



## **The Importance of Human Capital Development in South Sudan<sup>1</sup>**

### **EXECUTIVE SUMMARY**

- 1. A journey backward through the history of economic thought has established beyond doubt that human capital is one of the determinants of economic growth and sustainable livelihoods;**
- 2. Literacy skills have been established to relate positively to agricultural productivity, which is in turn influenced by the level of education of the farmer. This finding/fact is of great relevance/importance to South Sudan where about 83 percent of the population lives in rural areas;**
- 3. There is emerging evidence that South Sudan spends more on security and less on human capital development than most of the East African Economic Community countries;**
- 4. South Sudan has the opportunity to increase its investment in human capital development by reallocating more financial resources to the social sector on the one hand, and on the other by effectively coordinating development assistance to health and education subsectors;**
- 5. The importance of human capital development in South Sudan was recognized during the war of liberation when the late Dr. John Garang encouraged the then Red Army (or Seeds of the Nation) to “hold pens in the right hands and guns in the left hands”; and**
- 6. The Transitional Constitution of South Sudan (TCSS, 2011), especially Article 2.9 (1) stipulates that “Education is a right for every citizen and all levels of government shall provide access to education without discrimination as to religion, race, ethnicity, health status, including HIV/AIDS, gender or disability.”**

### **I. The Context**

It is now established that human capital is one of the three proximate causes of economic growth. The other two are physical capital and technology. Even these two are underpinned by human capital in that, as stated by Kuznets<sup>2</sup>:

<sup>1</sup> Prepared by VEST, Ebony Center.

<sup>2</sup> Kuznets, Simon. 1971. “Modern economic growth: Findings and reflections”. Nobel Memorial Lecture. In Kuznets, Simon, *Population, capital, and growth: Selected essays*. London: Heinemann

*If technology is to be employed efficiently and widely, and, indeed, if its own progress is to be stimulated by such use, institutional and ideological adjustments must be made to effect the proper use of innovations generated by the advancing stock of human knowledge.*

That stock of human knowledge is the foundation of human capital. A backward journey through the history of economic thought would reveal that what makes the economy grow has always been the dominant question, which economists and policymakers alike seek to understand and explain. This sustained search started, in our view, with the seminal book of Adam Smith: *An Inquiry into the Nature and Causes of the Wealth of Nations* first published in 1776. In this regard, we would like to enrich the debate on the importance of human capital development by citing the following passage from the introduction to the *Wealth of Nations* as by way of encouraging investment in education and health as the two key pillars of human capital formation:

*The annual labour of every nation is the fund which originally supplies it with all the necessaries and conveniences of life which it annually consumes ... bears a greater or smaller proportion to the number of those who are to consume it... [B]ut this proportion must in every nation be regulated by two different circumstances: first, by the skill, dexterity, and judgment with which its labour is generally applied; and secondly, by the proportion between the number of those who are employed in useful labour, and that of those who are not so employed<sup>3</sup>.*

The above passage would help **encourage the Government of the Republic of South Sudan (GRSS) and its development partners to prioritize investment in health and education, so as to ensure a healthy workforce with necessary skills to guide a peaceful transition to sustainable peace, economic growth, and poverty eradication in South Sudan.** Moreover, a careful look at the concept or phrase of the “annual labour” as the “fund” would reveal that Adam Smith was essentially treating labor as a combination of human capital and technology (which is created by this labor through innovation and know-how).

## II. The Call for Action

The starting point here is to differentiate between human development and human capital. The former is measured by the United Nations Development Programme (UNDP) through a human development index (HDI), stating that “**Human development is the expansion of people’s freedoms to live long, healthy and creative lives; to advance other goals they have reason to value; and to engage actively in shaping development equitably and sustainably on a shared planet<sup>4</sup>.**” While the latter is measured through human capital index (HCI), which has been developed by the World Bank to quantify “**the contribution of health and education to the productivity of the next generation of workers. Countries are using it to assess how much income they forego because of human capital gaps, and how much faster they can turn these losses into gains if they act now<sup>5</sup>.**” In this regard, we could broadly treat HCI as **the stock of knowledge, skills and other personal characteristics embodied in people that help them to be productive.**

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<sup>3</sup> *An Inquiry into the Nature and Causes of the Wealth of Nations* first published in 1776, p. 3

<sup>4</sup> <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>

<sup>5</sup> <https://www.worldbank.org/en/publication/human-capital/brief/the-human-capital-project-frequently-asked-questions#>

It is with the above understanding of human capital that we are appealing, through this policy brief, to the development policy community in South Sudan to take urgent action (s) to ensure efficiency, equity, and effectiveness in the allocation of resources to health and education.

