# Macroeconomic and Demographic Settings toward Educational Development in Lesotho

OGAWA Keiichi\* NOMURA Shinsaku\*\* LIM Joanne Y.\*\*\*

#### 1. Introduction

At present, there are few completed, well-designed research studies on the development of education associated with macroeconomic trends and the demographic profile of a country. Various research accounts have found that educational development is essential for a country to expand and improve its economic system. Under the slogan of Education for All (EFA), the international community is encouraging the expansion and improvement of education in many developing countries. However, it is very important to develop an education system that is suitable for the country's economic and demographic settings. In many developing countries, even though education is often recognized as an engine for poverty alleviation and economic development, the government does not devote enough financial resources to the education sector. Further, many developing countries, especially ones in southern Africa, suffer from HIV/AIDS, which has an added negative impact on their educational development.

This paper focuses on Lesotho as a case study of educational development from the viewpoint of macro settings, by examining her macroeconomic trends, public expenditure, and labor market conditions, and current demographic profile. More importantly, this paper analyzes the impact of the aforementioned factors on Lesotho's educational development.

<sup>\*</sup> Associate Professor, Graduate School of International Cooperation Studies, Kobe University.

<sup>\* \*</sup> Graduate Student, Graduate School of International Cooperation Studies, Kobe University.

<sup>\* \* \*</sup> Financial Analysis Manager, Freddie Mac, USA.

#### 2. Macroeconomic Trends

The Kingdom of Lesotho is a mountainous landlocked country, entirely surrounded by the Republic of South Africa (RSA). Its economic development centers on its membership and participation in the activities of the Southern African Customs Union (SACU), the Common Monetary Area (CMA) and the Southern African Development Community (SADC). Due to Lesotho's proximity to the Republic of South Africa, the economies of these two countries are strongly connected and Lesotho's national currency, the Maloti (in singular form, the Loti), is pegged to the Rand of the RSA. Since Lesotho is a member of the South African Customs Union (SACU), tariffs against imported goods are an important source of revenue for the government of Lesotho. Since its independence in 1966, Lesotho has gone through several development strategies, including five-year plans, import-substitution industrialization, structural adjustment and most recently, poverty reduction. While the names of the schemes vary from time to time, the core strategy has always been the improvement of the well-being of the Basotho (a generic term for the people in Lesotho). Since Lesotho is not well-endowed with natural resources, the government is heavily committed to develop the country's only tangible resources, human resources.

For most countries, the key indicator of economic performance is usually the Gross Domestic Product (GDP); however, for Lesotho it is the Gross National Income (GNI), which represents the real economic situation. In Lesotho, there has been a huge gap between GDP and GNI because many Basotho male adults have worked in RSA and have sent remittances back to Lesotho. As a result, the GNP used to be close to double the size of the GDP. The most critical macroeconomic situation in Lesotho is that the GNI per capita has declined from \$720 in 1997 to \$470 in 2002 as seen in Figure 1. This is largely due to the declining remittance of the Basotho mine workers in the RSA as well as a relatively high population growth rate. Lesotho is unusual in that it receives a substantial inflow of net factor income (mostly remittances from Basotho mineworkers in the RSA) and net transfers from the SACU revenue pool. Looking at Lesotho's trend of economic growth between 1980 and 2003, it should be noted that there is a perceptible yearly fluctuation of the growth rate (Figure 1). A significant drop in GDP growth rate in 1998 was attributed to a political upheaval, but in general, Lesotho's growth rate has been relatively high.

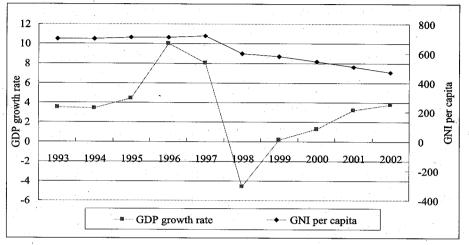


Figure 1: GDP Growth Rates in Lesotho, 1980-2003

Source: IMF Country Report (2004)

High GDP growth rates in the late 1980s to early 1990s were primarily due to the Lesotho Highland Water Project (LHWP). This project started in 1987 as collaboration between Lesotho and the RSA. The project has contributed to Lesotho's economy in two ways. Firstly, it generated a massive construction demand, which led to the creation of employment in the construction industry and consequently, contributed to the economic growth<sup>1</sup> in Lesotho. Secondly, the project enabled Lesotho to generate electricity on its own and at the same time, export water to the RSA. With the completion of the first phase of the project, the contribution of LHWP to the GDP growth had shrunk by the late 1990s. Although the second phase of LHWP was carried out during that period, the contribution to GDP was minimal.

