UNESCO and Educational Needs For Sub-Saharan Africa at a Global Age.

A project Report Submitted to the School of Arts and Sciences in Partial Fulfillment of the Requirements for the Degree of Masters of Arts in International Relations.

By

Elizabeth M. Kihara

Summer 2005
STUDENT'S DECLARATION

I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University in Nairobi for academic credit.

Signed: ___________ Date: 12-07-05
Elizabeth M. Kihara (ID No.613819)

This project has been submitted for examination with my approval as the appointed Supervisor.

Signed: ___________ Date: 13-07-005
Ambassador Prof. Philip Mwanzia.

Signed: ___________ Date: 13-07-05
Dean, School of Arts and Sciences

Signed: ___________ Date: 21st July 2005
Deputy Vice Chancellor, Academic Affairs
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I also owe thanks to my IRL colleagues for their company throughout the course. It has been my good fortune to enjoy their friendship, support and encouragement. I’m also indebted to my office colleagues who have given a helping hand whenever possible. Some who must be remembered are: Charity Maina, Jane Njoroge, Lois Thuku and Esther Ndichu whose prayers, support and encouragement have been immeasurable.

Finally, I feel quite indebted to my family for being very patient and tolerant with my absence from many family matters during the course of this study. I appreciate the understanding of my children, Peter and Samuel, and the massive financial support of my dear husband Jimmy towards the success of this project. My parents also deserve mention for without their value for education, I may never have advanced up to this level.
ABSTRACT

This research has been carried out with the major objective of assessing the role of UNESCO in its contribution towards the development of education in Sub-Saharan Africa at this global age. In this light, research has been carried out on certain key areas of UNESCO's educational activities in the region. The research has also dealt with UNESCO's role in promoting regional cooperation in Sub-Saharan Africa, for the purpose of educational development, especially its partnership with African Union (AU) and the New Partnership for Africa's Development (NEPAD).

In order to meet these objectives, the researcher has collected some data from books and journals in the K. Lilian Beam Library (USIU). However, most information has been gathered from the UNESCO library at UNESCO's office in Nairobi where many journals and reports on proceedings from various UNESCO conferences are available. Some information has also been obtained from the internet.

The research found that UNESCO's main objective in the region is to make EFA a reality by 2015. However, to realize this objective, UNESCO has had to contend with serious problems, such as high level poverty in some of the countries in the region, external debt, conflicts, high rates of HIV/AIDS infection and lack of will among national leaders to give education first priority. These problems have made it difficult for UNESCO to achieve its goals, at least within the time frame.

Amidst these problems, UNESCO has made a remarkable achievement in the region through the establishment of the Regional Office for Science and Technology in Africa (ROSTA). ROSTA has worked to strengthen science and technology in the region. EFA goal can also be viewed with optimism in some countries and the fight against gender disparity is on the move. But still, illiteracy remains an obstacle to African renaissance; higher education is still faced by many problems and UNESCO has not satisfactorily met the needs for capacity building in the region. The organization also seems to have underestimated the effects of HIV/AIDS on the development of education in the region.

