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# Policy Brief

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*Improving public policy making for economic growth and poverty reduction*

## Strategies for Expanding Access to Secondary Education in Kenya

The importance of secondary education has evolved over time in both developed and developing countries. Secondary education has gained significantly from household, government, development partners, and civil society support on the realization that there are higher social and economic benefits, both directly and indirectly, from participation in secondary education. Analysis of secondary education development in Kenya indicates that the number of secondary schools increased from 2,678 in 1990 to 3,999 in 2006 (11.3% of them in the private sector). On the other hand enrolment increased from 870,000 students in 2003 to 1.0 million students in 2006 (10% of them in private schools).

### Challenges of Secondary Education in Kenya

#### *Low participation rates*

In 2006, secondary school age population of between 14-17 years was approximately 3.3 million compared to 1.0 million students enrolled at the time. This represents a gross enrolment rate (GER) of 31.0 percent and net enrolment rate (NER) of 20.0 percent. This implies that 8 in every 10 secondary school age children were not attending school in 2006. Regional disparities are also evident. While North Eastern Province had the lowest GER of 4.7 percent, Central Province had the highest GER of 44.9 percent during the period.

#### *Low transition rates from primary to secondary school*

In 2005 and 2006, the transition rate from primary to secondary school was 52.0 percent and 57.0 percent, respectively. This implies that more than 40.0 percent of the pupils

who complete primary education do not progress to secondary education, partly due to secondary education costs and/or limited capacity in some parts of the country.

#### *Under-utilization of teacher resources*

The pupil-teacher ratio and class-pupil ratio was 21:1 and 35:1, respectively, in 2006. This implies that teacher resources are under-utilized. Secondary education has specialized teachers and staffing is based on curriculum establishments. Teaching loads also vary widely between schools, partly due to subject specialization. Some optional subjects are characterized by teacher under-utilization due to small class sizes. Other contributing factors include school under-enrolment. Somewhat paradoxically, in most

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This policy brief is based on KIPRA Discussion Paper No. 63 on *Determinants and Strategies for Expanding Access to Secondary Education in Kenya*, by Eldah Onsomu, David Muthaka, Moses Ngware and Damiano Kulundu Manda. The paper also estimates factors that determine access to secondary education and simulates resource requirements for secondary school education with the aim of coming up with strategies for improving access to secondary education.

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education systems, Kenya included, a more qualified specialist teacher in secondary school teaches fewer subjects but gets a higher pay compared to a primary school teacher who teaches more subjects for longer hours. On the other hand, socio-economic factors constrain more effective transfers of teachers, leading to understaffing in some schools while others are over-staffed.

shouldered by parents, while the government covers teachers' remuneration.

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Given the low participation levels, unsatisfactory transition levels, and low teacher resource utilization levels, it is important to identify mechanisms that will improve access to secondary education in Kenya. In the medium term, the government's strategic targets for secondary education include increasing transition rate to 70 percent, increasing teacher-student ratio to 1:35, and increasing gross enrolment rate to 45 percent by 2008. However, the main questions are:

- What factors contribute to the low access levels?
- What resources would the government require to meet the set targets?
- What strategies can be employed to achieve the same targets, while expanding access levels?

## Determinants of Access to Secondary Education

### *Cost burden*

Secondary education attracts various types of costs ranging from tuition fees, boarding, stationery, school supplies, uniforms, transport and contributions for development projects and activities. Most of these costs are

According to a KIPPRA study on which this policy brief is based, school fees has a negative impact on access to secondary education because it decreases the demand for education. Any strategies aimed at lowering the cost of secondary education on parents will therefore lead to more parents taking their children to school. Descriptive analysis of factors for school non-attendance indicates that 33.2 percent of the school age students were not in school due to the cost burden arising from school fees.

Further, the effects of inequitable structure of public financing of education can also explain the impact of secondary education costs on access. Although the level of budgetary allocations to secondary education was 22.0 percent in 2005/6, 91.0 percent of these resources were allocated to recurrent expenditures, mainly personnel emoluments for teachers, while bursaries, grants and capital expenditures were allocated 7.8 percent and 1.2 percent, respectively.

