory requires employees from technical school, minimum of secondary certificate up to university degree. It uses recruiting agency as well as corporate website and SNS and moves on to selection process to be employed. Requirement of working experience varies according to position, and there is no gender bias in employment and seeking for the most suitable candidates. After the employment, they provide internal training for certain posts, and consider that the enhancement of training for employee is important²⁶⁷.

5.4 Automobile Maintenance

5.4.1 Policies

No policies and legal systems focusing automobile maintenance itself were found during this survey, though the “Axis of Infrastructure” of the Three-year Program of the MOFEP is focusing on transportation sector. In this sector, the government states that it will improve the convenience of vehicle transportation through the development of road infrastructure, thereby reducing the cost of importing spare parts, tires, and petroleum.

5.4.2 Overview of the Automobile Sector

The number of registered vehicles in Sudan is increasing and traffic congestion is getting worse every year.²⁶⁸ On the other hand, high tariffs are imposed on vehicle imports: 400% on diesel vehicles, 300% on gasoline vehicles, and 50-60% on buses²⁶⁹. In recent years, it is said that the number of vehicles smuggled into the country from Libya via Darfur has greatly exceeded the number of officially imported vehicles²⁷⁰.

In addition to the simple increase in the number of automobiles, the increase in investment in Sudan (infrastructure, agriculture and agricultural product manufacturing, etc.) is expected to lead to increased use of trucks and other vehicles in agriculture-related and construction-related fields, and the need for automobile maintenance, including regular maintenance, is expected to grow.

The following is an overview of the automobile sales market in Sudan. There are major distributors and manufacturers in Sudan, and most of them have one or two direct sales outlets. There are 15 to 20 dealers

²⁶⁷ Interview with Middle East packaging factory on 8 June 2021

²⁶⁸ <https://www.ceicdata.com/en/indicator/sudan/motor-vehicle-registered>

²⁶⁹ Interview with Golden Arrow on 3 June 2021

²⁷⁰ According to Golden Arrow, it is estimated that the number of smuggled vehicles reaches to 150,000 whereas officially imported vehicles are around 4,000-5,000.

under these major distributors and manufacturers. The market is almost entirely dominated by Japanese, Korean, and Chinese products²⁷¹.

Regarding the automobile sales market, according to the 2019 data, it has declined for the fourth consecutive year. Toyota vehicles account for 44.2% of the market (down 13.8% from the previous year), well ahead of Isuzu and Nissan. The Sudanese market is 90% imported used cars²⁷².

Looking at agricultural tractors in relation to agriculture, two major companies, Sudanese Tractor Company (SUTRAC) of DAL Group and GIAD, are mainly engaged in the assembly of agricultural tractors. SUTRAC mainly produces equipment for large-scale farms, while GIAD has a production line for Massey Ferguson tractors.

5.4.3 The Situation of Companies

● The Trend of the Economic Sector

Since there is no data of accurate number of companies in the automobile maintenance sector, and there was no numerical information of registered companies at SBF, there is no statistics was found. The brief picture of the sector structure is; maintenance workshops by official distributor such as Golden Arrow are 10-15% of the industry, factories run by UN or NGOs are 5%, governmental organization (Ministry of Interior, police, army, National Electricity Corporation, etc.) are 10-15%, and there are so-called “Under the tree mechanics” that are SMEs and sole proprietors. (mechanic)²⁷³.

Vehicles that have just been purchased are regularly taken to authorized maintenance shops by customers. However, as the value of the vehicle decreases in the second-hand market after a few years, customers tend to spend less money on maintenance, and the frequency of bringing the vehicle to an authorized maintenance shop decrease. In Sudan, where the used car market is large to begin with, there is a high demand for services by small and medium-sized companies and individual mechanics. GIAD, a state-owned company, reported that it provides driving instructions and support during the warranty period to customers who have purchased new vehicles, but maintenance after the warranty period is often performed by local mechanics²⁷⁴. In this way, the role of small and medium-sized companies and individual mechanics is still significant in the automobile maintenance industry.

Automobile maintenance companies, especially small and medium-sized companies and individual mechanics, are segmented into body maintenance (car body repair, including flat tire repair and simple sheet metal work), diesel vehicles, gasoline vehicles, and automotive electrical equipment, nyalaand the industry is not structured for one company to handle everything.

²⁷¹ Interview with Golden Arrow on 3 June 2021

²⁷² <https://www.focus2move.com/sudan-car-market/>

²⁷³ Interview with Golden Arrow on 3 June 2021

²⁷⁴ Interview with GIAD by GEMS on 3 October 2016

In addition, there are many cases where the lack of basic 5S²⁷⁵ is an issue in automobile maintenance and tractor maintenance workshops²⁷⁶.

● The Effect of Protracted Economic Sanctions

Vehicle technology is evolving rapidly. Already in the 1980s, mechanical engines were being replaced by electronically controlled engines, but the replacement of vehicles in Sudan did not proceed under economic sanctions. Many mechanics have been able to use their acquired skills without facing the necessity of learning maintenance techniques for vehicles with electronically controlled engines, but over time, the import of inexpensive vehicles from Korea and China has increased, and the replacement of vehicles is gradually occurring. Under these circumstances, there are not necessarily many maintenance providers other than authorized maintenance companies that have been able to keep up with the technological progress of vehicles²⁷⁷.

Especially in rural areas, there is an increasing number of inexpensive small cars for mini taxi use, which causes many problems that existing mechanics cannot repair. This situation is especially likely to occur in rural areas. Even though the car breaks down in Kosti, it needs to be brought to Khartoum to repair. Such incidents are happening frequently. Small service providers, especially in towns, urgently need people who can diagnose faults in electronic control systems.

Furthermore, the lack of genuine spare parts is an issue in the Sudanese automobile maintenance industry. Due to economic sanctions and other factors, there is a shortage of many consumables such as engine oil and various spare parts in Sudan. As a result, there are many problems caused by inferior copies being sold in the market, and there are no laws and regulations to control the copies. Securing such genuine spare parts is essential for the promotion of the automobile maintenance sector²⁷⁸.

● Efforts to Prevent Breakdowns

In Sudan, the roads are poorly maintained, vehicles are easily damaged, and weather conditions such as sandstorms and floods often cause serious damage, making vehicle maintenance and management a challenge. Since vehicle breakdowns, especially in rural areas, are difficult for maintenance services to reach, dealers are conducting user training and other activities to prevent breakdowns as much as possible.

²⁷⁵ <https://www.5stoday.com/what-is-5s/>

²⁷⁶ Interview with tractor maintenance company (GEMS) on 17 October 2016

²⁷⁷ According to interviews with companies in the maintenance workshop cluster in Khartoum city, only 2-30% of mechanics could use fault diagnostic machines for electronically controlled vehicles in 2016 (4 September 2016). The same interview with an instructor of the automotive department at Kassala Vocational Training School showed that about 50% of the passenger car volume is electronically controlled vehicles, but minibuses and other vehicles still often have mechanical engines. The instructor also reported that the number of automatic vehicles is increasing, which is a challenge (27 October 2016). (GEMS) Although the situation in 2021 is not clear, the instructor reported that in Kassala, the number of maintenance shops that are familiar with fault diagnosis machines for electronically controlled vehicles is increasing.

²⁷⁸ Interview with Golden Arrow on 3 June 2021, tractor maintenance service provider by GEMS on 17 October 2016, Union of Chamber of Commerce on 24 June 2021.

When DAL Engineering sells heavy machinery and other equipment to areas outside Khartoum, it provides customers with training courses on operation and maintenance to ensure that at least a minimum level of operation and maintenance is done correctly. The company also tries to provide repairs and support for an unlimited period. There are branch offices in rural areas, and staff are dispatched from the branch offices in case there are problems with the machines²⁷⁹.

5.4.4 Challenges of the Companies and Human Resource Needs

● Delay in Human Resource Development to Meet Global Automotive Industry Standards

As mentioned above, the speed at which vehicles with electronically controlled engines have entered the market in Sudan has been slow, partly due to the impact of economic sanctions. As a result, there is an overall shortage of human resources capable of servicing the new vehicles. This delay is partly due to the lack of opportunities for retraining and updating of skills, especially for small and medium-sized companies, which basically have no chance to be exposed to new technologies. They are mentally hesitant to purchase or enter the market because they do not know the types of failure diagnosis equipment and the contents of failure diagnosis come in English. Another problem is that failure diagnostic equipment is expensive (some are inexpensive, but they have limited diagnostic capabilities) and are difficult to obtain²⁸⁰.

There are only a few TVET schools that teach electronic vehicle maintenance; the first thing that has not been done in the auto maintenance department of VTC, which is run by SCVTA, is to revise the curriculum. Equipment is expensive and cannot be maintained at VTC, making it difficult to provide unified training across the country. Furthermore, training of instructors is necessary. Through JICA's support to date, some instructors have become good at fault diagnosis, and some private VTCs have instructed trainees at their own initiative, but this is not part of the curriculum and has not yet led to an organized effort. The technical high schools also do not provide instruction because they do not have the equipment. In addition, English is not a subject of instruction at vocational training schools.

● Efforts to Secure Human Resources That Meet the Needs of the Industry

Golden Arrow is working to improve the level of its Sudanese staff by actively recruiting foreigners. The company has about 1,000 employees, of which 800 are Sudanese and 200 are foreign nationals²⁸¹. There are mechanics, technicians, supervisors, and managers at different levels, and the after-sales service and spare parts managers are foreigners (a British and a South African each). The rest are Sudanese or Filipinos. Foreigners are often assigned to posts with supervisory responsibilities to learn from them so

²⁷⁹ Interview with DAL Engineering on 15 June 2021. According to SUTRAC of the same DAL group, it has been providing operation & maintenance training for 300 to 400 customers every year. (GEMS) on 3 October 2016

²⁸⁰ Interview with car maintenance company by GEMS on 17 October 2016 Failure diagnosis equipment is the tool to investigate failure of the vehicle. It is also called as scan tools.

²⁸¹ Approximately 20 senior posts, 35 middle post, 30 engineers, 400 skilled technical workers, 400 unskilled technical workers, and 80 % men, 20% women. Interview with Golden Arrow on 3 June 2021

that the employees can acquire skills and eventually be assigned to senior positions. In the past, there were 20 to 30 Filipino technicians, but now the number of Filipinos has been reduced to five as Sudanese employees have been learning the skills.

In addition, of the approximately 600 employees at DAL Engineering, about 160 are in technical positions, and the majority are engineers with university degrees. Other than that, 7% to 10% are technical training school graduates. Since 1986, the company's policy has been to hire only university graduates due to their better learning and communication skills. Furthermore, thorough screening during the hiring process ensures a high level of technical skill and commitment²⁸².

In addition, the startup company Monjid employs 24 workers, along with contract-based 12 mechanics, all male, graduates of vocational training center. Monjid has a partnership with Spark VTC to hire graduates. The co-founder, who is the operations manager, is skilled in auto maintenance, so he recruits the technicians himself. Monjid is currently preparing to start a car maintenance service for women by women and has already hired three female mechanics with the intention of making a breakthrough in the male-dominated industry. The company has already hired three female mechanics²⁸³.

● Recruiting Process

Some of the companies commented that it is sometimes difficult for them to grasp the skills of the people they have hired because there are no objective indicators such as skill level standards or qualifications for auto mechanics at the national level²⁸⁴. In this situation, this section describes how each company selects personnel through its own process.

Recognizing the importance of managing the skill level of mechanics, Golden Arrow has divided its engineering staff into different levels within the company and uses Toyota's engineer certification. In addition, although they advertise for personnel when hiring, they often hire through referrals by mechanics. Hiring is based on technical skills, and in all cases, the company's engineers conduct tests on knowledge and practical skills.

According to Golden Arrow, there are a number of highly skilled micro-repair workers. For general maintenance such as flat tire repair, sheet metal painting, and inspections, the ability to provide adequate service without the need to read and understand manuals means that the company sometimes hires small repair workers through referrals from its employees. However, even if the technicians are highly skilled, there may be issues with adherence to discipline. For example, some of them work only for a few days and then leave immediately. Since they need to understand professional attitudes, they try to provide mentors when they hire.

²⁸² Interview with DAL Engineering on 15 June 2021

²⁸³ Interview with Monjid on 16 June 2021

²⁸⁴ Interview with Golden Arrow. It was also suggested the organizations such as SBF should work on the establishment of national standard or qualification, though it is not reached there yet. SBF auto dealer unit has members at around 10 -15.

● Recruitment Through Apprenticeship Program

DAL Engineering does not use recruiting agents and receives candidates directly²⁸⁵. The following is their process of recruitment: (1st screening by application form) They will fill in the application form and we select the potential candidate, (2nd screening by attitude test), they screen some of them by an attitude test to check engineering sense, math, communication etc. Then they take candidates in OJT training for 30-45 days, (3rd screening by OJT supervisor) After the OJT, there is an evaluation by the supervisors, and (4th screening by interview) There will be report prepared about the candidates' performance, and then the candidates will sit for an interview with service office, HR, and training office. After passing all 4 stages, the candidates start working in DAL Engineering's apprenticeship system. The process will take at least 2 to 3 months up to 6 months. The apprenticeship lasts for 24 months for university graduates, and 12 months for graduates of technical vocational schools²⁸⁶. The process is quite long and troublesome but for them it is better than investing in the wrong candidate. DAL engineering has implemented 15 batches of the apprenticeship program until today.

DAL Engineering considers gap areas of youth based on their indicator called ADPS²⁸⁷. According to them, the best workers are those with good basics of KSA²⁸⁸.

The worst-case scenario is to have a high level of knowledge but poor skills and attitude, and this pattern is difficult to train. This pattern is difficult to train, but if a person lacks the skills and knowledge, but has a good attitude, there is a possibility that they can be trained as long as they have the ability to learn, and we use this as an indicator in our hiring evaluations²⁸⁹.

● Issues Related to Securing Human Resources

Through the survey, it was found that, in addition to the technical level, companies place particular importance on (1) English language skills, (2) computer skills, and (3) attitude (commitment, attitude to continue learning) in securing auto maintenance personnel. This is not limited to auto maintenance but is said in general²⁹⁰.

There is already a tendency for talented people to seek employment overseas, and this has been accelerated by economic difficulties caused by inflation, currency devaluation, and other factors, resulting in a serious brain drain, making it even more difficult to secure human resources. In particular, it is difficult to recruit talented people who are willing to work for large companies, as they are in great

²⁸⁵ If they are within three years of graduation, they are accepted as new graduates. The graduates of the vocational training school will be trained as machine operators for nine months, and when the machines are purchased, they will also suggest to their customers to hire these operators.

²⁸⁶ The program was launched in 2006 for heavy equipment maintenance technicians, and has been expanded to include passenger car maintenance since 2011. The program was launched in 2006 for heavy equipment maintenance technicians, and has been expanded to include passenger car maintenance since 2011.

²⁸⁷ A: Appearance, D: Discipline, P: Punctuality, S: System

²⁸⁸ K: Knowledge, S: Skills, A: Attitude

²⁸⁹ Interview with DAL Engineering on 15 June 2021

²⁹⁰ Interview with Sudanjob on 3 June 2021, Orooma on 1 June 2021

demand from other companies, and it is also necessary to devise a way to keep them without having them switch jobs.

On the other hand, many young university graduates tend to prefer to work outside Sudan or in a clean office environment and not in a dirty job. In order to eliminate this mismatch, DAL Engineering intends to go through a lengthy recruitment process to hire people who share the company's values and have a strong will to do this job for a long time. They try to keep as many people as possible pooled in their HR database so that they can utilize talented people immediately²⁹¹. The Situation of Comprehensive Training and Human Resource Development by Major Companies that Complement Technology

Companies' requests universities and vocational training schools include: (1) revision of curricula based on the latest technology, (2) training of teachers, improvement of equipment and facilities, and (3) training in soft skills including work attitude and English.

According to Golden Arrow, there is the Toyota Kenya Academy in Kenya, but the curriculum is in English. On the other hand, there is a training center in Bahrain that teaches in Arabic, so they send trainers there to provide opportunities to learn in Arabic. They also invite outside instructors to train in English to read the manuals.

In addition, the company has accepted 300 to 400 trainees (in-house training) from vocational training centers. The technical level of these trainees is generally good, and the company sometimes hires from them. However, the problem with graduates from vocational training centers and technical high schools is their low English skills.

On the technical side, mechanics who have graduated from the vocational training center sometimes face difficulties in using fault diagnosis tools for electronically controlled vehicles, especially the younger mechanics. The ability to read English manuals is also an important factor here, and as new electric and hybrid vehicles enter Sudan in the near future, technical training to deal with them will be essential²⁹².

DAL Engineering trains all new employees through a fast-track program called the "Accelerated Basic Course". In addition, the company has an apprenticeship program for young people, which takes 6 to 12 months depending on the type of job, and the fast track program is applied to the trainees. The program covers basic engine structure, hydraulics, transmissions, etc., as well as work attitude, communication, English, and computers. English in particular is essential to understand the manuals. Even in mechanical and electronic engineering, computer skills are essential to keep up with technological advances, which explains the need for such a comprehensive program²⁹³.

²⁹¹ Interview with DAL Engineering on 15 June 2021

²⁹² Interview with Golden Arrow on 3 June 2021

²⁹³ Interview with DAL Engineering on 15 June 2021

Regarding the human resource development plan and its implementation, a major transportation company began to create a systematic human resource development strategy and plan in 2016 after reflecting on the fact that it had not been able to adequately develop human resources in the past because it did not have its own human resource development plan and relied only on training provided by suppliers of transport trucks and other equipment²⁹⁴.

● Challenges in Securing Human Resources for Small, Medium, and Micro enterprises

While large companies are facing challenges in hiring, retaining, and further developing human resources, small and medium-sized companies and start-ups, which are less likely to spend funds on these tasks, are thought to be facing challenges in securing human resources.

According to Monjid, an app-based auto mechanic dispatch service, it is difficult to find technicians with sufficient skills due to limited information, so they are trying to secure as many talented people as possible by partnering with Spark VTC. There is also a shortage of skilled mechanics who can provide proper training to mechanics. For this reason, the company went to Nissan Motors to receive training on how to diagnose and maintain new models and developed its own training program and textbooks based on this experience. The company feels that there is a large gap between vocational training schools and the market, and that it needs to consider continuous training for its employees²⁹⁵.

To recruit human resources with high technology and comprehensive abilities in English and computer skills, it would be realistic to take the time and go through an extensive human resource development program and screening process of recruits through apprenticeship programs, as is the case with major companies. On the other hand, it would be difficult for small and medium-sized companies to invest resources to this extent, so they would need to take advantage of opportunities for cooperation with large companies or collaborate with vocational training schools. At the moment, this is one of the sectors where the gap between the human resources needed and the needs is very large.

5.5 Construction

5.5.1 Policies

Infrastructure, which is the major business of construction sector is one of the 6 axes shown in The Three-year Program for Stability and Economic Development (2021-2023) by MOFEP.

Table 5-14 Axes of Infrastructure, The Three-year Program for Stability and Economic Development

Subsector	Items	Contents and Target
Infrastructure	<ul style="list-style-type: none"> • Urban Development and Housing • National Council for Urban Planning • Engineering Business Contractors 	<ul style="list-style-type: none"> • Providing adequate economic housing for all citizens • Mainstreaming urbanisation throughout Sudan

²⁹⁴ Interview with Raiba Trans Co. Ltd. (GEMS) on 8 September 2016

²⁹⁵ Interview with Monjid on 16 June 2021

	<ul style="list-style-type: none"> Regulatory Council National Committee for Geographical Names 	<ul style="list-style-type: none"> Amendment of the current law
Transportation	<ul style="list-style-type: none"> Railways Sea Ports Road Transportation Roads and Bridges River Transportation Aviation 	<ul style="list-style-type: none"> Increasing the tons transported by rail Raising the efficiency of Port Sudan sea port Rehabilitation of roads. Information build and manage nation-wide roads and bridges Center and Central Operating Room for exchange of information on the international level. Rehabilitation of the infrastructure for river transport Adherence to national and international standards in safety, security and development
Electricity and Renewable Energy Sector	<ul style="list-style-type: none"> Meeting the total demand for electrical energy within the grid and outside the grid 	<ul style="list-style-type: none"> Implementing the energy efficiency program Updating the national energy plan and renewable energies including hydropower, natural gas, wind, solar energy, some geothermal energy and biomass

Source: MOFEP, The Three-Year Program for Stability and Economic Development 2021-2023

In addition, as mentioned earlier, the Draft Poverty Reduction Strategy Paper (PRSP) for 2021-2023 identifies infrastructure services for reconstruction and growth as one of the priority areas. For energy and roads, it cites active private sector involvement and public-private partnership (PPP) financing of infrastructure investments. In addition, a new PPP law was approved in April 2021 and a PPP unit was established²⁹⁶. This will help Sudan to attract domestic and foreign investment, encourage private sector involvement, and promote efficient infrastructure development.

5.5.2 Overview of the Construction Sector

The contribution of the construction industry to GDP in Sudan was 1.9% in 2018²⁹⁷. However, Sudan under the new government is in the process of national development, and there is a high need for various infrastructure (roads, bridges, water and sewage systems, hospitals, schools, etc.) throughout the country. Furthermore, due to rapid population growth and urbanisation, the need for housing supply in urban areas is rising, and the construction sector is an industry with growth potential²⁹⁸.

Various construction projects have been planned, but most of them are concentrated in Khartoum, major cities, or oil-producing areas, and most of them have not been realized. In addition to the instability of the

²⁹⁶ The unit will be under the control of the Ministry of Finance and Economic Planning. Sudan Investment Prospectus (May 2021)

²⁹⁷ The Central Bank of Sudan 58th Annual Report 2018

²⁹⁸ Interview with SBF consultant Mr. Husam Saud on 9 June 2021

regime, macroeconomic recession (inflation, exchange rate), lack of investment, and even corruption are believed to have contributed to the failure of these construction projects²⁹⁹.

The construction sector has a large number of related businesses, which generate employment not only directly but also indirectly, and have a high economic ripple effect. For example, the construction industry includes the manufacturing of building materials³⁰⁰, as well as plumbing, electrical distribution, ductwork, tiles and bricks, interior decoration, and equipment related to construction work³⁰¹. According to the president of the construction industry, the construction sector has the second largest working population after agriculture, and the construction industry as a whole creates 50,000 short-term jobs every year³⁰².

In addition to the employment impact of construction and related sectors, the economic impact of buildings, facilities and infrastructure is also significant. In the construction sector, a large number of workers are employed for a fixed period of time, and these workers spend money in the local economy to make a living, which also has an economic consumption effect.

The construction sector is recognized as an important growth sector that can contribute to job growth. However, in order to realize this contribution, an industry-wide roadmap is needed, according to the interviews³⁰³. Construction companies face a variety of challenges every day. The most prominent challenge is loans. Many construction companies are small and medium-sized enterprises, which makes it difficult for them to borrow from banks on a large scale. Without a good business environment, simply starting to train some human resources will not lead to growth of the sector. Therefore, the sector as a whole must develop a vision of what it should be, identify the current issues, provide a roadmap, and improve the laws, banks, and other administrative procedures and systems necessary to realize this vision, which will lead to true sector revitalization.

5.5.3 The Situation of Companies

● Trend of Companies

There are around 5,000 companies registered with the Sudanese Contractors Association³⁰⁴, all of which are small, micro and medium-sized companies. The construction sector is structured with a small number of contractors and a large number of sub-contractors who receive orders from these contractors. At

²⁹⁹ Interview with DAL Design & Construction on 15 June 2021

³⁰⁰ Some of the existing companies are; Elbarbary Building Materials (Elbarbary Group), RAK Ceramics Investment Sudanese Co Ltd, Ceramic Ras Al Khaimah Sudanese Investment Co Ltd. Also, there is a significant number of SMEs in the subsector.

