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Poverty Situation and Prospects in South Sudan

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1 Introduction

Following the referendum of January 2011, South Sudan became an independent country on July 9, 2011. The new government undoubtedly faces daunting challenges ahead in a context of complex social and economic problems at the back of weak institutions and lingering social tensions. Sudan is one of the few African countries where household surveys at a national level were not conducted for over three decades, at least since 1978. As a result, very little was known on the state of poverty, income distribution and labor markets.

The National Baseline Household Survey (NBHS) conducted in 2009 opened the door for a better understanding of the causes, magnitude and consequences of poverty and inequality in South Sudan. Based on a descriptive analysis of the data and use of the traditional poverty analysis tools (Foster, Greer and Thorbecke (1984) class of poverty indices, Kernel density estimates and Gini coefficients), this brief provides a preliminary assessment of poverty, inequality and labor market conditions prevailing in Southern Sudan. It also provides some projections on the evolution of poverty under different assumptions on growth patterns in the next de-

cade and delivery of basic social services using benefit incidence curves.

2 Basic Facts on Socio-Economic Conditions in South Sudan

The NBHS is a nationally representative survey based on about 5,000 households in the Southern States. The demographic characteristics of South Sudan are typical of a poor developing economy: a large labor force (about 50% of the population is aged between 15-64), and households in which there is at least one dependent person for every able-bodied person; large family size, average of eight members, where close to 70% of the heads of households have never been to school. Access to basic social services is also extremely low with only 24% of the total population living in areas close to basic health care centers. Subsistence agriculture and informal employment are dominant sources of livelihood. Close to 42 percent of the working population is engaged in agriculture, 56 percent in the services sector, and very few employees find work in the industry sector (2.4%).

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Labor market conditions in South Sudan are precarious. Adding the inactive population and the unemployed population as a percentage of the total working age population indicates that 73% of the South Sudanese aged 15-65 is not working. The rate of unemployment, that is the unemployed population as a percentage of the active population, is about 11.5% (10.8% for men and 12.2% for women). The army of young men either inactive or unemployed could be a source of social unrest and instability in South Sudan. Lack of employment opportunities is one of the causes of poverty in South Sudan.

Women in South Sudan, as in other poor regions, have lower labor market participation rates compared to their male counterparts and even among those employed, most are unpaid family worker (Table 1). Clearly, disparities between male and female-headed households in poverty levels are rooted in their disparate positions in the labor market.

3 Poverty prospects in South Sudan

According to the Southern Sudan Commission for Census Statistics and Evaluation

(2010), individuals whose monthly consumption expenditure falls below 74 SDG (Sudanese Pounds) are considered to be living in absolute poverty. By that measure, half of the total population in the South is considered to be extremely poor. Table 2 summarizes the national poverty indices for South Sudan with a poverty line at 74 SDG and for Sudan with a poverty line at 114 SDG. It shows that South Sudan is much more affected by poverty than Sudan.

Considering the fact that per capita GDP doubled in the last decade following the discovery of oil in the country, it is remarkable how little effect growth has had in reducing poverty. Not only is poverty widespread in South Sudan, it is also so deeply entrenched that the average per capita monthly consumption expenditure of the poor population is 48% lower than the official poverty line, suggesting that most poor people are extremely deprived. More than 92% of overall poverty is attributed to conditions in rural areas (agricultural subsistence activities, low access to health and education services and weak infrastructure). Close to 81% of poverty is due to low earnings by household heads with no education. Thus, focusing

on farm productivity and education emerge as policy priorities.

Female-headed households have a poverty incidence that is 9 percentage points higher than male-headed households and at all levels of income females earn lower income than their male counterparts. Finally, poverty affects differently the geographic regions of South Sudan. The headcount ranges from 26% in Upper Nile to 76% in Northern Bahr Al Ghazal. South Sudan has also a skewed income distribution. Estimated from the NBHS data, the Gini coefficient is 45.5% in South Sudan, which is slightly higher than the Sub Saharan Africa average (42% in 2009).

The macroeconomic framework that is put in place essentially determines to a large extent the degree to which economic growth has an impact on poverty. Figure 1 shows the evolution of poverty based on key assumptions about output and employment growth in the three core sectors of the economy: agriculture, industry and services². In the first scenario, the source and pace of growth will continue to be the same as the recent past but with slight acceleration in the wake of in-

Table 1 Economic activity by gender (%)

	Male	Female
Inactive	65	73
Unemployed	4	3
Employer	1	1
Wage employee	11	3
Self employed	7	5
Unpaid family worker	12	15
	100	100

Source: Authors based on NHBS 2009.