Based on the research findings, it was recommended that UNESCO appreciate the idea of partnership with other bodies, civil society and all stakeholders in educational development in the region. It should pressurize other bodies for help in order to build a strong educational base in the region; it should also encourage national governments to allocate more funds to educational development.
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<th>Abbreviation</th>
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<tbody>
<tr>
<td>AAST</td>
<td>African Association of Advancement of Science and Technology.</td>
</tr>
<tr>
<td>AAS</td>
<td>African Academy of Science.</td>
</tr>
<tr>
<td>AASU</td>
<td>All-Africa Students Union.</td>
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<td>AAU</td>
<td>Association of African Universities.</td>
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<td>ABN</td>
<td>African Biological Network</td>
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<td>ADEA</td>
<td>Association for the Development of Education in Africa.</td>
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<td>ADB</td>
<td>African Development Bank.</td>
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<td>AFSTD</td>
<td>African Forum on Science and Technology for Development.</td>
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<td>AJST</td>
<td>African Journal of Science and Technology.</td>
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<td>AMU</td>
<td>African Mathematics Union.</td>
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<tr>
<td>ANSTI</td>
<td>African Network of Science and Technology Institute.</td>
</tr>
<tr>
<td>AU</td>
<td>African Union.</td>
</tr>
<tr>
<td>AUPAC</td>
<td>African Union of Pure and Applied Chemistry.</td>
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<td>BAC</td>
<td>Biototechnology Action Council.</td>
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<td>BLMI</td>
<td>Basic Learning Materials Initiatives.</td>
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<tr>
<td>BREDA</td>
<td>Bureau of Regional Education in Africa.</td>
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<tr>
<td>BTCA</td>
<td>Biototechnology Training Center for Africa.</td>
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<tr>
<td>CAL</td>
<td>Computer Aided Learning.</td>
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<tr>
<td>CASTAFRICA</td>
<td>Conference on the Application of Science and Technology in Africa.</td>
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<tr>
<td>CIDA</td>
<td>Canadian International Development Agency.</td>
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<tr>
<td>CITEN</td>
<td>Centre for International Technology Education Network.</td>
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<tr>
<td>ECOWAS</td>
<td>Economic Community of West Africa States.</td>
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<td>EFA</td>
<td>Education for All.</td>
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<tr>
<td>FABS</td>
<td>Federation of African Biochemical Societies.</td>
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<td>FAO</td>
<td>Food and Agricultural Organization.</td>
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<td>FAPED</td>
<td>Forum of African Parliamentarians for Education.</td>
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<td>FAWE</td>
<td>Forum of African Women Education.</td>
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<td>GASAT</td>
<td>Gender and Science and Technology.</td>
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<tr>
<td>IACCE</td>
<td>International Association for Continuing Engineering Education.</td>
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<td>IBE</td>
<td>International Bureau for Education.</td>
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<td>ICRO</td>
<td>International Cell Research Organization.</td>
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<td>ICS</td>
<td>International Council for Science.</td>
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<td>ICT</td>
<td>Information Communication Technology.</td>
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<td>IDRC</td>
<td>International Development Research Centre.</td>
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<td>IGCP</td>
<td>International Geological Correlation Programme.</td>
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<tr>
<td>IGNOU</td>
<td>Indira Gandhi National Open University.</td>
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<tr>
<td>IHP</td>
<td>International Hydrological Program.</td>
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<td>IICBA</td>
<td>International Institute for Capacity Building in Africa.</td>
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<td>IIEP</td>
<td>International Institute of Educational Planning.</td>
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<tr>
<td>INGO</td>
<td>International Non-Governmental Organization.</td>
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<tr>
<td>IOC</td>
<td>Intergovernmental Oceanographic Community.</td>
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<tr>
<td>LDC</td>
<td>Least Developed Countries.</td>
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<tr>
<td>MDG</td>
<td>Millennium Development Goals.</td>
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<tr>
<td>MICRENS</td>
<td>Microbiological Resource Network Centres.</td>
</tr>
<tr>
<td>MINEDAF</td>
<td>Ministers of Education of Africa.</td>
</tr>
<tr>
<td>NAPRECA</td>
<td>Natural Products Research Network for Eastern and Central Africa.</td>
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<tr>
<td>NEPAD</td>
<td>New Partnership for Africa’s Development.</td>
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OAU - Organization of African Unity.
ODA - Overseas Development Administration.
PACSICOM - Pan-African Conference on Sustainable Integrated Coastal Management.
PANGIS - Pan-African Network for a Geological Information System.
PAUST - Pan-African Union for Science and Technology.
PEER - Programme for Education for Emergency and Reconstruction.
PRODEC - Programme for the Development of Education.
PUST - Pan-African Union of Science and Technology.
R & D - Reconstruction and Development.
RINAF - Regio Informatics Network for Africa.
ROSTA - Regional Office for Science and Technology in Africa.
SAPs - Structural Adjustment Programmes.
SIDA - Swedish International Development Agency.
S & T - Science and Technology.
TEN - Teacher Educational Network.
TSBF - Tropical Soil Biology and Fertility.
UAP - Union of African Physics.
UN - United Nations.
UNDP - United Nations Development Programme.
UNESCO - United Nations Educational Scientific and Cultural Organization.
UNHCR - United Nations High Commission for Refugees.
UNEP - United Nations Environmental Programme.
UN-NADAF - United Nations New Agenda for Development in Africa.
WCCEE - World Conference on Continuing Engineering Education.
WGES - Working Group on Education Statistics.
WGFE - Working Group on Finance and Education.
WGHE - Working Group on Higher Education.
WGFP - Working Group on Female Participation.
WGNFE - Working Group on Non-formal Education.
WSGSA - Working Group on Sector Analysis.
WGTP - Working Group on the Teaching Profession.
WHO - World Health Organization.
WICS - World Islamic Call Society.
CHAPTER ONE

1.0 Introduction

The mission of UNESCO set forth in its constitution is that of advancing, through the educational, scientific and cultural relations of the peoples of the world, the objectives of international peace and of the common welfare of mankind. The United Nations Organization was established for this purpose.\(^1\) This mission is as essential today as it was in 1945 when, in the aftermath of a great and terrible war, UNESCO was established. Education, in the broadest and noblest sense of that term, is at the very heart of this mission. Through education, the defenses of peace in the minds of men can be constructed. It is also through education that development would be advanced and ensured today.