³⁰¹ In Japan, the construction-related industry is divided into 29 sectors, including civil engineering, building, plastering, roofing, electrical, plumbing, tile/brick/block, and reinforcing steel. (Ministry of Land, Infrastructure, Transport and Tourism) <https://www.mlit.go.jp/common/001209751.pdf>

³⁰² "It is estimated that large companies employ 2 to 300 people every year, while the construction hires many and there is spill-over as well". Interview with Aspalta Group on 12 June 2021

³⁰³ Interview with Aspalta Group on 12 June 2021

³⁰⁴ The association is under the SBF-Union of Chamber of Commerce, Chamber of Construction and Engineering Service.

present, there are no large private companies in the Sudanese construction sector, and the major players are limited to government-owned companies. In Sudan, there are no developer companies that can take the lead in urban development³⁰⁵.

● Current Status of Digitization

The impact of digitalization with the evolution of technology in the construction sector is significant and the industry is changing. DAL Design & Construction has digitized the entire design process, and the design team has been given high-specification computers, and all internal project progress management and other processes have been digitized to share information among all employees.

● The Impact of Exchange Rates

On the other hand, the construction sector is easily affected by economic instability. The construction sector tends to be directly affected by exchange rate fluctuations. The cost of raw materials can change drastically, which means that material supply, schedules and budgets for ongoing projects must be reviewed frequently. The unstable exchange rate also has a significant impact on the quality of raw materials³⁰⁶.

● The Impact of Shrinking Bank Lending Services

In addition, bank loan services are shrinking, making it difficult for businesses other than those that are existing customers of banks to access them. As a result, the number of local suppliers and material manufacturers that used to supply materials to construction companies is decreasing, and the necessary materials are becoming unavailable. As a result, construction companies are forced to import materials from overseas, which is costly and expensive, including transportation costs. In order to cope with this problem, DAL Design & Construction purchases large quantities of materials that can be procured locally and stores them in warehouses, but since it is difficult to predict market demand, purchasing materials in advance is risky³⁰⁷.

5.5.4 Challenges of the Companies and Human Resource Needs

About 80% of construction workers are informal workers, working as subcontractors or sub-subcontractors for construction projects by large companies. Many of these workers work on a fixed-term basis for individual projects, so the number of workers is fluid. For example, according to interviews with a construction company, they employ normally 5 to 15 workers and 4 to 5,000 workers on a temporary basis when there is a project³⁰⁸.

³⁰⁵ It was pointed out that a National Committee for Construction needs to be established in the future. There are large construction companies in Egypt, and they are major developers. Interview with Aspalta Group on 12 June 2021

³⁰⁶ Interview with DAL Design & Construction on 15 June 2021

³⁰⁷ Currently they import 60% of the materials. Interview with DAL Design & Construction on 15 June 2021

³⁰⁸ Interview with Aspalta Group on 12 June 2021

In addition, many workers in the small and medium-sized construction industry are dissatisfied with the long working hours and lack of overtime allowances, etc., and are engaged in other part-time jobs even though they have signed employment contracts. As a result, the performance of the work decreases, and there are issues such as the flow of clients to major construction companies and workers changing jobs to other industries³⁰⁹. In particular, in recent years, workers have gone to the mining industry, making it difficult to hire workers in the construction sector³¹⁰.

● The Level of Technical Human Resources Required

The human resources required are those with technical skills and machine operation skills. Nowadays, most of the work is done using machines, and the skills to be able to work immediately are important³¹¹. For example, there is a shortage of operators who can use the large machines that are used in infrastructure construction sites.

There is a need for human resources who are aware of the need for quality work in all technical areas such as electricity, plumbing, bricklaying, and welding³¹². Although there are vocational training centers that teach electricity, plumbing, bricklaying, etc., which are necessary for the construction industry, the content of instruction is outdated and the equipment is old, so they are far behind the technology that is advancing every day. There are no educational institutions that provide the necessary training for certain technology in construction.

● Recruitment Process

Recruitment at DAL Design & Construction is conducted mainly through recruitment advertisements, recommendations, headhunting, and the DAL Group's Graduate Development Program³¹³. In terms of hiring requirements, emphasis is placed on technical skills as this is a technology-intensive industry, and work experience is also important unless the candidate is a recent graduate. There are no gender-based hiring criteria, and referrals are not taken into consideration, and judgments are made based on competence and work attitudes.

There is a strong socio-cultural bias in the construction sector, and it is generally seen as a job for men. In some cases, graduates of construction departments are even rejected when they try to find a job because

³⁰⁹ "Sudanese Small and Medium Sized Construction Firms: An Empirical Survey of Job Turnover", Wellington Didibhuku THWALA et. al, University of Johannesburg, Journal of Basic and Applied Scientific Research, 2012

³¹⁰ Interview with Union of Chamber of Commerce on 24 June

³¹¹ GEMS (2021) COVID-19 Impact Survey

³¹² Interview with Union of Chamber of Commerce on 24 June 2021, Interview with Aspalta Group on 12 June 2021 It was also suggested that in order to provide support to the construction industry, it would be a good idea to select two or three fields and implement them as pilots.

³¹³ DAL Group's recruitment program. It is a young human resource development program that provides training, coaching, mentoring, and on-the-job training over a 24-month period for new graduates (within three years of college graduation), and only those who pass the final selection process are hired. This indicates that they place a high priority on human resource development and consider the need for it to be high. <https://courses.erwaq.com/gdp-dalgroup/>

they are women³¹⁴. However, as mentioned earlier, there are cases in Darfur where construction is considered to be a woman's job (but for simple labourers), so regional differences need to be considered.

In addition, the president of a construction company commented that the labour law created in the 1970s has a strong perspective of protecting workers, and since there are many disadvantageous conditions for companies, he is cautious about long-term employment³¹⁵.

● Human Resource Development

DAL Design & Construction provides in-house training for newly hired employees and trainees from the Graduate Development Program. For those who are assigned to the design department, the company hires those who are familiar and proficient in using the design program³¹⁶.

The president of a construction company (a small business owner) pointed out that in the past, many companies accepted internships after graduation, but now, due to the economic downturn, small companies in particular are being hit hard, and they cannot afford to train human resources anymore³¹⁷. The time when people could properly learn from their masters is gone, and even those who are already employed are noticeably lacking in skills. As new workers enter the labour market, they will learn from them, which may lead to a decline in quality, pointing out that it is important to strengthen the capacity of the existing workers.

● Cases and Possibilities of Qualification Systems for Construction Workers

In order to employ the right kind of people in the construction sector, it is desirable to first clarify what kind of work fields are available, and then clarify the knowledge and skills required for each field, and certify the qualifications³¹⁸. In this case, it is essential to have qualifications and certifications that are consistent with international standards as much as possible, but Sudan has not yet developed any of these. In addition, if qualifications are to be issued, the accreditation process needs to be clarified and the legal basis for the qualifications needs to be ensured, so a comprehensive approach is needed. Such an international qualification would be a strong motivation for young people to improve their skills³¹⁹. When considering the introduction of a qualification system at the initiative of the government, the idea may be biased toward making qualifications compulsory and the associated fee income, and it may take time to

³¹⁴ Interview with GEMS. The point that it is difficult for women to engage in the construction industry due to social norms is pointed out in Thwala et al. (2012) Similar points are made in the "Sudan: Scoping Report" (CFYE) (even if a woman has a specialty in engineering, she is not allowed to work in a field that is seen as a man's job due to social norms) and the "Economic Report" (AfDB). (women's access to certain professions is restricted by labour laws and social norms).

³¹⁵ Interview with Aspalta Group on 12 June 2021

³¹⁶ Interview with DAL Design & Construction on 15 June 2021

³¹⁷ Interview with Aspalta Group on 12 June 2021

³¹⁸ There are no driving licenses or qualifications such as large trucks for land transportation, and no qualifications in the welding industry.

Interview with Aspalta Group on 12 June 2021

³¹⁹ In the age of social networking, young people have access to a wide range of information, and those who are motivated are going as far as Egypt to obtain internationally approved qualifications. Currently, air conditioner repair at the LG Academy conducted by the CTC Group is highly beneficial for young people because they can obtain the qualification issued by LG. Interview with Aspalta Group on 12 June 2021

build a practical system, so care must be taken in how to tackle this issue, but the government should consider measures that take into account the social impact that will motivate young people.

5.6 ICT

5.6.1 Policies

In the Three-year Program of MOFEP, telecommunication sector is featured as one of the important areas of “the axis of infrastructure”. As a priority policy, the government is supposed to expand the telecommunications network and improve the legal system with the goal of optimizing telecommunications, IT and postal services. In addition, to keep up with the development of communication technology at the global level, the National Communication Authority is in charge of communication services in accordance with the Telecommunication Law of 2001.

The Draft PRSP for 2021-2023 also discusses the establishment of a national digital technology program or department to serve as a starting point of information for all actors involved in the digital ecosystem, including all government agencies (state, local, etc.), donors, and the private sector, in order to revitalize the digital sector. A program or department in charge is being considered.

In addition, digital applications have already begun in the fintech sector, and these experiences will be leveraged to create a regulatory framework specific to digital technology so that digitization can proceed in a safe environment³²⁰.

The Ministry of Investment and International Cooperation has identified the Digital Transformation Program in the ICT sector as one of the priority investment projects for the country's growth, with specific projects to expand mobile data communication service areas, promote mobile banking, and develop e-government³²¹.

In 1999, the National Information Centre (NIC)³²² was established to oversee telecommunications networks, information systems, and information businesses throughout Sudan. In addition, the Sudan e-Government Master Plan 2016-2020 has been formulated, and projects are being implemented to digitize public services and improve the efficiency of procedures³²³.

Major ICT-related laws and regulations include the Information Crimes Act (2007), NIC Law (2010), Electronic Transactions Act (2015), and Right to Information Access Act (2015).

³²⁰ Sudan Poverty Reduction Strategy Paper, Draft, Feb 28 2021 “Leveraging Technology for Accountability, Efficiency and Equity”

³²¹ MOI (2021) Sudan Investment Prospectus, May 2021

³²² <http://nic.gov.sd/>

³²³ “Sudan e-Government Master Plan and Transition to Smart Government 2016-2020 Comparison of Current Approaches” (2015)

5.6.2 Overview of the ICT Sector

The ICT industry can be divided into a wide range of sectors, from telecommunications infrastructure to businesses that use it. Since it was not possible to confirm the classification of the ICT industry in Sudan, the analysis in this section will proceed with reference to the classification of the ICT industry in Japan.

In Japan, ICT industrial coverage is categorized in 9 areas shown in the following table³²⁴.

Table 5-15 ICT Industrial Coverage in Japan

Category	ICT Industrial Coverage	Category	ICT Industrial Coverage
1) Telecommunication	Fixed telecommunication, Mobile Network Operator	6) Telecommunication related manufacturing	telecommunication cable, optical fiber cable, Electro-audio equipment, Computer, etc.
2) Broad casting	Public broadcasting, television, radio, etc.	7) Telecommunication related services	Leasing information communications equipment, advertisement, printing / binding, etc.
3) Information service	Software, data processing, information service	8) Construction of telecommunication related facility	Construction of telecommunication plant
4) Internet related service	Internet related service	9) Research	Research
5) Creation of video, audio, textual information	Creation and provision of video information, newspaper and publishing, news provider		

Source: Based on Ministry of Internal Affairs and Communications, Japan (2015) WHITE PAPER Information and Communications in Japan

With this as a reference, the ICT industry in Sudan can be broadly classified into three categories: (1) development of ICT infrastructure (expansion of cell phones, Internet access, etc.), (2) digitalization in existing industries (innovation of ICT-based business models such as mobile, AI, IoT, etc.), and (3) promotion of tech start-ups (innovation of new fields that have not been seen before using ICT).

ICT is cutting across the Economic Sector, and the use of ICT in the business environment of each sector is essential for future industrial development and is a major force in boosting employment.

First, ICT infrastructure in Sudan is rapidly spreading. The following are some of the key digital-related indicators in Sudan. Cell phone subscriptions are at 72% and internet users are at 28%. In addition, the fiber optic network was advanced by Sudatel in 2016 and covers most region³²⁵.

Table 5-16 Mobile and Internet Use Indicator

Mobile subscriptions	30.29 million, 72% (vs. population)
Internet users	11.82 million, 28%
Total number of active mobile internet users	11.27 million, 27%

Source: Hootsuit Sudan Digital 2019

The number of subscribers by major telecommunications companies is shown in the figure below.

³²⁴ <https://www.soumu.go.jp/johotsusintokei/whitepaper/ja/h27/html/nd110000.html>

³²⁵ <https://africabusinesscommunities.com/tech/tech-news/sudans-telecom-infrastructure-bolstered-by-fibre-optic-connectivity-report/>



Source: 58th ANNUAL REPORT 2018, Central Bank of Sudan

Figure 5-4 Telecommunications and Internet Subscribers in 2017 and 2018

Due in part to the impact of economic sanctions, Sudan's digital environment has lagged far behind the rest of the world, but from 2019 onward, digital technology will be introduced in Sudan, transforming business and creating new services through ICT³²⁶.

According to Sudan Digital (2019), only 8.6% of people with some form of digital access (email, social media, Google display ads) have actually used e-commerce, and 48% have visited the site³²⁷. However, 94% said they would use the site again and again if they could get a reliable transaction. In the interviews for this survey, respondents indicated that interest in online shopping has increased rapidly since the COVID-19, and that online delivery services are increasing, so future expansion is expected³²⁸.

As for mobile money, which is widely used in African countries, payment services for the general public are being enhanced with the spread of the mobile money application Bankak introduced by Bank of Khartoum, and major telecommunication companies such as Sudatel, MTN Sudan, and Zain have entered the mobile money market, and the number of registered users is growing more than other African countries³²⁹. A new business model using mobile money has already emerged in Sudan³³⁰.

Mobile money has dramatically expanded its use in other African countries with underdeveloped financial systems, and has not only contributed to poverty reduction, but has also had a financial inclusion effect, with cases of subsistence farmers (especially women) entering business and using microfinance³³¹.

³²⁶ Sudan Digital (2019) The State of Sudan Digital 2019

³²⁷ Sudan Digital (2019) The State of Sudan Digital 2019

³²⁸ GEMS (2021) COVID-19 Impact Survey, interview with Tirhal on 17 June 2021, Fandora on 8 June 2021

³²⁹ Launched in 2018, MTN Sudan had 1.3 million mobile money registrations in its first nine months. In addition, 85% of the population that owns a cell phone uses mobile money. (Leading Edge (2019) Sudan Investment Guide 2019)

³³⁰ Tirhal, a mobile app-based ride-sharing service, launched BushraPay (an e-payment service).

³³¹ Sudan Digital (2019) The State of Sudan Digital 2019

One area that is considered to have great potential in digitizing existing businesses is the use of ICT in the agricultural sector (agri-tech). Smart agriculture using technology is also attracting attention in Sudan, and the Inter-Regional Smart Agriculture Forum was held in Sudan in 2018³³².

As described in the section on agriculture, one of the challenges for small-scale farmers in agricultural production is the lack of access to market information and information related to agricultural technology. In recent years, Sudan has introduced an increasing number of ICT- and mobile-based agricultural information services and extension services in order to disseminate market information through the use of digital technology and it is expected to contribute to the improvement of agricultural production in the future.

For example, in 2016, the Technical Centre for Agricultural and Rural Cooperation (CTA) is implementing a project to increase productivity of small-scale farmers in Gezira scheme irrigation through satellite data and mobile applications³³³. Also, in 2021, AfDB is implementing a virtual incubation program for Rwanda and Sudan on agri-tech in Sudan³³⁴.

5.6.3 The Situation of Companies

(1) Development of ICT Infrastructure (expansion of mobile network and internet access)

The first important aspect of the ICT sector is infrastructure development. There are four major telecommunication companies (Sudatel, MTN, Zain, and Canar), and telecommunication networks are being expanded throughout Sudan. In addition, there are many hardware and Internet service providers, including network equipment, from large companies to small and medium enterprises. The challenges are poor communication conditions and unstable supply of power.

(2) Digitalization in Existing Industries

What is needed in Sudan today is software development. In the financial sector, software development for online and mobile banking, money transfer, and security will be crucial. There is also a significant increase in the need for digitization of all existing businesses, not just financial ones, such as factory and other programs. It is estimated that there are many individuals and small business owners in these software industries as they can start their business online without the need to set up an office.

In Sudan's existing industries, the traditional way of doing business is still the norm, and digital applications, such as digital marketing services, are still in their infancy. The large companies³³⁵ that drive the Sudanese economy are undergoing a generational shift, with leadership coming from people in

³³² <http://www.isaf-forum.com/index.html>

³³³ <http://www.ict4ag.cta.int/2016/08/11/satellites-and-mobile-phones-improve-crop-productivity-in-sudan/index.html>

³³⁴

https://www.linkedin.com/pulse/afdb-tech-incubation-program-breaks-new-ground-its-first-schiebel/?fbclid=IwAR1IUAo_zdKTdykUMTChw6jiUxBH-G6YX7-voQaflyvuP-0oCubEO53SsgU

³³⁵ Most of the large-scale companies in Sudan are family owned businesses.

their 30s and 40s who were educated in the West and understand the significance of digital, and digital adoption is beginning to make steady progress. On the other hand, those in their late 40s and above, who will be leading the industry in the future, lack digital knowledge and experience, and it has been pointed out that their understanding may become a potential bottleneck in the future³³⁶.

(3) Promotion of Tech Start-ups

Focusing on innovation through the use of ICT, which is assumed to be closely related to small and medium-sized enterprises, the following new business examples are found. Since it is possible to start a business with a relatively small investment in equipment, and if the needs of customers are met, it is expected to lead to large returns, this is a field where the younger generation is entering. There are examples such as the ride-sharing business Tirhal, which uses mobile apps, and the food delivery company Samakak Aleina, which simply uses Facebook to attract customers.

Table 5-17 Major New Business Models Utilizing ICT

Category	Company / Services
Mobile money	Bankak, BushraPay, bCash,
Ridesharing	Tirhal, Lemon Labs,Careem
E commerce	3amir (Zain), Soooqna (Sudatel), M3roud (AMC group), Platform.sd, Fresh mobile app
Job matching	Africawork.com (37 countries in Africa), Sudanjob.net, Orooma.com, Hiba international
Food delivery	Yalla Natlob, Talabatey Online Food Delivery,Lemon Food
Other services	Ordepharma (B2B platform connected pharmacies with pharmaceutical companies and agencies)

Source: Sudan Digital (2019) The State of Sudan Digital 2019 / Created based on the website of each company

The rapid growth of ridesharing businesses such as Tirhal and Lemon Labs in recent years has been driven by the growing need for alternatives to the unstable public transportation services due to fuel shortages (especially diesel). As people's transportation needs are met by ridesharing services, they are also having an impact on employment and income growth, as many people are getting jobs as drivers or working on the sidelines.

In addition, the need for delivery services is increasing due to COVID-19. According to Tirhal, a ride-sharing service, restaurant delivery services have expanded rapidly in the wake of COVID-19, and Tirhal has also started this business, which is growing. Tirhal also provides a delivery service for documents and packages, and the number of users for this service is also increasing³³⁷. Samakak Aleina, which buys seafood at the market and delivers to restaurants, private homes, hotels, etc., is also a business started by a young entrepreneur who was triggered by COVID-19³³⁸.

³³⁶ Interview with Sudan Digital on 22 April 2021

³³⁷ Interview with Tirhal on 17 June 2021

³³⁸ Interview with Samakak Aleina on 17 June 2021

■ Potential for business development using mobile money³³⁹

MTN Sudan is developing mobile money services with the CBoS and domestic banks. In accordance with the CBoS's regulations, MTN Sudan is preparing to set up a specialized FinTech organization to be licensed as a Payment Service Provider. Once approved, MTN Sudan will be able to offer a full range of remittance services, including international remittances. Currently, the existing money transfer service Mobile amwal has about 3.5 million registered users. In addition, there is the Bulk Payment service for businesses and organizations.

The reason for the popularity of the service is the low rate of bank account ownership, the fact that MTN's money transfer service can be used without internet connection, and the low price.

MTN Sudan has its own incubation program and provides an open API (Application Programming Interface) to support new service ideas.

5.6.4 Challenges of the Companies and Human Resource Needs

As ICT progresses and digitalization increases the efficiency of industries, and new business models that never existed before using IoT, AI, and other technologies become widespread, this will change the form of employment and the way employment promotion is carried out. Employment promotion for young people is not limited to blue-collar jobs as wage earners as it has been in the past, but a wide variety of possibilities are opening up. The indirect employment impact of business models such as online shopping delivery, ride-sharing, and service delivery such as Monjidi, which is referred to in the section on automobile maintenance, which use digital technology to connect with small businesses and individual entrepreneurs and lead to the development of their businesses, is also significant. Such businesses are expected to stabilize and develop existing businesses and promote employment.

Whether it is ICT infrastructure, digitisation of existing businesses, or promotion of tech businesses, excellent IT engineers are essential. Although ICT research is being conducted in academic fields such as universities, what is important for industrial development is the development of human resources who can work as professional technicians in the business world. Although there are more options in terms of ICT human resource development, such as universities and training courses, there are still issues in the perception of young people themselves. Some point out that computer science students have no vision for the next five years³⁴⁰. The ICT industry is a relatively new market, and development, security, database, and other services are expected to be needed in the future, so human resource development is urgently needed.

The outflow of excellent human resources to overseas countries has been pointed out here and there, but truly excellent ICT human resources are in great demand all over the world. The need for ICT human resources in the neighboring Arab countries is also high, and it is difficult for companies in Sudan to retain talented ICT human resources, and securing human resources has become a global competition³⁴¹.

³³⁹ Interview with MTN Sudan on 25 May 2021

³⁴⁰ Interview with SBF consultant Mr. Husam Saud on 9 June 2021

³⁴¹ Interview with Union of Chamber of Commerce on 24 June 2021, Golden Arrow on 3 June 2021

It has been pointed out that there are still many challenges for women to enter the ICT sector due to the lack of social acceptance³⁴². In order to promote women's employment and entrepreneurship in the ICT sector, consideration must be given not only to the technical aspects, but also to the social aspects, such as the acceptance of companies and the willingness of women themselves to enter the field. On the other hand, there are cases like Sudan Digital, where 90% of all employees are women as a result of a hiring process that looks only at skills and willingness to learn, regardless of gender.

In order to promote women's employment and entrepreneurship in the ICT field, consideration must be given not only to the technical aspects, but also to the social aspects, such as acceptance by companies, women's willingness to enter the field, and understanding by their families³⁴³.

● The Recruitment Process

The following are the examples of each company's recruitment process.

Tirhal employs a large number of contract drivers as well as direct employees through its mobile app-based ride-sharing service, and is a good example of a business model that can have a significant impact on employment promotion. The company has 350 employees, of which about 200 are call center workers, many of whom are women. The company also has about 70,000 registered drivers. Many of the drivers have other jobs during the day and work as second jobs.

For hiring employees, the company mainly uses LinkedIn and Facebook, and also Orooma and Hiba international. After screening documents, candidates are interviewed and selected for employment after a trial period. Normally, priority is given to internal appointments. If there is a vacancy, they first invite applicants internally, and if there are no suitable candidates, they recruit externally³⁴⁴.

● Human Resource Development and Training Opportunities

The following are examples of training programs at various companies.

At Tirhal, after drivers are hired, they receive training on how to use the app and on customer service. Most of them are also knowledgeable about technology. Also, due to the difficulty in raising funds experienced by the founders themselves, the company sponsors the Orange Corner program, providing USD1,000 to 5,000 to help young entrepreneurs start their businesses. Young entrepreneurs need coaching, training, and funding.

In addition, MTN Sudan has implemented the Yellow Talent Program, which is a one-year knowledge training and hands-on program for new graduates to improve their skills. Although the program is conducted in Sudan, candidates can also participate in MTN Group programs to gain experience across

³⁴² Interview with Sudan Digital on 22 April 2021

³⁴³ Interview with Sudan Digital on 22 April 2021

³⁴⁴ Interview with Tirhal on 17 June 2021

the African continent. the Yellow Talent Program aims to help candidates understand corporate values, work on their own initiative, and have a high motivation to learn. Some of those who have completed the program have now reached the senior level³⁴⁵.

