MILLENIUM DEVELOPMENT GOALS IN SUB-SAHARAN AFRICA: THE IMPACT OF PRIMARY EDUCATION ON CONFLICT VULNERABILITY

OVERVIEW

In 2000, world leaders gathered at the United Nations to establish eight Millennium Development Goals (MDGs) as framework for the subsequent 15 years of international development. The second goal aimed to achieve universal primary education. Fifteen years later, the primary school Net Enrolment Rate, Adjusted (NERA) in developing regions had reached 91 percent in 2015, up from 83 percent in 2000. The number of out-of-school children of primary school age worldwide had fallen by nearly half, to an estimated 57 million, down from 100 million in 2000. Simultaneously, in countries affected by conflict worldwide, the proportion of out-of-school children increased from 30 percent in 1999 to 36 percent in 2012.

As an indicator of conflict vulnerability, the Fragile States Index (FSI) of each country represents the social, economic, and political pressures that determine the risk of state weakness and failure. A comparison of NERA and FSI data reveals the spatial correlation of increased primary education rates on the fragility of states and overall conflict vulnerability.

METHODOLOGY

Two major datasets were used to compare the enrolment rate in primary education as a measurement of the second MDG and the conflict vulnerability for each country. First, the Net Enrolment Rate, Adjusted (NERA) in primary education offers a precise measure of the relevant participation of the official primary school age population to the education system for all types of schools and education institutions, including public, private, and all other institutions that provide organized educational programs. Second, the Fragile State Index (FSI) in each country is determined using a Conflict Assessment System Tool (CAST). Each country is apportioned a FSI score determined by 12 indicators, with an average of 14 sub-indicators, across social, economic, and political factors. Classifying each dataset across three consecutive intervals (2006, 2009, and 2012) revealed a correlation between variable trends. When distinct Central and Southern trends, including clustering, became apparent, dissolving relative country boundaries distinguished the Central region (Democratic Republic of Congo, Republic of Congo, Central African Republic, Rwanda, and Burundi) and the Southern region (Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, Zambia, and Zimbabwe). Averaging the data from each country allows for a comparison between the Central and South regional averages for NERA (1) and FSI (2).

RESULTS

Sub-Saharan Africa maintained the best record for improvement in primary education rates of any region since the MDGs were established: a 20-percentile point NERA increase from 2000 to 2015, compared to a gain of only 8 percentage points between 1990 and 2000. While overall rates have increased, both regional and country-level enrolment rates and fragility within Sub-Saharan Africa show distinct trends. Over the timespan, individual countries did not fluctuate greatly across indexes of NERA (3) and FSI (4). The Central region averaged 82 percent NERA, while the Southern region averaged just 68 percent. Simultaneously, the FSI of countries in either region followed an inverse trend: the average FSI of the central region fell to 73 percent, while the average in the Southern region fell to only 86 percent. On both the country and regional level, areas with high enrolment rates consistently correlated to areas with lower FSI, implying that increased primary education positively impacts state fragility.

CONCLUSIONS

Clustering of high and low FSI and NERA suggests the potential for fragility and conflict vulnerability to diffuse across borders, and the potential for MDG success to vary according to regional, and likely cultural, accessibility. From 2006 - 2012, both individual countries and regions appeared to have consistently increasing NERA and consistently decreasing FSI. The progression, however, is not visible with short time intervals. Within the six years of available data, there is limited variation between enrolment rates and FSI within each country, indicating that more time is needed for countries to make significant changes.

While it is evident that there is a regional distinction of the two variables, the differences may be the result of external factors. Regionally, the distinction in both average NERA and average FSI is indicative of a larger external factor at play. The 2008 economic crisis likely had spillover effects on the region, including global trade contractions and collapses in primary commodity exports. Uneven economic development, poverty and economic decline are the main economic indicators of increasing FSI.

REFERENCES

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Data: UNESCO; The Fund for Peace
Cartographer: Hannah Robinson
Introduction to GIS
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