In this light, UNESCO then becomes very relevant to the sub-Saharan African region, which according to D.K Leonard and S. Stans is seen by the rest of the world as the locus for civil war, ethnic strife, autocracy, economic stagnation and the plagues of AIDS and Malaria.\(^2\) In Sub-Saharan African region, UNESCO has been committed to making education relevant to economic recovery and development. This programme is the practical expression of UNESCO’s determination to contribute to United Nations New Agenda for Development in Africa (UN-NADAF) and to the global coalition for Africa. The aim of the contribution is to procure extra-budgetary resources to support regional and sub-regional cooperation of an interdisciplinary and intersectoral nature. Under the African programme, pluridisciplinary missions to identify cooperation projects have been organized, national specialists have been trained for that purpose. Regional programmes have also been drawn up relating to the

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management of higher education, the development of distance education and educational technologies and enrolment of girls in schools. This has been done with regard to the implications of these programmes in the fields of science, culture and communication, and to the development of a culture of peace in the region as UNESCO’s ultimate goal.

Escalating poverty and degradation of the environment have also been witnessed in Sub-Saharan Africa. These difficulties have been inherent in the apprenticeship of freedom and democracy. Hatred and ethnic intolerance have been more than expected. The Sub-Saharan African situation demonstrates that peace is not a matter of circumstance or even of politics, but requires the intellectual and moral solidarity of mankind. In such a situation, no task is more vital than promoting, through education and culture, an active sense of tolerance and mutual understanding. This is the only basis upon which a lasting peace can be established between nations and peoples. UNESCO is deeply committed to making the right to education an everyday reality, not a remote promise. It was born out of the tragedy of war in the conviction that the education of humanity for justice and liberty and peace are indispensable to the dignity of man and constitute a sacred duty which all nations must fulfill in a spirit of mutual assistance and concern. This mission is as vital today as it was yesterday and will be tomorrow.

Any sound development strategy aimed at promoting economic development, democracy and social justice must be fully cognizant of human resource development. For when all is said and done, development is about people, their physical health, moral integrity and intellectual awareness. Through education people become aware of their environment and the social economic options available to them. Many challenges lie ahead if the global goal of Education For All (EFA) is to be achieved. According to UNESCO report of 1993, about 40 million primary school age children in Sub-Saharan Africa received no education in that year. Dynamic growth in educational quantity since independence has been achieved at
the expense of quality and relevance. Educational systems have not been keeping up with the changes in the economy and technology that have enormous impacts on the types of skills and the critical thinking required in the emerging world economy. Today’s low quality education has serious implications for tomorrow’s development tasks.

UNESCO believes that education for the 21st century should help societies cope with the challenges facing them in the century. This is particularly the role of the Commission on Education for the Twenty-First-Century. It examines the renewal of scientific, technical and vocational education at the secondary level, the role of higher education in seeking of solutions to the problems of society, the diffusion of information on educational research and innovations, and the reconstruction of educational systems in societies experiencing profound changes. In a global situation in which more and more countries find themselves beset by crises and unexpected difficulties, it is UNESCO’s responsibility to ensure that its limited resources are used to maximum effect to aid them.

1.1 Background to the problem

The problem presented in this study has its background in the dreadful state of education in Sub-Saharan Africa since the 1980s. Since education is the cornerstone for human development in every society, its promotion and advancement should occupy a central place in the society at this global age. P.M Mutebi describes education as a weapon for combating ignorance, poverty and disease, a bridge between confusion and comprehension, a rocket for transporting man from a state of intellectual subservience to a state of intellectual sovereignty.

According to article 26 of the Universal Declaration of Human Rights, everyone has the right to education. Education shall be free at least in the elementary and fundamental

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3 Mayor, OP. CIT. p. 9
stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.  

But today, the right to education remains an empty promise for millions of children and grown-ups, mostly women.

Sub-Saharan African region has entered the 21st century facing perhaps the greatest development challenge than any other region in the world. For most African countries, the post-independence period has been marked by far-reaching political, social and economic problems. Africa today is a continent where the number of people living in absolute poverty has reached close to half of the population, and this figure continues to rise. The economic and social development has been hampered by shortages of skilled men and women. This is confounded by widespread ignorance and indifference.

During the 1980s, education in most Sub-Saharan African countries stagnated or deteriorated. Deeply affected by economic recession and the growing debt burdens, these countries were generally unable to maintain the pace of educational expansion maintained during the 1960s and 1970s. In the face of rapid population growth, education actually declined in most Sub-Saharan countries during the 1980s. Many schools lacked text books and other basic essentials. With the introduction of the Structural Adjustment Programmes (SAPS), the educational sector in most Sub-Saharan countries experienced the sharpest cut in resource allocation. Fantu Cheru gives a picture of the educational situation in Sub-Saharan Africa during the 1980s as follows, “All over Africa, everyday, children run or walk for miles to reach decrepit buildings, which often do little more than keep off the sun and rain. There may be no water or electricity and not enough benches or desks. Books and equipment if any

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are shared in classes of up to a hundred. Sports is kicking a ball of wrapped-up rags in a stony field. In some areas, schools have to take one set of pupils in the morning, another set in the afternoon. And many children do not get there at all.\(^8\)