According to the World Bank, HCI is grounded on the following three pillars: (a) **survival**, which measures the percentage of children surviving past the age of 5 years; (b) **school**, which focuses on two aspects - quantity of education (expected years of schooling by age 18 years old) and quality of education (harmonized test scores); and (c) **Health**, which focuses on adult survival rates (percentage of 15-year-olds who survive until age 60 years old) and healthy growth among children (stunting rates of children under 5 years).

The next step is to place South Sudan on the map of human capital development/formation. The country is ranked **third of the least literate countries in the world** (see Table 1 below).

**Table 1: Some indicators of human capital development for the ten least literate countries in the world**

Country	HCI	Literacy rate (%)	Annual Public Spending on Education (% of total public spending)	Annual Public Spending on Health as (% of GDP)	Nominal GDP per capita (\$)	% of Rural Population
1. Chad	0.30	22.3	16.7	5.4	703	76.0
2. Guinea	0.39	32.0	10.2	4.0	1,543	62.3
<b>3. South Sudan</b>	<b>0.31</b>	<b>34.5</b>	<b>6.5<sup>6</sup></b>	<b>0.8</b>	<b>417</b>	<b>83.0</b>
4. Niger	0.29	35.1	12.0	6.2	631	83.1
5. Mali	0.32	35.4	4.4	4.3	913	54.7
6. Central African Republic	0.30	37.4	10.7	9.4	539	56.9
7. Burkina Faso	0.38	41.2	22.0	6.7	888	68.1
8. Benin	0.40	42.4	17.7	2.6	1,449	50.5
9. Afghanistan	0.40	43.0	10.9	15.5	413	73.4
10. Sierra Leone	0.36	43.2	12.7	8.8	415	56.2
<b>Group Average</b>	<b>0.35</b>	<b>36.7</b>	<b>12.4</b>	<b>6.8</b>	<b>791.1</b>	<b>66.4</b>

Source: Constructed by the VEST team from various sources of data

<sup>6</sup> It is 13.4% in the FY2023/2024 budget, but this increase is due mainly to raised salaries of the universities

It is interesting to note that 9 of 10 least literate countries are African countries. Literacy is used here to refer to the ability of a person to read and write and does not necessarily entail the level of education/schooling attained. South Sudan is also the third country with the lowest HCI – after Niger and Chad with Central African Republic occupying the first and second lowest human capital indicators respectively - out of 173 countries in the world. It is the second in this group of 10 least literate countries in the world that spends less than 10 percent of total public (i.e. government) spending on education and less than one percentage point of Gross Domestic Product (GDP) on health (see Table 1 above). And South Sudan has, together with Niger, the highest percent of rural population (83%) in the group of 10 least literate countries in the world. These depressing indicators call for urgent actions with respect to human capital formation in South Sudan in general, and rural areas in particular.

South Sudan is a member of the East African Economic Community (EAC) of seven member states and it is therefore imperative that we contextualize its HCI within this group. But before doing that let us look at both the global and African human capital indicators. The African average HCI is **0.40** with Kenya (**0.55**) ranked number 93 out of 173 countries of the world and in which South Sudan (with **0.31**) is ranked number **171<sup>st</sup>**. The global average value of HCI is **0.57**, which implies that all the African countries are below the global average.