Thus, although technical skills³⁴⁶ are taken into consideration when recruiting, the emphasis on willingness to learn and work attitude is similar to the situation in other industries, especially in the ICT industry, where the pace of change is much faster than in other industries, and the attitudes and attitude to learn are important qualities that are directly linked to the acquisition of new technologies.

5.7 Other Prospective Economic Sector for Youth Employment Promotion

The following is a list of sectors outside of the Economic Sector that have been mentioned so far, and that were said to have potential in this survey hearing as those with a particularly large number of small and medium-sized enterprises and those that can be expected to employ young people³⁴⁷. As seen in Chapter 2, wholesale and retail trade, hotels, and food and beverage are expanding as a percentage of GDP, and there is also a rapid expansion of other service industries whose classification details are not available in the public data. (see Figure 2-4)

Table 5-18 Other Prospective Service Subsectors for Youth Employment Promotion

- Wholesale, retail, vehicle maintenance: Retail stores, trading
- Transportation and storage: Land transportation (trucks, buses, cabs, etc.), home delivery
- Accommodation and food services: Hotels, restaurants, cafes
- Professional, scientific and technical: Advertising and marketing
- Management and support services: Travel agencies, cleaning, housekeeping, packaging
- Education: Childcare, training, and training services
- Health and social work: Health services, medical and welfare services
- Arts, entertainment, and recreation: Museums, sports, creative, and arts
- Other services: Beauty services

Source: Prepared by Survey Team based on interviews, existing research

Similar to tech businesses, many of these service industries can be opened by individuals with relatively low investment, and thus have a high potential to lead to employment and entrepreneurship among young people.

This study focuses on the current situation and issues of the tourism sector as a business sector that has many related industries and is considered to have a high potential for employment impact.

³⁴⁵ Interview with MTN Sudan on 25 May 2021

³⁴⁶ Intelligent Orientation, an IT infrastructure services company that installs and operates electrical machinery for factories, buildings, and other facilities, has its own IO Training and Career Development Center that provides a wide range of electrical engineering training for young men and women in major companies. The company provides a wide range of training programs for young people and women in major companies, which is part of its core business.

³⁴⁷ Since we were unable to confirm the industrial classification of Sudan, the classification is based on the International Standard Industrial Classification (ISIC).

5.7.1 Tourism

(1) Policies

According to the United Nations World Tourism Organization (UNWTO), a 25-year tourism plan was developed in 2004 with technical assistance to the Sudanese government. Tourism is under the jurisdiction of the Ministry of Information, Culture, and Tourism, and there have been suggestions that the emphasis on the information sector may reduce its policy treatment³⁴⁸.

In the Five-Year Economic Reform Plan (2015-2019) of the Ministry of Finance and National Economy (now the Ministry of Finance and Economic Planning), the government has set policies aimed at increasing the ratio of tourism to GDP. Specifically, while promoting Sudan's potential tourism attractions and culture to attract tourists, the plan also calls for tourism research and master planning, infrastructure development, environmental protection and development of existing tourism resources, human resource development, building international consensus on tourism and tourism protection, improving service quality, protecting historical heritage, and In addition, various laws and regulations at the government level that are considered to be hindering the growth of the tourism industry are to be improved.

The Three-year Program of the MOFEP also aims to expand the tourism sector from modern perspectives, such as education, therapy, sports, art, and international conferences, to reach 1 million tourists and 2 billion USD in revenue. The program aims to attract 1 million tourists and USD 2 billion in revenue. Furthermore, the "Khartoum Model" implemented by the Youth Projects Commission, as mentioned in 2.4, aims to expand the employment opportunities for young people, and to maximize the power of young people to generate economic benefits, with tourism as one of the main sectors³⁴⁹.

Sudan has several UNESCO registered world heritage sites³⁵⁰ such as the pyramids in the northern region, and there is a wealth of potential tourism resources, as well as a large range of related industries.

(2) Overview of the Tourism Sector

According to the AfDB, the growth potential of tourism and tourism-related industries, not only in terms of potential tourism resources, especially World Heritage sites, but also in terms of textiles and other handicraft industries using traditional agricultural cotton, is a sub-sector with potential for growth and employment expansion³⁵¹.

³⁴⁸ Interview with entrepreneur Mr. Ahmed Hamza on 17 June 2021, and former Head of Secretary, Sudanese Association of Travel & Tourism Agents (SATTA) 22 June 2021 Ministry of Culture, Tourism and Antiques was restructured and merged with Ministry of information in February 2021.

³⁴⁹ Other areas are: Agriculture, livestock/fishery, and mining. Khartoum Model, Khartoum state, 2021

³⁵⁰ Gebel Barkal and the Sites of the Napatan Region, Archaeological Sites of the Island of Meroe, Sanganeb Marine National Park and Dungonab Bay - Mukkawar Island Marine National Park (UNESCO website)

³⁵¹ African Development Bank, Sudan: Economic Report: After Two Decades of "Solitude", Targeted strategies for quick economic wins, 2018

It has not been a priority area for the government due to the size of the capital required, the need for production technology, and the need for stable electricity. In addition, there is a lot of room for development in the tourism industry, and the infrastructure and information have not been well organized so far. In the future, as the economy is liberalized, the number of formal tour operators and hotels is expected to increase³⁵².

Tourism in Sudan accounted for 6.1% of GDP as of 2019, and approximately 586,000 people are employed in tourism-related industries³⁵³; between 2017 and 2019, the number of tourists increased by 2.9%, from 812,782 to 836,193³⁵⁴. However, these figures are based on tourist visa data, and official statistics are not yet available³⁵⁵. In addition, there are expectations for domestic demand in tourism-related industry. For example, Kassala is famous as a mecca for Sudanese honeymooners, and it is said that those who cannot travel abroad visit Kassala³⁵⁶. Stimulating domestic demand is also important for the development of the industry, as it is affected by exchange rate fluctuations, inflation, and COVID-19.

The world's tourism industry has been hit hard by COVID-19³⁵⁷, and the situation in Sudan is not good, as the country has been affected by COVID-19 in addition to the 2019 civil revolution. On the other hand, there is some positive news, such as the peace agreement with the rebels and the lifting from the State Sponsors of Terrorism list (SSTL). Vaccinations are also progressing internationally, and if there is a recovery in the movement of people, there is hope for the development of the tourism industry through appropriate promotion.

(3) The situation of companies

● Overview of Businesses in the Tourism Sector

The tourism sector in Sudan is a small but growing industry. There are six tour operators in the country, which provide general services for arranging sightseeing tours. Each of these operators has its own tour guide³⁵⁸. In addition, there are more than 100 travel agencies, most of which provide only air ticket arrangement and booking services.

Even though there are many hotels, the number of well-equipped hotels is very limited, and infrastructure is the biggest challenge. Even when new hotels are built, maintenance is often neglected³⁵⁹. Although

³⁵² Ministry of Investment and International Cooperation (2021) Sudan Investment Prospectus

³⁵³ Increase by year+0.1% (WTTC "SUDAN: Annual Research: Key highlights)

³⁵⁴ CBO, 58th Annual Report 2018

³⁵⁵ Interview with Italian Tourism Co. Ltd, on 2 June 2021

³⁵⁶ There are various legends that if you drink the water from the Taka mountain in Kassala, your wishes will come true and you will be blessed with a child. <https://www.realsudan.com/attractions/kassala/>

³⁵⁷ According to the UNWTO (United Nations World Tourism Organization), global inbound tourism is down 74% from about 1.5 billion in 2019 to about 381 million in 2020, with a 75% drop in the African region from 70 million to 18 million. <https://www.unwto.org/covid-19-and-tourism-2020>

³⁵⁸ Interview with Italian Tourism Co. Ltd, on 2 June 2021. Other 5 companies are: Raidan Tours (operates hotel in Meroe), Lendi Tourism, Shiri Travel, DGL, AMAL

³⁵⁹ Italian Tourism Co., Ltd. operates a 25-room boutique hotel in Khalima, northern Sudan. The company also operates tourist camps in places

accurate statistical information is not yet available, industry sources indicated that there is a shortage of hotel rooms throughout Sudan, with 90% of them located in Khartoum³⁶⁰.

As for tourism-related sectors, the food and beverage industry, including cafes and restaurants, will also be an important source of employment absorption. In particular, in recent years, Ethiopians and other foreigners have dominated the food and beverage industry, but young Sudanese are beginning to work there³⁶¹.

- Major Issues in the Tourism Sector (infrastructure development, image enhancement, mentality)

The major issues in the tourism industry are the lack of infrastructure, lack of human resource development opportunities, and the lack of a tour guide qualification system. In general, Sudan has an image of being a dangerous country, and the tourism industry in Sudan is trying to improve the image of Sudan to the world through participation in international exhibitions and online communication to attract tourists³⁶².

In addition, one of the major challenges in the tourism industry is the mentality of the Sudanese people. Although the staff and people are generally friendly, some of them tend to have a very low awareness of the maintenance of facilities, such as hotels, and are reluctant to bear the cost of such maintenance. As a result, there are many cases where facilities such as air conditioners and water facilities break down and are left unrepaired, which eventually becomes unrepairable and the facilities have to be renewed³⁶³.

- The Impact of COVID-19 on and Shift to Domestic Tourism

While the tourism industry has been hit hard worldwide by COVID-19, many have been forced to leave the business in Sudan as well, and the tourism industry is facing a difficult situation. Some tour operators, who usually accept tourists via travel agencies in Europe and Asia because they no longer have customers from abroad, have managed to survive by specializing in domestic tourism, especially domestic tours for diplomatic missions and foreigners living in the country³⁶⁴.

(4) Challenges of the Companies and Human Resource Needs

- Human resource needs

In the tourism industry, hospitality, knowledge of tourism, language, and ability to cope with emergency situations³⁶⁵ are required. However, there is a serious skills gap among human resources³⁶⁵. Many human

such as Meroe, home to the pyramids, a UNESCO cultural heritage site.

³⁶⁰ Interview with SBF consultant Mr. Husam Saud on 9 June 2021, Italian Tourism Co. Ltd. on 2 June 2021

³⁶¹ Interview with Sudan Job on 8 June 2021

³⁶² Interview with Italian Tourism Co. Ltd, on 2 June 2021, and other

³⁶³ Interview with Italian Tourism Co. Ltd, on 2 June 2021

³⁶⁴ Interview with Alrawda Travel and Tourism Agency on 22 June 2021, Italian Tourism Co., Ltd. On 2 June 2021

³⁶⁵ Interview with Chamber of Commerce on 24 June 2021

resources have hospitality skills but lack the language skills, tourism knowledge and response skills, and professional skills required³⁶⁶.

In general, there is a lack of professional learning opportunities in the tourism sector and limited learning opportunities for the youth. Currently, there are not enough training centers, and the existing ones are run on a commercial basis, which many young people do not have access to because they cannot afford the fees. Foreign language training centers are generally expensive³⁶⁷.

● Recruitment Process

Sudan does not have various qualification systems, and there is no qualification for government-approved tour guides. Therefore, it is not possible to determine the skill level of personnel by their qualifications at the time of recruitment.

The two companies interviewed this time hire staff through referrals from family members and acquaintances. In terms of hiring requirements, they consider the level of education and work experience, but they place the utmost importance on internal qualities such as a good understanding of the company's work methods, understanding of the roles and responsibilities of the position, and honesty and integrity. In some cases, they hire mainly university graduates and consider their track record of training and professional courses if they have attended them.

In the tourism industry, it is important to hire freelance local guides when necessary because it is cost-prohibitive to hire tour guides all the time, and they are contracted based on their language skills. Although most of the guides are university graduates, some of them do not speak English.

In addition, Italian Tourism Co. Ltd., is actively hiring young people, and some of them are highly knowledgeable, such as an archaeologist with a master's degree in Qatar³⁶⁸.

● Training Opportunities for Tourism Sector

The existing universities and training courses on tourism in Sudan have not been able to come to an agreement in terms of number and cost, or there is a gap with the actual needs of the tourism sector, so there is a situation where each company is conducting its own training and human resource development to fill the gap.

In 2010, the Sudan International University opened a Tourism and Hotel Department³⁶⁹. At present, a total of two colleges and four universities offer tourism-related courses, but they lack experienced

³⁶⁶ Interview with Italian Tourism Co. Ltd, on 2 June 2021

³⁶⁷ Interview with Alrawda Travel and Tourism Agency on 22 June 2021

³⁶⁸ Interview with Italian Tourism Co. Ltd, on 2 June 2021 It was suggested that one of the ways to increase employment in the tourism industry is to collaborate with the Sudanese Egyptian Civilization Research Center at the Meroe University of Technology in Karima, Northern Province, for example, to train young archaeologists locally and employ them as tour guides. This would allow us to hire guides locally without having to bring them from Khartoum.

³⁶⁹ <http://www.siu-sd.com/academics/program-desc.aspx?id=22>

instructors and the necessary equipment and facilities³⁷⁰. In addition, a vocational training center in Khartoum State offers hotel and tourism courses, and UNWTO conducted training on crisis communication³⁷¹ in Sudan in 2016³⁷².

Italian Tourism Co., Ltd. has European trainers visit the company every year from October to April, the off-season when there are few tourists, to provide training. In addition, the company sometimes sends selected staff members to Italy, Germany, and Spain to study abroad at company expense for a certain period of time to acquire language skills. It is said that staff members who have experienced the actual tourism industry in other countries and have acquired language skills are able to make a very significant contribution.

In addition, Alrawda Travel and Tourism Agency has a training program for new graduates and also allows young tour guides to accompany them on existing tours as on-the-job training. In addition, the company sometimes gives free lectures on tourism and hospitality at universities as a contribution to the development of young human resources.

5.7.2 Other Prospective Area

A business forum held in Paris in May 2021 to showcase business and investment opportunities in Sudan identified four priority areas for investment in Sudan: (1) energy and mining, (2) agriculture, (3) infrastructure and transportation, and (4) ICT and digital transformation³⁷³.

Infrastructure development is indispensable for political stability and subsequent economic development, and in particular, the stability of power supply is fundamental to economic activity. The Draft PRSP, MOFEP's Three-year Program, and other strategic documents have listed power supply as priority items, and a number of projects are planned.

In Sudan, electricity is mainly provided by geothermal and hydropower, but 47% of the rural population is still not connected to the grid distribution system and electricity supply is unstable. In addition, off-grid power grid development using small-scale power generation in rural areas that are not covered by the grid is an issue, and the government considers it an important destination for private investment³⁷⁴.

In addition, the price of diesel, which has long been subsidized to keep prices low, has skyrocketed with the removal of subsidies, leading to higher operating costs for agricultural irrigation pumps. The

³⁷⁰ "Tourism for Sustainable Development in Least Developed Countries: Leveraging Resources for Sustainable Tourism with the Enhanced Integrated Framework" UNWTO, 2017 He teaches hotel and tourism at a training center that was established in 2013 with the support of Turkey. https://www.tika.gov.tr/en/news/more_than_5_000_people_in_sudan_entered_a_profession_thanks_to_tika-55677

³⁷¹ Prompt and appropriate communication activities to stakeholders based on "information disclosure" to prevent unforeseen events from occurring and to minimize their impact and damage in the event that they do occur. (Public Relations Association of Japan) <https://www.unwto.org/archive/africa/press-release/2016-11-17/unwto-supports-sudan-s-tourism-development>

³⁷³ The "Paris Conference on Support for the Transfer of Civil Administration in Sudan" was held in France on May 17-18, and a business forum to promote investment was held as a side event. <https://paris2021.esudan.gov.sd/> "SUDAN: The land of Opportunities: Paris Conference" Paris, France, May 2021

³⁷⁴ "Empowering Sudan: Renewable Energy Addressing Poverty & Development" UNDP, 2020

introduction of solar-powered pumps for irrigation facilities has attracted much attention, and UNDP is implementing a solar power project³⁷⁵.

Rather than renewable energy for large-scale public works projects, job creation is expected to come from the installation and maintenance of solar panels to drive underwater pumps used for small-scale irrigation, and some believe that the number of companies selling and installing relatively small-scale solar power systems may be increasing.

However, the reality is that it is not easy to raise the investment under the economic recession³⁷⁶. The expansion of the power transmission and distribution network and the stabilization of supply are not problems that can be solved immediately, but there is a possibility that the spread of solar power systems will gradually spread, and that related industries such as service supply and maintenance will lead to employment for youth.

5.8 Potential Areas of Employment for Women

The high unemployment rate among young women and the barriers for finding jobs is a serious problem for Sudan. Prompt measures to promote employment are important, but at the same time, changes in social norms and practices require long-term action. The following sections describe the challenges and possibilities of both employment and starting business for improving women's participation in economic activities.

5.8.1 Challenges and Opportunities in Employment

As observed in Chapter 2, women face a variety of institutional and socio-cultural barriers to employment, which limits their choices of career.

Interviews with the SBF, associations and companies in the agriculture, manufacturing, car maintenance, construction, ICT and tourism-related industries covered during the survey indicate that, with the exception of one company, gender is basically not a determining factor in recruitment. The one company who basically hires only men explained that such choice is because women are still disadvantaged and harassed in business negotiations in Sudan. Others said that social prejudices, such as employers using women only for menial jobs, and clients not trusting them in the workplace, make it difficult for women to continue working³⁷⁷.

Due to Sudan's socio-cultural context, auto mechanics, construction, factories, etc., are perceived by society as male occupations, and in these industries, even if the company makes no judgements based on

³⁷⁵ "Empowering Sudan: Renewable Energy Addressing Poverty & Development" UNDP, 2020

³⁷⁶ Interview with Noble Capital on 1 June 2021. Currently there are around 36 solar companies in Khartoum.

³⁷⁷ GEMS interview with a start-up consultant in 2016, "I graduated architect and worked in an architectural design company. The clients were not positive about me, women, showing up and sometimes chased away 'this is not a place for women'. I felt I cannot exercise my capacity in this situation, so I left my work and started my own".

sex, it is quite possible that only men will apply, and as a result, few women are in these industries. Even in agriculture, which is a major source of employment for women, in River Nile, Northern and Kassala States, women usually do not work on farms, due to their cultural norms³⁷⁸.

SBF officials and the job-matching companies said that, since the economic recession, there has been an increase in women's participation in the workforce due to higher expectations of women's contribution to family income, and that the atmosphere in the labour market has changed since the revolution, with more companies being positive about employing women³⁷⁹. They said that more and more companies value women highly, as they are more patient and enthusiastic about their work compared to men, and are more likely to stay in their jobs without changing. There is also an appreciation of women's excellence, with some saying that women are more likely to get a job if they are chosen on the basis of their ability³⁸⁰.

5.8.2 Challenges and Opportunity in Entrepreneurship

While there are various restrictions on employment, the World Bank (2021) study indicates that there are relatively few gender-based restrictions on entrepreneurship (equal rights for men and women to sign contracts, register companies and open bank accounts). According to the Sudanese Association of Social Entrepreneurs, the entrepreneurial environment for women is not always conducive, and many people have a negative view of women's business in particular. In some cases, women are unable to obtain business support from fellow male entrepreneurs³⁸¹.

According to the interviews with women entrepreneurs, starting their own business is an attractive option for women, as their priority is to take care of their family and they prefer to work which offers greater flexibility in working hours. Many women consider that marriage is the most viable option, and thus in their 30s after their children are somewhat independent, women start considering their own independence³⁸². The GEMS survey also showed that 63.2% of the business women were engaged in production and sales of confectionery and bakery products (11 out of 57) and handicrafts (25 out of 57), and 58.7% (27 out of 46) of them work at home³⁸³.

JICA's agriculture project in River Nile State actively engaged women in economic activities which they could undertake at home or in someone else's home. The project has supported the development of women's businesses such as nurseries, oil crops and oil presses, those are linked to the demand for the

³⁷⁸ Interview with Expert of Agriculture on 30 April 2021, UNIDO expert on 11 June 2021

³⁷⁹ Interview with SBF-Youth Department on 4 June 2021, SBF-Union of Chamber of Commerce on 24 June 2021, Orooma on 2 June 2021, and Sudanjob on 8 June 2021

³⁸⁰ Interview with Sudan Digital on 22 April 2021

³⁸¹ Interview with Sudan Social Enterprise Association on 3 June 2021

³⁸² Interview with Fandora on 8 June 2021

³⁸³ The data is based on the record of GEMS workshops (3 workshops on women's employment and entrepreneurship implemented during June to August 2016 in Kosti, and 1 workshop implemented in September 2016 in Kassala). The parameter of each questions differs.

irrigation scheme. As a result, some of the businesses have been successful and even maintained after the project³⁸⁴.

Thus, in both urban and rural areas, there are many potential businesses that can be started at home, but there is no consolidated information or statistical data about those home-based businesses. While these businesses can enable women to generate income and contribute to improving their livelihoods, it should be noted that many of them are informal in nature. It is important to make balanced interventions to promote women's economic empowerment without stereotyping their economic activities.

5.9 Good practice for Promoting Youth Employment

5.9.1 Good Practices for Employment Promotion in Sudanese Industry

The following are some examples of good practices in industry that have led to employment promotion.

(1) Examples of Appropriate Job Matching Through Internships and Apprenticeships

Companies have raised concerns about the fact that youth have not been able to acquire practical skills through school education and vocational training, and that students do not know the realities of society and employment. Therefore, internships and apprenticeships in companies have become an important process to prevent mismatches.

○ Securing Human Resources Through Internship Program³⁸⁵

DAL and MTN Sudan employ new graduates as interns and train them for a year to acquire practical skills and discover their aptitude, and then employ them on the basis of their motivation and work performance. The company believes that this process prevents mismatches in hiring.

DAL Engineering is also conducting an attitude test during the internship period in order to ensure that they have people who are willing to work with their hands. MTN Sudan also emphasizes the sharing of its corporate philosophy of "Can Do" throughout the internship period and the identifying the independent worker with a desire to learn who can put Can-Do into practice.

(2) Uncovering Human Resource Demand

In Sudan, where the economy is in a recession, 87.5% of the unemployed say that they cannot find a job because there are no jobs available, and 5.3% of the inactive population have given up on finding a job and are not participating in the labour force. However, if the demand for human resources is carefully interviewed, there could be companies that are willing to hire. This suggests that resolving the information mismatch between supply and demand in the labour market may lead to an improvement in the unemployment rate.

³⁸⁴ JICA (2019) Capacity Development Project for Irrigation Scheme Management in River Nile State, Project Completion Report, and interview with Expert of Agriculture on 30 April 2021, UNIDO expert on 11 June 2021

³⁸⁵ Interview with MTN Sudan on 25 May 2021, DAL Engineering 15 June 2021

○ Searching for Information Job Offer to Fill the Gap: Job Scouting

GIZ visited door to door to various companies (from large to small) in Kassala and asked them about job openings and what human resources they would employ now. Although this was before the COVID-19, it led to the securing of over 500 job offers, many of them with high or reasonable salary. Although they had planned to hold a career fair based on this information, they were forced to suspend it due to COVID-19. Still, this initiative provides a very good hint for what need to be done to enhance the job matching.

(3) Developing Human Resources Internally

In interviews with companies, some said that young Sudanese are lazy and that foreign workers are cheaper and more hardworking. In response, it is pointed out that there is the importance of readiness and commitment of employers to develop human resources.

○ Good Practice of Human Resource Development of Youth

Sudan Digital approaches recruitment from the perspective of training rather than simply employing people as labour force, and emphasizes the desire to learn. Rather than continuing to work at Sudan Digital forever, they are encouraging people to use their own interests as business stories to start their own businesses. The stereotype of Sudanese as lazy is a leadership challenge, they said, pointing out the importance of working to change the mindset of employers.

○ Good Practice of Shifting from Informal to Formal Apprenticeship

Mr. Mohamed Yagoub, a small-scale welding business owner in Western Darfur, became aware of the importance of training apprentices after learning about management through a JICA project. After the training, an apprentice contract was signed, an apprentice leader system was introduced, and team building was conducted by providing work uniforms, etc. The apprentices became more self-aware and came to work on time and finished the work after cleaning up, leading to a change in overall mindset within the company. In addition, the company has formed business partnerships with apprentices who have become independent after completing the apprenticeship training period, leading to the expansion of business.

