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Policy Options for Financing Secondary Education in Kenya

Secondary education is important in generating opportunities for social and economic development. Besides being a transitional level between primary and tertiary education, secondary schooling provides a base for acquiring insights, skills and competences required at the higher levels of education and in the labour market. However, Kenya has low secondary school participation rates. Net enrolment rate is estimated at 17 percent and transition rate from primary to secondary school level at 52 percent in 2004. In year 2004, Kenya had 4,042 secondary schools (12% of them private) with an enrolment of 923,000 students (8% enrolled in private schools) compared to the secondary school age population of 3 million youth.

Despite its importance in the process of development, the costs of provision and expansion of quality secondary education have been escalating while resources for secondary education have been dwindling. The current status of education in Kenya suggests that the scenario is likely to remain the same, if not worsen, unless urgent interventions are put in place to address the problem. Various observations support this proposition. First, with the introduction of Free Primary Education, the number of pupils completing primary school is bound to increase in the near future. Second, doing nothing on transition rates into, and access to, secondary education may have adverse consequences for primary school completion rates, as students lose hope of joining secondary school. Third, failure to expand secondary education will compromise human capital accumulation and therefore jeopardize economic recovery and development. Fourth, it should be realized that a more meaningful way of achieving gender equity in schools is to expand enrolments. Fifth, gender, social class and regional inequalities in education will worsen as secondary schooling replaces primary education as the main determinant of life opportunities and subsequent employment and income in the absence of reforms that allow vulnerable groups to participate. Sixth, in Kenya, economic recovery and growth will prove elusive with small proportions of the labour force completing secondary education, and this will undermine the financial sustainability of Education For All (EFA) as envisaged in the national development goals.

In the medium term, secondary education enrolments are projected to increase by 200 percent as a result of the introduction of Free Primary Education in 2003, and transition rate is targeted to reach 70 percent by 2008. Enrolment is expected to increase from 0.92 million in 2004 to 2 million and 2.7 million students by 2010 and 2015, respectively. This growth requires increase in resource mobilization by both public and private sectors, and financing systems based on the core principles of lifelong learning such as promotion of access, equity, quality and efficiency.

This policy brief is based on KIPPRA Discussion Paper No. 55 of 2006 on Financing of Secondary Education in Kenya: Costs and Options. The study examines the financing options for secondary education for the next ten years, using data from various sources. The Education Simulation and Financial Projection Model of the Ministry of Education provided the basis for projecting both growth in secondary school enrolment, resource needs and financial implications of various policy options over the target period.

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Considering the envisaged increase in enrolment and the current curriculum-based teacher establishment policy, the number of teachers required is projected to rise from 46,721 to 90,779 while required classrooms are projected to increase from 22,914 to 54,467 by 2010. Implied costs are estimated at Ksh 47,489 million and Ksh 57,876 million in 2008 and 2010, respectively.

The main sources of secondary school funding in Kenya include households and the government. Other sources of funds include private sector, religious organizations, communities, Non-Governmental Organizations and development partners. Public resources mainly fund teachers' personnel emoluments, and bursaries to students, while households meet the cost for provision of supplies and equipment, operations, maintenance, repair and physical infrastructure. During the 2004/5 financial year, for instance, out of the total Ksh 18 billion allocated to the secondary education sub-sector, 94 percent was spent on salaries and 6 percent on non-salary inputs. If no changes are instituted in improving resource mobilization and utilization, the sharp increase in demand for resources might be difficult to meet.

Trends in Financing Secondary Education

The costs of secondary education borne by the government and households consist of salaries for teaching and non-teaching staff, bursary allocations, capital investments, school fees, tuition and transport, among others. Figure 1 shows that public expenditure on education as a percentage of GDP increased from 6.1 percent in 2000/01 to 7.3 percent in 2004/5 while expenditure on secondary education as a percentage of GDP increased from 1.4 percent to 1.6 percent during the same period. The proportion of secondary education expenditure to total education budget was 22 percent in 2004/5.

In the 2003/4 financial year, the estimated total recurrent (per student) public expenditure for secondary education was Ksh 22,381. The average spending per student, after accounting for both public expenditures and user fees is estimated at Ksh 38,999. Therefore, if secondary education is to be expanded at per capita costs equivalent to those in public schools, up to five times current expenditure of secondary education would be required by 2008. Unless the GDP and secondary education budget as a percentage of overall education resource allocation increases faster, the government alone cannot meet the costs.