Although the GNI per capita has been declining, the economy in Lesotho is currently showing a strong recovery led by second industries as a result of the Africa Growth Opportunities Act (AGOA) of the United States. This was complemented by the 1997 currency depreciation of 40-50 percent, which improved the competitiveness of Lesotho's products in the global markets. However, the macroeconomic situation in Lesotho has shown instability and a sense of vulnerability. Dependence on remittance from migrant mine workers created vulnerability against international gold prices, and economic expansion by LHWP induced severe slowdown in the aftermath. These fluctuations in macroeconomic settings have caused instability to both the labor

market and education sector. Thus, it is important to stabilize and build up the nation's macroeconomic backdrop and reflect in its educational development strategy.

# 3. Public Spending and Implications for the Education Sector Spending

One consequence of Lesotho's small size is that international trade is large, in relation to the size of the economy; this fact makes it relatively easy for the government to obtain revenue. The Lesotho Highlands Water Project (LHWP) has also made a significant contribution towards government revenue. In an average SSA country, the government revenue is usually 21 percent of the GDP; however, in Lesotho in recent years, the government revenue has been about 42 percent of the GDP. This revenue increase has supported the government expenditure of 47 percent of the GDP in Lesotho, as compared with 27 percent of GDP in the average SSA country.<sup>2</sup> While high government revenue performance is often considered to be a blessing, it can also give rise to the risk of the government absorbing too much of the national income in relation to the prospects for private sector investment and growth.

Table 1: Central Government Budgetary Operations (% of GDP)

	1998/99	1999/00	2000/01	2001/02	2002/03
Revenue and Grants	45.1	42.6	43.9	44.0	45.3
Revenue	42.7	40.3	42.4	41.2	41.3
Grants	2.4	2.3	1.6	2.8	4.0
Expenditure	48.0	58.9	46.8	44.7	49.8
Recurrent	38.2	40.5	39.8	35.5	38.9
Capital	9.8	8.4	7.6	11.0	11.3
Net Lending	0.0	10.0	-0.7	-1.8	-0.4
Balance w/o grants	-5.3	-18.5	-4.4	-3.5	-8.5
Balance w/ grants	-2.9	-16.3	-2.9	-0.7	-4.5

Source: Ministry of Finance (2004)

The aforementioned unstable macroeconomic setting has had a significant impact on public expenditure. On the contrary, Lesotho experienced fairly rapid economic growth until the mid-1990s when an economic recession accelerated by civil disturbances in 1998 led to fiscal disorder. Real GDP fell, inflation accelerated to 9

percent, the balance of payments weakened and the government's fiscal deficit (as shown in Table 1) ballooned to unsustainable levels.

In order to correct the situation, the government in the year 2000 began to implement an economic program supported by the International Monetary Fund (IMF). Initially this was a "staff-monitored program" not involving drawing upon IMF resources; then in early 2001 the IMF Board approved access to IMF resources under the Poverty Reduction and Growth Facility (PRGF). The objectives of the program are to reduce inflation, strengthen the balance of payments and achieve an economic growth rate of at least 4% annually.

The government intends to limit its budget deficit to levels that can be financed by external grants and concessional loans. A broad, long-term Public Sector Reform Program will be implemented, which includes improved budgeting and expenditure control as well as civil service reform.

# 3.1. Implications for the Education Sector Spending

The education sector's share of the government budget has been on an increasing trend in recent years, with its share of recurrent budget reaching 27 percent in 2003/04 (Table 2). The share of the government expenditure on education as a

Table 2: Education Sector's Share of the Government Budget (% of GDP)

	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04
Government Expenditure on Education						
Recurrent	8.9	8.0	8.0	10.0	8.8	9.2
Capital	1.3	1.5	1.1	2.1	1.2	. 1.3
Total	10.2	9.6	9.2	12.1	10.0	10.4
All Ministries						
Recurrent	44.3	38.9	39.0	36.0	40.4	34.8
Capital	13.2	13.1	10.5	11.9	10.9	10.6
Total	57.6	52.0	49.5	47.9	51.4	45.4
Education Sector's Share						
of all recurrent expenditure	20.1	20.6	20.7	27.9	21.7	26.4
of all capital expenditure	10.1	11.7	10.8	17.3	11.2	11.9
of all expenditure	17.8	18.4	18.6	25.3	19.5	23.0

Source: Ministry of Finance (2004)

percentage of the GDP has been around 9 percent in the past six years, which is one of the highest shares in the world. However, the government will be exercising fiscal restraint in the years immediately ahead, with non-interest recurrent expenditure projected to decrease in the years to come. In this environment, increases in the real resources devoted to the Ministry of Education from the government budget can come only at the expense of other sectors.

