

THE ROLE OF EDUCATION IN ALLEVIATING POVERTY¹

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INTRODUCTION

Poverty is one of the main problems facing governments in the developing world. This is not an issue that can be solved overnight and will require careful planning. The extent and the reasons for poverty differ from country to country and there is no one solution for the poverty problem in the world.

In this paper the poverty situation in the developing world, with special emphasis on Africa and especially Southern Africa will receive attention. It will be shown that the poverty situation in Sub-Saharan Africa is really a serious problem. The extent of the problem will be highlighted.

Then the role that education can play to alleviate this situation will be discussed. It will be emphasised that just spending more funds on education won't necessarily improve the situation. The important issue of providing quality education will be stressed. The importance of a balanced approach will also be highlighted.

ECONOMIC PERFORMANCE AND POVERTY IN AFRICA

In 1960 280 million people lived in Africa, which represented 9 per cent of the world's population (African Development Bank 1998: 135-137). By the end of 1997 people living in Africa increased to 758 million (or 13 per cent of the total world population) and it is projected to further increase to just under 1,5 billion (or 20 per cent of the world population) by the year 2025. This increase in population growth was the direct result of high fertility rates coupled with lower mortality rates. For the period 1995-2000 the total fertility rate is estimated at 5,3 – the highest in the world. The use of modern contraceptives is much lower in Africa than in other regions in the world. For example, in Burundi, Benin, Guinea and Mauritania only one per cent of married women used contraceptives. With such high fertility rates, how does Africa compare to the rest of the world economically?

The economic performance of Africa compares badly when compared with other developing countries. In the 1980's the GDP per capita declined by 1,3 per cent per annum – 5 percentage points below the average for all low-income developing countries (Collier and Gunning 1999: 64-69). During the period 1990-1994 the GDP per capita decreased by 1,8 per cent per annum, no less than 6,2 percentage lower than that of the other low-income countries. They determined that in countries with dictatorships, ethnic diversity reduced the growth rate by 3 per cent per annum. Restrictive trade policies accounted for between 0,4 and 1,2 per cent of the growth shortfall. It was clearly illustrated that openness is important for growth and the lack thereof was damaging the African economy.

African infrastructures are also poorly developed. The road network's density is 55 km per square kilometer, compared to 800 km in India (Collier and Gunning 1999: 71). The telephone system had triple the number of faults than the system in Asia. Rail fees are double the fees in Asia, air fees are four times more expensive than in East Asia and port charges are in general much higher. A lot of potential investors regard Africa as a risky undertaking due to political instability as well as the failure of African courts to enforce law and order (Collier and Gunning 1999: 75-86, 103). Although the return on direct investment (24-30 per cent) was much higher in Africa than in other developing regions (16-18 per cent), it was more than offset by the risk investors put on Africa. Private capital flows to Africa is far below those of other developing regions.

Collier and Gunning (1999: 102-103) identified three criteria that seem to be important for growth in Africa, namely peace, macroeconomic stability and allocative efficiency. In the countries that experienced civil wars during the 1990's (in total these countries represent 12 per cent of the population) the average growth rate was only 0,8 per cent per annum. They took an inflation rate in excess of 25 per cent as an indication of macroeconomic instability. The countries that met the first criteria, but failed on the second one covers 43 per cent of the population of Sub-Saharan Africa. Their economic growth rate on average was 2,7 per cent per annum. For allocative efficiency they used a scoring system comprising of trade and exchange rates systems, the financial sector, factor and product markets, parastatals and the composition of public spending. Countries representing 12 per cent of the population now failed on the third criteria. They had average annual growth rates

¹ Paper read at the DEVNET conference, 17-19 November 2000, Wellington, New Zealand

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of 4,2 per cent. Those countries that satisfied all three criteria (although it was on modest levels) represented 26 per cent of the population and they experienced a high annual growth rate of 4,7 per cent.