(4) Recruitment Process without Gender Biases

Women face various barriers to employment. On the other hand, there is a tendency for women workers to be revalued in the labour market.

○ Good Practice of Recruitment without Gender Biases

Sudan Digital is a digital marketing company, a business started by a British-born Sudanese who returned home. The company has a policy of hiring only young and inexperienced people. Recruitment is done by posting on Instagram and other social networking sites. When they advertise for jobs, the ratio of male and female applicants is about 50/50, but 90% of the applicants who pass the CV, technical written test, and interview are female.

○ Good Practice of Proactive Employment of Women

Monjid is an entrepreneurial business that provides on-site vehicle maintenance services, and is currently preparing to launch a new female-centric business by hiring women mechanics. They have already hired three women mechanics and are working on training to reduce not only skills but also various risks, including harassment, that they may face.

5.9.2 Good practice in promoting employment in other countries and regions

In recent years, there has been an increase in the number of cases of employment growth through start-up support and collaboration, not only through direct employment by companies, but also through the use of technology to develop and strengthen micro-enterprises and sole proprietors.

The table below shows some examples of innovative business models in neighbouring countries that have used technology to create jobs.

Table 5-19 Key start-up cases with employment impact

【Case 1】 M-Kopa Solar (Kenya)	A service that uses a solar-powered electricity supply system to enable households to use electricity on pay-as-you-go basis. The service is being rolled out across the country and has not only been successful in electrifying rural areas, but has also led to the creation of local jobs by employing local people to install and maintain the systems.
【Case 2】 WASSHA (Tanzania)	The company uses kiosks in towns scattered across the country as a base to provide electricity and other services on a pay-as-you-go basis, which has also led to an increase in employment. The company is setting up a new joint venture, Baridi Baridi, with air conditioning manufacturer Daikin in 2020, which will increase the range of services offered and has the potential to create further jobs.
【Case 3】 Tugende (Uganda)	A service of mobile collateral loans (asset loans) for drivers of motorbike taxis "Boda Boda". Mobile money is utilized. It facilitates new entrants (sole proprietors) into the Boda Boda business.
【Caseb4】 Alaska Tanzania (Tanzania)	Management guidance for Mamalishe (blue sky canteen) owners, strengthening management through matching with bank financial services using mobile money history as credit information. The growth of the canteen has led to an increase in employment.

Source: Prepared by Survey Team based on the company websites

In order to realize such success stories in Sudan, it is essential to support entrepreneurship development in the Sudanese context, and to establish a business environment, including a financial environment where international fund-raising can take place, and to work with incubators/accelerators.

Chapter 6 Support Trends of Development Partners in Sudan and JICA's Support in Africa

6.1 Support Trends of Development Partners³⁸⁶

The table below summarizes the support provided by development partners for youth employment promotion, entrepreneurship support, SMEs support and private sector support.

Table 6-1 Support Trends of Development Partners

Development Partner	Name of Program/Project (status as of June 2021)	Activity and Achievement
African Development Bank ³⁸⁷	ENABLE Youth Program (2016 to date)	<ul style="list-style-type: none"> • Sudan is the first country in the region to be included in the overall African Development Bank (AfDB) initiative (Feed Africa - agriculture, jobs for youth, private sector, improve African lives, gender, resilience). • The Ministry of Agriculture and CBoS are the counterparts. • Six participating banks will lend start-up capital to youth, with a guarantee from Taysier, a CBoS subsidiary. • Project 1 is a 12-month incubation programme to train 2,000 agribusiness entrepreneurs along the agri-product value chain. Each entrepreneur will receive a loan of USD30,000 to start their business, and each entrepreneur is expected to employ five people, creating a total of 12,000 jobs (6,000 are women). • Project 1 covers five states of Khartoum, Gezira, Kassala, Gadaref and River Nile. To date, 650 people have graduated, and 98 people have borrowed start-up capital. • Project 2 is scheduled to start at the end of June 2021. Another 4-5 provinces will be added, and there will be a 6-months support for youth who have already started a business to continue and expand it.
	Accelerating Women Entrepreneurship and Access to Finance (AWEAF) Project	<ul style="list-style-type: none"> • A pipeline project, with the Ministry of Social Development as counterpart. • Target states are Khartoum and Red Sea State. • The project has three main objectives <ul style="list-style-type: none"> - To improve the business environment for women entrepreneurs and to strengthen the organisational capacity - Improve access to BDS and finance for women entrepreneurs - Strengthen the capacity of financial institutions and improve their services
World Bank Group	Technical Assistance from Sudan	<ul style="list-style-type: none"> • The Sudan Multi-Partner Trust Fund (SMTF) is managed by the World Bank.

³⁸⁶ Unless otherwise noted, this report is based on information gathered at the Sudanese Private Sector Forum (PSF) and hearings in March 2021.

³⁸⁷ Sudan Ministry of Finance and Economic Planning (2019) Implementation of Istanbul Plan of Action for Least Developed Countries (IPoA) 2011-2020 Sudan National Report. The Bank also invested in GEM 2018 Survey.

Development Partner	Name of Program/Project (status as of June 2021)	Activity and Achievement
<p>The mission was to visit Sudan in the week of 6 April 2021.</p> <p>It plans to open an office in Sudan by the end of 2021.</p>	Multi-Partner Trust Fund (in progress)	<ul style="list-style-type: none"> Supporting the development of micro, small and medium enterprises (MSMEs) in the agricultural sector. Support for Special Economic Zones (SEZs).
	IFC Advisor to the Ministry of Finance (in progress)	<ul style="list-style-type: none"> Support for HIPC preparation and drafting of HIPC policy conditions. Assisting Sudan to resolve its unpaid debt problem and access to IDA.
	Plans described in the Engagement Note 2020.	<ul style="list-style-type: none"> Technical Assistance for CBoS (intermediary function for economic growth and private sector development through enhanced prudential regulatory oversight capacity). Achieving financial inclusion. Sources of Economic Growth and Job Creation Study in Agriculture to be conducted. The Sudan Private Sector Diagnostic will be completed by July 2021.
	Private Sector Development and Youth Employment Program (in pipeline)	<ul style="list-style-type: none"> Support for private sector growth (e.g. business registration, reduction of operational costs and barriers, implementation of micro, small and medium enterprise strategy, innovation and entrepreneurship development). Market development support for SMEs. As a first step, an Enterprise Survey is being conducted in Khartoum, Khartoum Bahri and Omdurman. Other surveys will be conducted in Obeid and Port Sudan.
	Sudan Women and Youth Entrepreneurship Project (SWYP) (in pipeline)	<ul style="list-style-type: none"> MOIIC and CBoS as counterparts. Private sector growth support (e.g. business registration, reducing operational costs and barriers, implementation of micro, small and medium enterprise strategies, innovation and entrepreneurship development). Support for SMEs to develop their markets. Consideration of support for improving access to finance and support for strengthening the capacity of financial institutions.
<p>For the three projects on the right</p> <ul style="list-style-type: none"> More than 30% of the beneficiaries are youth and women. IFAD established the Agricultural Bank of Sudan Microfinance Initiative (ABSUMI) with the help of 	Establishing Private Sector Development Authority under MOIIC. (in pipeline)	<ul style="list-style-type: none"> Pipeline project, which was requested prior to the restructuring of Sudanese ministries in February 2021. Current status needs to be confirmed.
	Integrated Agricultural and Marketing Development Project (IAMDP) (2018-2024)	<ul style="list-style-type: none"> Income generation project in the rain-fed agricultural area. Productivity improvement of cash crops (sesame, peanut, Arabic gum) and sorghum. Support for post-harvest crop storage facilities. Improved access to agricultural inputs and services, improved business skills, financial access and market access support for small farmers, rural women and youth through organising producer groups and improving business skills. The project targets 27,000 smallholder farm households (less than 6.3 ha) in 129 villages in Northern Kordofan, Southern Kordofan, Western Kordofan and Sennar provinces. Total budget USD 48.26 million (IFAD: USD 26.02 million, Sudanese side: Government: USD 8.78 million, Private sector: USD 10.2 million, Beneficiaries: USD

Development Partner	Name of Program/Project (status as of June 2021)	Activity and Achievement
<p>CBoS from the previous projects to provide group credit through Islamic finance to 70,000 women, achieving almost 100% repayment rate.</p> <p>· Women's economic empowerment was strengthened, and they began to participate in decision-making in their communities.</p>	<p>Livestock Marketing and Resilience Programme (LMRP) (2014-2021)</p>	<p>2.52 million)</p> <ul style="list-style-type: none"> Project to support the strengthening of food security, income and climate resilience of poor households. The project aims to increase income opportunities and improve livelihoods of pastoralists. Main activities: livestock business development, community-based natural resource management and capacity building, rural enterprise and social development. The beneficiaries are poor households, especially women and youth, in Blue Nile, Northern Kordofan, Sennar, West Kordofan and White Nile States, with secondary beneficiaries being the private sector, service providers and operators of livestock value chains.
	<p>Sustainable Natural Resources and Livelihood Programme (SNRLP) (2019-2024)</p>	<ul style="list-style-type: none"> The project will support pastoralists, pastoral farmers and small-scale farmers to strengthen their food security, income and resilience through natural resource management. The project will improve natural resource-related livelihoods, develop technologies and business models, and facilitate access to rural finance.
<p>ILO</p>	<p>COVID-19 Response Plan and Revised National Employment Policy in Sudan</p>	<ul style="list-style-type: none"> Supporting the formulation of the employment policy, established a committee comprised of relevant ministries agencies and stakeholder. Labour force survey (sampling survey) will be completed in July 2021. A labour policy with a 2 years priority plan will be prepared. Statistics officers' capacity building
	<p>Sustainable community-based safety-net platforms in North Kordofan and White Nile (CAPISUD Sub-project) (2018-2021)</p>	<ul style="list-style-type: none"> One of the components of "Building Capacity for Inclusive Service Delivery (CAPISUD)" implemented with AfDB. North Kordofan and White Nile are the target states. Technical training for youth and women to enable them to find employment and generate income, and business support for MSMEs Training on animal husbandry which is suitable for the areas is planned and implemented in cooperation with UNESCO
	<p>PROSPECTS: Partnership for improving Prospects for Forcibly Displaced Persons and Host Communities</p>	<ul style="list-style-type: none"> The project targets refugee camps and settlement area in Eastern Darfur and Western Kordofan. Conduct value chain analysis to identify the profitable crop such as peanuts and ground nuts which can be sold to large companies by forming a cooperative and realize income generation. Support business development of the cooperative (finance, knowledge, and skills) Promote decent work and workers' rights
	<p>Building community resilience with young people in Mayo Suburb of Khartoum through improved access to water</p>	<ul style="list-style-type: none"> To be implemented in collaboration with the Ministry of Labour and Administrative Reform funded by Japan Rehabilitation of access road and water facility in Mayo District of Khartoum will be implemented by labour intensive approach. 500 youth will be hired and trained on the maintenance

Development Partner	Name of Program/Project (status as of June 2021)	Activity and Achievement
	Free Movement of Persons and Transhumance in the IGAD Region: Improving Opportunities for Regular Labour Mobility (2018-2022)	<p>of road and water facility.</p> <ul style="list-style-type: none"> The EU-funded initiative, in cooperation with IGAD, seeks to protect the rights of migrant workers by enabling free movement of workers under appropriate regulation. Conducted survey on migrant workers in the region
UN Women	Women's Economic Empowerment	<ul style="list-style-type: none"> Works for gender mainstreaming in all sectors Workshop on the Roadmap to Integrating Gender in the Macroeconomics and Sectorial/ Ministries' Policies and Strategies was conducted in June 2021 in collaboration with Ministry of Social Development
	Women's Empowerment for resilience, Inclusion, Sustainability and Environment in Eastern States.	<ul style="list-style-type: none"> Assistance to support women in Eastern Region for their economic empowerment in collaboration with AICS. Support the young women and men under vulnerable situation to gain access to inclusive market. Work for capacity building of the federal government and state government, to work on gender norms and to enhance gender equity and women's empowerment Conducted entrepreneurship support on fishery business in Red Sea State with AICS/UNIDO Conducting a survey on Sudanese women and social norms
UNDP	UNDP Accelerator Lab (Institutional Effort, not program)	<p>Involving small businesses in the UNDP's activities to:</p> <ul style="list-style-type: none"> Help small business solve the challenges they face daily, so that UNDP can understand their issues and translate them into policy recommendations. Facilitate small businesses to formalize
	Private Sector Advisory Board (ongoing)	<ul style="list-style-type: none"> The Board is made up of SBF, UN Agencies, including UNDP and focuses on three sectors: agriculture, clean energy and digital infrastructure.
	Youth Volunteers Supporting Peace and Recovery in Darfur (YoVoReD) (Started in 2012 and ongoing)	<ul style="list-style-type: none"> Funded by KOICA, Japan, and UN Volunteer. 4 phases are completed, and 5th phase will start from 2021 for 3 years, supported by KOICA. Young Darfuri were recruited as volunteer and they worked for improving infrastructure of the locality they were assigned. UNDP paid for raw materials and training. Volunteers can gain work experience. UNDP also supported them with entrepreneurship program (Start and Manage your own business). So far supported 240 social enterprises with a grant of SDG1,000-100,000.
	Youth Leadership Program (Started in 2015)	<ul style="list-style-type: none"> Targeting 11 Arab countries including Sudan. 2,500 youths took part in a training on design thinking and collaborative leadership. 250 were selected and attended entrepreneurship training
	Socio-Economic COVID-19 Recovery (Ongoing)	<ul style="list-style-type: none"> 300 youth jobs created by plastic waste management
	Policy Development Support	<ul style="list-style-type: none"> Works with the Government of Sudan on developing the Microfinance Strategy for Growth so that MFIs can enhance financial support to MSMEs and entrepreneurs.
	Supporting Informal	<ul style="list-style-type: none"> It includes Technical Assistance for supporting

Development Partner	Name of Program/Project (status as of June 2021)	Activity and Achievement
	Enterprises to transition towards Sustainable Growth and Formalization (pipeline)	formulation of the policy on promoting business formalisation.
UNESCO	Sudanese TVET System Developing Project funded by Capacity Development for Education (CapED) Programme	<ul style="list-style-type: none"> Supporting the Ministry of Higher Education and Scientific Researches, Ministry of General Education, SCVTA and NCTT to develop a TVET strategy, draft has been prepared Supporting the development of the National Qualification Framework (NQF), in line with Arab Region and Africa Regional Qualification Framework. Capacity building of TVET institutions (Technical College, Technical School, and VTC in Khartoum and Technical School and VTC in Gadaref).
	Peacebuilding x TVET (Plan)	<ul style="list-style-type: none"> The development of peace education curricula in Eastern and Darfur State. TVET component will also be implemented to strengthen livelihoods.
	Contributing to the ILO's CAPISUD	<ul style="list-style-type: none"> UNESCO has developed training courses on livestock breeding (goats, sheep) in White Nile and Northern Kordofan State. Audiovisual materials are also prepared.
UNIDO There is an incubation centre for every region. Sudan belongs to Arab region and its incubation centers are Investment and Technology Promotion Offices (ITPO) and Arab International Center for Entrepreneurship & Investment (AISEI) In Bahrain.	University incubation centre support (completed)	<ul style="list-style-type: none"> ITPO supported the establishment of business incubation center at University of Khartoum (UOK) and Sudan University of Science and Technology. For UOK, the center called Technopole was developed under the School of Engineering
	Arab Regional Centre for Training and Development of Entrepreneurs (ARCDE) (completed)	<ul style="list-style-type: none"> UNIDO, Islamic Development Bank (IDB), and Ministry of Investment in Sudan established the ARCDE based on the Bahrain's successful entrepreneur's model The centre is expected not only to promote the "Bahrain Model" but also to lure investment for agriculture and animal husbandry
	Enterprise Development and Investment Programme (EDIP) (2015-2019)	<ul style="list-style-type: none"> EDIP is an ITPO's entrepreneurship curriculum and so called "Bahrain Model". Bank of Khartoum established EDIP Unit and UNIDO implemented the program through the Bank³⁸⁸.
	Entrepreneurship support (Plan)	<ul style="list-style-type: none"> USD 300 million fund, which is to support the Government of Sudan to establish a fund for young entrepreneurs Non financial support for entrepreneurs
	Project on Employment and Entrepreneurship Development for Migrant Youth, Refugees and Asylum Seekers and Host Communities in Khartoum State (2017-2021)	<ul style="list-style-type: none"> Partnering with Khartoum State Human Resource and Labour Office as main counterparts, implementing Competency Based Training (CBT) at Vocational Training and Entrepreneurship Centre (VTEC) funded by EU. CBT course level 1-2 were available from the previous phase, and level 3-4 were developed through this project. Provision of training to the refugees, IDP and host community to improve their access.

³⁸⁸ <https://open.unido.org/projects/SD/projects/140189>

Development Partner	Name of Program/Project (status as of June 2021)	Activity and Achievement
	<p>Fostering Inclusive Economic Growth in Kassala State Through Agro-value Chains Development and Access to Financial Services (Phase 1:2018-21; Phase 2: 2021-24; “UNIDO Kassala Project”)</p>	<ul style="list-style-type: none"> • As of November 2020, 530 persons took training (31% women) • Implemented with support of Italian Government and AICS, in collaboration with State Ministry of Finance, State Ministry of Production and Economic Resources, Kassala University and MFIs. • Enhancing the whole process of the value chain from the agricultural input to marketing and selling, target products are: sesame, ground nuts, horticulture, and fodder. • Supporting the formulation of cooperatives to encourage business by farmers. 39% of cooperative owners are women. • Supporting the establishment of Entrepreneurship Development Committee (EDC), composed of various stakeholders. EDC appraises the business plan and facilitate the financing. EDC was approved as a new legal entity under the state government. • Established Entrepreneurship Hub and Entrepreneurship Development Centre in Kassala University. • Phase 2 will have more focus on renewable energy and utilize and expand the results of Phase 1.
<p>EU</p> <p>There was no regular relationship on the last 30 years and thus there was no EU development fund for Sudan, but from now on they will set a fund for support.</p> <p>Currently 7-year support programme document is under preparation, which contain the support proposals in this table.</p>	<p>Agribusiness in Eastern Sudan, a component of the Regional Development and Protection Programme (RDPP) for the Horn of Africa (2018 to date)</p> <p>Private Sector Development</p>	<ul style="list-style-type: none"> • Implemented by the Netherlands Enterprise Agency (RVO) • Support for agriculture-related income generation activities for refugees and host communities. • Enhance agricultural productivity through value chain approach • In collaboration with private sector and Sudanese Standards and Metrology Organization (SSMO) which is in charge of food security certification and standard training, develop quality standard. • Stimulate the entrepreneurship and innovation through business incubator and ICT • Promote private sector linked to the EU’s new intervention sector (biodiversity and culture) • Scoping mission will be conducted in this year • Pipeline • In collaboration with International Trade Centre (ITC) and UNCTAD, EU will support Sudan to join WTO, and SMEs. • Promote trade of agriculture products and advance the concept of green economy from the production at farm. • Pipeline • Working to enhance the value chain of fish and salt in the Eastern State, to improve livelihood and increasing job opportunities. EU focuses on the nutrition value of the food, and thus thinking of promoting the products such as sesame, groundnuts, sunflower seeds. • It is planned to improve the gum Arabic production and

Development Partner	Name of Program/Project (status as of June 2021)	Activity and Achievement
		improve economic situation of women and youth, in cooperation of French Development Agency (AFD).
	Women's economic empowerment in relation to land issues (Plan)	<ul style="list-style-type: none"> • Develop and/or implement gender-sensitive regulations on land issues for producer groups. • With regard to human capital, strengthening the agripreneurship and leadership skills of women and people with disabilities by TVET with regard to selected agro-industrial value chains. • With regard to financial capital, targeting women's access to finance, EU will work to enhance partnerships with the private sector, incubator development, and increasing the number of women board members and members in cooperatives and farmers' federations. • On social stigma and barriers, work with women and youth federations to raise awareness and educate local political/religious/tribal leaders
	TVET (Plan)	<ul style="list-style-type: none"> • TVET governance and equity growth • TVET in line with labour market demands • Strengthening the role of social partners • Improving quality in existing TVET and introducing ICT in all TVET institutions. • Mutual recognition of diplomas in the region • Protection of workers' rights • Strengthening the visibility of TVET effectiveness to tackle social stigma of TVET • (Currently working with GIZ and UNIDO to support vocational training in Darfur, Eastern and Khartoum)
British Council	Entrepreneurship support at universities (completed)	<ul style="list-style-type: none"> • Supported the Ministry of Higher Education to set up entrepreneurship centres in universities and to introduce entrepreneurship subject curriculum³⁸⁹.
	Impact Enterprise “Mashrouy” (2014-to date)	<ul style="list-style-type: none"> • Support for young entrepreneurs with British Embassy and the Sudanese Young Businessmen's Association. • A competition system to select promising business ideas from applicants, followed by an educational process in which a panel advises them to turn them into viable projects, and then selects the winner. • Partners include universities (Mashreq University, etc.), companies (CTC, SUDANI, etc.) and banks. • Awareness-raising activities involving the media were also carried out. • By 2018, 4,000 entrepreneurs have participated.
	Social Enterprise Sudan (2018-2021)	<ul style="list-style-type: none"> • Supporting young people to become entrepreneurs with social impact. • As part of this process, mapping of social entrepreneurs and ecosystems was carried out. • Conducting social entrepreneurship courses at three universities. • Achievements: 5,000 social entrepreneurs trained, over 10,000 people raised awareness, 55,000 social

³⁸⁹ 249Startups (2021) Situation Analysis of Startups in Sudan

Development Partner	Name of Program/Project (status as of June 2021)	Activity and Achievement
		enterprises created, over 500,000 jobs created, Social Enterprise Association established.
	Creative Enterprise Programme (2019-2023)	<ul style="list-style-type: none"> • Support for entrepreneurs working in the creative industries (fashion, art, literature, etc.). • Implemented in collaboration with the Creative Hub, the Ministry of Culture and the private sector.
	TVET (2021-2025)	<ul style="list-style-type: none"> • Job creation through skills development and enhanced employability, with a special focus on women agricultural entrepreneurs. • Implemented in collaboration with NCTTE, SCVTA and the private sector.
	SME Policy Support	<ul style="list-style-type: none"> • Support to MOIC in formulating its SME policy.
	Private Sector Support (in progress)	<ul style="list-style-type: none"> • Support to SBF and stakeholder dialogue for policy formulation. • The cooperation is being planned to contribute to improving the business environment and strengthening Sudanese and UK business relations.
GIZ • BMZ	Employment Promotion Darfur for Refugees, IDPs and Host Communities YES – Youth, Employment, Skills (2017-2023)	<ul style="list-style-type: none"> • Support development of Recognition of Prior Learning (Trade Test) with SCVTA on some selected subjects • Capacity building of the state labour office • Support to establish the state council for vocational training • Capacity building of SBF-SICU (mainly in Darfur) • Construction and rehabilitation of VTCs • Conducting 6 months-long entrepreneurship support project in collaboration with the local Hubs • Prepared a brochure on access to labour market for refugees • Conducted a challenge contest on agri-business in Khartoum in collaboration with Impact Hub
	Vocational training and food security for refugees and host communities in Eastern Sudan (To be completed in 2021)	<ul style="list-style-type: none"> • Rehabilitation of facilities and equipment for Gadaref VTC and Kassala VTC • 1-year diploma courses on electricity, welding and small engine were developed, and approved by SCVTA. Textbooks and teacher's manuals were also produced. The course is open to refugees and others who have had limited educational opportunities. • Training for refugees and host community was conducted for 926 people (43% women) on welding, electricity, leather, and food processing. • Prepared integrating strategy from school to work with Kassala and Gadaref labour office and other stakeholders • Job Centre is established in Kassala and Gadaref labour office and online job posting site was also developed http://www.shogol.gov.sd/
	Employment Initiative Khartoum: Prospects for the future of refugees and the local community	<ul style="list-style-type: none"> • SCVTA and TVET institution's capacity building • Training for refugees, IDP, and host communities will be implemented in collaboration with SBF, Khartoum State and SCVTA. • Conducted a labour market study in Khartoum State
	Structural strengthening of employment promotion and	<ul style="list-style-type: none"> • Capacity building of the MOLAR on vocational training toward raising awareness and effectively supervise vocational training

Development Partner	Name of Program/Project (status as of June 2021)	Activity and Achievement
	vocational training and apprenticeship (2021-2023)	<ul style="list-style-type: none"> Clarify and enhance federal-state relationship
KOICA	VTC support	<ul style="list-style-type: none"> Follow up support to strengthen the Sudanese Korean VTC, including facility rehabilitation, equipment, training of trainers, management capacity, curriculum development, etc. (detail planning phase) In the previous project, Hyundai and GIAD companies collaborated with the VTC and received many in plant training Established an agricultural VTC in Gezira (completed in 2018).
	Project for solar-powered irrigation in River Nile State (Finance to UNDP and dispatch experts)	<ul style="list-style-type: none"> To enhance sustainable agriculture in Sudan by promoting the use of solar pumping instead of diesel-based irrigation water pumping in farmlands. Provide agricultural training (including small scale irrigation) Support the government to create the National Photo Voltaic (PV) Fund.
The Government of Netherlands ³⁹⁰	Orange Corners Program (OCP) (2018~)	<ul style="list-style-type: none"> 6 months incubation (intensive entrepreneurial essentials training) and 6 months post-incubation (free working space use, advice and coaching) programme run by 249Startups The program accepts 20 entrepreneurs per term with business ideas that are innovative and solve SDGs agendas. The first term started in 2019, the third term just graduated from the incubation programme in June 2021, and the fourth term has 2,400 applicants against 25 openings. The budget of the Dutch government is USD 3 million per year. The budget is split 50/50 with the Sudanese side and is supported by the CSRs of the private companies such as Nefeidi Group, Haggar Group, United Capital Bank, Abdul Rahman Saleh Yaqoub Group and Tirhal. These private companies not only provide financial support but also help in the form of business linkages and business support and purchase of products. Financial support for trainees: The Orange Corner Innovation Fund (OCIF) track 1 provides €5,000 per trainee (€400 per month for travel, daily allowance and other expenses for the training and prototyping) when participating in the incubation programme. Track 2, which provides up to €50,000 per person in scale-up funding for the top five entrepreneurs in the pitches at the end of the incubation period, was introduced in the third phase. This includes a further 18 months of mentoring and accompaniment support, with the aim of

³⁹⁰ From consultations at the Private Sector Forum, on 31 March 2021. In addition to this, there is a joint venture (JV) garment factory between the Netherlands and Sudan. The Dutch companies are struggling with remittances and the Dutch Embassy will talk to Dutch banks to handle remittances to Sudan as Dutch banks tend to avoid remittances to Sudan due to the experience of the previous regime.