The root cause of the crisis in Sub-Saharan African education dates back to the colonial days. Only few Africans in Sub-Saharan region received education due to racial discriminative policies of the colonial governments. In most places, only the capacity of the missions to provide education made its growth possible. The problem was aggravated by the ambitious but misguided policies of post-independence governments, anxious to correct the legacies of colonialism. In its most recent manifestations, the educational crisis in Africa has been exacerbated by the regressive macro economic policies that African governments implemented from 1980s, at the behest of the international Monetary Fund (IMF) and the World Bank. Basically, SAPS constituted cuts in government spending particularly expenditure on services that are crucial to the poor and the aged. For instance, education, health, housing and water.\(^9\) While the purported goal of these economic reform programmes was to bring efficiency in the economy and in the use of public resources, the outcome has been detrimental to education, health and nutrition in Sub-Saharan Africa.

Many governments were prompted to reduce their educational budgets at the cost of lower standards. Teachers' salaries fell to desperately low levels, and the acquisition of books and instructional materials were severely affected. The cuts, combined with economic crisis have contributed to low educational standards. Sub-Saharan Africa is the only region in the developing world where total educational expenditures have been declining in the 21st

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century. These disinvestments in human capital development have come precisely at a time when the continent should have been doing the opposite, that is, investing more in human development in order to minimize the gap between Africa and the rest of the World, and to build a foundation for lasting human development.

The following are some of the most critical problems facing the Sub-Saharan African educational system in the 21st century:

First there is limited access to education. Demand for education remains high (partly due to the expanding population) and parents still want their children to attend primary and secondary school. This is understandable since education was the primary qualification for access to well paying jobs in the first few years after independence. The policy of guaranteed employment for university graduates followed by many African governments, until the economic crisis of 1980s, helped further to fuel the competition for higher education. This led to a tremendous increase in school enrolment in the face of a scramble for attractive white collar jobs. Despite greater demands, there are fewer resources available to finance education.

Secondly the educational system is characterized by high drop-out rates. In Sub-Saharan Africa, drop out and repetition rates are very high at all levels of the educational system. According to the World Bank report of 1994, approximate population of school-age children entering grade 1 were 70% for Sub-Saharan Africa, 95% for South Asia and 98% for South America. However, the proportion reaching grade 5 for all three areas was approximately only 47%. An estimated 25% of those in school repeated the same class before they moved forward to the next stage.

Thirdly, there is the problem of low quality education. Rapid enrolment, coupled with declining resources, has significantly lowered educational quality in Sub-Saharan Africa. The

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10 Cheru, OP.CIT p. 65.
11 IBID p. 68.
problem has been exacerbated by a severe lack of tools, technology, instructional materials and textbooks, poorly trained and unqualified teachers, and curricula not closely linked to performance standards and measures of outcome. Economic development in sub-Saharan Africa largely depends on the ability of this region to introduce technical change. Technical change has been credited in the economic theory with being a major factor in economic growth.\(^{12}\)

Fourthly, the educational policy after Independence had a loophole. For most Sub-Saharan African countries, the predominant themes of educational policies were that education must foster a sense of nationhood and national unity; and the skills and knowledge required for national development. Thus, money and resources were directed into a tremendous expansion of a system still largely cast in a colonial mould. Fundamental changes in structure, curriculum and examination were not undertaken, however. Moreover, the whole style and approach of the educational system was never transformed to make it consistent with the post-independence reality.

Finally, Gender disparity in the provision of educational opportunities has continued to widen. Although the potential contribution of women’s higher education to economic growth is great, a gender gap in enrolment at the tertiary level has been pervasive in Sub-Saharan Africa. While the multiple interrelated school socio-economic, socio-cultural, political and institutional factors that constrain female education are increasingly well documented, much remains to be done to design and implement programmes to accelerate female education in Africa.

It follows from the decline in educational investment that, notwithstanding the new educational requirements being dictated by the current techno-economic paradigm, Sub-Saharan Africa faces an all together different set of problems. These problems range from

difficulties in providing minimum basic education for a rapidly growing primary school population, to the development of skills adequate from improving standards of living in both rural and urban areas. Countries that do not keep up with global technology are likely to collapse, unable to maintain their standard of living, much less to increase it.