Challenges of Financing Secondary Education

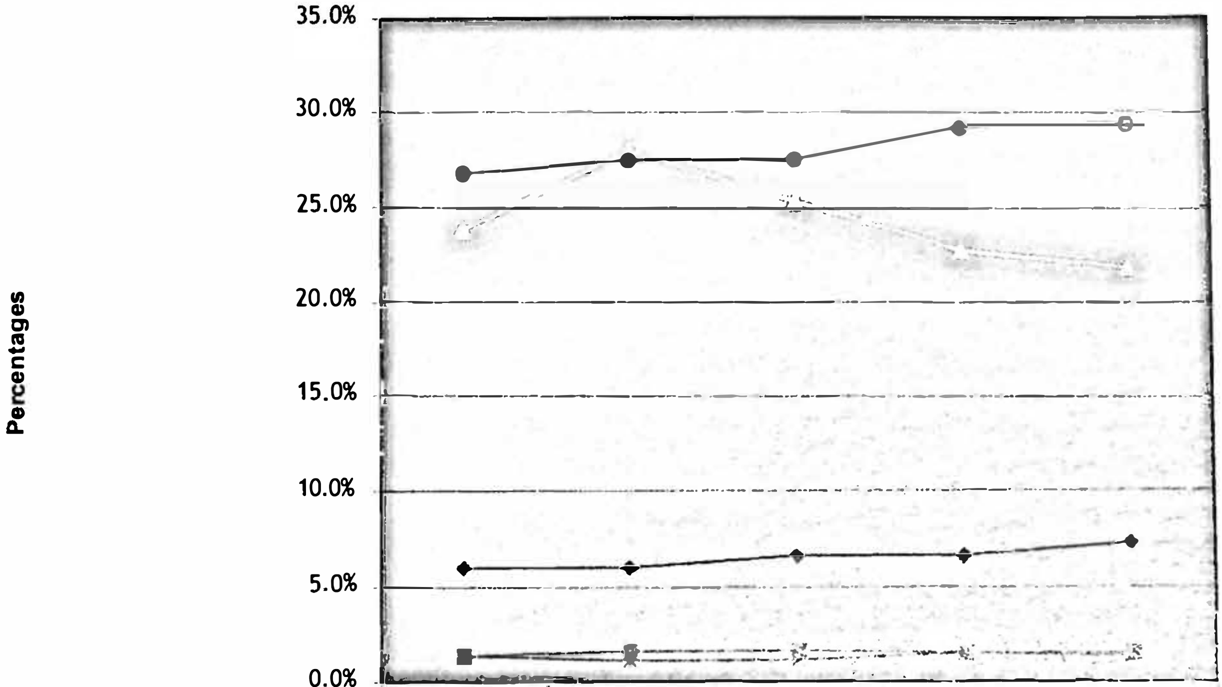
Limitations associated with current sources of financing

The government is facing budgetary constraints because public resources are not adequate to meet physical infrastructure development, while donor funds for education are inclined towards primary school education. At the same time, widespread poverty has reduced the ability of households and communities to finance education projects. Sustainable public-private sector financing framework is also lacking.

Inequality in spending

Financial resources allocated to education have been characterized by inter-sectoral inequalities. Analysis of distribution of education expenditures reveals that it is skewed towards primary education compared to other sectors. In 2004/5, for example, primary education accounted for 56 percent of the education budget while the corresponding secondary budget was 22 percent. University education and administration and planning accounted for 12 and 8 percent, respectively, while the remainder went to other sub sectors.
The relatively high sub-sector expenditures on personnel emoluments mean that minimal

Figure 1: Gross enrolment rate (secondary) and expenditure as percent of GDP and education budget, 2000/01 -2004/5



	2000/01	2001/02	2002/3	2003/4	2004/5*
Education % GDP	6.1%	6.1%	6.6%	6.6%	7.3%
Secondary % GDP	1.4%	1.7%	1.7%	1.5%	1.6%
Secondary % Education	23.8%	28.0%	25.3%	22.7%	21.7%
Secondary Salaries % Education	22.4%	26.8%	24.2%	21.1%	20.3%
Secondary Non-Salary % Education	1.4%	1.2%	1.2%	1.5%	1.4%
Secondary GER	26.9%	27.5%	27.6%	29.2%	29.5%

Year

Source: Ministry of Education, Appropriation Accounts, and Authors' Computations

public resources are available for other important educational inputs such as learning materials, textbooks, physical infrastructure, operations, maintenance and repair, among others. Consequently, the burden is either shifted to households, or quality of education provided is bound to suffer. The most affected, though, is provision of physical infrastructure, which constitutes a low of 1 percent of public secondary education budget. This has meant inadequate schools and therefore low access levels in the sub-sector.