Development Partner	Name of Program/Project (status as of June 2021)	Activity and Achievement
	Challenge Fund for Youth Employment (2020~)	<p>attracting private companies and financial institutions to provide financial support.</p> <ul style="list-style-type: none"> The OCP, which has been successfully implemented in Khartoum State, will be rolled out in Darfur State (Nyala) and a new private sector partner will be sought. After that, it is planned to expand to Eastern Kassala State, but the details are still under discussion. A matching fund aimed at creating jobs for youth, with a target of creating 200,000 jobs (half of them women) in the Middle East and Africa by 2025. In Sudan, maximum six projects will be selected, with a target of creating 250 jobs per project. The fund will provide 10-50% of the budget for the selected projects, depending on the milestones, and TA support will be provided. There were 35 applications from Sudan and by May 2021, the number had been narrowed down to eight. By the end of July 2021, they will be asked to submit a business case, from where the finalists will be selected.
The Government of Netherlands (Netherlands Enterprise Agency)	Entrepreneurship Made Inclusive through Digitisation Project (E-MIND) (Feasibility Study underway)	<ul style="list-style-type: none"> Development of a digital tool for entrepreneurship training by skill-ed, a consortium of industry, academic and NGOs. Prototype will be developed, tested, and produced a minimum viable product (MVP) in coming 2 years.
CIPE commissioned by Bureau of Democracy, Human Rights and Labor of US Department of the Interior	SBF Capacity Building (Ongoing)	<ul style="list-style-type: none"> Support conducting SBF member company survey Support the private sector to participate in the decision making of the government, and to promote public private partnership, Public Private Dialogue (PPD) between SBF and Ministry of Trade was organized, and the Task force was formed. Support election of officers within SBF as part of strengthening the governance, and support a bottom-up stakeholder consultation process to identify and prioritise issues in the development of the National Business Agenda. Support linkage between taxation and business ID by liaising with business registries, tax authorities and the Financial Investigation Unit under the Prime Minister's Office.
	Anti-Corruption (Ongoing)	<ul style="list-style-type: none"> Establish Sudan Anti-Corruption Resource Center (SARC) with Development Studies and Research Institute (DSRI) of University of Khartoum Supporting legal issue forums for public sector, private sector and investigative journalists. Conducted a stakeholder review of anti-corruption legislation and submitted recommendations to the government
	WTO accession and trade support (Ongoing)	<ul style="list-style-type: none"> Consultation with the Trade Commission of the Ministry of Trade to ensure that Sudan meets the conditions for WTO accession.
USAID Noble Capital (UK based)	Investment Promotion Support for Paris Investment Conference	<ul style="list-style-type: none"> The company was originally commissioned by USAID for the US-sponsored Sudan Investment Conference, but instead of being a US stand-alone conference, it was

Development Partner	Name of Program/Project (status as of June 2021)	Activity and Achievement
consultant firm)	on Sudan (Completed)	held jointly with France as the Paris Investment Conference on Sudan held on 21 May 2021. <ul style="list-style-type: none"> Helping to solicit support for leveraging Sudan's comparative advantages and core competencies at the Conference.
USAID	Towards Enduring Peace in Sudan Program (TEPS) (2014-2023)	<ul style="list-style-type: none"> Youth employment through vocational skills training in Blue Nile State, youth vocational skills training and income support for women in Darfur State, livelihood skills support for women in Southern Kordofan State. Startup Weekend Women 2021 in Khartoum.
EU Chamber of Commerce	Paris Investment Conference on Sudan (Completed)	<ul style="list-style-type: none"> The conference aimed for: (1) reintegrating Sudan into the international community, (2) showing the Sudanese government's enthusiasm for improving the private sector environment, and (3) attracting private companies to Sudan. More than 100 companies registered for attendance.

Source: Prepared by Survey Team based on the partners' website and interview

6.2 JICA's Support in Africa

JICA is promoting youth employment and supporting SMEs and entrepreneurs in Africa as shown in the table below.

Table 6-2 JICA's Support for SMEs and Entrepreneurs in Africa

Name	Outline and Reference Point
<p>Youth Employment Project for Somalia (2017-2022)</p> <p>*Target: Whole area of Somalia (an implementation team stationed at Nairobi)</p>	<p>Their approach leading to youth employment (pilot industry promotion, and capacity building of ecosystem) was referred for proposing draft support measures for this survey.</p> <p>【Project Design Matrix】</p> <ul style="list-style-type: none"> Overall goal: Youth employability is enhanced, which eventually contributes to human capital development in Somalia. Project purpose: The supporting environment for youth employment and entrepreneurship is improved. Expected Outputs: <ul style="list-style-type: none"> (i) Policies or strategic plans on youth employment for the pilot industries are drafted (ii) Knowledge and capacity of trainers/mentors for youth employment in the pilot industries are improved. (iii) Knowledge and capacity of supporting institutions for start-ups and Micro, Small and Medium Enterprises (MSMEs) are improved.
<p>Project on Business Development Services (BDS) Enhancement for Enterprises Growth (2018-2021)</p> <p>*Target: Addis Ababa City</p>	<p>JICA is building a system in which city counselors who provide counseling to SMEs at city halls allocate BDS providers (BDSPs) to them according to enterprise needs, which would eventually promote the growth of SMEs. The approach was referred when proposing draft support measures for this survey.</p> <p>【Project Design Matrix】</p> <ul style="list-style-type: none"> Direct beneficiaries: the Federal Small & Medium Manufacturing Industries Development Agency (FeSMMIDA) and the Federal Urban Job Creation and Food Security Agency (FeUJCFSA), Bureau of Industry and Development (BoID), Bureau of Micro and Small Enterprises (BoMSEs), target sub-cities and woreda staff, BDS providers, pilot enterprises (growth oriented MSMEs) Final beneficiaries : MSMEs

	<ul style="list-style-type: none"> • Overall goal : Ethiopian MSMEs receive high quality BDS provided through BDSPs network and its business are enhanced both in target woreda and other areas. • Project Purpose : Ethiopian MSMEs receive high quality BDS through BDSPs network in target areas. • Expected Outputs: <ul style="list-style-type: none"> (i) The capacity of FeSMMIDA and FeUJCFSA to develop strategic plan for MSMEs support is strengthened. (ii) Implementation set-up for BDS provision in collaboration with BDSPs is developed and operated. (iii) The capacity of One Stop Service Centres' staff to support MSMEs is strengthened.
Solving Social Problems through Business by Utilizing Technology (Solve IT) in Ethiopia (2019)	<ul style="list-style-type: none"> • Employment promotion measures through the development of social entrepreneurs using IT technology by business competition, initiated by the US Embassy and an Ethiopian Company. • The experience of JICA Expert who boosted the involvement of private sector and bringing in Ethiopian and Japanese companies to support entrepreneurship through public-private partnerships, visiting schools to increase the number of applicants, and increased the coverage of cities all across the country was referred for proposing a draft support measure for startups in this survey.
Project NINJA (Next Innovation with Japan) (2020 to date)	<ul style="list-style-type: none"> • A platform for entrepreneurship support, with the aim of fostering entrepreneurs who can solve social issues as businesses and create high-quality jobs to assist nation-building in developing countries. • It is JICA's first attempt to provide comprehensive and tailored support to entrepreneurs at every stage of their business development. There will be projects in Nigeria, Ghana, Kenya, Zambia, and Uganda. • The various approaches to business innovation creation was referred for proposing a draft support measure for startups in this survey.

Source: Prepared by Survey Team based on JICA Website and Interview with JICA Headquarters on 11 March 2021

6.3 Case Study Analysis: Good Practices and Lessons Learned

(1) Combining Financial Services and Non-Financial Services

The lessons and cases of the provision of financial access can be divided into those which benefit the recipient side and those that benefit the financing side.

As for the recipient side, the lesson is not to provide only financial services to the target population, but to take a holistic approach that is to provide non-financial services, before and after the financial service. For example, UNIDO's Kassala Project provides small-scale farmers with training on household bookkeeping, accounting and financial management so that they understand the profit structure of their business and how to manage their money before providing them with finance. The AfDB's Enable Youth Program trainee selects a value chain crop at each training centre and goes through hands-on value-adding business exercise before receiving a business loan. Since the trainee will also receive a share of the profits from the business, they take it very seriously and some of them have even developed their own brands and logos for their products. The trainees receive a loan and start their own business after receiving this practical training and guidance in writing a business plan. The Dutch government's Orange Corner offers a six-month incubation programme to help people develop their business ideas, train them to start their own businesses, and then offer grants to the best candidates.

In both cases, recipients are prepared psychologically and practically before loans or a certain amount of grants are given, which also works as a selection process of eligible candidates for finance.

In case of UNIDO, farmers continue to be empowered through agricultural technology and farmer field schools after the funding; Enable Youth Program connects beneficiaries with mentors in large companies for advice after the funding has been provided; Orange Corner aims to provide start-up capital to lure business support, including business opportunities and investment from the private sector.

There are also some innovations for the funding side.

While existing financial services are only available to large corporations or small amounts of microfinance for poverty alleviation, there have been efforts to create mechanisms that cater for the scale need of funding by SMEs and entrepreneurs, as well as to sectors and targets, such as agriculture, youth and women, that are considered riskier than those traditionally served by financial institutions.

For example, the AfDB's Enable Youth Program provides a guarantee fund to the guaranteeing institution, which in turn provides a tiered guarantee to the financial institution (100% of the loan is guaranteed at the beginning of the loan, and the guarantee rate will be reduced as the lender gains experience).

UNIDO provides financial institutions with a grant of 50% of the loan capital to the farmer's association, with the remaining 50% to be lent by the financial institution, allowing the financial institution to take half of the risk and accumulate experience of serving farmer's associations. Once the farmer's association repays the loan capital after the harvest, the remaining profit is shared between the farmer's association and the financial institution in accordance with Islamic financial principles. The new approach is that the profits of the farmers' associations are pooled within the associations as collective savings "sunduk". The intention is that this fund will be turned into equity when some of the farmer associations are organised into farmer federations aiming for export.

There have also been efforts to engage financial institutions in the entrepreneurship ecosystem so that they would continue providing financial services to MSMEs and entrepreneurs after the support of development partners (Enable Youth and UNIDO Kassala) end. Orange Corner has engaged large Sudanese companies and received incubation programme budgets from their CSR departments, as well as mentoring and other support.

(2) Building of Business Ecosystem which can provide comprehensive supports to MSMEs and Entrepreneurs

The UNIDO Kassala Project provides technical assistance in cultivation and production, entrepreneurship and business training support, marketing support and financial support to small-scale farmers who grow and process value chain crops.

The project brought together the Ministry of Production and Economic Resources, the Agricultural Research Corporation, the Commission of Investment and Industry, producers' associations, and banks and microfinance institutions which have headquarters and/or branches in Kassala to create a state-level ecosystem. UNIDO Kassala supported to register the ecosystem as the Entrepreneurship Development Committee, a non-profit organisation. While giving a formality and ensuring sustainability in this way, they interact closely with organisations that have basis in the State and understand the local context better and are quick to make decisions (rather than organisations with headquartered in Khartoum).

In Sudan, where government institutions are fragile, creating an ecosystem that involves the private sector is also an innovation that leads to sustainability and self-sustaining development. The Dutch government has made a great achievement in this regard by attracting a large group of Sudanese companies into the entrepreneurship development community through Orange Corner Program.

It is also helpful to note that JICA Ethiopia's Solve IT (an initiative to support entrepreneurship and business competition), for which the expert Mr. Fuwa toured the country's rural areas, succeeded to attract sponsors from the private sector in local cities to the point where it covered 30-40% of all costs. The key is not to rely on the philanthropy of the private sector, but to increase value of the event so that private companies feel like putting money in the event would lead to their publicity and business opportunities.

(3) Transition from School to Work: Human Resource Development with Exit Strategy

The experience of JICA and other donors suggests that efforts to reduce mismatches in employment are effective.

In the case of GIZ's ongoing project in the Eastern Region, GIZ visited all the companies and industrial areas to find out the kind of people they are looking for and the salaries they can pay, not following the "common sense" that companies do not offer jobs. As a result of this extensive information gathering, over 500 vacancies for both white-collar and blue-collar positions were found. With this information it was planned to organise a job match event for unemployed young people to help them prepare their CVs, but the COVID-19 disaster forced the cancellation of the event. Although the actual impact could not have been measured, this job hunting can be considered to be a very effective initiative in Sudan, where employment support is limited.

JICA's SMAP-II placed a focus on how to swiftly connect youth to employment after training. In the context of conflict affected area, youth were seeking for a quick option to change their lives.

Following a suggestion from a business owner stating that "even if someone is a TVET graduate, they are treated as an apprentice", a short-term training course was designed (3 months of school-based training and 3 months of internship). The expected career path was designed that after 6 months they become apprentices and gain skills at the master crafts for about a year, then become proper employee or start their own business.

At the time of recruiting trainees, information sessions were held and those who agreed to this career path were invited to apply. The Project also asked for the cooperation of SICU, and obtained their cooperation in accepting interns. As a result, 80% of the trainees were able to find employment.

(4) Learning by Doing

In a country like Sudan, where there are many challenges from macro to micro level, there is a great deal of uncertainty when considering starting new supports or cooperation. If we wait for the external factors to improve or keep assessing external factors, it would never be possible to start new cooperation. Assuming that there is always a certain risk of failing, it is still important to start and try new approaches, and we improve as we move, by learning by doing approach.

UNIDO and the AfDB have been designing bold methods, implementing them by running pilot projects and devising them according to the actual situation, while fully drawing on lessons learned from their experience of cooperation in Sudan and abroad. In case of UNDP's Youth Volunteer Programme in Darfur has been running several phases, by gradually changing its approach, using the learning from the implementation experience.

(5) Input to Policy Level from the Actual Experience

The British Council and the Dutch Government have long experience of supporting entrepreneurship. They have identified issues through their supporting experience, and send them as inputs to the policy level for the formulation of new policy. UNIDO in Kassala while forming a local own business ecosystem in Kassala, they continue its dialogue with the federal government.

(6) Consideration of Purchasing Power when targeting outside Khartoum

The Solve IT project is a US Embassy's initiative that aims to, primarily, decentralize technology and include the youth in problem-solving programs and JICA Expert Mr. Fuwa supported its implementation. He scaled up the target 8 cities to 15 cities across the country. He approached inventively to the universities and TVET institutions in the country to woo the application. As a result, he succeeded to attract 2,000 youths in the competition, and to gain sponsorship from the local private companies.

He advised the survey team to consider the internet access, population size, and the purchasing power of the local area as criteria for selection, if draft support measures are to target local cities for entrepreneurship support. The same point was raised by a youth employment project in Rwanda

supported by Switzerland Government³⁹¹. They suggested the importance of supporting the innovation in relation to the local purchase power.

It is important that the technology developed by entrepreneurs is affordable and appropriate, otherwise if they develop expensive and advanced technology that is beyond the purchasing power of the local population, that will not solve local problems.

(7) Ensuring Transparency and Fairness

During the days of the former regime, nepotism prevailed and information on the activities of some government apparatus such as the Graduate Fund, which helped graduates to find jobs and start their own businesses, and microfinance, was only available to a few people, and for application, it is said that an introduction from influential people was necessary.

In order to avoid such a situation, the AfDB's Enable Youth Program is designed to ensure that the process of selecting participants for the incubation program and start-up loans is not left to government agencies, but involves a committee of the ecosystem. They also conduct periodic questionnaire survey with youth to check if they feel that transparency and fairness are ensured.

(8) Devices to Attract the Interest of Young People

The AfDB's Enable Youth Program, which targets university graduates, places great importance on raising awareness of youth about the concept of agriculture as a business, not for a survival, and its potential of becoming a lucrative agribusiness. The Bank invests considerable resources in these awareness raising activities. The youth of Sudan, even if they are able to find a job, once they do not find it rewarding nor are dissatisfied with the benefits they receive, they resign even if they have not found an alternative job, or they go abroad to work. The Bank thus placed an emphasis on being close to the youth's vision of the future, and providing them with a rewarding business opportunity, rather than just offering them income generating opportunities, because they are unemployed. The British Council's support for social entrepreneurship, and an idea of using technology to solve social problems (of Solve IT) have also gained support as they appeal to young people's desire to contribute to society.

³⁹¹ According to the interview with Promoting Market Oriented Skills Training in the Great Lakes Region (PROMOST) in Rwanda on August 3, 2020, for the Data Collection Survey on Technical and Vocational Education and Training in the Republic of Rwanda. In terms of supporting innovation by youth, the average monthly wage in the village economy is USD30 for men and USD17 for women, so the concept is to support innovative ideas of youth that can be sold in the local market with that level of purchasing power. As an example, they started to produce environmentally friendly bricks. This is inexpensive, has great demands and can be sold at the economic level of the village.

Chapter 7 Summary and Recommendations for the Next Phase

7.1 Summary of the Survey

7.1.1 Macro Environment and Sudan's Characteristics

● **Macro Economy and Policy Environment**

The Sudanese economic growth was heavily depending on the oil export, which led to a delay of the private sector development. GDP showed negative growth over the last 2 years partly due to political turmoil. On the other hand, the population is growing at the rate of 2.4% annually, and urbanisation is also rapidly growing at 3.2%, making it difficult to absorb labour especially in urban areas.

Although the Transitional Government places importance on youth and women who led the civil revolution in 2019 in its policy, the specific policy on promoting youth employment is still unclear. The issues of youth employment is multi-faceted, therefore, cross-ministerial policy and efforts is essential. Early formulation of the youth employment policies and their steady implementation through inter-ministerial cooperation are desirable.

From the point of view of policy implementation, there is a need to emphasise the importance of the local government. Many projects are concentrated in Khartoum, and development in other states, especially in rural areas has lagged behind. Under the decentralisation system introduced in the 1990s, there has been insufficient coordination between the federal and state governments. A common understanding between the two parties and the allocation of appropriate resources, including budgets, are essential for the implementation of national policies in the states.

There is also a need for a mechanism to engage the private sector, especially MSMEs which is estimated to account for 98% of businesses. Promoting youth employment cannot be achieved without working in partnership with the private sector. It is also important to establish a mechanism for regular dialogue with the private sector to promote cooperation and collaboration.

In order to formulate and implement such policies, there is an urgent need to grasp the current situation, and for this purpose, it is necessary to develop various statistical data as soon as possible. Statistical information such as regular censuses, and industry statistics, and the disclosure of such information is essential for a more accurate understanding of economic trends and for the formulation of appropriate policies.

● **Situation of the Implementing Agencies of the Policies**

A common challenge highlighted in the interviews with the relevant ministries was that only half or less of the ministerial budget is approved, and even the approved budget would not be executed in the end. As a result, they cannot implement the planned activities. The ministries claimed that they are depending on the development partners to implement the activities, which makes it difficult to implement the annual plan prepared by the agencies themselves. In addition, the lack of national

policy is making the activities fragmented, rather than making a holistic approach. Furthermore, the lack of proper monitoring and evaluation of the activities, combined with the lack of statistical data and IT infrastructure in the workplace, makes it impossible to formulate an evidence-based policy. It was suggested that the Government is currently prioritising efforts to improve the country's fiscal soundness (i.e. income-generating ministries), and budget allocation for service-implementing ministries have been put on the side³⁹².

The promotion of MSMEs and entrepreneurship has been put as a priority of the Government after the revolution. With the lifting of economic sanctions and removal from the SSTL, the development partners have stepped up their support in this area. However, it is not clear which ministry in the government will take the lead in this area, and there are no laws, policies and institutions on MSMEs and entrepreneurship. There is a lack of coordination mechanism among various governmental agencies, private sector, and development partners.

7.1.2 Situation of Employment and Challenges

In view of promoting youth employment in Sudan, it was observed that the environment in which the young people live varies from localities, sex, and rural/urban settings. Although it was not possible to present statistics specific to young people (15-35 years), the table below provides an overview of the characteristics by rural and urban areas and by gender.

● Characteristics of Men's Employment

In urban areas, the level of education is higher and the age of labour participation also tends to be higher. There are more employees, which means a slightly higher security of employment than in rural areas, nonetheless, the share of own account workers is also high. In rural area, the unemployment rate is lower comparing to the urban area thanks to the absorption capacity of the agriculture sector. Education level is generally low and job opportunities are limited. Young men are found in vulnerable employment, working at low wage to secure livelihood.

Table 7-1 Characteristics of Men's Employment by locality

Item	Urban		Rural	
Labour participation	15-34 years old	52.7%	15-34 years old	61.4%
	25 years old and above	84.6%	25 years old and above	88.0%
Unemployment rate	15-34 years old	26.7%	15-34 years old	18.6%
Employment by Industry (15 and above)	Wholesale & Retail	19.1%	Agriculture	58.6%
	Transportation & storage	15.8%	Wholesale & Retail	11.9%
	Manufacturing	14.5%	Transportation & storage	7.3%

³⁹² Interview with Ministry of Labour and Administrative Reform on 19 May 2021, Ministry of Youth and Sports on 19 May 2021, Ministry of Social development on 23 June 2021, Ministry of General Education 5 June 2021, Ministry of Higher Education and Scientific Research on 6 June 2021, , Sudan University of Science and Technology on 6 June 2021, Ministry of Agriculture and Forestry 24 May 2021. Ministry of Social Development does not disclose the budget.