With these moderate economic growth rates the formal economy could not absorb the increasing number of people entering the labour market. It is estimated that open unemployment rates in Botswana and Zimbabwe are about 20 per cent and in South Africa it is above 30 per cent (African Development Bank 1998: 140). In North Africa it is between 15 and 20 per cent. Quite a few countries actually experienced negative employment growth in the 1990's. Although millions of people are making a living in the informal sector, the average earnings in this sector are very low and won't do much to alleviate poverty. The above-mentioned facts create an environment on the Africa continent under which poverty is flourishing.

Poverty is a broad concept that manifests in many ways. Chambers (in Woolard and Barberton, 1996: 6) categorized poverty in five dimensions. Poverty manifest in what he calls 'poverty proper' which refer to a lack of income to generate income. Physical weakness due to under-nutrition or sickness also characterised the poor. The poor is also frequently socially isolated due to a lack of goods and services or illiteracy. They are very vulnerable for any crisis and the possibility to become even poorer in the process. They also feel powerless in existing social, economic, political and cultural environment. In the rest of this section most of these dimensions will be discussed within an African context.

Poverty in Africa is a harsh reality. In 1998 it was estimated that 290,9 million people living below \$1 per day, or 46,1 per cent of the population (World Bank Group, 2000). It was also estimated that an astonishing 474,8 million people (or 75,6 per cent of the population) lived below \$2 a day. This corresponds to the finding of Machipisa (1999) that 44% of the population live below a poverty line of \$39 per person per month. At the same time the population is expected to increase from 628,3 million in 1998 to 788,7 million in 2008 – a rate of 2,3 per cent per annum (World Bank Group, 2000).

Apart from being a very poor region the wealth of Africa are very unevenly distributed. The richest 20 per cent of the people of Africa receive more than 50 per cent of the income, while the poorest 20 per cent receive only 5,2 per cent of the income (Machipisa, 1999). According to him the income of the richest group is ten times more than the income of the poorest group.

To cut Africa's poverty by half in 2015 it is estimated that an annual growth rate of 6,8 per cent will be needed, compared to the current 4 per cent per annum. To achieve this investments of one third of the GDP will be needed. Domestic savings are only 14,9 per cent of GDP, while overseas development assistance is 8,9 per cent of GDP. This leaves a residual savings gap of 9,2 per cent of GDP (Escape from Poverty, 1999). Boorman and Ahmen (1999) agrees with the above mentioned statement, but emphasize that the poor don't necessarily benefit from growth. According to them not enough is known about the linkage between poverty reduction and macroeconomic stability and growth and that the situation in each country will differ.

Some recent results tend to indicate that poverty plays a major role in determining IQ differences (IRP News, 1996). Studies in Columbia and Northwestern Universities found that black IQ scores were 15 points lower than for whites. Poverty alone accounted for 52 per cent of the difference and controlling for children's home environment reduced the difference by another 28 per cent. This makes the difference an insignificant 3 points. It seems as though poverty and early learning opportunities are very important in Africa where blacks seem to be poor. In the above-mentioned study 40 per cent of the blacks lived in poverty, but only 5 per cent of the whites. Psacharopoulos (1990: 374) research support these findings. According to him schools in industrial countries don't add that much to their knowledge, because children grow up with more exposure to education.

The situation of woman in Africa is still very appalling. They are still responsible for 90 per cent of work on crops and fetching water and fuelwood, 80 per cent of food storage and transporting to the village, 90 per cent of hoeing and weeding and 60 per cent of harvesting and marketing (Gender, Growth and Poverty Reduction, 1999). Girls grow up in this environment, get caught up in it and it limits their opportunity to attend school. According to Muruga (Educating girls reduces poverty in Africa, 1999) a lack of education is responsible that only 32 per cent of African woman participate in the formal sector, as opposed to 63 per cent of the men. It is estimated that about 26 million girls in Africa of school going age are out of school. Education plays an important role in reducing poverty –it reduces fertility and improve health end equip people with the skills they need to participate fully in the economy and in the society. It was also estimated that by the turn of the century one billion people were unable to read or write. Two-thirds of them are woman and 130 million are of school going age in the developing world.

