

The Role of Education in the Challenge of Underdevelopment Syndrome of Africa: A Lesson from the Orient

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Introduction

Ironically, equity is preached more now than ever before while the gap between the rich and poor countries and rich and poor people is widening. This, in blunt terms, means the rich are getting richer while the poor are getting poorer. The rich, 20% of the World's population, own a share of world's income, that is, 74 times that of the poor; this was only 30 times in 1960. In other terms, the extreme disparities in global opportunities between the haves and the have-nots is depicted by the World Bank which compared the shares of World GDP. In 1997 the richest (20%) had 86% of the World GDP while the poorest had only 1% of the GDP. (UNDP: 1999)

The poor countries are not only poorer than decades ago but they are also indebted now more than in the past. Many of the poorest countries dispense more for payment of debt than for the basic social services that are in dire need. Paradoxically enough in this era of tremendous growth of wealth of the globalizing World the official development assistance of the richer countries to the poorer nations has shown an alarming decline in the nineties of the past century. This means the rich are getting richer and parsimonious at the same time while the poor are getting more and more impoverished. (UNESCO: 2000)

In our contemporary world, as Mayor (1995) has correctly stated, the map of poverty and the map of illiteracy can fit by superimposing one

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over the other. That means wherever there is ignorance there is hunger and other manifestations of poverty.

All the above attributes of poverty are applicable to Africa, and specifically to sub-Saharan Africa, where the bulk majority of the least developed countries are found. The proportion of poor people is increasing in sub-Saharan Africa. The per capita income of most of these countries is declining (UNDP: 1999). In short, Africa is more and more lagging behind. Such a trend needs reversing.

Status of Human Development in Africa

Africa is increasingly being challenged by so many intricate problems such as pervasive poverty, proliferated armed conflicts, rapid growth of population, HIV/AIDS pandemic and limited capacity due to backwardness in science and technology. It is understood that the most important of the challenges is the last one i.e. the lack of knowledge in science and technology. It is clear that it is the Africans who could bring about a sustainable solution for their problems. But they need to be knowledgeable of both their problems and their means of alleviation or reduction. Unfortunately, it is a vicious circle—they need knowledge to effectively fight poverty, but they do not have the knowledge because they are poor. The question is how to break the vicious circle. I believe the easiest and most effective segment of the circle is the knowledge aspect of human resource development whose best medium is education.

In August 1999 two African adolescents were found dead in a plane undercarriage after they secretly hid themselves in the aircraft which was flying from Conakry to Brussels. Even though their intent was to flee from misery, they were conscious of the probability of death and left an appeal to the World: *We need your help to fight against poverty, and bring war to an end in Africa. However, our greatest need is education.*

Their message was telling and their priority was education. As things stand at the beginning of the third millennium, unless it develops its human resources effectively, Africa risks becoming perpetually marginalized from the benefits rendered by the fast integrating world. Now and more in the future poverty reduction and broad-based economic growth increasingly depend on the *capacity of individuals, communities and societies to acquire, adapt and create knowledge* (World Bank, 2000a).

Africa has the lowest educational services in the World. Access did not increase much in the past two decades. In fact there was some decline. For instance in 1980 the average gross enrollment rate of primary education was 79.5%, which dropped to 76.8% in 1997.

Besides the quantitative problems of education, quality is affected by the constrained learning environment in most of the African countries. In 10 out of a surveyed 11 selected least developed African countries, over 30% of students were in classrooms without chalkboard; in 8 countries the majority of the students in the highest grade were without maths books and more than two third of the students in the 11 countries did not have tap water (UNESCO: 1998).

The quantitative and qualitative shortcomings of the education systems in Africa and especially in sub-Saharan Africa are worsened by the low level of retention and tremendous wastage. In some countries repeating students account for 20% to 50%! (UNESCO: 1998). Dropping out is another characteristic of inefficiency. In countries like Chad and Madagascar more than 30% who join school do not complete grade two (World Bank, 2000a). Consequently, the African adult has an average of less than three years of education and, one third of the male and half of the female population are still illiterate.

