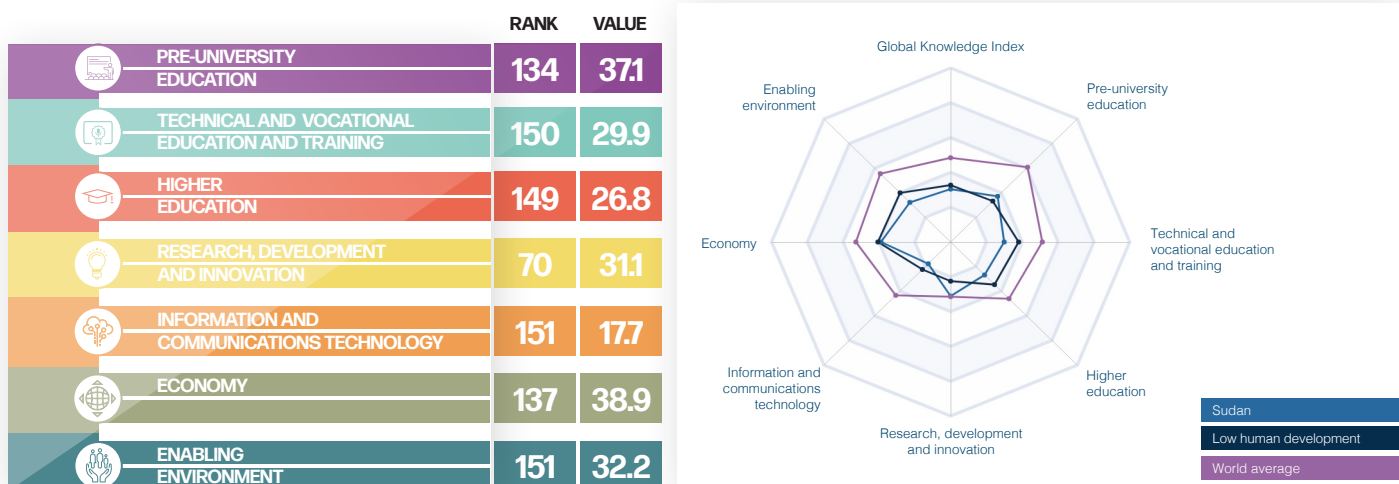
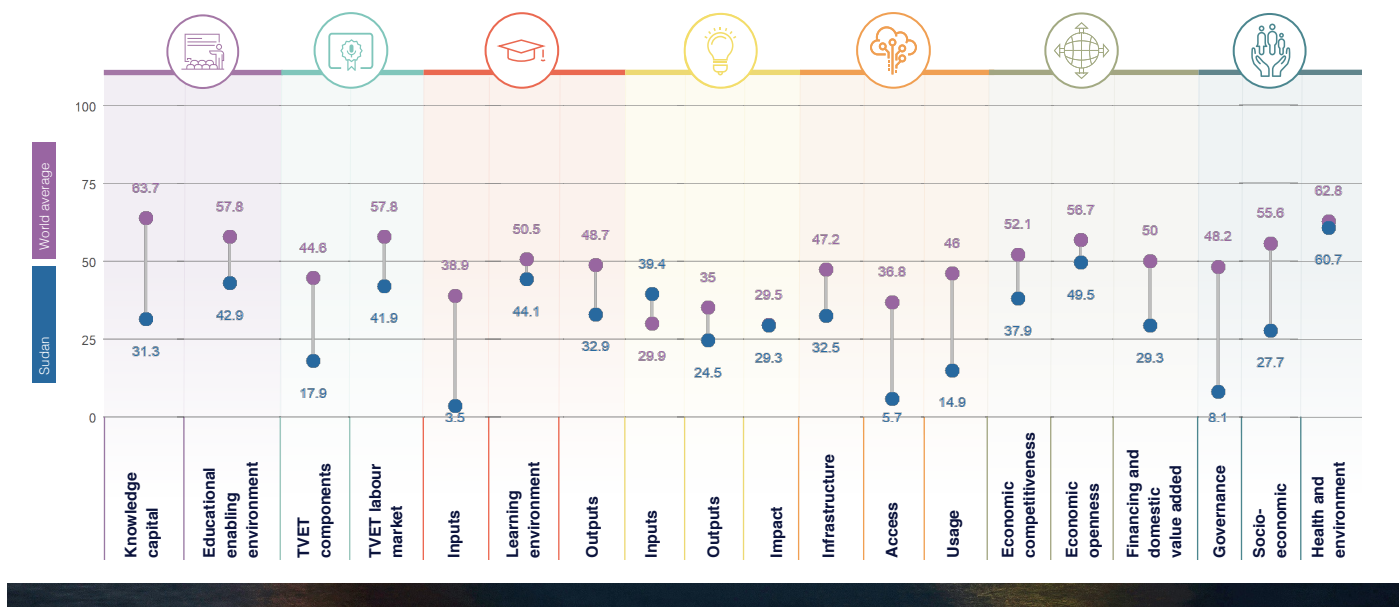