The low allocation on capital expenditure could be an indication of high requirement for capital financing on the part of parents, which further increases the cost burden. Household contribution as percentage of total secondary education costs is estimated at about 60.0 percent.

## *Performance in Kenya Certificate of Primary Education (KCPE)*

Quality of education is another factor affecting participation in secondary education. This can be captured through performance in national examinations and overall learning achievements, curriculum content, and internal efficiency, among others. KCPE is the main screening tool for transition from primary to secondary school level. According to the 1997 Welfare Monitoring Survey, about 10.4 percent of the children out of school identified low performance in KCPE as one of the reasons for school non-attendance.

### *Lack of access to secondary school*

Transition from primary to secondary school also depends on the number of available spaces in public secondary schools and affordability, among other factors. Due to the limited number of schools in some parts of the country, about half of the pupils completing primary school lack opportunities to enrol for secondary education. From the analysis, supply of secondary education captured through number of secondary schools per square kilometre has a positive impact on access to secondary education, even though the schools are under-provided especially in marginalized areas and densely populated urban informal settlements.

### *Opportunity cost*

The opportunity cost of schooling in urban areas is higher than in rural areas as the youth perceive returns for formal and non-formal employment to be higher than the expected returns to education. This is accelerated by the fact that most of the population in rural areas are concentrated in informal settlements, where school

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infrastructure is either inadequate or non-existent, leading to more children being vulnerable to either paid, unpaid or informal employment. Children mainly engage in employment in order to supplement household incomes. On the other hand, urban households could be considering their children's education as a better investment in terms of economic empowerment and improved future earnings.

About 17.5 percent of the children out of school indicated that school was either irrelevant and or uninteresting. This implies that if schools are perceived not to be yielding expected returns such as employment, students do not see the benefit of enrolling. Further, this creates little incentive for households to forgo the income that could be generated from their children's labour in order to send them to school.

### *Gender and age of the child*

Other socio-cultural factors that have negative effect on secondary education are gender and age. According to the KIPPRA study, low girl child participation in secondary education is associated with negative social attitudes towards educating female children among some communities. It is also associated with teenage pregnancies, early marriages, among others. In 2006, the ratio of girls to boys attending secondary education was 0.9:1.

The cost sharing strategy and the high poverty levels tend to compel poor households to support boy child education relative to that of the girl child. Besides, late school entry is associated with higher wastage rates and low school progression.

### *Projected expansion in secondary education*

In the interest of addressing the current challenges limiting access to secondary education, there is need to expand the secondary education sector. In absolute terms, secondary school going age population is expected to rise from 3.3 million in 2003 to 3.4 million by 2010. In 2006, 20.0 percent of the youth eligible for secondary schooling were in school. The KIPPRA study shows that if the transition rate grows at about 6 percent annually to 70.0 percent by 2008, demand for secondary education in terms of enrolment in absolute numbers will increase from 926,149 students in 2003 to 1.5 million in 2008 and close to 2.3 million by 2010. This translates into an annual growth rate of 10.7 percent. This will require additional resources in terms of classrooms, schools and personnel, and improved utilization of available resources.

### *Projected teacher requirements*

Assuming an average teaching load of 20 hours per week, the number of teachers is expected to increase from 48,425 teachers in 2007 to about 63,624 teachers by 2010. The number of teachers required is higher in the case of lower teaching loads of 18 hours.

### *Classroom projections*

In 2004, there were 22,914 classrooms in secondary schools, with a projected

requirement of 33,703 in 2009, assuming a class size of 45 students. If dropout and repetition rates at primary school are reduced to less than 1.0 percent and 5.0 percent, respectively, completion rate will increase to 80 percent. On the same note, if adequate physical infrastructure exists at secondary school level, transition will increase to between 65-70 percent in the medium term.