Higher education is at a very low level of development in Africa and as a result the continent has meager sources of technical and professional personnel. UNESCO's survey shows that the ratio of scientists and engineers working in research and development in Africa is extremely low. For instance, the ratio of these scientists and engineers per one million people is only 15 in Nigeria, but 149 in India, 350 in China and 3700 in USA. (World Bank, 2000a). Besides the meager source of high level educated manpower, the brain drain from this continent to the developed world is a serious problem. As many as 30, 000 Africans with Ph.D. degrees are serving in other continents. Africa had paid a big toll of natural resources and abundant unskilled human resources during the colonial era and before; and now it is still paying a big toll of skilled human resources.

The problem of brain drain seems to be encouraged more when one considers the recent US bill called *21st century Technology Resources and Commercial Leadership Act* which states that immigration of foreign nationals with postgraduate degrees in maths, science and engineering or technology to the US should be encouraged (Sorvate: 2000, Dejene: 2000). This direction of depriving the African countries of their *best and the brightest* skill was a minus for them and a plus for the developed world (Johnson and Regets 1998). The brain drain thus increases the disparities between the developing and the developed nations, whereby *poor nations and their taxpayers bear the costs of training and maintaining potential migrants, and wealthier nations reap the skills of migrants ... retarding income, welfare and growth in developing countries* (Dejene: 2000). It is the exploitation of expensive and essential resources by the developed world from the least developed countries.

Theoretically, the explosion of knowledge provides the opportunity to narrow information and knowledge gaps between Africa and the rest of the world, resulting in much faster pace of development in Africa. Unfortunately, however, unless the vicious circle of poverty and lack

of technology is somehow severed, such an opportunity of global knowledge explosion has less effect in the continent. In fact, the status of education is changing. Contrary to the expected role of integration and unity, it is becoming more of a differentiating and fragmenting factor and, thus, creating big distinctions among societies - by rewarding those who possess advanced knowledge and skills and depriving and denying those who do not have the knowledge and skills the opportunities for advancement and better life (UNESCO: 1998; UNDP: 1999; Damtew: 2000).

Africa should break the vicious circle and come out of the syndrome of underdevelopment which in explicit terms is poverty, ignorance, excessive debt, pandemic HIV/AIDS and, in short, misery. The question now is that it has not succeeded up to now and how could it be possible for Africa to extricate itself from misery in the future.

Africa needs to be keen enough to learn some lessons from the East. One Oriental lesson that helped to break the vicious circle is presented below.

Experiences of Asian Countries

In the East and South East Asian countries human resource was considered to be a critical factor for national development and to develop and exploit such a resource it was possible to develop a non-western system of modern education. Japan took the initiative and other countries in East and South East Asia followed. One common belief in these countries was the Confucian tradition which prevailed as a political and social directive for about two millennia. Japan and Thailand were able to resist the western influence and, hence, to devise their system of education for modernization on the basis of their cultural values ingrained in the Confucian tradition and beliefs. Other East and South East Asian countries then followed suit and the pattern of education with clear, successful results as those in Japan and Korea were recorded (Cummings 1995). In general education

has proved to have a strategic position in the development plans of all South and East Asian countries of both planning categories - those with more government intervention like in China and those with less government intervention like in Thailand.

Hence besides the strategies such as regulated monetary markets, setting alternatives for investors, encouragement of savings, promotion of particular sectors in industry, intervention in trade by way of support of export, the South East Asian countries *policies placed heavy emphasis on education and technology in order to close the knowledge gap with more advanced countries* (World Bank, 2000b; Mayor: 1995).

The main components of the strategy essentially followed by the East Asian countries in the development of education were the following:

- High priority was given to investment in education.
- Education was based on the cultural values of their respective societies.(i.e. oriental value and western science)
- Basic education received the highest priority in the system of education.
- Universalization of basic education, by design, achieved in a rather short time.
- Special emphasis was put on science and mathematics.
- National languages were used as media of instruction.
- Preference and subsidy was provided to specified second and third level education areas of study deemed to be critical for development.

- A policy of absorbing science and technology from the west in an efficient and concerted manner was followed; for instance
 - abundant scholarships to the west;
 - massive translations of books and essential materials from the west
- The private sector was allowed to supplement areas of top priority;
- Laissez-faire type of education was not allowed -- all educational activities (government, non government, formal, non-formal or even informal) were being checked for general consistency in the process of acculturation.