Hanushek (1995: 229-232) discusses 69 studies that were done in developing countries adopting some form of production function approach of linking inputs with outputs. For better quality education the education level of the teachers seemed to be significant as well as the provision of a certain minimum level of facilities like textbooks. The results in developing countries have a unique characteristic that differences in the school environment are important. This, however, does not mean that all schools are the same. Hanushek is of the opinion that not enough is known about how schools operate and why they differ in quality. It does seem as though the organisation of a school is of vital importance and that individual schools differ very much and the same schools also differ from year to year.

This brings Hanushek (1995: 236-237) at an important point that while the rate of return to schooling in developing countries seems to be a very good investment, few people take advantage of it. According to calculations by the Forum for African Woman Educationalists (in *Educating girls reduces poverty in Africa*, 1999) the social rates of return of basic education for girls in Africa is 24,3 per cent and 18,2 per cent for secondary education – the highest rates in the world. Hanushek makes the conclusion that the low school quality explain the widespread failure to take advantage of the high returns available from education.

ACCUMULATING EDUCATIONAL HUMAN CAPITAL

The private demand for education by households includes the magnitude of public expenditure on education. The high proportion that teacher's salaries comprise of this expenditure place a constraint on public expenditure in low-income countries. The education level of parents seems to be very important, because they value education more than uneducated parents. They can also help their children to a greater extent to learn from their experiences in school as well as helping them with their homework. Non-earned income or inherited wealth also plays an important role for children to stay in school, because their parents can afford to pay for their education. These socioeconomic constraints determine the enrollment rates of pupils. The higher the enrollment rates the greater the increase in labour productivity (and hourly wage) which will lead to an increase in national income and GDP per capita. It was also found that more education make the workers more flexible for changes in technology and market circumstances (Schultz in *African Development Bank 1998: 112-113*).

It is also important to note that the health status of pupils seems to play an important role in determining the successful progressing of pupils through the system. More healthy children will be able to concentrate better and the value added in the education system will be greater. In Africa child mortality is directly linked to the education level of parents. It is calculated that a year additional schooling of the mother can lead to a 5 to 10 per cent decrease in child mortality rates (*African development Bank, 1998: 114-116*). There are, however still areas in Africa that are plagued by tropical parasitic diseases like malaria and schistosomiasis. Certain climatic conditions also worsen the situation. The development of human capital also requires health expenditure. Increased expenditure on health (and schooling) has a lagged effect during which period the formation of human capital occurs before a worker becomes more productive. When the workers become more productive they demand increased expenditure on health and education. It do seem as though health expenditure plays an important role in supplementing educational expenditure and increase human capital formation.

A CASE STUDY: THE DELIVERY CAPACITY OF THE SOUTH AFRICAN EDUCATION SYSTEM

In Southern Africa the inequality of wealth is even worse than in the rest of Africa. With a very high Gini-coefficient of 0,60 it is clear that income are distributed very unevenly. The poorest 40 per cent of the people (52 per cent of the households) earn only 10 per cent of the income, while the richest 10 per cent of the population (6 per cent of the population) earn 40 per cent of the income (Woolard and Barberton, 1996: 8). In 1998 the richest 10 per cent of the taxpayers paid 46 per cent of taxes and the poorest 50 per cent of the taxpayers only paid 8 per cent of the taxes (*Republic of South Africa 1999: 168*). The majority of the poor - 76 per cent - live in rural areas, while 66 per cent of black households live in poverty the corresponding figure for whites is only 2 per cent. The poverty rate of female-headed households is 60,3 per cent, but only 31,3 per cent for male headed households. Lack of education is named as the key course of poverty, because it leads to low wages or unemployment and crime. A good education is seen as the ticket out of the poverty trap (Woolard and Barberton, 1996: 15-19). This section deals with the question about the quality of the South African education system.