The failure of Sub-Saharan Africa in human resource development has also contributed to the food crisis experienced in the past years. It is important for the region to develop the scientific and technological base necessary for food security. The food crises in Africa dates back to early 1970s, when the Sahel countries started experiencing serious drought.\textsuperscript{13} At that time, world wide attention focused on the specific needs of the semi-arid tropical zones of the continent. The most serious drought situation was experienced in Ethiopia beginning in 1983, with the severity increasing in 1984/5. In response to Food and Agricultural Organization (FAO) appeal, many countries in the world and donor agencies were impelled to mobilize massive emergency food aid for the drought stricken countries in Africa. But many lives had already been lost. The food assistance received by Africa in 1984 was the largest record in history, doubling that reported in previous years.\textsuperscript{14}

Although much food aid has been given to Africa, this provides no guarantee of sustained availability of food for the continent. Emergency is intended only to combat the devastating effects of famine by providing food, drugs, shelter and transportation for the immediate term. What is likely to happen is a dramatic fall off in the interest generated in the international community unless proper safeguards are devised. The affected Sub-Saharan countries should themselves set up long-term strategies to meet their needs, for instance, ensure food security. African countries must understand that while global activities to promote food security are essential, it is ultimately at the regional, national and local levels

\textsuperscript{13} E. Chole, \textit{Food Crisis in Africa, policy and management issues} (vikas publishing House, PUT Ltd, New Delhi 1990) p. 25.

\textsuperscript{14} IBID p. 227.
that the battle for food self-sufficiency is won or lost.

As far as manpower for agriculture in Sub-Saharan Africa is concerned, practical work at higher educational level and Vocational training mainly involving extension services for modernizing agricultural production among small scale farmers is extremely weak. Solutions to the problems of poverty and fulfillment of food needs lie in increased technological utilization of physical and human capital. Agricultural research can give us the guarantee and ensure the certainty of meeting some of our food needs. Subsistence farming, which is the predominant mode of agricultural production, uses primitive means, principally because of lack of cheap and suitable technology. The correct course for agriculture in Sub-Saharan Africa is to resort to technology, requiring a trained labour force. The region must therefore be able to mobilize research and development efforts of UNESCO. African leaders should know that the success of any national agricultural and rural development programme lies in the availability of trained manpower in general.

Another area of concern in Sub-Saharan African educational crisis is the study of social sciences. This has been deeply affected by instability, political repression and debilitating economic hardship. In particular, the public universities, which have dominated research and training, operate at low levels of capacity due to resource constraints, government interference and the brain drain.¹⁵ Many of Africa’s greatest social scientists, the vast majority of whom have been trained abroad through donor-supported capacity building programmes, have taken up residence outside the region due to a combination of poor working conditions, impoverishment and hostility from ruling regimes. For those scholars who remain, survival is often predicted upon either leaving the research and teaching world together, or combining university duties with a range of other income generating activities. Some of these activities are in the realm of social science research albeit mainly of the

applied variety conducted under contract with government or donor agencies.

Most African-based scholars, and in particular, Junior Social Scientists are isolated from both the work of their colleagues in the region and that of the international scholarly community. This is due to unavailability of journals and books, limited communications technology and linguistic divides, especially between Africa’s Anglophone and Francophone zones. The development of social and human sciences is one of UNESCO’s major programmes and it would benefit the Sub-Saharan region to a great extent if well embraced.

The educational system in Sub-Saharan Africa therefore requires fundamental reform and an infusion of funds, qualified managers and policy analysts, to make it effective and consistent with the overall development needs of the region. This must be followed by a plan to transform curricula and educational content to improve the link between graduating students and the needs of the economy. UNESCO is committed to meeting these educational needs of sub-Saharan Africa in its efforts to improve the quality of education. These efforts are multifaceted, for example, training of teachers, management of schools, provision of learning materials and the measurement of learning outcomes.

Particular attention is being given to the needs of the least developed countries as their progress depends critically upon the education of their populations. In the implementation of all its activities, UNESCO aims at achieving the UN millennium goal of halving levels of poverty by 2015. Since the 1990s, Africa has been a priority focus of UNESCO’s activities. In November 2001, UNESCO organized an international seminar entitled “Forward looking approaches and innovative strategies to promote the development of Africa in the 21st century.” It aimed to review UNESCO’s strategy on Africa in the light of recently launched partnership on Africa’s Development (NEPAD). Over all aim is to promote development in

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Africa in the 21st century.

1.2 Problem Statement

For the last two and a half decades or so, Sub-Saharan African educational systems have been in a lamentable state. During the 1980’s, education in most countries in the region stagnated or deteriorated. Such factors as economic recession, growing debt burdens and population growth have led to the decline of education.17 Many governments have been prompted to reduce their educational budgets at the cost of lower standards. Teachers’ salaries have fallen to desperately low levels, and the acquisition of books and instructional materials have been severely affected.

At the turn of the 21st century, most countries have experienced the problem of limited access to education, high dropout rates, low quality education and gender disparity in educational opportunities. It is against this background that UNESCO has engaged in a number of activities to reform education in the region. Sub-Saharan Africa has been a priority area of focus for UNESCO in the development of education. But sadly for UNESCO, some of the problems that faced educational development some 20 years ago still feature even today.