Following the above strategy the South and East Asian countries were able to provide broad-based quality education and build the human resource bases for their socio-economic development endeavors. They exerted tremendous efforts for fast quantitative and qualitative growth of education. Japanese school children achieved higher scores than their American counterparts - so much so that the Japanese 12-year-old achieved as high as the American 15 year old in the schools (Lynn; 1988). Hence educational standards were higher in Japan than in many Western developed countries that developed modern education much earlier than the Asian countries. Unlike the African and to a degree Latin American countries, the Asian countries used neither foreign languages nor alien values in their system of education. However, they were extremely fast adapters of Western science and technology.

Through developing the human resource in this manner, the Asian countries were able to develop self-reliance and avoid the western cultural subordination. This consequently helped them to develop sound and sustainable development policies and programmes to

alleviate poverty and avert the problem of underdevelopment syndrome that is facing Africa now.

Discussion

The argument that education brings about economic benefits to the individual and society is no more a sole domain to the human capital theorists and screening protagonists who were both popular in the 70's and 80's. Now it is axiomatic that the human resource is the most important factor of development. The concept of human resource development is now by preference replaced by human development which depicts itself as a means (an input for development) and as an end (better life of people). This is a development paradigm of currency. The basic assumption of human resource as the effective prime mover of development of course is that it has to be a skillful and knowledgeable type of human resource.

However, as we have already tried to describe the educational status of Africa above, poverty has caused quantitative and qualitative setbacks in the 1980's and stalled its development in the 1990's. This was essentially due to the inadequate facilities, low material inputs, untrained and unmotivated teachers, and short hours of schooling. As a result, Africa is not only with the lowest enrollment rate, and with an average education of adults of less than three years, but it is also with an inferior quality of education. The *cognitive achievements among African students is low by world standards* and this raises a serious concern (World Bank: 1988). Another factor in the quality and relevance of education in many African countries is the cultural basis of the curricula. Many of the curricula in Africa were *replicas* of the ex-colonial metropolis, unlike in the Asian countries, which also copied some western models only with innovations of adaptation that were compatible to their national needs and cultures (Thompson and Fogel: 1976; Coombs: 1985).

The provision of primary education is of paramount importance. But there is strong evidence that it can not grow and society can not develop without an education system that enrolls a large number of students in the other higher tiers, including post graduate studies in the higher education institutions. Such balanced growth in the system, (i.e., the primary, the secondary, the technical and vocational and the tertiary) makes it sustainable.

The World Bank has emphatically stated that *development policy will need to recognize that people are the most important - and sometimes virtually the only resource the country has. This makes the development of education -- basic education as well as graduate and post graduate training - the central development imperative* (World Bank: 2000a; Kakkala: 1995)

More investment in education in Africa can be expected to result in various economic benefits which include higher incomes and lower population growth. *The research evidence to this effect is compelling.* (World Bank: 1988). A vivid lesson in the economic development of the East Asian countries is that the highest pay off among so many areas of investment has been investment in education (Thompson and Fogel:1976).

It is thus desirable that African countries must strive to increase their public and private expenditures on education in order to enhance sustainable development. In fact it is recommended that government expenditure need not be less than 5% of the national income and should gradually increase above that.

There is one essential aspect of the development of social capital of East and South-East Asian countries from which Africa should learn a lesson. The experience is that in education of those countries the teachers are more motivated and bound to the profession; students are more committed and determined to achieve; and parents,

community members and citizens at large give support in the provision and utilization of facilities and other resources. These are some of the vital factors for quality education.

Another important point to consider about the provision of knowledge and skill through schooling in Africa is to recognize the three conditions that are eroding the human resource of Africa more than any other region. These problems are conflicts, HIV/ AIDS and the brain drain. The last one was discussed earlier in this paper. But here it has to be pointed out that as long as the global imbalances and the conditions in Africa do not change, international migrations of intellectuals from the continent will tend to increase (Mayor: 1995). The other two problems are also more prevalent in Africa than elsewhere. They all waste the resource. Nevertheless, these problems could effectively be tackled by narrowing the knowledge and technology gap between Africa and the rest of the World.

