Comprehensive Evaluation of the Universal Primary Education (UPE) Programme

Theme: "Education Modelling and Forecasting"

Abstract

Two decades of implementation of the Universal Primary Education Policy in Uganda, have been associated with notable achievements regarding increase in enrolment and investment in primary education by both the public and households. However, the policy has been marred by critical challenges including high dropout rates and lower completion rates that need addressing through evidence-based interventions deriving from rigorous statistical modelling and forecasting. This policy brief draws on the findings of the education modelling and forecasting thematic area of the independent comprehensive evaluation of the Universal Primary Education (UPE) Policy undertaken by the National Planning Authority. It presents the trend of progress made on key indicators during the UPE policy implementation, the main drivers of such progress, the interventions that have had the largest and most cost-effective impact on educational outputs, and the contribution of UPE to returns to education and overall household welfare. The findings show that (i) while 93% of primary school-age children are enrolled in school compared to 40% before introduction of UPE, there is limited achievement in completion of the primary cycle and acquisition of the defined competences (ii) whereas government has prioritized increasing school resource inputs as key drivers of progress, government aided primary schools remain technically inefficient in converting such inputs into outputs (iii) while there is higher return to primary education, this is dependent on the technical efficiency of primary schools. It is recommended that monitoring and evaluation of the inputs, processes and outcomes of the primary education system should be prioritized to improve the technical efficiency of especially government aided primary schools. Besides, more investment in UPE is required to deliver the intended results.

Introduction

The modelling and forecasting analysis aimed at conducting evidence-based analytical analysis of the UPE policy interventions in order to assess the achievements, effectiveness, efficiency, relevancy, and sustainability of the UPE policy. Specifically, the analysis took stock of the gains and identified the underlying constraints that must be addressed to accelerate and sustain progress. The main objective was to assess the impact of the UPE program on acquisition of basic skills and knowledge necessary for exploitation of the environment for self-development, life sustenance and social development. The specific objectives included, to conduct econometric analysis of: the drivers of UPE learning outcome indicators; technical efficiency and total productivity growth in Uganda's primary education; and the dynamics or changes in returns to schooling that have taken place since the introduction of UPE in Uganda.

The comprehensive evaluation used both quantitative (secondary and primary) and qualitative evidence using data from; the UNHS, EMIS, UNEB, NAPE, MTEF, World Bank, UNESCO, and NPA Survey among others. The quantitative analysis was based on rigorous econometric and non-econometric models that include the: Standard Mincerian Regression; Stochastic Frontier production function; Benefit Incidence analysis, cohort analysis, ordinary least squares analysis, logit analyses. In this regard, this brief provides the key findings and recommendations from the Education Modelling and Forecasting thematic UPE Evaluation area.

Key Findings

1. With the government as a major provider of primary education, there has been a rapid growth in school enrolment. The introduction of UPE has contributed to a more than threefold increase in total primary school enrolment from 2.7 million in 1996 to 8.3 million in 2015 (see figure 1). The primary school net enrolment ratio (NER) was 91% in 2015. It increased from 53% in 1990 and 57% in 1996 to 87% when UPE was introduced in 1997. However, gross primary school enrolment remains above 120%, implying that the system continues to enroll over-age and under-age children in contravention of the official school-age bracket of 6-12. The gender, rural/urban differences and regional differences in primary enrolment have also reduced significantly. Indeed, the subsector has achieved gender parity. However, access to quality early childhood education remains low at 9.5%, largely due limited government involvement in terms of provision and regulation.

2. Despite the increase in enrolment, absenteeism of pupils remains a major issue of concern due to factors ranging from socioeconomic status; lack of school feeding programme in government schools; lack of sanitary pads for girls; among others. Analysis of the demographic and household factors shows that, the age of the child, per capita expenditure, household assets, and education of the household head, urban and regional dummies, have a positive and significant impact on enrolment, especially among girls. Households headed by a female and the number of siblings aged 6 to 18 years negatively affect girl child enrolment. However, the gender of the household head does not significantly effect on enrolment for boys.