Note: In the table, unemployment is expressed as a percentage of the total working age population. It is the reason why the figure is different from the rate of unemployment given above.

Table 2 Poverty Indices in South Sudan

	Incidence of poverty	Depth of poverty	Severity of poverty
SOUTH SUDAN	51%	24%	14%
Male headed households	48%	23%	14%
Female headed households	57%	27%	16%
Urban areas	24%	9%	5%
rural areas	55%	26%	16%
SUDAN	47%	16%	8%

Source: Authors based on NHBS 2009.

² Simulation is based on Excel-based program written by Datt and Walker (2002). For poverty prospect in South Sudan, employment is assumed to expand at 3% in agriculture, 1.5% in industry and 5% in services. The assumption on output growth is that industry grows by 10% per annum and services by 5%. In the first scenario (historical), agriculture output grows by 5% while it grows at 7% per annum in the second scenario (inclusive growth).

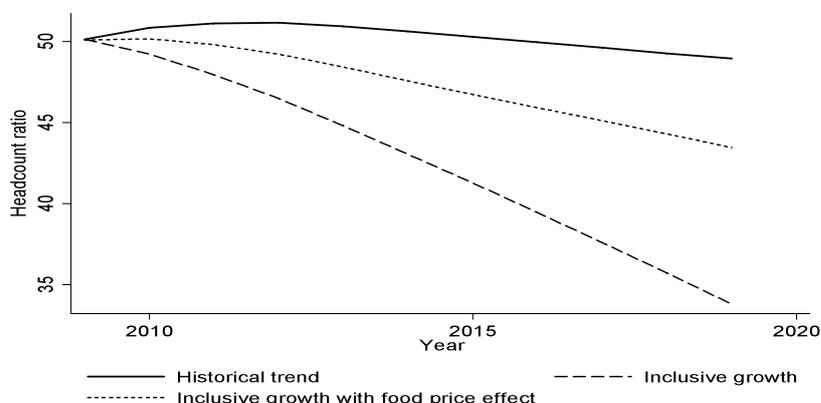
dependence. At the end of the decade poverty would have declined only by one percentage point. The implication is that growth led by an oil-boom as in the past will not have a strong impact on poverty in the future. The second scenario follows from the assumption that the government puts strong emphasis on agriculture by raising land and labor productivity. Poverty in the next decade would decline by 16 percentage points or approximately 3.2% per annum. The third scenario is a variant of the second one whereby the second scenario is mitigated by food price shocks in South Sudan. If the current rate of changes in relative price of food continues to prevail over the next decade, South Sudan could experience a 9 percentage reduction in poverty even if growth remains inclusive and pro-poor. Thus, policies to stem a food price crisis also need to be part of the anti-poverty effort by the government.

4 Education as a Key Issue

The level of education in South Sudan is a concern. Protracted conflict and decades of negligence by the central government has left an entire generation without basic education. From the household survey, it is clear that close to 91% of the population have less than a primary level education. More than 70% of the population cannot read or write. The condition of women is even worse where at every educational level, they tend to be underrepresented.

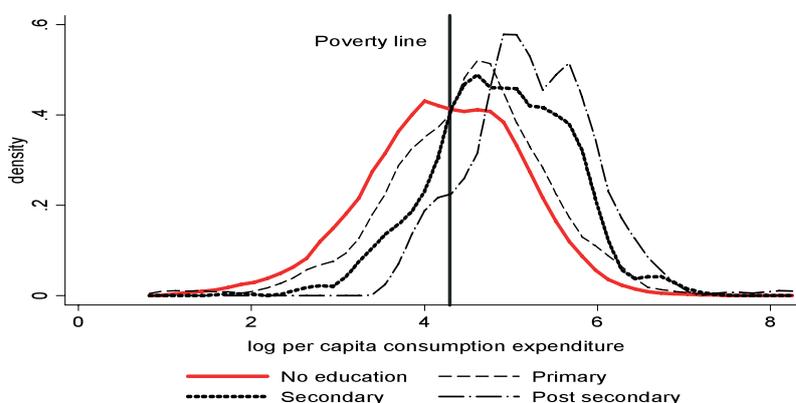
Educational status of households is a robust indicator of differences in poverty levels as shown in Figure 2. It is clear from the figure that poverty conditions vary considerably by the level of education attained by household heads regardless of which poverty line one uses. The variance

Figure 1 Evolution of poverty in South Sudan under different assumptions on the pattern of growth



Source: Authors based on NHBS 2009.