## SECTORAL INDICES



## GKI PILLARS





# SUDAN

	Rank	Value
<b>PRE-UNIVERSITY EDUCATION</b>	<b>134</b>	<b>37.1</b>
<b>Knowledge capital</b>	<b>140</b>	<b>31.3</b>
Enrolment	141	30.8
Net enrolment rate in primary education	140	0
Net enrolment rate in lower secondary education	117	52.1
Net enrolment rate in upper secondary education	112	40.1
<b>Completion</b>	<b>123</b>	<b>43.5</b>
Years of compulsory education in primary and secondary	116	61.5
Completion rate in upper secondary education	99	33.8
Gross intake ratio to the last grade of lower secondary education	118	35.2
<b>Outcomes</b>	<b>139</b>	<b>19.8</b>
Assessment of 15-year-old students in math, science and reading	n/a	n/a
Learning-adjusted years of schooling	139	19.8
<b>Educational enabling environment</b>	<b>121</b>	<b>42.9</b>
<b>Expenditure</b>	<b>n/a</b>	<b>n/a</b>
Government expenditure on primary education (% GDP)	n/a	n/a
Government expenditure on secondary education (% GDP)	n/a	n/a
Government funding per primary student (% GDP per capita)	n/a	n/a
Government funding per secondary student (% GDP per capita)	n/a	n/a
<b>Resources</b>	<b>n/a</b>	<b>n/a</b>
Pupil-trained teacher ratio in primary education	n/a	n/a
Pupil-trained teacher ratio in secondary education	n/a	n/a
Schools with access to computers in primary education (%)	n/a	n/a
Schools with access to computers in secondary education (%)	n/a	n/a
<b>Early learning</b>	<b>121</b>	<b>37.5</b>
Gross enrolment ratio in early childhood education	76	37.5
Proportion of children who are developmentally on track	n/a	n/a
Proportion of children with stimulating home learning environments	n/a	n/a
Pupil-trained teacher ratio in pre-primary education	n/a	n/a
<b>Equity and inclusiveness</b>	<b>94</b>	<b>48.3</b>
Completion rate in upper secondary education, gender parity	86	83.4
Completion rate in upper secondary education, wealth parity	89	16.2
Completion rate in upper secondary education, location parity	87	45.4
<b>TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING</b>	<b>150</b>	<b>29.9</b>
<b>TVET components</b>	<b>151</b>	<b>17.9</b>
<b>Continuous training and skilling</b>	<b>109</b>	<b>32.4</b>
Firms offering formal training (%)	121	9.8
Labour force with short-cycle tertiary education (%)	19	83.7
Participation rate in formal and non-formal education and training	67	3.7
<b>TVET structure</b>	<b>142</b>	<b>3.3</b>
Government expenditure on vocational education (%)	n/a	n/a
Share of students enrolled in secondary vocational programmes	118	3.3
Share of students enrolled in post-secondary vocational programmes	n/a	n/a
<b>TVET quality and qualifications</b>	<b>n/a</b>	<b>n/a</b>
Extent of staff training	n/a	n/a
Quality of vocational training	n/a	n/a
Ratio of high-skill TVET occupations earnings to average wage	n/a	n/a
Ratio of medium-skill TVET occupations earnings to average wage	n/a	n/a
<b>TVET labour market</b>	<b>130</b>	<b>41.9</b>
<b>Efficiency of the labour market</b>	<b>124</b>	<b>50.7</b>
Firms constrained with inadequately educated workforce (%)	48	72.1
Employment educational mismatch (%)	n/a	n/a
Proportion of skilled production workers	94	41.6
Unemployment rate with vocational education	110	38.4
<b>Post-TVET employment</b>	<b>129</b>	<b>29.2</b>
Share of TVET occupations	122	32.6
Manufacturing employment (%)	111	25.9
<b>Equity and inclusiveness</b>	<b>123</b>	<b>45.7</b>
Enrolment in vocational education, gender parity	n/a	n/a
Vulnerable employment rate	112	45.7