3. The progression and completion rates are still low due to increased drop out and repetition rates. The focus of UPE is not only on enrolment but to enable children, especially girls, to start school on time, complete a full cycle of quality primary schooling. The cohort analysis shows that of the 1,488,434 pupils who joined primary one (P1) in 2006, only 564,115 were able to complete. This represents a survival rate of only 37.9%. The majority of pupils either dropout or repeat a class(es). Analysis showed that 26% pupils in rural areas repeat P1 compared to only 17% in urban areas. The rates are also higher in the northern and western regions compared to the central districts. The cohort completion rates at primary seven (P7) are still very low (less than 50%).
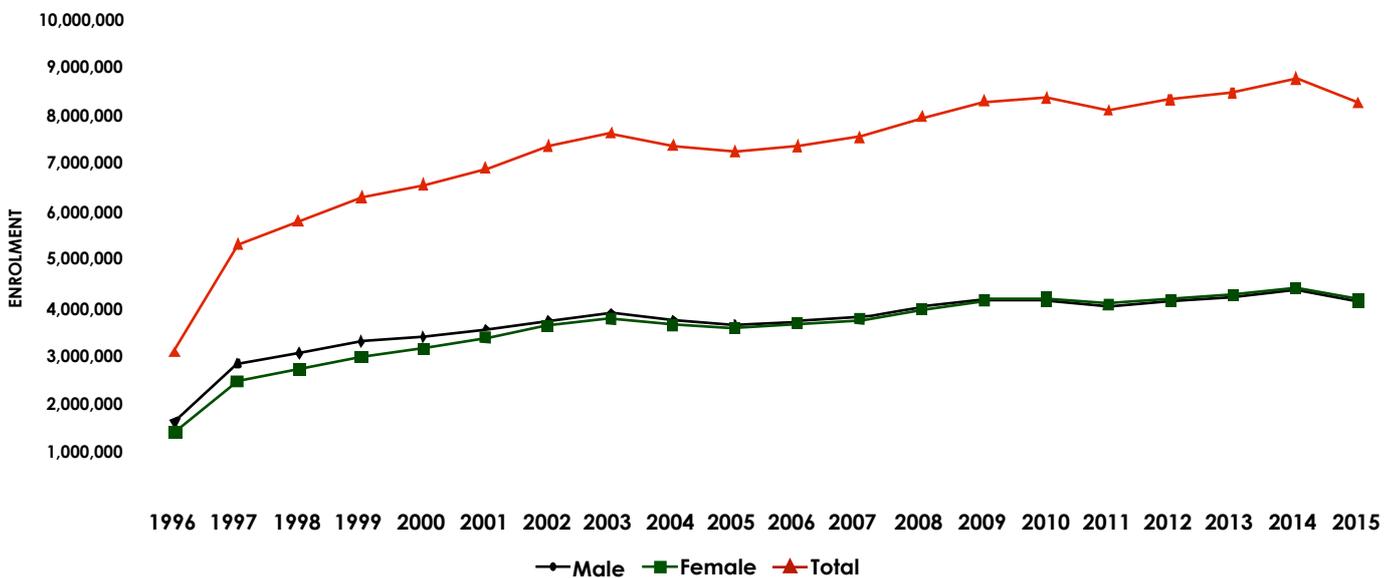
4. Many pupils leave school without mastering literacy and numeracy. The UPE aims to enable pupils attain the required proficiency in literacy and numeracy. Between 2014 and 2015, the number of primary three (P.3) pupils rated proficient in literacy declined by 4% points from 64.2% (62 % boys; 66.5% girls) in 2014 to 60.2% (59% boys; 61.3 girls) in 2015. This decline is largely attributed to limited opportunities for pupils to learn which limit the attainment of the defined proficiency level. However, the percentage of P.3 pupils proficient in numeracy remains relatively high albeit stagnant at 71.7% (73.0% boys; 70.6% girls) in 2015. There are major gender, rural/urban, regional and owner ship differences in learning outcomes. The percentage of P3 and P6 pupils who reached defined competency levels in numeracy and literacy in 2015 is higher for boys compared to girls and in private schools than in government-aided schools mainly due to higher PTR and PCR.

The literacy rate for P.3 pupils declined from 64.2% in 2014 to 60.2% in 2015 however, the numeracy rate remained relatively high at 71.7%

5. **The Pupil Teacher Ratios (PTR) and Pupil Classroom Ratios (PCR) have significantly declined despite differences across location and ownership of schools. Nonetheless, the PTR remain higher than the ideal 40:1.** Over 95% of the teachers have attained a qualification of Grade III since the introduction of UPE, which is the minimum level of professional teacher qualification in primary education. This increase in qualified teachers is attributed to the current government policy of recruitment of only qualified teachers. Correspondingly, there has been an increase in the number of classrooms and schools constructed since the introduction of UPE. In 1996 there were 7,351 primary schools, and as of 2015 it was estimated at 22,600, and approximately 63.7 per cent of these were government owned/aided schools. The coherent and targeted government strategy to invest in UPE schools through the School Facilities Grant has resulted in increase in classrooms from 40,000 in 1996 to 149,000 in 2014. As a result, the PCR declined from 72:1 to 63:1. Nevertheless, there are noticeable variations in these indicators across school ownership and location. The ratios remain high in government schools compared to private schools and also lower in the central region.