On the other hand, the government has set an ambitious agenda of expanding enrollment and improving quality in primary education, which will require considerable funds. In the macroeconomic environment of fiscal restraints, it will be necessary to examine the allocation of resources within the education sector, to explore whether there are areas where efficiency can be improved, or whether the financial burden on the government can be reduced through cost-sharing reforms.

It is, therefore, important to consider an efficient resource allocation within the education sector. Lesotho's high educational expenditure will not allow any more educational funds and what is needed is the focus in sector development. With a strong commitment of the government to expand primary education, the Free Primary Education (FPE) was introduced in 2000. Table 3 displays the per student government recurrent expenditure. While per student expenditure rose somewhat from M493 in 1999/00 to M888 in 2003/04 due to the commencement of FPE at the primary level, it is still far less than that of the higher levels, indicating an enormous skew in the financial support given by the government. In 1999/00, about 30 times as much was spent on TVET and NTTC, and more than 80 times as much was spent on a student from the National University of Lesotho than on a primary school student. In 2002/03 and 2003/04, the unit education spending on TVET and NTTC against primary education has declined in the past two years - their unit recent expenditures are about 20 times higher than that of primary education.

Table 3: Government Recurrent Expenditure per Student (Maloti)

	1998/99	1999/00	20.00/01	2001/02	2002/03	2003/04
	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Revised)
Expenditure per Student						
Primary	491	493	524	577	736	888
Secondary	1,431	1,537	1,705	1,806	1,792	1,789
TVET	16,133	15,235	16,368	9,744	10,015	10,933
NTTC	13,778	12,455	12,667	22,855	14,041	13,385
NUL	47,527	44,836	43,964	32,770	n/a	n/a
Students at other Universities	n/a	42,111	34,333	n/a	n/a	n/a
Ratios, to expenditure per primary student						
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Primary	1	1	1	1	1	1
Secondary	2.9	3.1	3.3	3.4	3.1	2.4
TVET	32.9	30.9	31.2	18.6	17.4	14.9
NTTC	28.1	30.9	24.2	43.6	24.3	18.2
NUL	98.7	91.9	83.9	62.5	n/a	n/a
Students at other Universities	n/a	85.4	65.5	n/a	n/a	n/a

Source: Government Expenditure Books

This highly skewed distribution of resource allocation raises the question of whether people are actually benefiting from education. For example, although the GER has become quite high due to the FPE with about 127.4 percent in 2002/03, the GER at the secondary level is only 34.5 percent. This huge drop implies severe resource wastage and inter-sectoral resource allocation should take these facts into account. As we will discuss in the following section, the demand for productive labor force is ever increasing. With the government's policy of human resource development, the extent of educational spending directed to those who need it should be reconsidered.

# 4. Economic Structure & Employment Patterns

Corresponding to the changing economic structure, the structure of the labor market is also changing. In the year 2002/03, the share of the primary sector in GDP was 13.7 percent, while secondary and tertiary sectors contributed 42.0 percent and 34.4 percent to the GDP, respectively. As seen in Table 4, the share of agriculture declined significantly from 20.9 percent in the early 1980s to 13.7 percent in 2002/03. On the other hand, the growth of the secondary sector has been overwhelming. It consisted only 22.6 percent of GDP in the early 1980s but it rose to 42.0 percent in 2002/03.

Table 4: Sector-Specific GDP Contribution, 1980/81-2002/03

	80/81-86/87	87/88-97/98	1998/99	1999/00	2000/01	2001/02	2002/03
Primary	20.9	16.8	15.9	15.6	15.2	14.4	13.7
Secondary	22.6	31.4	35.6	38	39.9	40.5	42.0
Tertiary	43.4	37.0	38.6	37	35.6	35	34.4
Indirect taxes	13.1	14.8	9.9	9.4	9.3	10.1	9.9
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Lesotho Growth Option Study (2003)

## 4.1. Employment Patterns

One of the most critical socio-economic situations in Lesotho is a large disparity in income among economic sectors. As seen in Table 5, the economy of Lesotho is led by secondary and tertiary sectors, which account for about 41 percent each of the GDP, with the remaining 17.4 percent of the GDP being generated by the primary sector. Despite this small amount of contribution by the primary sector, the employment pattern shows that 72.8 percent of the Basotho engage in the primary sector. On the other hand, only 8.8 percent and 18.3 percent of the Basotho are in the secondary and the tertiary sectors. In rural areas, 83 percent of the population engages in the strictly low-yielding primary sector and the majority of them are subsistence farmers. On the other hand, 21 percent and 52 percent of the urban population engage in the secondary and tertiary sectors, respectively.