According to the UNESCO’s International Literacy Day Publication of September 2002, four out of ten Africans could not read or write and there was no sign that the situation would change. Of the 21 countries where estimated adult literacy rates remained higher than 50 percent, 13 were located in Sub-Saharan Africa. Women accounted for two-thirds of them.18

UNESCO has not succeeded in meeting its EFA goal in the region. Despite the

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organization’s initiatives, commitment to literacy has been lacking in the region. Problems facing higher education have not quite been addressed. Its funding has been declining and this has had adverse effects on students’ enrolments in higher education institutions. Despite UNESCO’s efforts in capacity building, education is still plagued with low quality of schooling, large class sizes and high number of students per teacher.

UNESCO’s various programmes in science and technology have not been fully managed to make the region’s education relevant to development needs. Gender disparity is even greater in science and technical education, yet women play a critical role in development. UNESCO’s efforts in the fight against HIV/AIDS have been overcome by the high infection rates in some of these countries. The epidemic has affected the development of education in the region to a great extent.

Despite much efforts and a few achievements, UNESCO does not seem to have brought much change to the Sub-Saharan African educational situation. This situation calls for an examination of the role of UNESCO in educational development today as far as Sub-Saharan Africa is concerned. The research has tried to critically analyze this role. In this analysis, it has tried to give an account on UNESCO’s failures, and further recommending on what the organization should do in order to improve the situation.

1.3 Research Objectives

The major objective of this research is to bring out clearly the role of UNESCO in its contribution towards the development of education in Sub-Saharan Africa during this age of globalization. This has made it necessary for the research to fulfill certain specific objectives, for instance;

i. To examine the role of UNESCO in the development of science and technology in the region, finding out whether the organization has raised the standard of this region to a level in
which it can keep up with global technology.

ii. To find out whether UNESCO has met the EFA objective in the region especially in its fight against illiteracy.

iii. To examine the role of UNESCO in strengthening the capacity of teacher education in the region; and also in the development of HIV/AIDS awareness and preventive education.

iv. To critically analyze the successes and failures of UNESCO in the development of education in the region.

v. To help find solutions to the many challenges that have hindered UNESCO’s progress in the region; giving various recommendations to UNESCO, national governments and all stakeholders in the educational development in the region.

1.4 Research Questions

The study aims at addressing the following research questions:

i. What are the challenges of education in Sub-Saharan Africa in the 21st century?

ii. What is UNESCO and what is its vision, objectives and priority areas?

iii. How relevant is UNESCO to Sub-Saharan African region in the 21st century?

iv. Has UNESCO raised the standard of Sub-Saharan Africa to a level in which it can keep up with global technology?

v. To what extent has UNESCO narrowed the gender gap in educational opportunities in Sub-Saharan Africa through EFA programmes?

vi. What role has UNESCO played in institutionalizing guidance and counseling services especially in HIV/AIDS awareness and preventive education in Sub-Saharan Africa?

vii. Can UNESCO claim to have strengthened the capacity of teacher education in Sub-Saharan Africa?

viii. To what extent has UNESCO promoted international and regional cooperation for the development of education in Sub-Saharan Africa?
1.5 Justification of the study

This study is considered to be important to various groups of people. For instance, Educational planners in Sub-Saharan Africa are likely to be motivated to supplement UNESCO's efforts in educational innovations. They may end up showing their commitment to educational development by allocating more resources to it. Curriculum developers are likely to be encouraged to put effort in making education relevant to the needs of the poor developing countries. They could also be challenged to come up with educational policies and goals that are compatible with human resource development; and also try to link literacy with everyday life. International organizations, Non-Governmental Organizations (NGOs), and regional financial institutions may be stimulated by this study to have a commitment to work hand in hand with UNESCO in developing education in Sub-Saharan Africa, thus redeeming the region out of poverty and ignorance. They are likely to show financial commitment in dealing with the challenges that thwart UNESCO's EFA goals.

Teachers for basic and higher educational institutions are likely to be exposed by this study to the resources availed to them by UNESCO in building and strengthening their capacity in education. Civil Leaders may also learn the importance of applying science and technology in the development of their nations. It will create awareness in them that solutions to the problems of poverty and food insecurity lie in increased technological utilization and research development. The study could also be helpful to students of all levels, in helping them to become optimistic about the future of education in Sub-Saharan Africa. This is likely to motivate them to work hard and utilize the resources availed to them by UNESCO and other international organizations.

The general public is also likely to benefit from this study especially in the area of HIV/AIDS awareness and preventive education. Since HIV is the greatest public health challenge of our times, and a great threat to African renaissance, those concerned with its
containment will be motivated to do more research in the area. Other researchers in the area of education in Sub-Saharan Africa are also likely to have a basis for further study. It will also be helpful to the students of international relations in furthering their knowledge about non-state actors in the international scene.