   The national average PCR significantly declined from 131:1 in 1998/99 to 53:1 in 2016/17 however, it is still higher than the target of 40:1.

6. **The UPE policy has been pro-poor, with expenditure on UPE benefiting more poor households than the rich.** Public expenditure on primary education for the poorest quantile increased from 24% in 2002/03 to 30% in 2016/17 however, it declined from 13% to 9% for the richest quantile over the same period.

7. **Public education spending has barely kept pace with the growth in the school-age population hence the increased burden on households.** Households' expenditure on education increased to 69% from 53% a decade ago. Spending on education by the poorest 20% of households grew by 11% over the last 15 years. Household spending is positively associated with education level of the household head, per capital household expenditure, household assets, number of children in the household aged 6-12 years; and area of residence. In terms of the economic burden of education, the age and gender of household head are significant factors that are negatively associated with the economic burden.

8. **The annual economic returns of primary education of 10.2% supports the Government's emphasis on UPE as a means to increase household income and reduce poverty.** Investment in education delivers a significant return in the wage employment, with higher levels of schooling significantly raising the average rate of returns to education. In

   69% education expenditure is financed directly by households, up from 53% a decade ago

particular, analysis shows that the annual economic returns of primary education are relatively high at 10.2%. By equipping every individual with basic skills and knowledge, they are able to exploit the environment for self-development as well as national development. Women have higher returns to education than men do; and the returns to education are higher in the urban areas. However, completing vocational education yields more returns compared to primary education. It is estimated to increase consumption by between 7.1% and 7.6% compared to a reduction of 4.4%.

9. **The level of technical inefficiency in rural and government-aided schools is much higher than that of urban and private schools.** The estimated standard percentage of deviation by which government-aided schools fail to attain their targeted outcomes is 0.38% compared to private schools at 11.8%. This implies government-aided schools are inefficient. Technical inefficiency in primary schools given government's effort on improving school resource inputs such as textbooks, hiring teachers and constructing classrooms in primary schools, calls for the need to harness the monitoring of government inputs, outputs and outcomes in order to improve the effectiveness and efficiency of primary schools.

Policy Recommendations

This section provides recommendations necessary for improving the quality of primary education in Uganda:

(i) **Government should increase investment in improving the quality of learning.** Notwithstanding the impressive performance in access to education, quality of education remains an enormous problem, albeit slight improvement in learning achievements. Reducing grade repetition and dropout are key to improving overall efficiency and attaining equity and quality education. Therefore, the government should focus on improving learning through increased investment. Increased government spending on UPE will also reduce the education-spending burden for households.

(ii) **A more balanced approach to spending on social sectors and infrastructure development needs to be adopted:** While there is indication that public spending on education grew at an average rate of 0.7 percent per year for the entire schooling age group (ages 6-24 years), this has grown at a much lower pace owing to the significant increase in the level of the school-age young population. This therefore calls for further allocation of resources to this age group. While much emphasis has been put on the primary age group (resources increasing by 1.2 percent per capita), this is

still not sufficient to meet the increasing population under this age group.

(iii) **Monitoring Inputs, Outputs and Outcomes is Critical for on Improving Effectiveness of UPE Policy:** The slow improvement of education outcomes is attributed to limited effectiveness of those interventions on the quality of education can be attributed to weak monitoring systems of Uganda's education system. Therefore, there is need to harness the monitoring and evaluation function to ensure that government interventions in education sector are more effective in simultaneously increasing access to and raising the quality of education.

Conclusion

Government took the right decision to implement the UPE policy. As a result, more investment has been directed to particularly infrastructure to accommodate more learners, leading to gender parity in the primary subsector. Nevertheless, technical inefficiencies within particularly government aided primary schools threated the gains made by government's continued investment. Accordingly, it is prudent for government to pursue a double pronged strategy of increased investment in the subsector accompanied by a robust monitoring and evaluation system to ensure more outputs from the inputs to UPE.

References & Useful links

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Acknowledgement