The post-1998 period for Lesotho is a period of economic transition. Formerly, the mineworkers in the RSA and the LHWP were the main contributors of Lesotho's economy but the number of migrant laborers has decreased substantively, from 127,400 in 1990 to 62,200 in 2002. At present, now it is the textile industry that has been growing at the fastest rate. Due to AGOA, it is estimated that the manufacturing sector will be employing over 75,000 additional workers in the next two years while the number of mineworkers will not be increasing very much.

Sector	GDP con	tribution	Composition of Employment			
	Million US\$	% share	Total	Urban	Rural	
Primary	143.8	17.4%	72.8%	27.1%	83.0%	
Secondary	339.3	41.1%	8.8%	20.8%	6.2%	
Tertiary	341.6	41.4%	18.3%	52.1%	10.8%	
Total	824.7	100.0%	100.0%	100.0%	100.0%	

Table 5: Composition of Employment and GDP, 1999

Source: Employment data from BOS (1999), and GDP data from Central Bank of Lesotho (2003)

# 4.2. Unemployment

The most alarming statistic in terms of employment patterns in Lesotho is the high unemployment rate. It is estimated that 27.1 percent of the population is either unemployed or underemployed. There are several factors contributing to the high unemployment rates in Lesotho.

The first major factor contributing to the high unemployment rate is the changing economic environment in Lesotho. Because of a significant decrease in labor demand for the mining industry and a slowdown in construction in LHWP, the former employees of the RSA gold mines and LHWP have become unemployed. Even though the labor demand in the manufacturing sector is growing, these workers are usually unskilled in terms of manufacturing. Traditionally, Basotho men regard mining work as the most remunerative work and especially in mountainous areas, young Basotho boys are expected to engage in herding while they are young and then work in mining industries when they are old enough. Parents of boys regard education irrelevant for both the herding and mine industries. When they find there is no work available in mining, they have no other alternative than to help out their families in subsistence farming or declare themselves unemployed because they do not have enough education. Hence, the recent change in the demand of mining industry jobs has brought about a considerable negative impact on employment.

The lack of employment is another factor contributing to high unemployment opportunities. In the 2002 Core Welfare Indicators Questionnaire (CWIQ), the overall unemployment and underemployment rates were reported to be 23.0 percent and 3.7 percent, respectively, with regional variations of the highest at 33.0 percent in Quthing District (rural and mountainous district) to the lowest at 16.5 percent in Mefeteng

District (rural but non-mountainous district). The percentage distribution of the unemployed population by reason indicates that 95.7 percent of the unemployed reported that there was no available work.

A third reason for the high unemployment rate in Lesotho is low levels of investments from both local and foreign investors in sub-sectors other than textile industries. Due to geographical reasons, Lesotho is generally not a very attractive country for foreign direct investment (FDI) although the LHWP generated some FDI from the RSA in the early 1990s. After LHWP, nearly 90 percent of FDI goes to the textile industry. It is desirable to seek diversified economic activities by creating other industries to attract FDI.

### 5. Demographic Profile and HIV/AIDS

Despite Lesotho's large commitment to growth through human development, Lesotho's demographic situation is now at a considerable risk. Lesotho's population has grown in size from 0.97 million in 1966 to 1.96 million in 1996 and is estimated to have reached 2.1 million in 2000. The annual rates of population growth have increased from 2.3 percent between 1966 and 1976 to 2.6 percent between 1976 and 1986. This high population growth rate was the result of a high fertility rate, which stood at 5.3 percent in 1986 and remained at around 4.9 percent in 1996. However, between 1986 and 1996, the population growth rate is now slowing down primarily due to the impact of HIV/AIDS.

Since the first reported case of AIDS in 1986, prevalence rates among adults aged between 15 and 49 years have skyrocketed from approximately 4 percent in 1993 to 31 percent in 2002. This figure is the fourth highest prevalence rate in the world, ranking ahead of only - Botswana (38.8 percent); Zimbabwe (33.7 percent); Swaziland (33.4 percent). Due to the high rate of HIV/AIDS prevalence in Lesotho, it may be necessary to revise the population projection downwards in the future.