There is a pressing need to bridge the knowledge gap between Africa and the other continents if development is going to be realized in the continent. Hence the challenge of the 21st century to extricate Africa from poverty and to ensure development and peace would be the major concern of the current generation in Africa. Educating the young to face these challenges must be a priority target for every African country. It is because of this that the World Bank in one discussion paper on sub-Saharan Africa asserted that education *is the single most important investment for making progress towards the 2015 international development targets adopted by the World's governments* (World Bank: 2000a; UNESCO: 1998).

Conclusion

It is universally accepted now that economic growth with a broad base and sustainability rest on the capacity to attain, utilize and create knowledge. In the face of globalization, the gap between the

know and know-nots is equally widening with time as is between the haves and the have-nots. Currently Africa is on one extreme of the know-nots and have-nots.

If Africa is to rise on its feet to challenge the 21st century, much will depend on the human resource development.

The Asian countries which gave no concession of their language and cultural identity were able to come out from the syndrome of underdevelopment via human resource development. African countries also need to have a thorough review of their systems of education in order to formulate and apply internally coherent policies relevant to respective unique culture and vision of development. Certainly education is inextricably interlaced with socio-economic development and is the cause and effect of the process. But that is the best cause and effect of the process as globalization *per se* can not resolve the African problem of underdevelopment. As Illich (1973) stated *the only way to reverse the disastrous trend of increasing underdevelopment, hard as it is, is to learn to laugh at accepted solutions in order to change the demands which make them necessary*. Thus Africans should learn from but not directly copy the Asian human resource scenario of development; they need first to be critical and then own it.

References

- Bernstein, Henry (ed) (1973). **Underdevelopment and Development: The Third World Today**. Penguin.
- Coombs, Philip (1985). **The World Crisis in Education: The View From the Eighties**. Oxford University Press, NY.
- Cummings, William K. (1995). *The Asian Human Resource Approach in Global perspective*. **Oxford Reviews of Education** Vol. 21 No.1.

Dejene Aredo (2000). *Human Capital Flight from Africa: An Assessment of Brain Drain from Ethiopia*. Paper presented in the Regional Conference on Brain Drain and Capacity Building in Africa, 22-24 Feb. 2000, E.C.A, Addis Ababa.

Dynn, Richard (1988). **Educational Achievements in Japan: Lessons for the West.**

IIEP, **Newsletter** vol. XVIII No. Jan- Mar. 2000.

Illich I, (1973). *Outwitting the Development Countries*. In Henry Berntein. **Underdevelopment and Development: The Third World Today**, Penguin.

Johnson, Jean M and Regets, Mark C (1998). *International Mobility of Scientists and Engineers to the United States - Brain Drain or Brain Circulation?* NSF 98-316, National Science Foundation (from the Internet).

Kokkala, Helkki (ed) (1995). **Education Pays Off**. Ministry of Foreign Affairs, Helsinki.

Kuawab Audit Services and Business Consultants (1996). **Household Demand for Schooling**, PHRD, Addis Ababa.

Mayor, Federico (1995). **Memory of the Future**, UNESCO.

State Education Commission of China (1990). **The Development of Education in China (1988-1990)**, Beijing.

_____ (1988). **The Development and Reform of Education in China (1986-1988)**, Beijing.

Sarvate, Sarita, (2000). *Brain Drain*, [http 11 www. Salon. com](http://www.Salon.com) (10 Jan 2000).

Thompson, Kenneth and Fogel, Barbara (1976). **Higher Education and Social Change**. Praeger Publishers, N.Y.

- UNCEF (1992). **The State of the World's Children**. Oxford University Press.
- UNDP (1999). **Human Development Report** Oxford, N.Y.
- UNESCO (1995) **World Education Report**, Oxford University Press.
- _____ (1998). **World Education Report**. Oxford University Press.
- _____ (2000). *Towards a UNESCO Strategy for Contributing to Development and Poverty Reduction*, 159 Ex/9
- Wolday Amha (1996), **Private and Social Return to Schooling**, IHRD, Addis Ababa.
- World Bank (1988). **Education in Sub-Saharan Africa: Policies for Adjustment, Revitalization and Expansion**, Washington D.C.
- _____ (2000a). **A Chance to Learn: Knowledge and Finance for Education in Sub-Saharan Africa** (Second Discussion Draft)
- _____ (2000b). **Entering the 21st Century: World Development Report 1999/2000**, Oxford University Press.