One strategy towards expansion of secondary education is to support the government initiative of encouraging construction of more day schools, ensuring quality provision of education in these schools and increasing awareness among parents, teachers and students to eliminate the attitude that day schools are of low quality.

However, access to secondary education cannot grow this fast without putting in place relevant strategies aimed at making secondary education more accessible and affordable, and addressing factors affecting access to secondary education.

## **Strategies for Expanding Secondary Education**

### *Expansion of school infrastructure*

It would be necessary to expand the number of secondary schools in areas with limited supply and high demand, after detailed analysis of distribution of both population and current number of schools. This will ensure equitable access of either day and/or boarding schools after critical consideration of socio-economic characteristics of catchment areas and ensuring schools are located within a reasonable radius.

One strategy towards expansion of secondary education is to support the government initiative of encouraging construction of more day schools, ensuring quality provision of education in these schools and increasing awareness among parents, teachers and students to eliminate the attitude that day schools are of low quality. This can be achieved by supporting effective teaching, improving the learning environment, and ensuring that graduates from day schools equally transit to higher education and the labour market.

In arid and semi-arid lands, expansion of boarding and mobile schools subsidized by the government will be required. This could be accompanied by expansion of schools to at least three streams, which would ensure better utilization of teachers within schools while increasing overall student-teacher ratio. In 2004, 46.5 percent of the students were enrolled in one-stream schools, 33.0 percent in two-stream schools and 20.0 percent in three or more streamed schools.

### *Reducing costs*

Given that more than 46.0 percent of households in Kenya are poor, cost reduction strategies would promote enrolment and reduce household burden on education. The Government initiative towards abolishing fees in all public secondary schools starting January 2008 is laudable and may yield high participation rates. However, implementation of the fees schedule may have to be closely monitored to ensure adequate compliance while ensuring that schools do not continue levying high user charges on the part of households above the expected levels.

The government could also improve access to secondary education by reducing the unit costs at secondary education level and improving teacher utilization by increasing student-teacher ratio from the current 20:1 to 35:1 with minimal teacher requirements. The recommended class size is 40 students.

Other cost-effective modes of secondary education that can be explored include distance learning, and reforming the curriculum to reduce the number of taught and optional subjects to enable rational specialization for higher levels of teacher utilization. Reforming the curriculum would also reduce costs related to textbooks that households have to bear, while making it more relevant.

### *Improving quality and learning achievements in primary education*

There is need to address issues on internal efficiency and quality of education offered at primary school levels, given the direct implication on transition to secondary school

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level. Available options include enhancing teacher in-servicing, learning environment and better utilization of teaching and learning materials for improved learning achievements.

### *Improving teacher utilization*

Another available option is reforming teacher utilization policy by increasing secondary teaching load from 18 contact hours to 20 contact hours in the short-term and 23 contact hours per week in the long-run. Improved teacher utilization can be achieved by instituting a feasible legal framework that encourages teachers with low teaching loads, especially those teaching optional subjects, to teach in more than one school within a given neighbourhood in order to achieve the set teaching load.

In the short-term, this policy option is likely to lead to lower demand for teachers. The strategy is sustainable in the medium term and will ensure better use of teachers compared to the current norm of 18 contact hours per week, and worse still, the fact that teachers teaching optional subjects only teach 13-15 hours per week.

### *Improving efficiency of bursary schemes*

A bursary scheme was introduced in early 1980s with a view to enabling students from poor households gain access to secondary education. However, the persistently low participation rates indicate that either the policy initiative has had minimal impact on enhancing access, or the partial bursary allocation has limited impact particularly on ensuring the beneficiaries are adequately supported for a full secondary school cycle.

The government initiative on decentralizing bursary funds management to constituency level should be closely monitored and clear guidelines developed to ensure efficiency and effectiveness, and in order to increase access to secondary education.