1.6 The scope of the study

The study is based on the educational aspect of UNESCO. As far as time frame is concerned, the study reflects on 1980 - 1990 which gives the main causes of the African educational crisis. 1990 - 2000 highlights several educational activities of UNESCO in Sub-Saharan African. The 21st century is the main focus of the study in trying to evaluate whether UNESCO has made a difference for Sub-Saharan Africa. Geographically, the study focuses on the Sub-Saharan African region although it has briefly touched on the global society especially in highlighting the vision and objectives of UNESCO.

1.7 Definition of terms

1.7.1 UNESCO

United Nations Educational Scientific and Cultural Organization is one of the specialized agencies of the UN. It is the intellectual arm of the UN, acting as a forum for knowledge exchange. Its primary objective is to contribute to peace and security in the world, by promoting collaboration among nations through education, science, culture and communication.19

1.7.2 Sub-Saharan Africa

This refers to the 48 countries below the Sahara desert, including the Republic of South Africa and Eritrea.20

1.7.3 Education

It is a weapon for combating ignorance, poverty and disease, a bridge between confusion and comprehension; a rocket for transporting man from a state of intellectual subservience to a state of intellectual sovereignty. Education for All is one of UNESCO’s policies ensuring that every person-child, youth and adult shall be able to benefit from educational opportunities designed to meet their basic learning needs. Through Education For All, UNESCO has been committed in eradicating illiteracy, with Sub-Saharan Africa as a priority area.

1.7.4 Distance Education

It is a system where the teaching behaviours are separate from the learning behaviours. The learner works alone or in a group, guided by study materials arranged by the instructor (Ven kataiah, 2001). The study material is based on course contents, supplemented by audio visual technology, keeping in view the needs and levels of students. Distance education is a new stage in the evolution of education, which recognizes the fact that in many situations, it is easier to transport knowledge to people than transport people to the place of knowledge. These approaches help to free learners from the constraints of time and place. They offer flexible learning to individuals and groups of learners.

1.7.5 Capacity Building

Strengthening the capacities of teacher education institutions, through research and training. This includes the building of institutional capacities; including the important principles, values, knowledge and processes which form the foundation of education.

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22 Report from, the Education For All Assessment, (UNESCO, 2000) p.1
23 Goel, A and Goel, S.L. Distance Education in the 21st century,(Elegant printers, New Delhi, 2001)p.31
1.8 Methodology

The data in this study has been collected from secondary sources. These include; books, journals, reports, magazines and the internet. The main libraries from which the information is sourced are the Lilian Beam Library [U.S.I.U] and the UNESCO library at the UN offices.
CHAPTER TWO

2.0 Literature Review

2.1 Historical Development of UNESCO

UNESCO is a specialized agency of the UN. According to the UN Department of Information, UNESCO’s constitution was prepared by a conference convened in London on 16th November 1945. UNESCO came into being in 1946. During this time, the cultural and scientific infrastructures in many countries had been destroyed by the two world wars and needed to be restored. In a world where poverty, deprivation and conflict had wrought terrible damage, education was seen as the key to a brighter future. As the UN developed and other arms of the organization took over in implementing programmes and aid, UNESCO’s role was distilled into that of an international forum for the exchange of ideas, knowledge and strategies. It is the organization that seeks to identify problems, pools the world’s best ideas and comes up with strategies for addressing them.

By April 2005, UNESCO had a membership of 191 nations. The organization is headquartered in Paris, France, with over 50 field offices and several institutes and centres throughout the world. It pursues its actions through five major programmes. Education, natural sciences, social and human sciences, culture and communication and information. Projects sponsored by UNESCO include: Literacy, technical and teacher training programmes, international science programmes, regional and cultural history projects, the promotion of cultural diversity; and international cooperation agreements to secure the world’s cultural and natural heritage and to preserve human rights.

The education sector based at UNESCO’s headquarters in Paris comprises 190 people and is headed by Assistant Director - General for Education. The education sector has an

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executive office and six divisions: division of International Coordination and Monitoring for Education For All; division of Basic Education; division of Secondary, Technical and Vocational Education; division of Higher Education; division of Educational policies and strategies; and the division for the Promotion of Quality Education.

It also runs a documentation and information service.

UNESCO has 56 field offices, including four regional bureaux for education in Dakar, Bangkok, Beirut and Santiago. Most offices have an education officer and maintain close relations with governments, development partners and civil society. They work to advance UNESCO’s goals, assist in designing and implementing programmes and activities and in raising extra-budgetary funds. Six institutes and two centres specialized in education work as part of UNESCO’s education sector to assist countries in tackling education problems of particular concern.27

2.2 Educational role of UNESCO in Sub-Saharan Africa

According to Mayor F, the chief function of UNESCO in Sub-Saharan Africa lies in the development of human potential. Its role is to facilitate the transfer and sharing of knowledge; knowledge of how to eliminate illiteracy, the greatest obstacle to development, and of how to improve the region’s education systems in an age where the key resources are intelligence, creativity and adaptability. This knowledge needed to protect the environment and master the phenomenon of population growth; knowledge to grant everybody access to science and technology while stemming the brain drain; to strengthen communication capacities and facilitate the circulation of information, and to foster mutual respect and tolerance; democratic participation and awareness of human rights. That is why the eradication of illiteracy and the promotion of education for all continue to receive the highest priority in the region. UNESCO has been co-operating with its institutional partners, as well

as with competent NGOs in the implementation of activities developed within the Jomtien framework for EFA in Sub-Saharan Africa. Priority has been given to the Educational/Training dimension and the sharing and transfer of knowledge function in every one of UNESCO's fields of competence.