The highest global HCI is that of Singapore (**0.88**), followed by Hong Kong (**0.81**), Japan (**0.80**), South Korea (**0.80**), Canada (**0.80**), Finland (**0.80**), Macao (**0.8**), Sweden (**0.80**), Ireland (**0.79**), and Netherlands (**0.79**). There is a need to look for the likely explanatory variables underpinning higher HCI for these ten countries. Three variables are relevant here. These are: (a) general government spending on education as percent of GDP; (b) general government spending on education as percent of total general spending; and (c) general government spending on health as percent of GDP. Here, general government expenditure on education or health, which covers current, capital, and transfers is expressed as a percentage of total general government expenditure on all sectors (including health, education, social services, etc.). Moreover, it includes expenditure funded by transfers from international sources to government at the national, state, and local levels.

Singapore (**2.81%**) is ranked, in the year 2021, number 28<sup>th</sup> out of 36 countries with respect to general government spending on education as percent of GDP. The average for 2021 based on 36 countries was **4.52** percent. Namibia was ranked number 1 with **9.64 percent, followed by Sierra Leone with 9.09**. Bermuda was ranked last (i.e. number 36<sup>th</sup> with **1.9 percent**). Turning to the second likely explanatory variable – the general government spending on education as percent of total general spending - it is observed that Namibia is again ranked number 1 with **24.7 percent** out of 63 countries in the world. The global average was **14.56 percent** and Singapore was ranked number 38<sup>th</sup> with **13.28 percent**. The third indicator of interest is the general government spending on health as percent of GDP. The average for 2020 based on 179 countries was **7.04 percent**. Monaco, which is ranked number 7 in the world with respect to the HCI is ranked last with **1.67 percent**. It is by now obvious that these three indicators do not clearly explain why Singapore has the highest HCI of **0.88** in the world.

We should then look, in the light of the preceding analysis, at a fourth indicator, which is the literacy rate. In looking at both the HCI and literacy rates for the top ten countries in the world with the highest human capital index, we see that the same countries have an adult literacy rate of **94 percent (e.g. Hong Kong)** or better (**e.g. Finland has 100%**). In this regard, there would seem to be a positive relationship between human capital development and the level of literacy. Hence, literacy, which is the ability to read and write would appear to us to be the most important

explanatory variable behind higher rates of human capital development exhibited by the top ten countries in the world with the highest HCI.

Let us then return to the EAC for a comparative analysis. All the countries of EAC with the exception of South Sudan, have literacy rates above the average literacy rate of **65 percent** for developing countries. The country ranks last within the EAC with respect to four key indicators of: HCI, literacy, public spending on education as a percent of total general government spending, and public spending on health as a percent of GDP (see Table 2 below). Moreover, South Sudan spends twice the EAC average of general government spending on the military as a percent of total public spending. We would nevertheless point out that South Sudan is currently at the beginning of her second decade of independence and to the extent that comparison of human capital development with EAC members should be at the same historical point and not at a point where most of them are at the sixth decade of their independence. Hence, we think that the indicators presented in Table 2 should motivate South Sudanese policymakers to aim at achieving the current regional averages by the end of her second decade of independence.

**Table 2: Human Capital and Related Indicators for East African Economic Community**

Country	HCI	Literacy Rate (%)	Public Spending on Education (% of GDP)	Public Spending on Health (% of GDP)	% of total spending on education	% of total spending on military
1. Burundi	0.39	85.5	4.9	6.5	20.6	7.2
2. DR Congo	0.54	77.2	2.7	4.1	18.4	7.5
3. Kenya	0.55	78.0	4.8	4.3	25.0	4.1
4. Rwanda	0.38	71.3	4.8	7.3	12.7	4.5
<b>5. South Sudan</b>	<b>0.31</b>	<b>34.5</b>	<b>3.0</b>	<b>0.8</b>	<b>6.5<sup>7</sup></b>	<b>17.2</b>
6. Tanzania	0.39	80.4	3.3	3.8	14.3	5.8
7. Uganda	0.38	73.8	2.7	4.0	8.5	10.1
<b>Regional Average</b>	<b>0.42</b>	<b>71.5</b>	<b>4.9</b>	<b>4.4</b>	<b>15.1</b>	<b>8.1</b>

Source: Constructed by the VEST team from various sources of data

<sup>7</sup> It is 13.4% in the FY2023/2024 budget, but this increase is due mainly to significant rise in the salaries of the academic staff of the public universities

Tables 1 and 2 above do provide a strong reason for us to **advance a binding narrative for investing in the stock of human knowledge and skills necessary for the productivity of the South Sudanese workforce at the end of the second decade of independence.** Such an investment must be in tandem with two critical and interrelated ideas that were popularized by the Sudan People's Liberation Movement/Army (SPLM/A) during the war of liberation.