	Construction	11.6%	Manufacturing	6.1%
	Public Administration	10.8%		
Education level (15 and above)	Completed primary or less	49.3%	Completed primary or less	76.8%
Occupation (15 and above)	Services and sales	27.2%	Skilled Agricultural	45.9%
	Technicians and associate professionals	23.4%	Service and sales	17.0%
	Plant and machine operators	12.8%	Elementary occupation	13.3%
	Professionals	8.6%	Plant and machine operators	5.7%
	Elementary occupation	7.6%		
Status of Employment (15 and above)	Employee	60.6%	Own account worker	47.3%
	Own account worker	30.9%	Employee	37.2%
	Employer	6.9%		
Vulnerable Employment	15-34 years old	31.9%	15-34 years old	39.9%

Source: Survey Team based on the SLFS 2011

● Characteristics of Women's Employment

In urban areas, although the level of education is increasing and women are highly motivated to participate in the labour force, they tend to find employment in "women's work" such as education and sales, partly due to the company side who are not yet open to women's employment, and their family's opinion. Under the impact of acute inflation, women are facing increasing pressure to participate in economic activities to secure the family's livelihoods. There are many cases of women engaging in the informal sector, where entry is easy, such as street teaseller and simple businesses that can be started at home.

In rural areas, women's participation in the economy is strongly influenced by local culture and other factors and varies considerably from state to state. In general, women's education is low and their employment options are mostly limited to agriculture, where they engage as contributing family workers without pay. It is estimated that nearly 60% of those contributing family workers are living under the poverty line³⁹³, and thus needs to improve their livelihood is expected to be high.

Table 7-2 Characteristics of Women's Employment by locality

Item	Urban		Rural	
Labour participation	15-34 years old	25.6%	15-34 years old	29.3%
	25 years old and above	31.6%	Kassala, 15 years old and above	2.7%
			Western Darfur, 15 years and above	70.5%
Unemployment rate	15-34 years old	59.9%	15-34 years old	33.2%
Employment by Industry (15 and above)	Education	24.2%	Agriculture	79.0%
	Wholesale and retail	18.6%	Education	6.7%
	Agriculture	11.4%	Wholesale and retail	5.0%
	Public Administrations	11.4%	Manufacturing	2.0%
	Health and social work	8.6%		

³⁹³ Central Bureau of Statistics (CBS) CBS Report No. 11, 2017, "Sudan National Household Budget and Poverty Survey 2014/15"

Education level (15 and above)	Completed primary or less	56.7%	Completed primary or less	84.8%
Occupation (15 and above)	Professional	29.5%	Skilled Agricultural	72.9%
	Service and sales	24.0%	Elementary occupation	9.5%
	Elementary Occupation	14.5%	Service and sales	6.9%
	Clerical support	10.8%	Professionals	6.4%
	Technicians and associate professionals	6.7%		
Status of Employment (15 and above)	Employee	67.8%	Contributing family worker	46.2%
	Own account worker	27.5%	Own account worker	34.7%
			Employee	16.8%
Vulnerable Employment	15-34 years old	31.0%	15-34 years old	51.0%

Source: Survey Team based on the SLFS 2011

● Youth Attitudes toward Employment

The survey of youths' opinion on their career conducted for this survey shows that, while there is a general sense of hopelessness about finding work in Sudan, the majority of them envisage a career path that they would start their own business in the future after building the necessary capital by working out of Sudan (see 2.3.2(4)). The number of those seeking job abroad reaches nearly half of the respondents (for both male and female), while the number of starting jobs in Sudan was 9 for men and 1 for women. Women responded to work in relevant ministries or continue study. Although the youth' opinion survey covers only a small sample and cannot generalize the thinking of youth, it seems that the result suggest a possibility of the influence of social norms, where men are pressured to earn, and women are confronted by social barriers that limits the choices for them.

With regard to the current situation of youth employment, it is important to note the social environment surrounding employment in Sudan, including the high rate of NEET (28.3%), prolonged unemployment in urban area (nearly 80% are jobless for more than a year), and the presence of the informal sector (60%) as a source of employment.

7.1.3 Supply Side of Labour Force, Current Situation and Challenges

● Old-school Human Resource Development System

Sudan's education and TVET systems need to be developed. The vocational training system, which was originally developed in the 1970s and the policy of expanding science and technology universities prepared in the 1990s are still in place. In order to improve this situation, it is essential to formulate high-level policies and to ensure the government's commitment for their implementation. It would not be easy to bring impact on employment promotion with partial intervention to the TVET institutions which is under resourced³⁹⁴. The training courses are skewed toward certain trades

³⁹⁴ ILO (2014) A Roadmap toward a National Employment Policy for Sudan, UNESCO(2019) Country Background Report for TVET

(mainly auto mechanics and electricity), and there is a lack of courses that are more accessible to women. The institutions are concentrated in Khartoum. Even at these existing institutions, the lack of finance limits them to provide enough practical training, as they cannot update the machines nor prepare enough raw materials for training. In addition, there are few training opportunities for teachers, preventing them to keep up with technology and innovations. The situation is even more challenging in the states.

● Challenge in Transition from School to Work

It is also worth noting that at present, there are few employment support systems in Sudan. The labour office is the official body that has a mandate to provide employment support, but in practice it almost only deals with civil service jobs. This is probably because the labour offices' recruitment services is not attractive from the private sector's point of view, and the fact that most of the private sector is informal. The number of companies who are conscious enough to spend money on private recruitment services is limited, and it is still challenging to access job information via internet for youth, especially rural and less-educated ones. Recently, universities have begun to provide support for entrepreneurship, but this is not always well recognised by the students³⁹⁵.

The lack of adequate skills qualification system is also making it difficult for the companies to hire staff based on the workers' skills. According to ILO (2016), 77.2% of TVET graduates who are employed say that they were referred to their job by a relative or friend.

Above all, women face multiple barriers to both schooling and employment. Even after overcoming social and family prejudice and going through an opaque recruitment process, they are never completely free from social prejudice and harassment. Moreover, women tend to take on a dual role, one in employment and one in family care.

● Needs of Job Matching

The survey has highlighted the challenges faced by both the demand and supply sides in the job matching, one of which is the mismatch caused by asymmetric information in the labour market: there has been little effort to link between the job seekers and job vacancies. There are some private business joining in this area, but there is a limitation especially for rural and less educated groups. Besides, it is important to uncover the recruitment opportunities. Job scouting by GIZ is one of such sample. Another example is the business owner who took business training decided to hire an accountant as he recognized his needs (SMAP-II experience).

Strategy

³⁹⁵ Only 3 out of 35 people surveyed said they attended entrepreneurship course at university, according to the online youth opinion survey conducted by the Survey Team.

Secondly, the lack of employability development during the education programmes has led to increased costs for employers in recruiting and development of human resource. There is a lack of exposure to the jobs, professions and the world of work during their education, and a chance to learn about soft skills such as communication and work attitudes and behavior that are required after employment. Companies claim that engineers/technicians with these soft skills, as well as high technical skills, are in great demand and very difficult to recruit.

Thirdly, it is also important to strengthen the awareness of employers about recruitment. It has been pointed out that a lack of awareness on the part of companies is preventing them from hiring the right people. While most of the companies and entrepreneurs interviewed said that they respect the competence and willingness to learn of individuals, there are still persistent voices heard from the traditional workshops that they hire only men, etc. Promoting fair and equitable recruitment by raising awareness on the part of companies about human resources development and recruitment may have a significant impact also from the point of view of social stability.

7.1.4 Status and Challenges of SMEs

Sudan does not have a policy for SMEs promotion and entrepreneurship development, and SMEs statistical surveys have not been conducted for a long time, the most recent being the 2014 Enterprise Statistics and the 2020 Enterprise Survey for Khartoum State by the World Bank. There is no definition of SMEs and no government support system for SMEs.

Of all enterprises, 98% are SMEs, of which 75% are micro-enterprises with about two employees. In addition, it is said that the informal sector is very large and estimated to have taken in 65% of employment.

Although the psychological barriers to starting a business are relatively small, research shows that just under 70% of businesses are still in the idea stage and have not yet started. In the first 3.5 years of starting a business, 70% of the companies have no employees, but after the first 3.5 years, the number of employees increases from 1 to 19. On the other hand, many businesses close down in less than a year. In order to create jobs, it is necessary to first ensure the employment of the entrepreneurs themselves by transforming their ideas into start-ups, and then, maintain and expand the business which will expand the employment potential of the start-up. On the other hand, Uber-type start-ups started by young people are indirectly creating jobs. There is a potential to promote employment through such new business models.

The main challenges for SMEs and entrepreneurs are access to finance, an opaque business registration system and tax regime, recruitment and mismatch of the workers.

Entrepreneurship and the start-up business ecosystem is still in its infancy. Many incubation programmes and hubs for start-ups are concentrated in Khartoum State, where there are many business idea competitions and support for turning ideas into businesses. There has been no

acceleration programme to help them start and expand their business. Enable Youth Program and Orange Corner have started to provide support in this area, including in regions other than Khartoum State.

On the other hand, with regard to the so-called Business Development Service (BDS) provider for SME support, there is no governmental SME promotion agency as seen in other countries. There is an SME support unit in the Ministry of Industry, but it has only one project to support women entrepreneurs with a small development budget.

Because all the formal enterprises were required to register with SBF, the SBF was assumed to act as an intermediary body to provide services to its member, but so far it has only been able to provide training when it received external funding from the government or development partners. In addition, microfinance institutions offered non-financial services to their clients, but these were mostly pro-poor and did not meet the needs of entrepreneurs. SMEs also seek the services of BDS consultants to assist them in developing their business plans, but the payments for their services are so small that it is difficult to make them a full-time profession.

The financial sector is dominated by the Islamic banking system, but most of the financiers are large companies. The CBoS has informed banks and MFIs that 12% of their portfolios should be allocated to microfinance, but in reality, this is less than 6%. In principle, microfinance is meant for poverty alleviation, and the amount is small, suitable for financing income generating activities, and not a source of money to meet the business objectives of SMEs. In fact, entrepreneurs and SMEs are often financed by acquaintances and family members. There is one venture capital (VC) firm, but due to taxation issues, it has no investment experience and provides mentoring and consulting for start-ups. The entry of foreign VCs has been hampered by the lack of a legal system that allows them to remit capital gains. On the other hand, mobile money has penetrated the market to some extent and there is a move to grant licenses on payment and remittance service to telecom companies. Yet there is still a need to improve the legal system in order to develop digital financial services that combine fintech with the financial needs of SMEs for growth.

The Transitional Government plans to develop strategies, policies and legislation for SMEs and entrepreneurship development, although the ministries responsible for these are not yet clear. On the other hand, financial inclusion and increased access to finance are planned in the policy document.

7.1.5 Current Situation and Challenges In Industrial Sectors With Employment Potential

The following table provides an overview of the growth potential of the main industrial sectors that are expected to employ youth.

Table 7-3 Industries Expected To Absorb Youth In Employment

Sector	Share in GDP	Potential for growth	Situation and Challenges for Employment
Agriculture	18.5% (2018)*	<ul style="list-style-type: none"> Positioned as priority industry and expected to expand domestic and export market thanks to the value addition. Highly potential growth area considering investment from foreign countries 	<ul style="list-style-type: none"> In mechanised rainfed agriculture and in traditional rainfed agriculture, there is a high labour absorption capacity. The expansion of cultivated area simply leads to employment absorption However, there is a shortage of labour as they are taken by the mining industry. There is a need to improve agricultural businesses to increase productivity and add value. There is a need for people and companies to support the management of agricultural businesses.
Manufacturing	11.0% (2018)*	<ul style="list-style-type: none"> High growth potential is found in agro-processing, food processing and some light industry. Agro-processing is dominated by micro-enterprises. Sesame, oilseeds and horticultural crops also have high growth potential as export products. Low quality of agro-processing (e.g. crops for export, meat and leather) is an issue It is important to develop domestic infrastructure such as production facilities and improve processing technology. 	<ul style="list-style-type: none"> Agro-processing can lead to employment on a variety of scales, from micro to small, medium and large enterprises in both urban and rural areas. It can promote employment through the activation of the value chain of relatively dominant agricultural products with high production volumes. MSMEs play a major role, but are challenged by a lack of technology and low quality. Recent mechanisation in manufacturing requires electrical engineering and computer skills, as well as the ability to understand manuals in English.
Auto mechanics	-	<ul style="list-style-type: none"> Most of the work is carried out by car mechanics in the informal sector. The needs is increasing as the number of vehicles increases. In the past, raw materials and genuine spare parts have been difficult to obtain, but with the lifting of economic sanctions, business would become easier and there is great potential for expansion. 	<ul style="list-style-type: none"> A myriad of operators absorb a large number of apprentices and technicians, and their employment absorption capacity is estimated to be high. Employment absorption capacity is higher in urban areas where there are more vehicles. Among the MSMEs, few mechanics can handle electronically controlled vehicles, and many still cannot cope with the repair needs. English manual is one of the challenges Foreign engineers are seen at large companies Beside the technical level, change in the mindset to work is also required Barriers to entry for women have been high, but there is a change in Khartoum
Constructio	3.3%	<ul style="list-style-type: none"> The infrastructure is largely 	<ul style="list-style-type: none"> There are many supporting industries

n	(2018)*	<p>undeveloped, but there is potential for growth as the economy revives.</p> <ul style="list-style-type: none"> • A wide range of related industries (building materials, plumbing, electrical distribution, tiles, etc.) • The economic impact of related industries and construction projects on the surrounding area is significant. 	<p>and some of them are labour intensive business. Labour absorption is expected to be high in urban area.</p> <ul style="list-style-type: none"> • There is a shortage in both labourer and engineer/technicians. Engineers with latest technology is needed but not available in Sudan. Fixing this mismatch may lead to employment. • Social norm challenges women to enter this industry (varies based on the region)
ICT	-	<ul style="list-style-type: none"> • There is growth potential in (i) the development of ICT infrastructure, (ii) the promotion of tech start-ups, and (iii) the digitisation of existing industries. • ICT is cross-sectoral and there is high potential for growth in digitalisation in various sectors such as agriculture, manufacturing and construction. • New business models are being created by tech start-ups. • A number of new initiatives, such as the digitisation of banking services, are creating new needs for system construction and security services. • A policy of promoting ICT-based industries would open up more growth possibilities. 	<ul style="list-style-type: none"> • The need for human resources is high and can be promoted through the spread of IT in existing businesses and tech businesses such as agri-tech. • Introduction of mobile money and Uber type business by start-ups can create employment other than directly absorbing employment. • There is increasing demand for delivery business • Women's employment & entrepreneurship can expand through new approaches • There is a high demand for qualified workers, but there is a tendency for those with high skills to leave the country, so securing human resources is an issue.
Other (Tourism)	Tourism 6.1% (2019)**	<ul style="list-style-type: none"> • There are key touristic sites and an important industry for earning foreign currency. • Although the tourism industry has been hit by COVID-19, it is expected to recover gradually with the removal from the SSTL • Tourism have various related industries such as hotel, restaurant, catering, handicrafts souvenir etc. • The infrastructure of hotels and other services is not yet developed, and further investment is required. 	<ul style="list-style-type: none"> • Tourism has economic spill-over effects and job creation effects as people travel and consume a variety of services and goods. • It is also expected to increase employment in rural areas through handicrafts and other related industries. • Despite the hospitality Sudanese people generally have, there is a gap between the needs of the industry and the level of human resources, with many people lacking language skills and professional skills.

Source: *Central Bank of Sudan 58th Annual Report, **World Travel and Tourism Council

In considering the employment promotion through specific industries, it is important to focus on the value chain and the range of supporting industries, and it can have a large impact on employment.

Agriculture and manufacturing (agro-processing) are expected to be the most promising sectors for employment absorption. It is already difficult to secure agricultural labourers. Efforts are needed to strengthen agricultural management and to provide better condition for the labourers. UNIDO's project in Kassala has led to improved farm incomes and the creation of opportunities for women to participate in economic activities, through supporting cooperatives and linking them on the

agricultural value chains. The Union of Chamber of Commerce (UCC) is working on promoting export of agricultural products, through which the UCC is looking at ways to improve the farmers' incomes.

The construction industry covers a wide range of supporting industries and can be expected to absorb large amount of employment. This sector is closely related to vocational training and qualification systems. There is a possibility of making a good impact by effectively linking with the private sector (employers) and training institutions, with which JICA has good working relationship.

- The need to grow from micro and sole proprietors to SMEs

It is also very important to enhance the incumbent workers, not only the youth because the underdevelopment of MSMEs may become a bottleneck for economic growth. The opening up of the economy to the international community is likely to lead to a rapid introduction of new technologies. It is important to address the shortage of technicians in order to keep up with the technological advancements. In all industries, auto mechanics, construction, agro-processing and agriculture, business owners often do not have access to information about new technologies, and even if they do, they do not know how to adopt them and are left behind while hesitating. It would be more effective to introduce appropriate and intermediate technologies that are affordable, rather than to introduce high-cost, digitalised technologies. In the auto mechanics and construction industries, where a large number of formal and informal MSMEs are active, it is particularly urgent to improve the skills and business mindset of owners and workers. By moving forward from subsistence-type micro-enterprises toward (more formal) small to medium-sized businesses, the potential for stable employment increase.

On the other hand, interviews with business owners reveal that they do not see the benefit of formalising or expanding their businesses, but rather are trying to survive by not enlarging the business. For example, employers commented that they are trying to keep a low profile because of the opaque taxation, which requires them to pay tax even if their business is not making a profit, and that labour laws are too protective of workers and provide little incentive for companies to hire, thus avoiding full-time employment. There are some movements toward revision of the laws including the corporate law/ SMEs laws, and thus the voices of these MSMEs must be appropriately consulted in the revision process.

7.1.6 Areas for Promoting Women's Employment

In order to promote women's employment, it is vital that efforts are made to address the barriers to employment in the long term, this include legislative aspects and social norms. At the same time, there is an urgent need to tackle the high unemployment rate. In addition, great caution must be taken to ensure that support does not result in further stereotyping of women, by strengthening awareness-raising and working complementarily with other agencies.

● Employment Opportunity

Given that most women in rural areas are engaged in agriculture, the employment impact could be gained by promoting investment in agriculture. However, since it is difficult for women to work in agriculture in some areas, and since the labour absorption capacity will decline as modernization progresses, it will be also vital to consider stabilizing their livelihoods by securing sources of income other than working as labourer, such as the production and sale of processed agricultural products.

In urban areas, regardless of the industry, it is first necessary to secure employment opportunities for women. By visiting companies and getting them to understand the advantages of employment of women and securing information on job openings, it is possible to provide training on employment and entrepreneurship for women who wish to work. Actively promoting the understanding of women's employment on the part of employers and reducing the risk of harassment after employment as much as possible will help to secure a safe working environment for women and enable them to continue working.

● Entrepreneurship Opportunity

Sudanese women are expected to take care of the family, and as a result, they often seek a flexible working environment. In many cases, they have limited time to go for training. As a result, it is said that many women start businesses that can be done at home, which is easier to gain the acceptance of their families. There are many examples of women doing such businesses from home using simple ICTs (e.g. Facebook, WhatsApp) for marketing. It is an immediate and easy way to make a living and improve their lives and earning an income can contribute to women's empowerment by boosting their confidence and self-esteem. There is also an emergence of start-ups by relatively well-educated women entrepreneurs. Women entrepreneurs face a number of challenges on a daily basis due to the prejudices of men in business, government agencies and banks. By addressing these challenges, finding role models who can influence the next generation of women, and supporting their development, there is a potential to change the image of women and business.

7.1.7 Employment Promotion through Entrepreneurship

The Sudanese job market has grown more through the creation of a large number of entrepreneurs than through the growth of enterprises. Therefore, supporting the development of entrepreneurs is in itself highly significant for promoting employment. In terms of supporting entrepreneurs, the following initiatives, are good examples.

● Expansion of Employment using Technology

Innovative tech businesses, such as Monjid and Tirhal, by registering a large number of individuals, as indirect workers, would lead to job security, improved soft skills for the registered individuals, while for the company, faster service delivery and improved efficiency.

● Business and Employment Expansion through Supporting the MSMEs Owners

This kind of intervention help the micro-enterprise owners to expand their businesses, creating new jobs and enabling apprentices to start their own businesses. In SMAP-II, some apprentices graduated, and they were subcontracted and created cooperative relations with their original employer. Apprenticeship contracts were also concluded. It is also expected that by enhancing the apprenticeship system, it actually contributes to protect young people who have dropped out of the school system.

● Women Starting Business

Vocational training conducted in Darfur, Kassala and White Nile, the course was prepared in an integrated way combining technical skills, entrepreneurship, internship and market research. About 80% of the women started their businesses at home or elsewhere. When financing was difficult, start-up kit was provided and regular mentoring was conducted to ensure their starting of business.

7.1.8 Employment Opportunities for Youth

For the specific industrial sectors analysed in section 7.1.5, the table below analyses the employment (employment and entrepreneurial) potential of each industry.

Table 7-4 Employment Opportunity for Youth by Sector

Category			Agriculture	Manufacturing (agro processing)	Auto mechanics	ICT	Construction	Other
Urban	M	Emp	×	○	○	○	○	○
		Ent	×	○	○	○	○	○
	F	Emp	×	○	×	△	×	△
		Ent	×	○	△	○	△	○
Rural	M	Emp	○	○	○	△	△	△
		Ent	○	○	○	△	△	○
	F	Emp	△	△	×	×	×	△
		Ent	○	○	△	△	△	○
Apprentice			△	○	○	×	○	○

Source: Survey Team

Note: Emp: Wage employment, Ent: Entrepreneurship, M: Male, F: Female

7.1.9 Development Partners' Assistance Area and Key Lessons Learnt

The table below shows the area of assistance and key development partners. In fact, all of the partners' interventions are aiming to achieve several objectives and therefore it is not simple to categorize them in a framework. In the table below, the partners are listed based on their activities' main objectives.

Table 7-5 Area of Assistance and Key Partners

Assistance Area (Main Objective)	Key Development Partners
Entrepreneurship & Start-up Support	UNIDO, UNDP, British Council, The Government of Netherlands, (Orange Corner Program, E-MIND (Pipeline))

Women's entrepreneurship and economic empowerment	African Development Bank (AfDB), World Bank, UN Women, USAID, EU
SMEs development	UNIDO, UNDP, British Council (Policy development)
Agriculture and agribusiness Support	AfDB, IFAD, UNIDO, EU Irrigation Scheme Support: JICA, KOICA
SBF capacity development	US Department of the Interior (CIPE)
Microfinance, Loan for small business	AfDB, World Bank, IFAD, UNIDO, UNDP
Startup Fund	The Government of Netherlands (Orange Corner), UNIDO
Investment and Trade promotion	British Council, USAID, EU/European Chamber of Commerce, US Department of the Interior (CIPE)
Youth leadership support	UNDP, UNESCO (Youth Policy)
TVET support	GIZ, EU, UNESCO, UNIDO, ILO, KOICA, British Council, USAID, AfDB
Youth Employment (Direct intervention)	The Government of Netherlands (Challenge Fund for Youth Employment), ILO (Employment Intensive Investment Program-Khartoum)

Source: Survey Team

As indicated in Chapter 6, the good practices and lessons learnt are as shown below.