Weaknesses in Bursary Fund

To cushion the income-poor and vulnerable group of society against the negative effects of the increasing cost of secondary education, the government introduced a bursary fund in 1993. However, the Fund has various weaknesses, including poor targeting and low retention rates among the beneficiaries. Although the bursary allocation has increased over time to about Ksh 1.3 billion in the 2005/6 fiscal year and management decentralized to constituency level, the funds are inadequate to meet the demand.

Inefficiency in resource utilization

Inefficient utilization of teachers at secondary school level is one of the main factors contributing to high public cost of secondary education in Kenya. The student teacher ratio reflects overstaffing in the secondary education sub-sector and the associated higher salaries and per student public expenditures.

Since secondary school teacher deployment is based on the curriculum-based establishments and that teachers specialize in a maximum of two subjects, the teachers teaching optional subjects teach fewer hours per week compared to the norm of 18 hours (27 periods). In schools with low enrolments and few streams, especially in remote and marginalized areas, small class sizes are prevalent. This means under-utilization of teaching resources.

The average number of hours currently taught by individual teachers is estimated at 15 hours per week. Thus, less number of teachers could be required if average teaching load of 18 hours is achieved. This reflects the existence of adequate teachers and/or teacher over-utilization in certain subjects, especially compulsory subjects, and teachers under-utilization in optional subjects. Thus, efficient utilization of resources could result into lower unit public expenditures in secondary education.

Inefficient targeting of expenditures

Analysis of the 1997 Welfare Monitoring Survey data provides important information about the beneficiaries of expenditure on secondary education. High-income households benefit more from provision and financing of secondary education compared to low-income households. This is because a large proportion of poor households do not enroll their children in secondary schools. The share of low-income group benefiting from education expenditures is below 29 percent, though they are the majority, while that of the high-income group is at 40 percent, though they are the minority within the population.

This inequality partly explains the inefficiencies in the current financing mechanisms of secondary education, and leads to low participation rates. The other constraint relates to the high unit expenditures of secondary education, reflected in the noticeable per student expenditures by both government and households.

Lack of enforcement of fees guidelines

Although the Ministry of Education has set clear fees guidelines, implementation and enforcement systems including procurement at school level lacks a strong monitoring framework, hence deficiencies in implementation of fees guidelines.