The first idea is of making agriculture the engine of economic growth and sustainable livelihoods. This idea makes farming households the center of development, which implies that they must have literacy skills for them to productively contribute to economic growth and sustainable livelihoods. That is, literacy is the gateway to knowledge simply because it ties farming households to life-long learning and opportunities for sustainable livelihoods. And more importantly, literacy skills connect farming households on the one hand to markets, and on the other to a wider world; a world increasingly driven by the Internet, social media, and information communications technology (ITC).

Moreover, the ability to read, write, and comprehend is essential in empowering farming households to access information, in engaging with their customers in the marketplace, and in making informed decisions. Furthermore, literacy encompasses not only text but also digital literacy (e.g. mobile money, such as M-Gurush, MoMo. M-pesa, etc.), ensuring people can effectively navigate the digital landscape. Hence, the realization of this idea would in turn call for investment in literacy skills of the farming households in rural areas of South Sudan where more than 83 percent of the population lives.

The second idea is of taking towns to the people in the rural areas of South Sudan. This is essentially calling for effective delivery of basic services to the people in the rural areas. We would like to highlight one critical service, which has the potential of enhancing the access of rural households to literacy skills. This critical service is rural electricity. Universal access to electric power is envisaged to be achieved by 2030. South Sudan is well-placed to achieve this global goal in the light of the country's great potentials for generating rural electrification through **solar-, wind-, hydro-, and diesel-power grids**. Electricity is **the hub** of the idea of taking towns (aka services) to the people in the rural areas – it has demonstration effect on the development of four important services: (a) social services (education and health; (b) markets for goods & services, labor, inputs, livestock, etc.; (c) institutions for effective local governance, e.g. rural banks, courts, local administration, law & order; and (d) centers of civic/communal engagements for enhancing trust and social harmony.

Policymakers in South Sudan should draw some lessons of experience from their own history of human capital development during the last war (1983 – 2005) of liberation. The importance of human capital development in South Sudan goes back as far as 1988 when the late Dr. John Garang encouraged the then Red Army (or Seeds of the Nation) to “**hold pens in the right hands and guns in the left hands.**” More than 2,000 from this group were taken in the early 1990s to the United States of America and Canada and were called “**the lost boys!**” The amount of human capital acquired/accumulated by this group is amazing – a dozen or so have obtained doctorate degrees from some of the top universities in North America and a number of them have returned to South Sudan. Moreover, a number of them have enrolled in the United States Army and three of them are reported to have reached the rank of major on the one hand and a doctorate degree on the other hand.

The same strategy of “**hold pens in the right hands and guns in the left hands**” could be applied to the South Sudan People's Defense Forces (SSPDF) to start a 5-year literacy campaign

targeting farming households. This strategy (i.e. literacy campaign) would be supplemented by a distance learning program supported by our diaspora communities in general, and “**the lost boys**” in particular. Our basketball team – **the Bright Stars** – is a living example of what literacy skills could do. These examples do encourage us to call for an action that focuses on what is the amount of human capital a South Sudanese child born today in the country will acquire on his 18<sup>th</sup> birthday? We would particularly encourage our policymakers to revisit the Transitional Constitution of South Sudan (TCSS, 2011). Article 2.9 (1) stipulates that “**Education is a right for every citizen and all levels of government shall provide access to education without discrimination as to religion, race, ethnicity, health status, including HIV/AIDS, gender or disability.**” It is our conviction that South Sudan can graduate by the end of the second decade of independence from the class of the top ten least literate countries in the world.

### III. Conclusions

South Sudan has the potential to achieve the global average value of HCI of **0.57** by the end of the second decade of her independence. This is, however, conditional on the urgent formulation and implementation of a 5-year literacy campaign program within the overall framework of making agriculture the engine of economic growth and sustainable livelihoods.