For SMEs Support, it is effective to:

- Combine financial services and non-financial services
- Build a business ecosystem which can provide comprehensive support to MSMEs and entrepreneurs

For TVET/ Human Resource Preparation, it is key to:

- Support transition from School to Work

For Designing the Assistance, it is preferable to:

- Manage flexibly through learning by doing
- Input to policy level from the actual experience
- Consider the purchasing power when targeting outside Khartoum
- Ensure transparency and fairness
- Devices to attract the interest of young people

7.2 Proposed Support Measures for Youth Employment Promotion

The survey team set the overarching goal as “to create a job market where young people can find rewarding work”, and considered the support measures that JICA can effectively use its experiences in Sudan and neighboring countries

Table 7-6 JICA's Assets in Sudan

Assistance Area	Strength /Assets	Weakness
Labour Demand	<ul style="list-style-type: none"> • (SMAP-II) MSMEs BDS support • Agriculture projects experience, and good communication built with relevant ministries • Conducted KAIZEN training with Ethiopian trainer 	<ul style="list-style-type: none"> • MSMEs BDS was a short-term intervention, and experience of long-term approach is limited in Sudan. • No financial support has been done (*Experience in Ethiopia)
Labour Supply	<ul style="list-style-type: none"> • Experience as a leading donor in the 	<ul style="list-style-type: none"> • Experience of working with the Ministry of

	<ul style="list-style-type: none"> field of vocational training • Experience in vocational training for vehicle maintenance and construction engineers • Established good relationships with relevant ministries and agencies • Established good relationships with other donors in the sector • Support for the institutionalisation of apprenticeship training • Experience in implementing the ABE Initiative 	<ul style="list-style-type: none"> Higher Education and the Ministry of General Education is limited due to the focus on vocational training • Limited experience in Sudan in supporting university and college graduates. (*Experience in Egypt, Kenya, Rwanda, etc.)
Employment Promotion	<ul style="list-style-type: none"> • (SMAP-II) Experience in working with labour office and technical high schools and women's training institutions to support employment promotion. 	<ul style="list-style-type: none"> • Cooperation with the Federal Ministry of Labour and Administrative Reform (MOLAR) was limited. • Limited support in Sudan to the labour office in the functioning of job matching (*Experience in Jordan, Indonesia, etc.)
Entrepreneurship Development	<ul style="list-style-type: none"> • Experience in supporting small business start-ups in Khartoum and other state cities (women and youth) as a part of project. 	<ul style="list-style-type: none"> • It is difficult to provide financial support for entrepreneurship. • Limited experience in supporting entrepreneurs such as women with university degrees. • Entrepreneurship and start-up support is not conducted in Sudan (*experience in Ethiopia)

Based on the above, the following support measures are suggested for consideration. These measures could be implemented separately or in combination. The details of the pilot project need to be planned in accordance with the budget, implementation period and the rapidly changing situation in Sudan.

It is important to note that there are challenges in every corner of the business environment: (1) legislative environment (SMEs development policy, corporate laws, labour laws, financial laws and regulations), (2) capacity of the implementing agencies (government institutions, banks, tax offices, state government agencies), (3) realities in the private sector' (lack of middle level businesses, challenges of the large scale and micro/small scale businesses), and (4) mismatching of human resources (youth attitude, lack of skilled labour force, etc). On the other hand, it is advisable to start with actions that have quick impact in the youth employment situation in order to realise the dividends of the civil revolutions rather than aiming for sustainability from the beginning. The experience-based evidences should be properly collected during the interventions and the lessons learnt should be reflected in the revision of the polices and legislation.

(1) Labour Demand Side Support: Agriculture Value Chain

Theme/Purpose	Strengthening farm incomes and stabilising employment by supporting the development of agricultural value chains.
Target	Rural youth (male and female)
Target Area	Rural areas (River Nile State, Gezira State, White Nile State and other areas with JICA assets)
Industry	Mainly agro-processing
Partners	Ministry of Agriculture and Forestry -Extension Office, Ministry of Industry,

	Youth Training Centre, TVET schools, etc. Women Support Component: SBF women business secretariat, women entrepreneurs' association, etc
Contents	Value chain analysis of specific high value-added products (sesame, groundnut, etc.), organising youth cooperatives, support for business planning, financial assistance, support for warehouse and storage facilities and equipment, marketing support, support for value chain finance, ecosystem development Women Support component: training on agro processing technics and business management, creating a saving group, facilitating access to microfinance, in collaboration with the agriculture project
Policy Input	Recommendations to the federal agriculture policy, agro business industry policy, state economic development plan, as well recommendation for agribusiness finance policy Women Support component: promotion of women's economic empowerment in rural area
Characteristics	Cooperation with JICA's agricultural projects. It may include the local people who are currently not directly involved in the project. Effective use of the JICA's experience in agriculture sector development Cooperation with Enable Youth Program of AfDB (Contribute to the enhancement of the Enable Youth Program training centres, and use the place as a platform for activities) Cooperation with UNIDO Kassala Project (knowledge and experience exchange)
Development Partners	Agriculture Value Chain / Agriculture Income <ul style="list-style-type: none"> UNIDO's Fostering Inclusive Economic Growth in Kassala State through Agro-value Chains Development and Access to Financial Services (UNIDO Kassala Project: Target area: Kassala) Agriculture Value Chain with Agri-business Entrepreneurship <ul style="list-style-type: none"> AfDB's Enable Youth Program. Targeting Khartoum, Gezira, Kassala, Gadaref, and River Nile States. University Graduates only. Each business are expected to hire 5 employees. New phase (project 2) starting shortly will expand to additional 4-5 states, and this phase will support not only start-ups but also those who have already started business. Agriculture Value Chain and Refugees Income Generation <ul style="list-style-type: none"> ILO's PROSPECTS target the refugees and IDPs in Eastern Darfur and Western Kordofan EU's agribusiness in Eastern Sudan project, implemented by the RVO (the Netherlands' agency), target the refugees and host community to improve livelihood through the agriculture related income Agricultural Productivity Improvement for Agricultural Income Improvement <ul style="list-style-type: none"> IFAD's Integrated Agricultural and Marketing Development Project (IAMDP) aims to improve the productivity of the cash crop of rain-fed agriculture area in Northern, Southern and Western Kordofan and Sennar Sates. Mainly targeting the poor households. EU in the area of "Private Sector Capacity Development", plans to (1) improve livelihood of farmers and fishery through value chain approach, create employment and improve nutrition, (2) enhance women and disabled people's business related to agriculture value chain through TVET, and (3) support for land policy development

(2) Labour Demand Side Support: MSMEs Development

Theme/Purpose	Increase the number of SMES that can contribute to employment growth by supporting the MSMEs' upward transition from subsistence businesses to formal SMEs.
Target	Business entities registered with SBF-SICU
Target Area	Urban areas in Sudan with JICA's assets (Darfur, Kassala, White Nile, Northern Kordofan, etc.)
Industry	Auto mechanics and construction related (electrical, plumbing, welding, etc.)
Partners	Ministry of Industry, SBF-SICU, MOLAR, TVET institutions, etc

Contents	Training on appropriate technology in cooperation with medium and large-scale employers, study of qualification system, support for business registration, business training, support for accessing bank loans, strengthening of capacity of SBF to provide BDS, contribute to building of ecosystem
Policy Input	Recommendations for SMEs promotion policy Recommendations for the promotion of formalisation of business (taxation, labour laws, business environment, etc) Organise the knowledge and skills required for each industry and propose qualifications. (In collaboration with NQF and qualification examination system)
Characteristics	Paying attention to the diversity among the SMEs and focuses on traditional ones who are estimated as majority of Sudan's economy. Enhancing them to stretch their business upward would have large impact to stabilize business and secure and increase employment. JICA's assets can be used and the project can be launched swiftly. It is desirable to maximize the effect by combining with the other proposed support measures described in (3) & (4).
Development Partners	Capacity Development of SBF: CIPE Formalisation of Informal Business: <ul style="list-style-type: none"> • UNDP takes institutional approach to involve informal /micro businesses, and plans to support policy development of policies promoting business formalisation • UNDP plans to work in the formalisation area (pipeline) Business entities' capacity development: <ul style="list-style-type: none"> • GIZ projects (Darfur, Eastern states) works enhance technical skills of the private sector (mainly) of those who accept the in-plant trainees Qualification System: <ul style="list-style-type: none"> • UNESCO on developing National Qualifications Framework • GIZ Darfur project works on improving the skills verification system (Recognition of Prior Learning)

(3) Labour Supply Side: Enhancing Employability at TVET institutions

Theme/Purpose	Raising awareness among TVET graduates and employers of the need for private sector-led human resource development
Target	TVET trainees
Target Area	Urban areas in Sudan with JICA's assets (Darfur, Kassala, White Nile, Northern Kordofan, etc.)
Industry	Auto mechanics and construction related (electrical, plumbing, welding, etc.)
Partners	TVET Institutions, SBF-SICU, MOLAR, Ministry of Industry
Contents	Improving the internship system at TVET schools to enhance employability (communication, time management, CV/Work history, etc.) Management training and HR management support for employers hosting interns
Policy Input	Contribution to the development of qualification systems Improvement of the intern and apprentice system Recommendations to TVET school curriculum
Characteristics	JICA's assets can be used and the project can be launched swiftly. It is desirable to maximize the effect by combining with the other proposed support measures described in (2) & (4).
Development Partners	Various partners (GIZ, UNIDO, UNESCO, ILO, KOICA, etc) works to enhance capacity of VTCs

(4) Employment Promotion: Job Matching Support

Theme/Purpose	Improving information asymmetries in the labour market by strengthening the role of the labour office as a job matching office. Realisation of a fairer employment environment.
Target	NA (can start with a pilot project with TVET students)
Target Area	Any place with labour office and JICA's assets (Darfur, Kassala, White Nile, Northern Kordofan, etc.)
Industry	NA

Partners	MOLAR- Labour office, SBF
Contents	Strengthening of job scouting and information management skills of Labour Office staff, HR management training for companies by the Labour Office, strengthening of career guidance skills for students in TVET schools, and support for strengthening of cooperation between TVET schools and the Labour Office.
Policy Input	Supporting the implementation of labour policy
Characteristics	Possibility of working with private companies with expertise in job matching. There is potential for collaboration with Jordan where JICA previously assisted career counseling, particularly in consideration of language. It is desirable to maximize the effect by combining with the other proposed support measures described in (2) & (3).
Development Partners	GIZ Eastern project worked with the labour office in Kassala and Gadaref to establish Job Centre and launched the job matching website.

(5) Employment Promotion: Sudanese Style Startups

Theme/Purpose	Start-up support for business models that solve employment and other social issues
Target	University students and the graduates, Technical college students and the graduates
Target Area	Khartoum and regional cities such as Northern Kordofan (Obeid), White Nile (Rabak and Kosti), River Nile (Atbara) etc
Industry	Any, but limited to businesses that target social issues, and/or employment-based business models Preferences may be given to the business that uses the appropriate / intermediate technologies
Partners	Ministry of Social Development, SBF Entrepreneurship Unit, Social Entrepreneurship Association Khartoum: University of Khartoum (Entrepreneurship Centre), Afhad University for Women, University of Medical Sciences and Technology Local cities are selected on the basis of internet access, population and purchasing power. Some cities with JICA's experience are: <ul style="list-style-type: none"> • Obeid: State government, locality government, University of Kordofan (the Centre for Intermediate Technology in Agriculture), Om Rowaba Technical College, Don Bosco Technical School, etc • Rabak/Kosti: State government, locality government, University of El-imam El-Mahdi, White Nile college of science and technology, etc • Atbara: State government, locality government, Nile Valley University, Elsheikh Abdallah Elbadri University, etc
Contents	Entrepreneurship support, business plan development, pitching events, private sector funding and mentoring. Development of Sudanese start-up support model. Preference to women applicants.
Policy Input	Recommendations on entrepreneurship policies and strategies, business registration laws, taxation and employment laws
Characteristics	Utilisation of JICA assets (Solve IT, Ethiopia). The start-ups in this assistance will expect innovative ideas, though not only advanced technology, but intermediate/ appropriate technologies. Thus, not necessarily aiming to expect the business to expand like the Silicon Valley style ventures. Linkage with CFYE project of the Netherlands, which provides matching fund support for employment creation.
Development Partners	Employment Promotion: <ul style="list-style-type: none"> • The Government of the Netherlands's CFYE Social Entrepreneurship: <ul style="list-style-type: none"> • British Council's Social Enterprise Sudan Start-up Support: <ul style="list-style-type: none"> • British Council's Impact Enterprises "Mashrouy" and Creative Enterprise Programme • The Government of the Netherlands's Orange Corner Program. Started in Khartoum and will expand in Darfur. Expansion to Kassala is also planned • UNIDO's Youth Entrepreneurship Development (Plan)

(6) Entrepreneurship for Women in Urban Area

Theme/Purpose	Economic empowerment of women in urban area through small scale business, and enhance intrahousehold negotiation power
Target	Women in urban area (education level is not necessarily required)
Target Area	Urban areas in Sudan with JICA's assets (Darfur, Kassala, White Nile, Northern Kordofan, etc.)
Industry	Any, but mainly the business that requires little initial investment
Partners	Ministry of Social Development, SBF-SICU's entrepreneurship unit, SBF- Women Business Secretariat, Women business association, Ahfad University for Women, and other universities running Community College
Contents	Technical training in cooperation with TVET schools (leather, toub, dry fruits and vegetables, occasional biscuit, etc), bookkeeping and saving, BDS by microfinance institutions and women entrepreneurs' associations, financial services by microfinance institutions (development of financial products to meet the needs of women entrepreneurs), marketing support, development of business models for women's economic activities, role model case studies, development of women entrepreneurs' networks, etc.
Policy Input	Development of Women Entrepreneurship Policy and Guidelines for Women Entrepreneurship Development of BDS model for SBF-Women Entrepreneurs Association
Characteristics	JICA's asset can be utilised (TVET institutions) This aims to support women who wants to generate income to improve or sustain livelihood, rather than advanced (technology/ innovation) type of entrepreneurship. Women's income is often directly associated with the education and nutrition of family members.
Development Partners	Women's small scale business <ul style="list-style-type: none"> • UNHCR, UNICEF and other international NGOs in cooperation with local NGOs conduct short training courses, often for the refugees, IDPs and host communities • UN Women, as a part of the UNIDO Kassala project, implemented entrepreneurship /economic empowerment targeting women

Appendices

Appendix 1: List of Interviewees

Organization / Institution	Name	Division/Title
Sudanese Governmental Organizations / Agencies		
Ministry of Agriculture and Forestry	Omer Mohamed Ali	Producers Organization Coordinator (former Head of Youth Empowerment Directorate)
Ministry of Finance and Economic Planning	Amin Saleh Yassin	Undersecretary Economic Planning (acting)
	Waeil Fahmi	General Manager, General Administration of Planning and Economic Policies
Ministry of Higher Education and Scientific Research	Mohamed Mahjoob	Deputy Manager Scientific Research
	Ratiba Haj	Manger, National Energy research Canter NERC
Ministry of General Education	Tamador Eltrifi, H.E.	Undersecretary
	Elhadi Elamin	General Director, Technical Education Directorate
Ministry of Industry	Ibrahim El Sheikh H.E.	Minister
	Suad Al Balaa	Head of SMEs Unit
	Emad	Planning Officer
Ministry of Investment and International Cooperation	Ahlam Medani, H.E.	Undersecretary
	Islam Alsadig	Director of Promotion Sector
	Tayseer Abdalla	Promotion Sector
	Saeed Ahmed Saeed	Undersecretary Office Manager
Ministry of Labour and Administrative Reform	Nader Eltayeb Elsmami	Head of Training Directorate
	Moolok Mohammed Said	Minister Advisor on International Cooperation
Ministry of Social Development	Aisha Abuhurira	Director, Women Economic Empowerment
Ministry of Youth and Sports	Aiman Saied Mohamed	The undersecretary
	Mortada Abd Almutlab	Head of Youth Unit
Youth Projects Commission	Osman Ajabain	Commission president
	Abdelmutial Sabon	Member
	Yousif Mohamed Yousfi	Member
National Bureau for Graduates Employment	Maha Shabo	General Secretary
	Magda Abdelrahman	Head of Foreign relations and partnership department
	Susan Elshafie	Head of Project department
Associations / Federations / Organizations		
Sudanese Business Federation	Hani Slieman	Board of Directors /International Relation Secretariat, Union of Chamber of Commerce
Sudanese Business Federation (Small Medium Hand Craft Unit)	Ali Fadul	Secretary General
	Al Tahir	Head of Unit, Training and Capacity Building Committee
	Haiat Alabady	Head of Unit, Entrepreneurs of small industries
	Magda Alnahas	Secretary, Entrepreneurs of small industries
Sudanese Business Federation	Husam Saud	Consultant, Small, Medium, Micro Enterprise and Hand Craft
Sudanese Business Federation (Youth Secretariat)	Ahmed Sayed	Secretary General, Youth Secretariat
	Hatim Mubark Hassan	Leader, Entrepreneurship unit
Social Enterprise Sudan Association	Amro Badedin Alnoor	Learning and Development
Zenab for Women Development Organization	Fatima Ahmed	Founder, Programme and partnership
Universities / Academic Institutions		
Ahfad University for women	Abdelhamid Kadafor	Professor Assistant, School of Business
University of Khartoum	Neimat Abdalla Ibrahim	Assistant Professor of Accounting and Finance-Director of Entrepreneurship Centre
University of Medical Sciences and Technology	Yusuf Ahmed Kani	Head of Department and Program Leader Global MBA in Impact Entrepreneurship.
Sudan University of Sciences & Technology	Mahdi Shakak	Vice President
	Tarig Aukair	Director General, Entrepreneurship Center
Banks / Financial Institutions		
Agricultural Bank of Sudan	Faiza Abdul Majed Ali	MF Department Manager
ANAFI Capital Partners	Ahmed Darwish	(Portfolio Manager of Challenge Fund for Youth Employment Sudan)
Central Bank of Sudan	Seifeldin Barri	General Manager, Microfinance Unit
Ebdaa Bank	Adil Balla	General Manage
	Nawal Majzoob	Deputy General Manager

Organization / Institution	Name	Division/Title
Family bank	Salih Gibril Hamid	General Manager
IRADA MFI Bank of Khartoum	Ammar Osman	General Manager
Saving and Social Development Bank (SSDB)	El Fatih Hassan El Sadig	MF Department Manager
Social Development Foundation Khartoum	Omar Abdul Hamid	General Manger (Acting)
Workers National Bank	Salah Al-Hassan Haj Abdulla	Deputy Manager
Development Partners / International Organizations		
African Development Bank	Mohamud Hussein Egeh	Task Manager, ENABLE Youth Program
World Bank	Maisoun Alaaidin Badawi	Sr. Private Sector Development Officer, Competitive and Finance
World Bank Sudan Women And Youth Entrepreneurship Project (SWAYE), Scoping Mission Team	Oloaku Oyewole	Financial specialist
	Asta Bareisaite	Private Sector development specialist
	Rachel Dawn Coleman	Research and operation Women and entrepreneurship
	Ana Goicoechea	Global unit, Entrepreneurship
	Saef Alnasr Ibrahim Mustafa	National consultant
	Marlon Rolston Rawlins	Finance expert
European Union	Juan Andres Cartwright Ramon	Private & finance development
	Federico CAPURRO	Rural Development Programme Manager, Resilience and Sustainable Development Team
	Léa Polony	Program manager, Economic affairs, trade, private sector and Public Finance Management
IFAD	Ahmed Subahi	Country Program Officer
ILO	Donald Sean Paterson (via Email)	ILO Sudan Programme Manager to the United Nations PROSPECTS Partnership
UNDP	Ali Muntsair	Head of Experimentation/Accelerator Lab
UNDP	John Anadom	Senior Project Manager, Youth Volunteer Rebuilding Darfur Project
UNESCO	Aiman Badri	Acting Representative
	Wa'el Mustafa	TVET Specialist
UNIDO	Mohamed Elsayed Abdelmomen	Country Representative
UNIDO -Project on Fostering Inclusive Economic Growth in Kassala State Through Agro-value Chains Development and Access to Financial Services	Edoardo Scalco	Chief Technical Advisor
UNIDO -Project on Employment and Entrepreneurship Development for Migrant Youth, Refugees and Asylum Seekers and Host Communities in Khartoum State	Ram Kishore Prasad	Chief Technical Advisor
	Shaza Brema Baballa	Project Officer
	Farouk Abdel Hamid	Intern
British Council	Amro Makki	Director Programme & Partnership, Programme and Partnership Development
USAID	Ibrahim Hamid	PPDO Project Management Specialist
GIZ	Cathleen Kummer	Portfolio manager
	Pratap Sinha	Deputy Project Manager
	Steffen Vetter	Private Sector
	Irene Genzmer	Private Sector
Embassy of Netherlands	Sjoerd Smit	Deputy Head of Mission
Challenge Fund for Youth Employment (CFYE)	Gerrit Ribbink	Country Lead Sudan
	Ahmed Darwish	Pipeline Manager, (Also as ANAFI Capital Partners)
Center for International Private Enterprise (CIPE)	Shaza Elmahdi	Sudan Country Director
Move Technology	Amir Osman	CEO

Organization / Institution	Name	Division/Title
	Ahmed Elrayah Masaad Elsedig	Managing Director of Move Technology, (Agriculture Consultant, Investment Consulting)
Silatech	Sakina Diab	Program Manager
	Mutasim Mohamed	Enterprise Development Director
	Suhaib Ahmed	Research Director
JICA		
Economic Development Department	Keiji Katai	Manager
Solve IT Ethiopia	Naonobu Fuwa	JICA Expert, Entrepreneurship Advisor
Project for Capacity Development Project for Irrigation Scheme Management in River Nile State	Naoki Koga	JICA Expert, Appropriate Agriculture International (AAI) (KOKUSAI KOSHU)
Private Enterprises		
Al Moshrega	Mohamed Siddig	CEO
Alrawdha Travel and Tourism Agency	Monna Abdallah	General Manager (Former Head of Secretariat, Sudanese Association of Travel & Tourism Agents)
Araak Group	Hussam Yassin	Group Finance
Aspalta Group Co.ltd	Yasir Sheikh Eldin Mohammed	CEO (Former Chairperson of Contractors Association)
Bayader Flour milling	Mohamed Tijani	Operational Manager
DAL Design and Construction	Adil El Boshra	Manager, Human Resources
DAL Engineering	Magdi Mohamed Elrasheed	Training Manager
DAL Medical	Raghda Mahgoub	Supply Chain Officer
Fandora	Maïsson Mater	CEO, Founder
Golden Arrow	Abdu Mamoun	General Manager
Green Food	Mohamed Yassir	Sales Officer
Intelligent Orientation (IO)	Nagi Mohamed	Founder, Capacity Development
Italian Tourism Co. Ltd.	Carla Piazza	
Marawi Trading	Mohamed Azhari	Head of business operations
Middle East Company	Leen Ihab Saeed	Administration
Monjid	Hasim Eltoun	CEO
Mahgoub Sons Group (MSG Food)	Merghani Mohamed	MSG Food
MTN Sudan	Shihab Eldeen Ibrahim	Fintech General Manager
Rosewind	Mohamed Abdelhalim	Management
SAEED Food	Mohamed Saeed	Management
Samakak Aleina	Ahmed Hamza	Founder
Sudan Digital	Andelaziz Musa	CEO
Tirhal	Mohamed Elzaky	Co-founder
	Mohamed Sayed	Acting CEO/HR
	Mohamed Shareif	Strategy Consultant
Toyota Tsusho	Kentaro Yamada	Representative, Khartoum Office
Incubators		
249 Start-ups	Ahmed Elmurtada	Managing Partner
	Sabrine Hisham	Research Associate
Impact Hub	Sarrah Kheir	Business Development & Programs Manager
Job Matching Services		
Orooma	Mohamed Satti	CEO
Sudan Job	Salma Mohamed	Operation Manager
Other BDS Providers / Resource Person		
Former UNIDO Consultant for Entrepreneurship	Ameer Hassan Abubakr	Arab Organization for Agricultural Development
PACT (Consulting Company for BDS)	Yousif Mohamed	Senior consultant
	Dalmas Menya	Consultant
	Kawther Abudin	Consultant
	Mohammed Gizooly	Consultant
Independent Consultant for BDS	Mohamed Elamin Gasim Elzubei	Consultant
Former Consultant for Ministry of Youth and Sports	Mohamed Mahmoud	Consultant

Appendix 2: Result of Youth Opinion Survey on Career (University Students)