	Rank	Value
<b>HIGHER EDUCATION</b>	<b>149</b>	<b>26.8</b>
<b>Inputs</b>	<b>147</b>	<b>3.5</b>
<b>Expenditure</b>	<b>n/a</b>	<b>n/a</b>
Government expenditure per tertiary student	n/a	n/a
Teaching staff compensation (% tertiary expenditure)	n/a	n/a
<b>Enrolment</b>	<b>106</b>	<b>7</b>
Enrolment in bachelor's or equivalent level (%)	101	9.4
Enrolment in master's, doctoral or equivalent (%)	106	4.6
<b>Resources</b>	<b>143</b>	<b>0</b>
Pupil-teacher ratio in tertiary education	131	0
Researchers in higher education (%)	n/a	n/a
<b>Learning environment</b>	<b>99</b>	<b>44.1</b>
<b>Diversity and academic freedom</b>	<b>94</b>	<b>45.2</b>
Teachers in tertiary education, gender parity	86	50.4
Inbound mobility rate	n/a	n/a
Academic freedom	117	40.1
<b>Equity and inclusiveness</b>	<b>46</b>	<b>43</b>
Gross attendance ratio for tertiary education, gender parity	24	90.9
Gross attendance ratio for tertiary education, wealth parity	49	29.3
Gross attendance ratio for tertiary education, location parity	45	8.7
<b>Outputs</b>	<b>132</b>	<b>32.9</b>
<b>Attainment</b>	<b>n/a</b>	<b>n/a</b>
Educational attainment rate, bachelor's or equivalent	n/a	n/a
Educational attainment rate, master's or equivalent	n/a	n/a
Educational attainment rate, doctorate or equivalent	n/a	n/a
<b>Employment</b>	<b>134</b>	<b>32.9</b>
Labour force participation rate with advanced education	105	56.3
Unemployment rate with advanced education	132	9.4
<b>Impact</b>	<b>n/a</b>	<b>n/a</b>
University-industry collaboration in R&D	n/a	n/a
Citable documents per R&D personnel in higher education	n/a	n/a
<b>RESEARCH, DEVELOPMENT AND INNOVATION</b>	<b>70</b>	<b>31.1</b>
<b>Inputs</b>	<b>30</b>	<b>39.4</b>
<b>Inputs of R&amp;D institutions</b>	<b>13</b>	<b>52.9</b>
GERD (% GDP)	n/a	n/a
GERD per researcher	n/a	n/a
Researchers per thousand labour force	n/a	n/a
Tertiary graduates from STEM programmes (%)	28	52.9
<b>Inputs of RDI in business enterprises</b>	<b>18</b>	<b>52</b>
GERD performed by business enterprises (%)	n/a	n/a
GERD financed by business enterprises (%)	n/a	n/a
Researchers in business enterprises (%)	n/a	n/a
Firms that spend on R&D (%)	15	52
<b>Inputs of societal innovation</b>	<b>154</b>	<b>0</b>
High-skilled employment (%)	n/a	n/a
Intellectual property payments (% total trade)	133	0
State of cluster development	n/a	n/a
<b>Outputs</b>	<b>119</b>	<b>24.5</b>
<b>Outputs of R&amp;D institutions</b>	<b>107</b>	<b>33</b>
Average documents per researcher	n/a	n/a
Citations per document	108	15.6
Patent applications (per 100 billion GDP)	66	50.4
<b>Outputs of RDI in business enterprises</b>	<b>81</b>	<b>29.6</b>
Intellectual property receipts (% total trade)	117	0
Industrial design applications (per 100 billion GDP)	60	8.3
PCT applications (per 100 billion GDP)	103	38.3
Firms producing new goods and services (%)	17	71.8