At present the South African school system is functioning at a very low level of efficiency if passrates are used as an indication of the efficiency of the system. It must be conceded that passrates are only a measure of cognitive skills. One reason for using passrates is because it is very difficult to measure non-cognitive skills. Another reason is that a primary function of any education system is to ensure that the pupils progress successfully through the system. Although this method has its drawbacks, there is no one method that gives faultless results.

In this section, the progress of the cohort that enters the school system at the age of 6 or 7 is briefly discussed (see De Villiers, 1997: 79-80 for a more detailed discussion). These cohort groups were used because it is the normal age at which children enter the school system. The new Department of Education supplied data of the enrolment figures of all the departments³ (except the former Transkei, Bophuthatswana, Venda and Ciskei regions) for the years 1985-1993. The data give the age distribution of pupils in each grade for the period mentioned above.

In calculating passrates, it was assumed that the number of seven year old pupils in grade 2 in 1986, for example, as a percentage of the number of six year old pupils in grade 1 in 1985 represented the passrate of the children in grade 1 in 1985. The normal flow through rates of this age group were thus used as a proxy for the passrate of the group. This process was repeated for this cohort group in all the grades for every year over the period under discussion. By calculating the arithmetic mean of the different passrates for each year, the average passrate for that age group in every grade was determined.

It was further assumed that the group entering the school system at the age of 7 achieved the same passrate as the group entering the school system at the age of 6. This assumption follows from the fact that most children enter school in one of these two cohort groups. These cohort groups represented 92 per cent of white, 72 per cent of Indian, 78 per cent of coloured and 73 per cent of black grade 1 pupils for the period 1985-1993. If the flow through rates of the six year old grade 1 group are applied to the seven year old grade 1 group, one can determine what percentage of the children passed and stayed in the system, how many failed but still stayed in the system, how many left the system and how many pupils that left the system at an earlier point in time came back into the system again. Passrates are not available according to age in each grade and the passrates of the other cohort groups are very difficult, if not impossible, to determine. Therefore, the analysis was done only for the cohort groups that enter the school system at the age of 6 or 7.

Departments responsible for whites and Indians

The departments previously responsible for white and Indian education operated very efficiently (measured in passrates). It is clear from table 1 that approximately 86 out of every 100 white pupils that entered grade 1 at the age of 6 or 7 passed grade 7 within the normal 7 years. At high school, approximately 81 per cent ($69.7/86.4 = 80.7$ per cent) of pupils entering grade 8 (of the above mentioned cohort groups) passed grade 12 (matric) within the normal 5 years. When considering the whole school phase, 69 out of every 100 grade 1 pupils completed their school career successfully within the normal 12 years.

Table 1
Index of net flow through rates of pupils entering the South African education system at the ages of 6 and 7

Grade	Whites	Indians	Coloureds	Blacks
Grade 1	100	100	100	100
Grade 2	94.3	98.0	78.0	76.0
Grade 3	90.9	96.7	69.0	62.6
Grade 4	90.4	96.2	64.2	54.5
Grade 5	89.9	94.7	60.7	47.7
Grade 6	89.6	93.4	57.4	43.5
Grade 7	88.5	91.7	53.8	40.0
Grade 8	86.4	88.3	50.4	35.2
Grade 9	83.4	86.6	44.2	61.3
Grade 10	80.8	82.9	37.2	25.5
Grade 11	76.9	74.3	30.7	21.4
Grade 12	73.3	66.3	24.8	18.2
Pass Grade 12	69.7	61.8	18.8	8.2

The former department responsible for Indian education achieved the highest flow through rates in the primary school phase of all the departments (see Table 1). Out of every 100 grade 1 pupils 88 passed grade 7 within 7 years. Surprisingly, the dropout/failure rate at high school is substantially higher and 'only' 70 out of every 100 grade 8 pupils pass grade 12 within

