



# POPULATION AND EDUCATION – KEY TO SUSTAINABLE DEVELOPMENT

## Introduction

Education is central to Kenya’s socio-economic transformation and the realisation of national development priorities. However, rapid population growth continues to exert pressure on enrolment, infrastructure, teachers, and learning outcomes.

As Kenya’s school-age population expands, the education system must accommodate ever-larger cohorts, stretching resources and risking overcrowding and declines in learning quality. At the same time, education itself powerfully shapes population dynamics: higher levels of girls’ schooling are strongly associated with delayed marriage, lower fertility, and improved child survival—factors that slow population growth and reduce demand on the education system.

Findings from the SDG-RAPID model reinforce this interdependence. The “family planning + enabling factors scenario” shows how reaching Kenya’s health and education ambitions – including an improvement in education to global averages by 2063, representing the full implementation of competency-based curriculum and established standards – creates a self-reinforcing positive cycle between population, education, and sustainable development.

## The interrelationship between population and education

**Rapid population growth increases pressure on schools and reduces learning quality, while expanded access to quality education—especially for girls—helps lower moderate population growth.**

- Rapid population growth increases the number of school-age children faster than education budgets can expand, reducing per-student resources and straining classrooms, teachers, and learning quality.
- A larger, younger population requires accelerated investment in teachers, schools, and learning materials, yet recruitment and construction often lag behind demographic demand, widening inequities in access and outcomes.
- As access to quality education—especially for girls—improves, fertility rates typically fall due to later marriage, greater economic opportunity, and increased knowledge and agency, which slows population growth and reduces long-term pressure on the education system.

## KEY FINDINGS

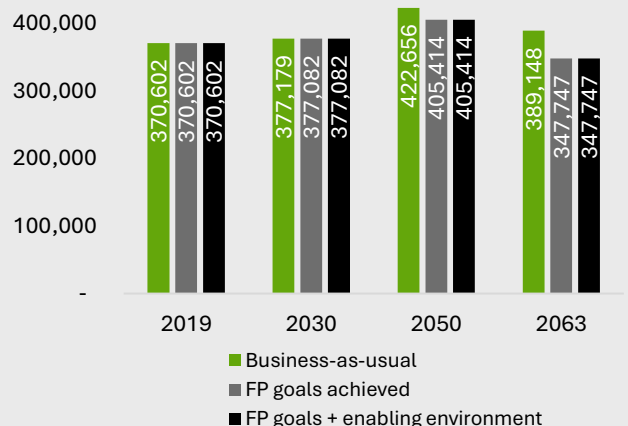
### School System Pressure

Under the business-as-usual scenario, higher fertility generates a faster-growing school-age population, driving the highest demand for total teachers to maintain current pupil-teacher ratios.

In contrast, under the family planning + enabling factors scenario—where increased access to family planning, improved maternal healthcare, and rising educational attainment lead to lower fertility and slower population growth—the size of future student cohorts is smallest.

As a result, the education system faces lower teacher requirements, because fewer new classrooms and therefore teachers are needed to maintain adequate ratios, and investments can shift from coping with demographic pressure to improving learning quality.

Total teachers required

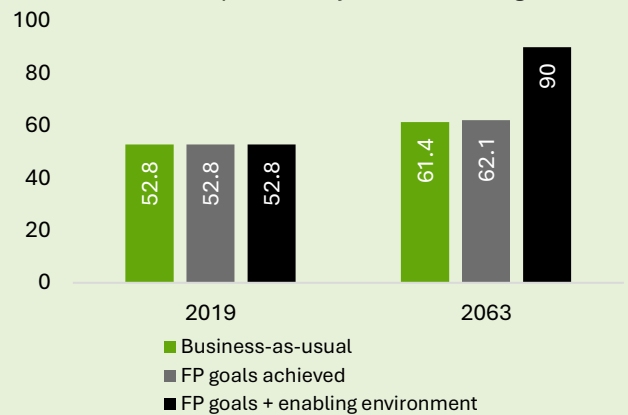


## Reading Proficiency

Reading proficiency (SDG indicator 4.1.1) is a key indicator of a country's education system performance. It measures the proportion of children and young people reaching at least a minimum proficiency level in reading at key stages of schooling. It reflects whether learners are acquiring foundational literacy skills essential for lifelong learning and is used globally to track progress toward ensuring all girls and boys complete quality primary and secondary education.

The combined “family planning + enabling factors scenario” shows that the best reading proficiency can be achieved in Kenya with smaller or more slowly growing school-age population interacting with strong education investments.

4.1.1 Proportion of children at the end of primary school achieving at least a minimum proficiency level in reading

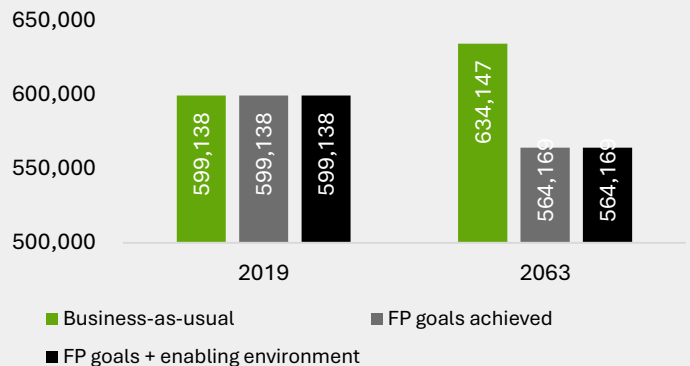


## Primary Out of School Population

Rapid population growth keeps the number of primary-age children out of school elevated, as expanding child cohorts place sustained pressure on education systems.

The SDG-RAPID modeling results show that slower population growth—through combined achievement of family planning goals and a supportive enabling environment—creates conditions in which targeted inclusion policies can be more effective, resulting in substantially fewer children remaining out of school compared to the business-as-usual trajectory.

Primary Out of School Population



## POLICY IMPLICATIONS AND CONCLUSION

- Learning outcomes improve faster when demographic pressure eases and per-child investment increases.
- Declining fertility reduces absolute numbers of children needing placement, making universal primary education more attainable and financially sustainable.
- Faster fertility decline reduces long term teacher recruitment pressure and allows reallocation of resources toward improving teacher quality rather than merely increasing numbers.
- Lower fertility trajectories reduce long term capital expenditure pressures, enabling a shift from rapid expansion to modernization and quality enhancement.

**The trajectory Kenya chooses today – slow progress, FP 2030 alignment, or an ambitious dual investment in education and family planning – will determine whether the education sector remains overstretched or becomes a driver of inclusive growth. Demographic transition is not just a population issue; it is a strategic lever for sustainable education financing, improved learning outcomes, and national development.**