Figure 2 Poverty by level of education attained: Kernel density estimates



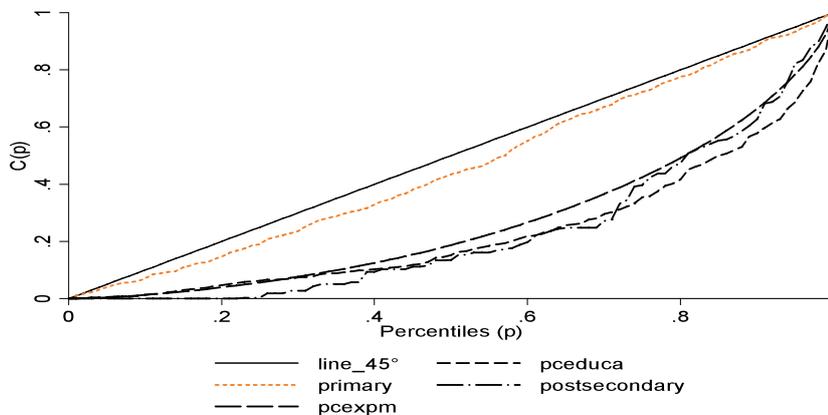
Source: Authors based on NHBS 2009.

in poverty levels between household heads who completed post-secondary education and those with no education is a remarkable 45 percentage points. The role of education in paving the way out of poverty cannot be overemphasized.

The question facing policy makers in South Sudan is the social cost or equity implications of providing education at different levels using government subsidies as it is the case in most African countries.

Does subsidizing primary education entail the same social cost or benefit as for instance subsidizing higher education? To provide some insight, we use the concept of concentration curves, which is close to the popular summary measure Lorenz curve. Figure 3 illustrates the welfare implications of expanding different levels of education in South Sudan: primary education (curve primary), post-secondary education (postsecondary) and all levels (curve pceduca) using the per capita hou-

Figure 3 Benefit incidence of expanding education in South Sudan



Source: Authors based on NHBS 2009.

sehold expenditure (curve pcexpm) as a point of reference for welfare comparison. The concentration curve examines whether public spending in education is pro-poor or pro-rich. If the concentration curve is far below the 45 degree diagonal (the equalitarian line), the distribution is more unequal than if it is close to the diagonal. As a consequence, primary education is a necessity where demand for it remains very low even if income rises (curve primary is above the pcexpm curve). On the other hand, for post-secondary education, demand raises faster with respect to income suggesting that as income rises, a proportionately higher share is spent on acquiring post-secondary education.

This implies that initial focus on primary education provides a good start where the benefit of subsidies from the publicly provided resources is extremely equitable. It does not mean that other education levels need to be neglected but investing in primary education is a priority.

5 Policy recommendations

The challenge ahead for the new government in South Sudan is enormous given the high expectation of the general population for a better life and the adverse initial conditions. As presented in this brief, poverty conditions are complicated by income inequality which puts a double burden on the policy makers of promoting growth, as well as making it inclusive and broad based. Labor markets are in dire condition. It is reasonable to expect from the preliminary findings that policy actions need to be prioritized along the following lines:

- Accelerating access to basic social services is essential and need to start soon. Particularly, initial focus on primary education provides a good start because the benefit of government subsidies is extremely equitable.
- Focus on rural development facilitates quick gains in terms of poverty reduc-

tion since more than 90% of poor in South Sudan reside in rural areas.

- Implementing a complex and multi-layer growth strategy requires substantial capacity by the government at all levels. It is vital that development partners assist the new government to facilitate conditions for the emergence of a new generation of technocrats and technicians that could rise to this monumental challenge.

References

Atkinson, A.B., 1970, "The Measurement of Inequality", *Journal of Economic Theory*, 2, 244-263.

Datt and Walker (2002), *Povstat 2.12, A Poverty Projection Toolkit, User's Manual*, The World Bank, October 14, 2002, mimeo.

Deaton, A. S., 1981, "Optimal Taxes and the Structure of Preferences", *Econometrica*, Vol.49, 1245-1260.

Foster, J., J. Greer, and E. Thorebecke, 1984, *Notes and Comments*, *Econometrica*, Vol. 52, No. 3, 761-766.

Kakwani, N., 1980, *Income Inequality, and Poverty: Methods of Estimation and Policy Applications*, Oxford University Press.

Southern Sudan Commission for Census Statistics and Evaluation, 2010, *Poverty in Southern Sudan – Estimates from NBHS 2009*, March 2010.

Yitzhaki, S and J. Slemrod, 1991, "Welfare dominance: an application to commodity taxation", *American Economic Review*, 81, 480-496.