Survey Method: Online survey form was distributed through university professors between 13 to 24 June 2021

Responses: 35 persons

S/N	1. Age	2. Gender	3. Level	4. University	5. Major	6. Did you study entrepreneurship at university?	7. Choosing a Job and Work: What do you want to do after graduation?	8. Regarding your choice of job (question #7), what would you like to do? please clarify.	9. Regarding your choice of job (question number 7), why did you choose this option? please clarify.	Do you think you will apply what you study to your work after graduation? (Scale) 1=Not at all - 5 Yes Very much so
1	25-30	Female	Master	Higher Academy for Strategic and Security Studies	Other	No	Work for wages (salary) outside Sudan	In the field of organizations	Because it is in my university major	5
2	25-30	Male	Bachelor	University of science and technology	Engineering	Does not exist	Starting my own business in Sudan	Consulting engineering office	The job is a restriction..a killer of creativity..a specific routine	3
3	25-30	Male	Bachelor	University of science and technology	Engineering	Does not exist	Work for wages (salary) outside Sudan	Join a company in the field of study and work as an engineer	The lack of sufficient job opportunities .. and the absence of a rewarding salary that fulfills the required needs at the level of the individual and the family	4
4	25-30	Male	Bachelor	University of science and technology	Engineering	Does not exist	Work for wages (salary) outside Sudan	I start with a salary in order to learn the work and then try to start my own business	Because it is the most suitable option in terms of knowledge, life and economics	3
5	18-24	Female	Bachelor	University of science and technology	Engineering	Does not exist	Starting my own business outside Sudan	Private company	Because Sudan does not have a job with good salaries	5
6	25-30	Male	Bachelor	Alazaiem Alazhari University	Agriculture	No	Work for wages (salary) outside Sudan	I want to work outside Sudan in order to earn capital that enables me to start my own business	This is due to the lack of jobs with sufficient income for me and my family	5
7	18-24	Female	Bachelor	Alazaiem Alazhari University	Agriculture	Does not exist	Work for wages (salary) outside Sudan	I want to work outside Sudan for a while and return again to Sudan with an excellent amount and open my own project	Because working inside Sudan limits career development	1
8	18-24	Male	Bachelor	Future University	Engineering	No	Starting my own business in Sudan			2
9	18-24	Female	Bachelor	Almogtrabeen University	Other	No	Work for wages (salary) outside Sudan	I work in my field of specialization with good pay and develop myself more	Because the conditions in Sudan are not helpful and there is not even the slightest right for me as a citizen	4
10	18-24	Female	Bachelor	Omdurman Islamic University	Agriculture	No	Work for wages (salary) outside Sudan	Working in animal production farms in the Emirates or Qatar	For high efficiency farms	3
11	18-24	Male	Bachelor	Emirates College for Science & Technology	Other	No	Work for wages (salary) outside Sudan	Building a better future	Because it is the best option for me	5
12	25-30	Female	Bachelor	Alazaiem Alazhari University	Agriculture	No	Work in a relevant ministry	Take advantage of the largest amount of information available in the field and expand it and work with it and fulfill my desires to have my job in my field in order to learn more and be able to develop it	I think it is better due to many reasons, including the lack of job opportunities, and if they are available, it can be mediated. There can be hope for the existence of job opportunities, even if it is a simple job, even with a small salary, in my field, so that if I find another job or a rewarding salary outside the field, I can work with it	1
13	18-24	Male	Bachelor	University of Khartoum	Engineering	No	Continue studying		Studying is fun	5
14	18-24	Male	Bachelor	Alazaiem Alazhari University	Agriculture	No	Starting my own business in Sudan	1. Focusing on the training aspect that I work in..Training courses in presentation skills and presenting workshops in awe of the audience 2. Starting a small agricultural project for vegetables 3. Starting work in the field of audio commentary	1. I have experience in these areas 2. Faster financial return 3. Time is at hand	5
15	18-24	Female	Bachelor	Kassala University	Other	No	Continue studying	Continuing studies, intensive training, and hospital practice until the forensic exam	Because my profession requires it	5
16	18-24	Male	Bachelor	University of Khartoum	Other	Yes Because of my strong desire to start my own business after graduation	Starting my own business in Sudan	Starting a special project	Because it is the most appropriate thing in a weak situation	4
17	18-24	Male	Bachelor	International University of Africa	Other	No	Starting my own business in Sudan	I studies abroad and work for two years to be able to be my own business	To be able to raise capital to start my own business	2
18	18-24	Female	Bachelor	Sudan International University	Other	No	Work for wages (salary) outside Sudan	I go outside Sudan and work in any Arab country. I will get a good income to fix my situation		4
19	25-30	Female	Bachelor	Sudan International University	Other	No	Work for wages (salary) outside Sudan	I work in a pharmacy	Same specialty and I need to raise money for my own project	2
20	18-24	Male	Bachelor	Alazaiem Alazhari University	Agriculture	Does not exist	Starting my own business in Sudan	An operating company for small projects related to the field of agriculture in general...	To help students and implement their ideas on the ground	5
21	18-24	Male	Bachelor	Alazaiem Alazhari University	Agriculture	No	Join an agricultural project	Immediately after graduation, the goal of joining agricultural projects is to gain experience	Because agricultural projects have a primary goal of investment and they have competition with each other, and this will give me experience faster than the rest of the other institutions	1
22	18-24	Male	Bachelor	Alazaiem Alazhari University	Agriculture	No	Work for wages (salary) outside Sudan	I want to join a university outside Sudan to develop my skills	I want to obtain a degree from outside Sudan	5
23	18-24	Female	Bachelor	Alazaiem Alazhari University	Agriculture	No	Work in a relevant ministry	Strengthening and developing agricultural projects and improving the agricultural economy	To benefit from it and because it is one of my fields of study and to strengthen agricultural projects in Sudan for better production, God willing	5
24	18-24	Male	Bachelor	Alazaiem Alazhari University	Social science	Yes Because it is compulsory Principles of management theories, history of management science, management functions in some detail, managerial personality theories and types of administrative systems	Starting my own business in Sudan			5
25	18-24	Female	Bachelor	University of Khartoum	Social science	No	Work for wages (salary) outside Sudan	Employment and completion of postgraduate studies outside Sudan	Due to the hardship of living that Sudan is going through, and no solution is in sight	4
26	25-30	Male	Bachelor	Sudan University for Science & Technology	Engineering	No	Starting my own business in Sudan	Establishing projects that accommodate youth	high income	5
27	18-24	Female	Bachelor	Alazaiem Alazhari University	Agriculture	No	Work for wages (salary) outside Sudan	get out of Sudan	Percentage of hardship to live in Sudan	5
28	18-24	Male	Bachelor	Omdurman Islamic University	Engineering	No	Work for wages (salary) outside Sudan	I want to work as an academic researcher in the field of infrastructure	Because it is less expensive than studying and research alone, working in a research institution creates the right environment for researchers at relatively low costs.	5
29	18-24	Male	Master	Alazaiem Alazhari University	Agriculture	I studied it outside the university	Join an agricultural project	Working on sustainable development projects	Because this field is related to food security and the interest of the country	5
30	31-34	Female	Master	University of Khartoum	Agriculture	No	Starting my own business in Sudan	I want to do a successful agricultural project	Private work in agriculture is of high economic value	5
31	31-34	Female	Master	University of Gezira	Other	No	Work for wages (salary) outside Sudan	I want to work in ideal conditions, which is what we lack here and a conducive atmosphere to work and add	Because I like to work away from extended family and relationships that take a lot of time and effort	5
32	18-24	Female	Bachelor	Alazaiem Alazhari University	Other: Dentist	Does not exist	Continue studying	Pass the internship period and continue my studies in the field of public health and surgery	To expand my knowledge and develop my field	3
33	25-30	Female	Master	Sudan University for Science & Technology	Engineering	No	Wage work (salary) in Sudan	work in my field.	to develop myself	1
34	18-24	Male	Bachelor	University of Khartoum	Other	Yes Because of my strong desire to start my own business after graduation How to create your own entrepreneurial project	Starting my own business in Sudan	Starting a special project	Because it is the most appropriate thing in a weak situation	4
35	18-24	Female	Bachelor	Al-Ahfad University for Girls	Other: Management	No	Continue studying	And continue studying and working	My desire	5

11. What kind of support is available to you currently to facilitate your obtaining a job after graduation? (1=Not available to me ~ 5 Available to me, No =doesn't exist)											
S/N	University's career counseling	University's Entrepreneurship Support	University's Job Fairs/Recruitment Support	Your professors support	University Alumni Network	Support friends and family members	Governmental support	Supporting Associations and Non-Governmental Organizations	Companies' youth support programs	Internship program	Recruitment websites (Sudanjob, Oromaa)
1	No	No	No	1	No	1	No	No	No	1	1
2	1	1	1	1	1	3	1	1	1	1	2
3	3	5	No	No	No	1	No	No	No	No	3
4	1	1	1	1	1	No	1	1	1	1	1
5	No	No	No	No	No	1	5	No	No	No	No
6	1	1	1	1	1	1	1	1	1	1	1
7	1	1	1	1	1	4	1	1	1	1	1
8	No	No	No	No	No	1	No	No	No	No	No
9	3	1	1	1	1	4	1	1	1	2	3
10	1	1	1	1	1	1	1	1	1	1	1
11	1	1	3	2	3	1	No	3	2	3	4
12	No	No	1	5	1	5	No	1	1	5	No
13	2	2	2	2	1	3	1	1	1	1	1
14	4	2	3	4	1	1	No	3	3	3	1
15	5	4	3	5	4	4	5	4	5	5	5
16	2	4	4	1	1	4	1	4	4	2	2
17	3	3	3	3	3	3	1	3	3	3	3
18	4	3	2	3	4	3	1	2	1	1	2
19	3	No	2	1	2	3	No	No	1	1	No
20	2	1	1	2	1	2	1	1	1	1	1
21	1	1	1	No	No	No	No	No	No	No	No
22	1	1	1	1	1	1	1	1	1	1	1
23	No	No	No	5	No	5	No	No	No	No	5
24	4	4	4	4	4	2	4	4	4	1	4
25	4	3	3	4	3	2	No	5	3	3	3
26	No	No	No	No	No	1	2	2	No	1	No
27	1	1	1	4	1	4	1	1	1	4	4
28	5	No	3	4	2	5	No	2	2	2	3
29	1	1	1	3	1	3	1	3	4	3	4
30	No	No	4	No	No	5	No	No	No	5	5
31	4	4	4	4	4	4	4	4	4	4	4
32	4	4	4	4	4	4	4	3	3	3	2
33	5	5	5	5	5	1	No	1	1	1	No
34	2	4	4	1	1	4	1	4	4	2	2
35	5	No	No	1	No	1	5	No	No	5	No

S/N	12. What kind of support will be useful to university students in their careers after graduation?	13. Please share with us your idea that would improve the youth employment situation and reduce the unemployed youth?
1	University support and training	Limiting the number of graduates and finding jobs for them in various jobs, benefiting from their energies, and transferring them from potential energies to benefit from them.
2	Paid training programs	Vocational education, paid training programs, reducing the retirement age to 50 years, enacting laws requiring the employment of a specific percentage of young people according to their number in the population
3	I think supporting entrepreneurship at the university, corporate programs to support youth	Reducing high wages and trying to take advantage of them in employing other youth..and opening youth rehabilitation and training programs..and giving new graduates opportunities to work and benefit from their enthusiasm
4	Salary training	The presence of bodies that receive inexperienced and students who have not yet graduated for training and rehabilitation with modern, organized and clear standards
5	labor saving	Providing opportunities and reducing intermediaries
6	Direct project support	Supporting small projects and new innovations
7	Government support and training programs	Conducting training programs for young people in their specialties and developing their expertise and knowledge
8	mentoring and material	Agriculture
9	Financial support and providing opportunities and grants to develop himself and obtain more certificates	Supporting small projects that can provide job opportunities for many.. and forcing the employment of young people for training periods in order to obtain experience
10	Practical implementation of their specialization	training
11	Material and mentoring support	Increasing investments for young people in the fields of agriculture, sports and management
12	Supporting non-governmental organizations and associations	Establishing free courses as well as centers that would support ideas for every novice with new ideas, taking care of students and providing centers that would be managed by experts and educating them in various fields, and then working with a simple capital, and the benefit would be mutual between the employee and the educated student
13	government	Providing job opportunities
14	Support with training programs and non-governmental organizations because they provide great and useful opportunities	In the beginning, educating the youth that the job will not come to the person while he is sitting in his place, he must strive to develop himself, in the beginning, open projects aimed at including fresh graduates, work with them, and train them because they have a passion for work and energy. Facilitate government procedures related to labor and investment offices to encourage young people to work and Especially in the agricultural aspect, smart companies work with newly developing neighboring countries to exchange cultures in the field of entrepreneurship due to the similarity of the geographical environment and companies with developed countries in the field of agriculture and food processing because the country contains all the required raw materials
15	providing job opportunities for the youth	Providing job opportunities in a large way with a financial return that is at least sufficient to lead a decent life
16	mentoring	Investments for young people and suggestions for them
17	Training and qualification to keep pace with the labor market	Conducting workshops on different fields
18	Supporting governmental organizations, associations, etc.	Providing job opportunities for them
19	On-the-job training courses	
20	Financial support, not cash	The idea is to set up simple operating companies with profits and a lot of work that take the ideas of ambitious young people and help them to implement them on the ground and then allow him to become project partners if he wants to build his own life
21	Material and mentoring support	According to my opinion, the provision of employment opportunities in all institutions with rewarding salaries, the participation of young people in their projects in implementation and financing
22	mentoring guidance and technical support	Providing job opportunities for university graduates with rewarding incentives and salaries
23	mentoring, psychological and material	Providing professions and employing young people who graduated and their loved ones on field work and humanitarian work, supporting them with wonderful ideas and strengthening their skills, and God is the guardian of success
24	Good loans and financing real productive projects	First: Knowledge support about the reality of the labor market. Second: Focusing on the realistic aspect of the theoretical and practical faculties of the applied faculties in the curricula of Sudanese universities. Third: To motivate and promote training work in ministries and private and public institutions.
25	Corporate youth support programs	Providing training and employment opportunities after the expiry of the period for fresh graduates
26	Financial	Educating young people without limits and restrictions
27	Supporting training organizations and companies	Companies, financial support and loans must be created for young people to make their own projects and achieve their dreams
28	Vocational training and entrepreneurship support	Forming an integrated system that harmonizes the economic reality of youth employment by focusing on training and supporting entrepreneurship within a system consisting of the public and private sectors and non-governmental organizations
29	Training programs in the Japanese Kaizen methodology that help in refining skills, and judging from my experience in them, they have a great benefit to the individual	Establishing advanced agricultural projects that create job opportunities for all groups
30	mentoring support and experiences	Providing employment opportunities and youth employment in public and private sector projects, providing financial support and funding for ideas owned by young people to implement them on the ground through feasibility studies and providing financial support afterwards
31	Project Finance	The work of youth organizations and serious organizations interested in establishing projects that support the economic situation of youth, such as building real estate and owning means of production
32	Scholarships, exchange programs and training	Creating investment projects
33	Training in fields of study to provide students with knowledge to prepare them for professional life after graduation	Spreading opportunities and not giving and not taking mediation
34	mentoring	Investments for young people and suggestions for them
35	Psychological support and training	Providing job opportunities for all levels of graduates, students and even the uneducated

Appendix 3: Youth Businessperson's Opinion Survey

Survey Method: Online survey form was distributed through SBF Youth Secretariat from 24 to 30 June 2021

Responses: 10 persons

S/N	1. Age	2. Sex	3. Education Attained	4. Location of Business Registration	5. Your field of work	5.1 What exactly is your business?	5.2 Capital? 1USD = 430SDG	5.3 How many employees and employees are working with you?	5.4 Ratio of women	6. When did you start your current business?	7. Your previous experience in the field of business before you started your current job?	8. What are your motivations for starting and running your own business?
1	31-34	Male	Masters	Khartoum	Mining and agricultural equipment	Import of mining and mining equipment, agricultural equipment and crops	500000	20-99 workers/e	21-30%	2011	Employee at Khartoum Petrochemical Company	I have an idea and I want to implement it and turn it into reality
2	35 <	female	Masters	Khartoum	General Trading	Beverage and coffee trade	500,000	1-4 workers	81-90%	2016	I worked in management	I have an idea and I want to implement it and turn it into a reality. I think that I can get more income than if I was employed in a fixed job, adding social value to the neighborhood in which I live.
3	31-34	Male	Masters	Khartoum	Farming	Export of agricultural and animal products (Sesame, horticultural products, livestock)		20-99 workers/e (with 51-60% seasonal workers)	0-10%	2008	High school days and holidays	I think I can get more income than if I work in a stable job
4	35 <	Male	Bachelor	Khartoum	publicity and announcement	Advertising and printing	300,000 EGP	1-4 workers	0-10%	2012	Marketing, sales department and warehouse work in a steel forming factory	I think I can get more income than if I work in a stable job
5	35 <	Male	Masters	Khartoum	Services	Information and Communication Technology Technology Solutions, business systems, Quality Management	200000	5-19 workers	11-20%	2019	15 years	I have an idea and I want to implement it and turn it into reality
6	25-30	female	Bachelor	Khartoum	Services	Other economic activities (marketing, advertising, tourism, general audit...etc)	300,000	5-19 workers	31-40%	2007	Accountant	A family investment, I have an idea and I want to implement it and turn it into a reality
7	35 <	Male	Bachelor	Khartoum	export	export of agricultural crops	400 thousand dollars	20-99 workers/e	11-20%	2014	Administration	I have an idea and I want to implement it and turn it into reality
8	31-34	Male	Bachelor	Khartoum	Media & Cinema	Artistic and media production		1-4 workers	0-10%	2014	Journalist at Al-Sudani Newspaper - Announcer on Mango 96 FM Radio - Presenter on Blue Nile Channel - "Independent" movie actor	I aspire to develop the media sector in Sudan and manufacture my own registered trademark
9	25-30	I prefer not to say	Bachelor	Khartoum	Industry	Factory for packing and exporting spices and legumes Agricultural products: flour, derivatives and animal products	50000	5-19 workers	11-20%	2020	Business development in companies outside Sudan	I have an idea and I want to implement it and turn it into reality. I think that I can get more income than if I was employed in a stable job.
10	31-34	Male	Bachelor	Khartoum	Trade, agriculture and services	Trade, services and agriculture	215,000,000 EGP	5-19 workers	41-50%	2015	10 years	I have an idea and I want to implement it and turn it into reality

S/N	1. Age	2. Sex	9. What were the initial challenges you faced when you started your own business?	10. How did you manage the initial capital?	11. How long did it take for your own business to settle down?	12. Have you ever stopped your business?	12.1 What is the reason for stopping/semi-stopping work?	12.2 Please explain the point above 12.1, and explain how you overcame it?	12.3 Do you think that women business owners have special challenges? If so, please explain
1	31-34	Male	Registration, Getting Credits, Marketing, Taxes and Customs, Balancing Life and Work (Home and Business)	Invest a friend(s)	12 months or more	Once only	Marketing challenges, networking and commercial cooperation challenges	By re-examining the reality in the market in terms of demand and marketing method, as well as asking for help from people with experience in the field of marketing	Society's problems in dealing with women, as well as the lack of bodies that provide specialized assistance to women
2	35 <	female	Business Administration, Marketing, Acquisition and Recruitment of Employees and Workers with Competence and Experience, Financial and Accounting Management, Work-Life Balance (Home and Business)	family investment	12 months or more	Yes, many times	Management, inability to balance work and family life		Yes, networking and balancing work and domestic responsibilities, the lack of trust of funders and authorities in dealing with women
3	31-34	Male	Design a business plan, get loans, run a business, build a good business network	Invest a friend(s)	12 months or more	Yes, many times	Management, challenges in marketing, challenges related to networking and commercial cooperation	Try again from another way, but I will be between them for a long time	Yes, the work environment in Sudan is very harsh for female elements
4	35 <	Male	Department of Labor	family investment	7-12 months	Almost, but I survived	Marketing challenges	The field of work depends on mediation in the pre-revolutionary period, which is always reserved for those with influence and nepotism	Balance homework and work
5	35 <	Male	Human Resource Management, Life and Work Balancing (Home and Business)	Invest a friend(s)	12 months or more	Yes, many times	Because of the business plan, challenges related to networking and commercial cooperation, the inability to balance work and family life	I faced difficulties due to the presence of my small family in another country. I need to prepare the situation in Sudan before returning them. The change in the business model was positively dictated by changes in government	To some extent.
6	25-30	female	Obtaining loans, obtaining and appointing employees and workers, in addition to competence and experience	family investment	12 months or more	Almost, but I survived	get loans		Yes society cultural problems
7	35 <	Male	get loans	Investing in private companies	12 months or more	I haven't faced any challenges so far that caused me to stop working	(I have not faced challenges because of the experience gained before starting work)		
8	31-34	Male	get loans	family investment	1-3 months	Once only	The situation of the country in the past .. from political discrimination		Yeah! But I don't know..
9	25-30	I prefer not to say	Registration, Getting Credits, Managing Human Resources, Taxes and Customs, Building a good business network, Balancing life and work (home and business)	Family investment, friend/friends investment	7-12 months	Yes, many times	Economic conditions and a sudden rise in the exchange rate سعر	In the event of an abnormally high exchange rate, we stop all operations, reduce costs and stop selling	Yes, because of the societal view of women's work and their role in the work environment
10	31-34	Male	Get loans, build a good business network	Investing a friend/friends, Investing in private companies شركات	12 months or more	I haven't faced any challenges so far that caused me to stop working	(I could avoid such situation because of Concentration in resource management)		

S/N	1. Age	2. Sex	13. What kind of support is available to you to develop your own business?	13.1 From the above question, which one is most important to the success of your business? Please select a maximum of 3 items	14. What is your recommendation to the Sudanese Business Federation / Youth Secretariat to improve the business environment for young people	15. Please share your recommendation to the government to improve the business environment for young people
1	31-34	Male	Finance (bank loans), business networks	Finance (Bank Loans), Company Tax/Accounting, Entrepreneur Networks	Providing training and funding is the most important reason for the success of youth projects	Issuing a special law for start-ups and small companies so that there are considerations in registration and procedures, as well as taxes and government fees
2	35 <	female	Guidance and guidance, advice on work procedures, businessmen networks	Business process advice, finance (bank loans), tax/accounting company	Facilitate financing and loans across the Union	
3	31-34	Male	Business Operations Management, Finance (Bank Loans), Entrepreneur Networks	Guidance and guidance during the business trip, financing (bank loans), networks of businessmen	Building networks for the members of the secretariat	Law for Entrepreneurs and Small and Medium Business
4	35 <	Male	Financing (bank loans)	Financing (bank loans)	Participation in the development of economic decisions, given that the trust of the youth is in the blood of young people, and it has accompanied the development and difficulties it faces	Reducing procedures, requirements and guarantees to participate in large projects
5	35 <	Male	Consulting related to work procedures, networks of businessmen رجال	business networks	Enlightenment with the secretariat services and ease of access to them	Create policies and work environment. Providing integrated systems for every business sector, from place to finance
6	25-30	female	Financing (bank loans)	Finance (Bank Loans), Company Tax/Accounting, Entrepreneur Networks	Improving access to finance	
7	35 <	Male	Financing (bank loans)	business networks	More advertising and enlightenment	Targeting young people with training, funding and follow-up
8	31-34	Male	business networks	Guidance and guidance during the business trip, financing (bank loans), networks of businessmen	Working hard, solving youth problems, providing them with a helping hand, and developing their own capabilities	If I get the chance
9	25-30	I prefer not to say	Mentoring and mentoring, business networking	Guidance and guidance during the business trip, advice on work procedures, financing (bank loans), businessmen networks رجال	Connecting startups and large companies	
10	31-34	Male	Mentoring and mentoring, business process management, business networking	Consultations related to business procedures, financing (bank loans), networks of businessmen	There must be clear and calculated goals to work on to contribute to the development of youth business	