# SUDAN

	Rank	Value
<b>Outputs of societal innovation</b>	<b>136</b>	<b>2.5</b>
Trademark applications (per 100 billion GDP)	110	4.6
Cultural goods exports (% exports)	132	0.5
Printing and publishing output (% manufactured output)	n/a	n/a
<b>Impact</b>	<b>73</b>	<b>29.3</b>
<b>Quality</b>	<b>150</b>	<b>1.2</b>
Research institutions prominence	n/a	n/a
Growth of innovative companies	n/a	n/a
ISO 9001 quality certificates (% GDP)	135	1.3
ISO 14001 environmental certificates (% GDP)	134	1
<b>Linkages</b>	<b>116</b>	<b>7.2</b>
GERD financed from abroad (%)	n/a	n/a
Joint ventures per strategic alliance deals (% GDP)	79	7.2
Computer software spending (% GDP)	n/a	n/a
<b>Business development</b>	<b>5</b>	<b>79.5</b>
New business density per thousand population	n/a	n/a
Firms with new product/service (%)	13	79.5
<b>INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<b>151</b>	<b>17.7</b>
<b>Infrastructure</b>	<b>120</b>	<b>32.5</b>
<b>Coverage</b>	<b>61</b>	<b>47.7</b>
3G/4G mobile network coverage (% population)	134	43
Secure Internet servers per 1 million population	147	0.3
Investment in telecommunication services (% GDP)	1	100
<b>Quality</b>	<b>144</b>	<b>0.8</b>
Mobile upload and download speeds	111	0.7
Fixed-broadband upload and download speeds	112	1.6
Fixed-broadband subscriptions by speed per hundred people	134	0
<b>Affordability</b>	<b>129</b>	<b>49.1</b>
Fixed broadband basket (% GNI per capita)	n/a	n/a
Mobile broadband basket (% GNI per capita)	125	38.2
Internet and telephony competition	116	60
<b>Access</b>	<b>151</b>	<b>5.7</b>
<b>Subscriptions</b>	<b>144</b>	<b>11</b>
Active mobile-broadband subscriptions per hundred inhabitants	126	17.8
International Internet bandwidth per user	142	11.6
Households with Internet access at home (%)	147	3.6
<b>Skills and employment</b>	<b>142</b>	<b>0.5</b>
Individuals with standard ICT skills (%)	83	0.9
Tertiary graduates from ICT programmes (%)	117	0
ICT employment (%)	n/a	n/a
<b>Usage</b>	<b>153</b>	<b>14.9</b>
<b>Services</b>	<b>147</b>	<b>13.4</b>
Government online services	137	30.6
Fixed broadband Internet traffic per subscription	98	0.5
Mobile broadband Internet traffic per subscription	117	1.3
Internet users (%)	129	21.3
<b>Outcomes</b>	<b>152</b>	<b>16.3</b>
ICT PCT patent applications (per 100 billion GDP)	103	22.7
E-participation	147	21.4
Internet activities by individuals (%)	n/a	n/a
Trade in digitally deliverable services (% total trade)	149	4.9
<b>ECONOMY</b>	<b>137</b>	<b>38.9</b>
<b>Economic competitiveness</b>	<b>130</b>	<b>37.9</b>
Infrastructure investment	140	35.6
Gross fixed capital formation (% GDP)	143	7
Logistics performance	118	35.7
Transport productive capacity	109	19.9
Building quality control	47	80

	Rank	Value
<b>Business agility</b>	<b>119</b>	<b>40.1</b>
Ease of starting a business	133	76.7
Insolvency recovery rate	96	32.8
Entrepreneurial employee activity rate	28	36.6
Extent of corporate transparency	111	14.3
<b>Economic openness</b>	<b>101</b>	<b>49.5</b>
<b>Trade and diversification</b>	<b>122</b>	<b>50.6</b>
Trade (% GDP)	148	0
High-technology trade (% total trade)	52	51
Product concentration	109	66
Market concentration	103	85.5
<b>Financial openness</b>	<b>87</b>	<b>48.4</b>
Chinn-Ito financial openness	74	55.2
Foreign direct investment, net inflows (% GDP)	71	41.6
Debt dynamics	n/a	n/a
<b>Financing and domestic value added</b>	<b>148</b>	<b>29.3</b>
<b>Financing and taxes</b>	<b>139</b>	<b>38.4</b>
Domestic credit to private sector (% GDP)	146	1.9
MSME financing gap (% GDP)	87	51.3
Tax and contribution rate (% profit)	108	62
Bank non-performing loans (%)	n/a	n/a
<b>Domestic value added</b>	<b>149</b>	<b>20.2</b>
Medium- and high-tech activities value added	n/a	n/a
Industry and services value added (% GDP)	146	29.8
Labour underutilization rate	142	24.8
Output per worker	112	6.1
<b>ENABLING ENVIRONMENT</b>	<b>151</b>	<b>32.2</b>
<b>Governance</b>	<b>149</b>	<b>8.1</b>
<b>Political environment</b>	<b>153</b>	<b>7.7</b>
Peace and stability	147	5.7
Voice and accountability	141	9.7
<b>Quality of institutions</b>	<b>147</b>	<b>8.5</b>
Rule of law	139	13
Control of corruption	148	6.7
Government effectiveness	150	5.8
<b>Socio-economic</b>	<b>150</b>	<b>27.7</b>
<b>Gender equity</b>	<b>123</b>	<b>51.4</b>
Female-to-male ratio in parliament	n/a	n/a
Female-to-male labour force participation	139	37.8
Female-to-male ratio in Internet usage	103	65.1
<b>Social inclusion</b>	<b>146</b>	<b>28.7</b>
Social protection coverage (% population)	121	6.7
Adult literacy rate	110	49.4
Youth not in employment, education or training (%)	141	30.1
<b>Standard of living</b>	<b>152</b>	<b>3</b>
Poverty headcount ratio (% population)	n/a	n/a
GDP per capita	124	3
<b>Health and environment</b>	<b>102</b>	<b>60.7</b>
<b>Health</b>	<b>126</b>	<b>49.2</b>
Universal health coverage	132	44
Healthy life expectancy (years)	115	52.5
Under-five mortality rate	132	51
<b>Environmental performance</b>	<b>30</b>	<b>72.3</b>
Renewable energy consumption (%)	30	63.7
Ecological footprint per capita	33	94.1
Natural hazard exposure	72	59

\*All values are normalized to a scale from 0 (worst) to 100 (best).