³ Up to 1994 education for whites was provided by the Department of Education and Culture (House of Assembly), for Indians by the Department of Education and Culture (House of Delegates), for coloureds by the Department of Education and Culture (House of Representatives) and for blacks outside the "homelands" by the Department of Education and Training. Each of the self-governing states as well as the TBVC states had a separate education department (ten departments in total).

the normal 5 years. This results in 62 per cent of the grade 1 pupils that entered the school system at the age of 6 or 7 passing matric within 12 years. To some extent these are even better results than the former white system (conceded that it is only a measure of cognitive outputs), because these results were obtained while the *per capita* spending on Indian pupils was only 62 per cent of white expenditure in 1990 (Department of National Education, 1993: 22 and 125).

The flow through rates of these two departments are very good indeed. Pupils are also academically well prepared as a passrate of more than 94 per cent in grade 12 seems to indicate. Unfortunately, these two departments provided education for only 1,26 million pupils in 1994 – only 11,0 per cent of the total number of pupils in school in South Africa in 1994 (Strauss *et. al.*, 1995: 3).

Departments responsible for coloured and black education

The outstanding characteristic of the primary school phase in the former education department responsible for coloureds is the high failure rate in grade 1. About 22 per cent of the grade 1 pupils fail or leave the system in the first year (see Table 1). This is in line with the findings of the Theron Commission in the seventies that coloured children from disadvantaged communities had difficulties in adapting to the school system (in Terreblanche, 1977: 77-78). Although flow through rates in excess of 91 per cent are achieved in grades 3 to 7, only about 50 out of every 100 grade 1 pupils reach grade 8 within seven years. The progress at high school is even worse. At high school, only 37 out of every 100 grade 8 pupils pass matric within 5 years. Thus, only 19 out of every 100 grade 1 pupils pass matric within 12 years.

The high failure rate in grades 1 and 2 indicates that the intention of the present government to introduce a one year compulsory pre-primary schooling may be of great help in alleviating this problem. With more than 80 per cent of the original cohort group either failing at least once or leaving the system, the wastage of resources on unsuccessful pupils is self-evident.

With the calculation of the black flow through rates, the data of the former TBVC states could not be obtained, but data were received for all the other departments (including the former self-governing states). As is the case with the coloureds, the black flow through rates are also characterised by very high dropout and failure rates in grades 1 and 2 (see Table 1). Although the flow through rates in the primary school phase then stabilise at levels above 86 per cent, only 35 per cent of grade 1 pupils reach grade 8 within 7 years. In the high school phase the failure rate is much higher and only about 23 per cent of grade 8 pupils pass matric within 5 years. Over the whole school system, only 8 per cent of grade 1 pupils (of the cohort groups under discussion) pass matric within 12 years.

The flow through rates in grades 3-7 are in excess of 86 per cent, in grades 8-11 the figure is about 84 per cent, but the passrate in grade 12 (in the only external examination) drops to a very low 45 per cent. The high failure rates at high school are an indication that primary school pupils pass too easily, but the poor passrate in grade 12 seems to indicate that even at high school, promotion is too lenient. In 1994 these departments were responsible for the education of 9,2 million pupils (or 81,1 per cent of the total number of pupils at school) and the impact on the efficiency of the whole system is self-evident (Strauss *et. al.*, 1995: 3-5). There is thus an urgent need to rectify the situation, because a lot of funds are wasted on pupils that are not prepared for school or do not progress successfully through the system. These results seem to support the views that poorer people gain less from education than the richer pupils. In South Africa this situation is just more complicated, because the inequalities are racially based.

WORKING TOWARDS POVERTY RELIEF THROUGH EDUCATION

If one assumes that the human capital theory holds for Africa, the solution to the poverty problem is a simple one. Just give the poor the right kind and amount of education and it will solve the problem automatically. By investing more funds in education, the labour force will become more productive in the process, it will enhance higher economic growth rates and the positive spillover effects will make people richer. However, in reality it is not such a simple procedure. This section deals with some of the possible solutions and the problems that may be encountered if it is put to practice.