The high rate of HIV has had an immense demographic impact on Lesotho. In 1986 the life expectancy in Lesotho was 55 years and it was estimated at that time that it would rise to 60 years by 2001. However, as a result of HIV/AIDS, the life expectancy has dropped to 37.9 in 2002. Furthermore, HIV/AIDS has a significant impact on the educational attainment of children as more and more children drop out of school either

to help the household or because their families are unable to pay for their costs of education. School dropout rates have risen significantly and will continue to be aggravated by the HIV/AIDS pandemic. Compounded with a large number of migrant labors, the HIV/AIDS pandemic is causing an increase in the number of female-headed household in recent years.

### 5.1. HIV/AIDS and its Impact on Society and Education

Similar to other African countries, HIV/AIDS is emerging as a major health and development concern in Lesotho. Lesotho is in a very vulnerable position because of its large migrant population, which is typically in the prime of their working life. Due to a lack of sufficient monitoring instruments, Lesotho's epidemic situation is still largely uncovered. According to the 2000 World Bank report, the HIV prevalence rate of Lesotho is 26.5 percent and it is revealed that the male prevalence rate is higher in general than its female counterpart. As of 1998, 57 percent of the HIV positive reported were in the cluster of ages 20 to 29, followed by the cluster of ages 30 to 39.

This implies that Lesotho's most productive generation is now in danger, and the epidemic will devastate the national demographic posture. The population in Lesotho is estimated to be 2.8 million by 2015, about 644,000 fewer or 23 percent lower than it would have been in the absence of HIV/AIDS. This will have a direct impact on the size of the future labor force and subsequently, on the nation's macroeconomic situation. It is estimated that the presence of AIDS in Lesotho reduces the average real GDP growth rate during the period 1986 - 2015 from 4.4 percent without AIDS to 3.6 percent with AIDS. This implies that the economy will grow eight-tenths of a percentage point smaller (or 29 percent smaller) by 2015 because of the epidemic.

HIV/AIDS is also a major concern in the education sector. Due to the impact of HIV/AIDS, about 30 percent of children born to infected mothers are likely to be infected and most of them will die before they reach school-going age. HIV/AIDS also has an adverse effect on the teachers. A recent impact assessment study estimates that 27 percent of the teachers were affected by HIV/AIDS in 2003 and the magnitude is expected to increase to 30 percent by 2007 before it stabilizes.

#### 6. Conclusion

Lesotho is nicknamed the "Switzerland of Africa" because of its beautiful mountainous landscape. However, the economic situation is far from that of Switzerland. From the macroeconomic perspectives, as a result of the Lesotho Highland Water Project's (LHWP) contribution to government revenue, Lesotho has enjoyed a relatively high economic growth rate in the past 10 years. On the other hand, in the late 1990s, the Lesotho economy was weakened by labor retrenchment in the South African mines. Under this macroeconomic framework, the government has allocated a large share of public expenditure to education; however, the government is expected to exercise fiscal restraint in the years to come. In order to achieve effective educational development with a sufficiently productive labor force, it is important to maintain macroeconomic stability. Lesotho is currently experiencing a high rate of unemployment and may inevitably experience increased unemployment or a brain drain of workers if the government education strategy does not match the economic development policy. Lesotho's educational development should be re-formulated according to the future outlook of the economic situation. With more employment opportunities being created in textile and other manufacturing industries, there will be another substantial shift in Lesotho's economic structure. It is time for the government of Lesotho to take advantage of today's slightly upward economic trend and expand education to produce a more skilled labor force which will be the main actors of future economic development.

The high rates of HIV/AIDS have affected the demographic profiles in Lesotho in terms of declining the population growth rate by lowering fertility rates and life expectancy. HIV/AIDS has also affected the education attainment of children because they either drop out of schools to help their families or they cannot pay their school fees. Moreover, the government's recent impact assessment study estimates that nearly 30 percent of teachers are affected by HIV/AIDS in 2003 and the magnitude is expected to increase. The government is now officially declaring to combat the HIV/AIDS pandemic and its educational development strategy should also take into consideration the impact of HIV/AIDs on school teachers, students' family background and their prospects in the future labor market.

All those non-education settings as we have seen are strictly related to the

educational development of Lesotho, and the country must develop its educational strategy to correspond to future economic development prospects and the demographic outlook.

#### Notes

- 1 The components of the projects were the construction of a 185-meter high dam, a 45 kilometer transfer tunnel, hydropower stations and others.
- Comparative data are from the World Bank, African Development Indicators 2001. If GNP rather than GDP were used as the denominator in these ratios, Lesotho would still be an "outlier" on the high side, although not to the same large extent.

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