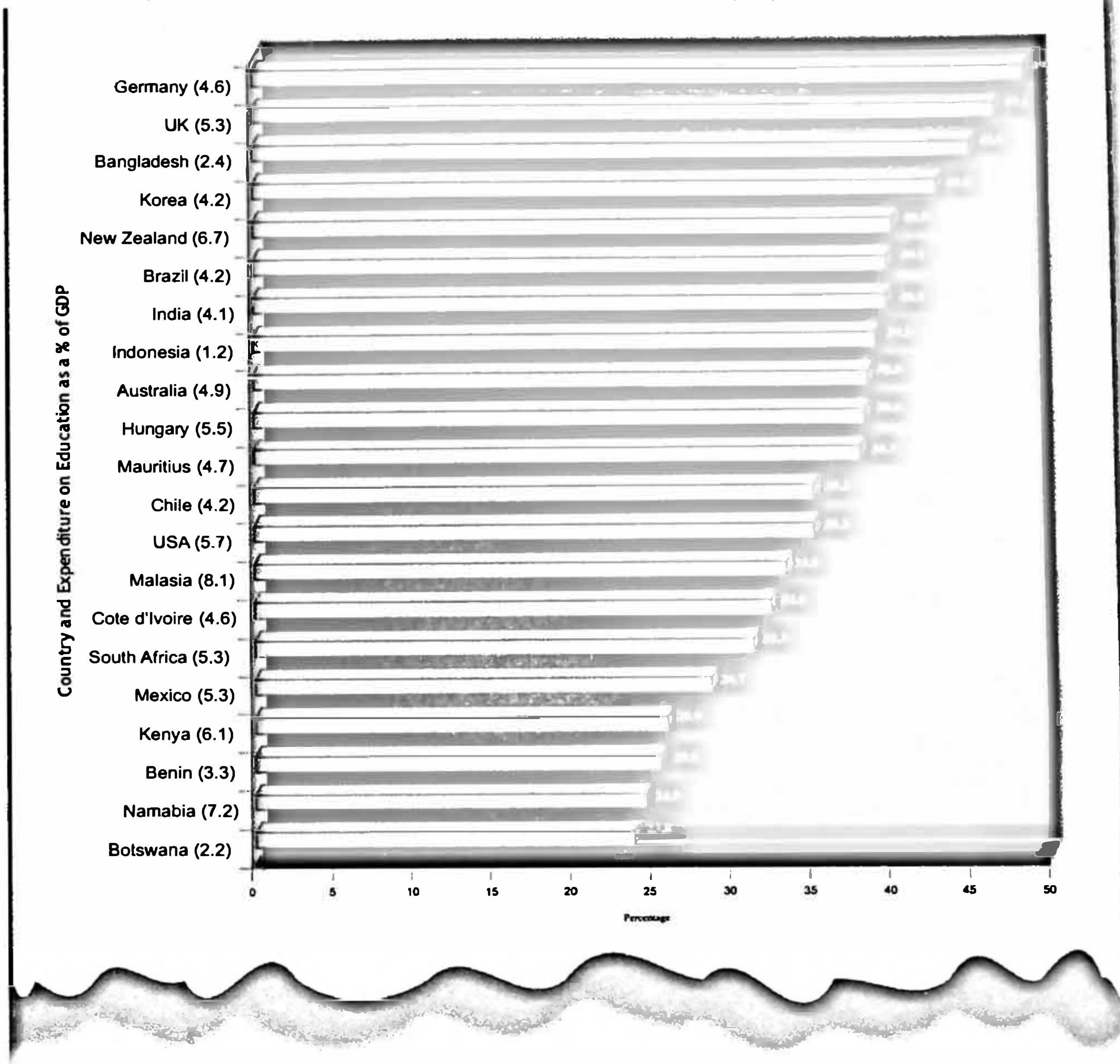
Experience from Other Countries

Options for financing education in other countries include grants, scholarships/bursaries, traditional loans, human capital contracts, income contingent loans, graduate tax, vouchers, entitlements, and learning tax credit, among others. From these options, bursaries and scholarships are the commonly used in secondary education. Management of such schemes varies across countries. Bangladesh, for instance, provides selective scholarships for female students while Colombia provides targeted vouchers for learners from socio-economically disadvantaged groups.

In Burkina Faso, partnerships are nurtured with the private sector through distance learning, targeted vouchers accessible to private and public schools, household subsidies, construction of low cost secondary schools in under-served areas and delegation of their management to non-public organizations at no recurrent cost to government, providing lease financing for construction of private schools to be operated and paid for on affordable terms by private sector or self-financed municipalities, and joint construction of additional classrooms at existing private schools.

Figure 2 shows that OECD countries such as Germany, UK, USA and Australia spend relatively higher proportions of public education resources on secondary education, ranging from 39 percent to almost 50 percent. The trend is similar in the fast growing economies of East and Central Asia such as Korea, New Zealand, Brazil, Malaysia, India and Indonesia, and also in Latin America. While it cannot be concluded that spending relatively higher amount of educational resources on

Figure 2: Expenditure on secondary education as a percentage of all levels, 2000-2002



Source: Human Development Report, 2005; Ministry of Education, Science and Technology, 2005

secondary education will accelerate economic growth, it is nevertheless emerging that countries with good performing economies spend relatively higher proportions of their education resources on secondary education. Mauritius and South Africa, who are among the main Kenya's trade competitors within the region, equally spend over 30 percent of their education public resources on secondary education.

Countries that spend relatively low on secondary education as a proportion of the education budget tend to have low enrolments in secondary education. Low enrolment at this level, which constitutes a bridge between primary education and specialized human capital development in higher education, will compromise a country's human capital development. In 2002/03, the fast growing economies of New Zealand, Korea, Chile, Brazil and Malaysia were characterized by high net enrolment ratios of 70 percent and above. Mauritius and South Africa have equally high net enrolment ratios, 74 percent and 66 percent, respectively. Perhaps this puts them in a potentially more competitive position when compared to Kenya (at 22 percent), even in future.

Experiences from these countries offer useful lessons. Among the ten highest spenders on education, which include Kenya, seven of them (Kenya excluded) spend well over 30 percent of their education public resources on secondary education. Emerging economies invest heavily

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in secondary education. Countries are increasingly employing other innovative education financing policies and mechanisms instead of overly relying on traditional sources such as public revenue and household contribution.

Therefore, despite resource constraints, the Government of Kenya has options that could address the issue of financing secondary education in Kenya. Possible policy options include focus on interventions that reduce secondary education costs, both at national and school levels, and exploring financing options that go beyond the traditional revenue sources.

Policy Recommendations

Improve resource utilization

An option towards reducing the burden of secondary education cost on government is to gradually increase the number of lessons taught per week from the current 18 hours per week to 20 hours, then 23 hours and 25 hours by 2010 with a class size of 45 students. Ideally, secondary teaching load should be more than 18 hours per week, with teachers having an option of either teaching more than two subjects or cluster of schools in order to achieve the target teaching load. This could be reinforced through in-service retraining of serving teachers to ensure that teachers are able to teach subjects with higher enrolments.