In trying to solve the poverty problem greater emphasis must be placed on the primary education (Psacharopoulos, 1990: 379). The reason is that the poor then benefits the most and education plays an equity role. At universities high income families are over presented and therefore they benefit the most. Public education expenditure must be more closely linked to the poor and primary education must receive the most attention. It can further be motivated, because countries that invested more in primary education developed faster – like Japan and South Korea. As an investment it also makes sense, because the rate of return on primary education in developing countries are 25 per cent and on higher education it is 12 per cent. (Psacharopoulos, 1990: 372)

An empirical research project in Africa supports these views of Psacharopoulos. The allocation for primary education (in Cote d'Ivoire, Ghana, Guinea, Kenya, Madagascar, Malawi, South Africa, Tanzania and Uganda) ranged from 40 per cent in Guinea to 70 per cent in Malawi. In Africa wages and salaries dominate educational expenditure. For the above-mentioned countries it varied from 81 per cent in Tanzania to 95 per cent in Guinea and Malawi (Castro-Leal, et. al. 1999:60-61). They also found that while enrollment rates in Africa are in general lower than the corresponding figures for low-income countries, the enrollment rates at secondary school level are extremely low. It ranges between 10 and 40 per cent while the worldwide average in low-income countries in 1993 was 42 per cent for girls and 55 per cent for boys. The enrollment rates of children from a poor background are lower than those of richer pupils at all levels, but it is more pronounced on the secondary level. Secondary enrollment rates of poor pupils in Guinea, Kenya, Madagascar, Malawi, Tanzania and Uganda ranged between 2 and 9 per cent in the years 1992-1994.

This tendency has drastic implications for the advantage that the poor receive from education. It was estimated that less than 20 per cent of the education subsidy reach the poorest quintile in the primary school phase (Castro-Leal et. al. 1999: 63-65). The subsidy is thus poorly targeted, because the majority of pupils in secondary and tertiary levels are from richer backgrounds. The poorest quintile receives about 10 per cent of the subsidy on secondary level, but almost nothing at tertiary level. The poor do not receive a satisfactory percentage of the subsidies, because they are not progressing through the system well enough. The implication is quite clear: the more the governments spend on primary education the more the poor benefit. Unfortunately the quality of the services that the poor receive are frequently at lower levels. This may further disadvantage the poor.

However, Africa is lacking behind to enroll all children in primary school by 2015. In 1998 68 million children attend school in Africa, but no less than 46 million were outside the school system (IMF et.al. 2000: 8-9). It implies that more than 40 per cent of children were not attending primary school. Linking this with the high fertility rates in Africa, the primary school age population will increase by more than 34 million in the period 2000-2015. This means that Africa is facing an enormous task to provide teaching facilities, train teachers and build schools to accommodate an additional 81 million children in 15 years time. That a huge effort is needed is almost beyond saying. The average man in Africa has less than three years of schooling, while the average woman has only about one year (African Development Bank, 1998: 171).

Here the difficult choice between equity and quality must sometimes be made. Hanushek (1995) emphasizes the wastage of funds in an effort to provide broad access to education, but being unable to guarantee the quality of education. This may lead to grade repetition and high dropout rates. The mere increase of expenditure on inputs is frequently inefficient. Research in Ghana indicates that the rate of return on school quality improvements are higher than additional years of schooling at the current level of quality (African Development Bank 1998: 118). Although a lot has been written about incentive schemes in education very few experiments were successful. Kremer (1995: 252-253) stresses the point that with incentive schemes schools tend to concentrate on objectives that can be measured and some unmeasurable objectives may not get enough attention any more, which may be to the disadvantage of the pupils.