Consequently, the government initiative on decentralizing bursary funds management to constituency level should be closely monitored and clear guidelines developed to ensure efficiency and effectiveness in accessing secondary education. For instance, it is not well documented how many students benefit from bursary awards. This may, therefore, require a review of the bursary scheme to improve its impact, through effective targeting.

Further, to address income inequalities in society, a special assistance scheme and preferential policies for needy students should be developed, targeting vulnerable groups such as students from marginalized communities, those with special needs, those from arid and semi arid lands, those living in slum areas, and those that are orphaned and vulnerable. Such students should be targeted for full scholarships over the full secondary school cycle.

### **Promoting Lifelong Education**

Lifelong education, especially for adults, should be supported given that household head's level of education has a positive impact on household schooling choices. Feasible measures include strengthening adult education programmes and reducing wastage within the basic education systems, such that no youth lapses into illiteracy.

### *Enhancing partnerships and local resource mobilization*

Sustainable expansion of secondary education requires building partnerships and mobilizing local resources. In part, regional disparities in access to secondary education could be addressed through collaborations between

local communities, central and local government organs, and other stakeholders such as civil society, private sector and development partners. It is not lost that over the years, financing of secondary education has been a responsibility of parents and communities through user charges.

Existing physical infrastructure in most secondary schools were put up through partnerships between government and community contributions, except for some national schools that were constructed during the pre-independence period. This implies that with the relatively high poverty levels and governance reforms on regulating fund raising activities, it could be difficult for any significant expansion in physical infrastructure in learning institutions unless feasible measures are identified. There is need to enhance the current initiative of allocating part of the Constituency Development Fund and Local Authorities Transfer Fund to education development activities. There is also need for strong partnerships with government, with clear guidelines on plans towards efficient resource utilization particularly in rehabilitation of existing physical facilities and targeted construction of secondary schools.

To address income inequalities in society, a special assistance scheme and preferential policies for needy students should be developed, targeting vulnerable groups such as students from marginalized communities, those with special needs, those from arid and semi arid lands, those living in slum areas, and those that are orphaned and vulnerable.

Regional disparities in access to secondary education could be addressed through collaborations between local communities, central and local government organs, and other stakeholders such as civil society, private sector and development partners.

Local communities should be encouraged to develop revolving funds for education at district level. Through this, they will raise funds from community organizations and civil society for targeted students covering full scholarship. Such localized revolving education funds would go a long way in utilizing efforts made by private companies through their corporate social responsibility schemes.

At the national level, the government should explore the possibility of introducing a secondary school education fund whose initial contributions should come from the government. The private sector, individual philanthropists and development partners should be encouraged to voluntarily contribute to such a fund. The government could, however, consider giving contributors some incentives, such as tax relief of a given amount and threshold.

### *Community empowerment and poverty mitigation measures*

Strategies aimed at secondary education expansion should first address factors that make secondary education unaffordable, including community empowerment through effective implementation of poverty reduction strategies at local levels; and provision of subsidies to communities by various stakeholders,

including government, philanthropists and private sector. Other strategies are creating awareness to households on the importance of secondary education and their role in the development process by facilitating them to start income-generating activities, and allowing them access to credit facilities both for business and for funding education; and community mobilization on effective utilization of decentralized funds such as the Constituency Development Fund, and Anti-Poverty Fund.

Besides, there is need to address social cultural biases, perhaps through awareness and affirmative action on gender equity in secondary education. Initiatives focusing on parents' awareness campaigns on the expected long-term returns for education regardless of student gender should be developed and implemented.

Finally, as secondary education access issues are addressed, it is important that aspects of quality and planning for transition to tertiary education are considered.

Secondary education curriculum content should be skills-oriented and in line with Kenya Vision 2030 human resource

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development needs. Secondary education should provide adequate basis for imparting and nurturing innovative skills that will enable the country attain sustainable development and poverty reduction.

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### **About KIPPRA Policy Briefs**

KIPPRA Policy Briefs are aimed at a wide dissemination of the Institute's policy research findings. The findings are expected to stimulate discussion and also build capacity in the public policy making process in Kenya.

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