The Government should offer optional subjects in specific schools with provision for part-time teachers handling small classes. In the medium and long term, teacher pre-service training, both in universities and diploma colleges could require restructuring to ensure secondary school teachers are trained to teach at least three subjects. Average teaching load of 20-25 hours per week is ideal for efficient teacher utilization and would enable the country achieve the student teacher ratio of 35:1 by 2008 at lower cost implications. The full time equivalent should also be reduced to ensure teachers are better utilized.

Expand and construct day schools

Annual average expenditure per student in day schools is 88 percent of the average expenditure for all categories of secondary schools. This is much lower than that of National (122 percent), Boarding (110 percent) and Mixed Day and Boarding (99 percent) schools. This, in part, indicates that any cost-effectiveness strategy in secondary education could be targeted at expanding day schools since they attract lower unit costs on the part of households. The current government initiative is to expand the number of streams to at least three streams per class. This would increase the utilization of available resources and reduce the unit expenditure. Indeed, specialist teachers are better utilized in schools with more streams than in single stream schools.

Boarding schools could, however, be constructed in sparsely populated areas, arid and semi-arid lands. Further, a larger proportion of enrolments could be encouraged by increasing the number of day students even in boarding schools, as is the case currently.

Increase class size

In 2003, secondary school class size ranged between 20 and 35 students per class. Therefore, to reduce secondary unit costs by enhancing cost-effectiveness in education, the Government could target an upper limit optimal class size of 45 students, which ensures efficient use of both human and physical resources. This option should be accompanied with cost reduction measures on the part of households in order to make secondary education affordable.

Improve school management systems

There is need to address weaknesses in school management that lead to schools charging higher levies than official levels. Mechanisms should be put in place to ensure school revenues are efficiently utilized and ensure quality education provision. Procuring school supplies at competitive prices can greatly reduce operational costs at school level.

Increase overall allocation to secondary education

The Government should develop clearly defined expenditure policies and budget priorities that encourage direct expenditure to expanding secondary education non-salary expenditures such as physical infrastructure, bursaries and targeted grants for low cost boarding schools. Under a high efficiency scenario, public secondary school financing is expected to increase from Ksh 21 billion (23 percent of total education budget) in 2003 to 36 billion in 2010. Under the low efficiency scenario, Ksh 41,340 million will be required by 2010. In both scenarios, enrolment in private schools is expected to grow by 10 percent annually, therefore contributing to the overall secondary school expansion.

Enhance bursaries and targeted cash transfers

Recent reforms on secondary education bursary fund include decentralized management to constituencies, gradual increase in allocation, and setting of higher minimum allocation per beneficiary. However, it is apparent that the current bursary provisions and cash transfers to vulnerable students (such as orphans) should be increased to sustain deserving students within the system.

Enhanced targeting mechanisms will ensure the deserving, poor and vulnerable groups benefit. Further, bursary allocation should target deserving standard eight leavers. Under the current system, identification of deserving students covers only those students already enrolled in secondary schools.

Strengthen public-private sector partnerships

Increasing public financing alone is not adequate given the envisaged expansion of secondary education both in the medium term and long term. Other stakeholders (private sector, individuals, NGOs, communities, among others) are expected to expand the provision of education in this level. Feasible financing options could include private sector and communities' contribution towards expansion of physical infrastructure and the proposed secondary education fund at district level.

Also, the notion of community school trust funds should be explored. This involves establishing a fund sourced from all stakeholders in which prospective secondary education investors, either communities and or individuals, can access credit to establish not-for-profit secondary schools. In addition, giving tax exemptions on teaching and learning materials could promote access to quality secondary education at lower costs. Over the period 2007 and 2010, enrolment in private secondary schools is expected to increase by 10 percent annually.

Mobilize external resources

The logic of Sector Wide Approaches in education planning and financing is, at least in part, that government defines priorities and mobilizes both local and external assistance over the medium term towards attainment of the set goals. Therefore, as this is institutionalized in Kenya, Government efforts to prioritize secondary education as an investment priority, next to primary education, is necessary. This would make it possible to identify the critical inputs, such as infrastructure development, for funding. Between 2007 and 2010, an annual average of 4,683 additional classrooms are required.

In conclusion, sustainable financing of expansion in secondary education requires adopting a combination of the identified policy options. It is obvious that more resources should be mobilized for secondary education expansion. Policy reforms for improving efficiency in spending could contribute to considerable savings. However, Kenya needs to determine a realistic secondary education unit cost, and also develop a secondary school infrastructure plan as a matter of urgency.

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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