Education can play an important role in lowering the fertility rates in Africa, which are the highest in the world. According to Schultz (in African Development Bank 1998: 124) a year of female enrolment ten years ago will reduce today's total fertility rate by 0,36 or a third of a child. Women with post-primary children have markedly fewer children. It seems as though female education is very important, but then preferably up to a post-primary level when the effect on fertility is greater. The attitude towards woman also has to change so that girls can actually choose to stay in school in stead of marrying young. Children of educated parents normally stay in school for more years than the children of uneducated parents. The education of mothers play a more important role on the enrolment of girls than boys (African Development Bank 1998: 125). These children from educated parents also seem to outperform the other children in school and may earn higher income in adulthood. The under-5 mortality rates dropped considerably as the education of mothers increase (IMF et.al. 2000: 13). However, this positive spillover effect from one generation to another takes many years. If less unwanted babies are born on the poorest continent in the world it can contribute to alleviating poverty. If this can be linked to the more frequent use of modern contraceptives, it can enhance the process.

The effect that HIV/AIDS can have on the African population is quite devastating. Until 1998 41,5 million people worldwide were infected of which 13,9 million died (Cilliers 1999). Of these deaths no less than 83 per cent occurred in Africa. In 1998 5,8 million people were infected – 5,2 million adults of which two thirds were living in Sub-Saharan Africa and 590 000 children of which 90 per cent were also living in this region. There is no better channel to inform children about the health risks of unprotected sex and children have to be informed urgently about it. The economic implications of losing millions of people in their most productive years (25-39 years) may be devastating. By changing the behaviour of people it may be possible to prevent future breadwinners contracting the disease and thereby saving the economy a huge

amount on medical fees in treating the ill. It will also be possible to change the present situation where millions of children grow up without or with only one parent due to HIV/AIDS deaths.

Although the quality of education is very important, Kamper (1998: 81-83) makes the point that education can only have an effect on people if absolute poverty has been overcome. In that sense education can only play a role in relieving relative poverty, but not absolute poverty. He also emphasizes the point that community involvement is important to ensure that quality education will succeed. In the process superior expectations have led to superior performance. The study by Butler and Kondrates suggests that to make undue allowances for poor background is a discriminatory way of educating the poor. However, without community involvement it would not be a success.

Education alone will not be enough to alleviate poverty in Africa. A balanced approach is necessary in which education is just one component. The success of the education system will to a large extent be determined by health expenditure. Healthy children will be able to concentrate better and progress more successfully through the education system. The main causes of illness on the continent are malaria (with an annual 300-500 million cases and about one million deaths – mostly children), respiratory infections, diarrhoeal diseases, childhood diseases (like polio, measles and tetanus), HIV/AIDS, tuberculosis, leprosy and malnutrition (African Development Bank 1998: 155-161). More than 300 million people are without water supply or sanitation. This may lead to illnesses like cholera and river blindness. A lot of these are curable through public health schemes.

CONCLUDING REMARKS

There is a definite interrelationship between better education, better health, reduced fertility, improved nutrition and increased household income to result in accelerated economic growth (African development Bank 1998: 122-126). Better education increase productivity and earnings, life expectancy and health, reduces fertility and change values about work and society. Better health lead to increased productivity, attendance of school and the ability to learn, reduces child mortality but increase life expectancy and can lead to less suffering and pain. Reduced fertility makes it able for households to invest more in education, health and nutrition and it also lowers population growth rates and maternal mortality while improving living standards. Improved nutrition increases productivity and health and simultaneously reduces mortality rates. Increased household income improves the standard of living and makes it possible to buy more education, health services and food. The interaction of all these factors may increase economic growth rates and improve the living standards of the poor.

A solution of the poverty problem through education cannot only look at education alone. A broader approach has to be followed, where expenditure on health plays an important role. By making sure that children are healthy more value can be added by the education system. It is necessary that educational funds must be targeted better, and increased spending on primary education seems to be the best starting place. Through education a lot of indirect benefits will also follow like lower child mortality rates, less undernutrition, lower fertility rates, less cases of HIV/AIDS, etc. By following a balanced approach much can be done through education to lower the levels of poverty although education alone cannot solve the problem.

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