The UN Chronical Magazine features UNESCO as the body responsible for providing technical services in the context of emergency situations in the region. This includes providing education for refugees and displaced persons, as well as assistance for the rehabilitation of national education systems. It has been therefore, a major role of UNESCO to work with countries on educating their people to resolve conflict and avoid war. With the high number of regional wars and conflicts in the region, it would be untrue to say that UNESCO has not been successful. After all, the absence of war does not make news and neither does much of the cultural reconstruction work that UNESCO has been doing in war torn areas. Greater awareness and exchange between cultures, which has been one of UNESCO's priority area, removes ignorance, one of the prime causes of war.

If peacekeeping in Sub-Saharan Africa is a role for the UN Security Council, peacemaking is a central concern for UNESCO, whose constitution requires it to build the defences against war in people minds. In countries torn by conflicts, UNESCO, in cooperation with the UN Department for Humanitarian Affairs and other agencies has tried to provide assistance for the reconstruction of educational scientific and cultural institutions destroyed by war as stated by the UN Chronicle Magazine. These activities, while catering for emergency situations, are nevertheless part of the long term framework for development involving the training of human resources. In Mozambique, an emergency education plan was drawn up in 1993. This was done by UNESCO in cooperation with the UNDP, UNICEF and United Nations High Commission for Refugees (UNHCR), for demobilizing child soldiers’ victims of war. In Somalia, temporary educational structures were created to ensure
continuity in the education of war victims. These were known as the "islands of education for peace".28

According to the Regional Survey of the World, UNESCO is also concerned with improving the quality, relevance and efficiency in higher education in the region. It assists member states in their national systems, organizes high level conferences for ministers of education and other decision-makers, and disseminates research papers. A world conference on higher education was convened in October 1998 in Paris. The conference adopted a World Declaration on Higher Education for the 21st Century, incorporating proposals to reform higher education, with emphasis on access to education, and education for the individual development and active participation in society.29

The UNESCO International Institute for Capacity Building in Africa (IICBA), based in Addis Ababa Ethiopia, promotes capacity building in teacher education, curriculum development, educational policy, planning and management, and distance learning. The International Institute for Educational Planning (IIEP) and the International Bureau of Education (IBE), undertake training, research and exchange of information on aspects of education. UNESCO Institute for Education researches literacy activities and the evaluation of adult learning systems. A joint UNESCO International Labour Organization (ILO) committee of experts has been established to consider strategies for enhancing the status of the teaching profession. The April 2000 World Education Forum recognized the global HIV/AIDS pandemic to be a significant challenge to the attainment of EFA. UNESCO, as a co-sponsor of the joint UN programme on HIV/AIDS, takes an active role in promoting formal and in-formal preventive health education in Sub-Saharan Africa.

The UN Chronicle Magazine cites another role of UNESCO in Sub-Saharan Africa as meeting educational needs of the most marginalized groups especially women and girls, ethnic minorities, refugees, disabled persons and out of school children and youths. UNESCO is making effort to extend literacy in Africa under the UN Literacy Decade (2003 - 2012), which was launched on 13th February 2003 at the UN headquarters in New York. The focus of the first two years of the decade was to be literacy and gender. When women are educated and empowered, the benefits can be seen immediately. Families are healthier, they are better fed, their income savings and investment go up. What is true of families is true of communities and ultimately indeed of whole countries. The education of women and girls also lowers fertility rates and improves the retention and achievement of their children in schools thereby breaking the cycle of illiteracy.\textsuperscript{30} Hence, it is a long-term investment in facilitating needed social and cultural transformations.

Mayor F also brings fourth another role of UNESCO as working to assist Sub-Saharan African states in building and renovating educational systems to meet the challenges of the 21st century. It is obvious that the world is undergoing profound scientific and technological revolutions. Education must prepare the citizens of today to live and work in the world of tomorrow. UNESCO therefore aims at human resource development through: Post-graduate training and institutional capacity-building; Support and organization of scientific conferences, seminars, training workshops and courses; research promotion and publications.\textsuperscript{31}

In the 21st century, UNESCO aims at educating highly qualified graduates and responsible citizens in the region, able to meet the needs of all sectors of human activity by offering relevant qualifications. These include professional training, which combine high-

\textsuperscript{30} Mayor F, OP.CIT p. 8.
level knowledge and skills, using courses and content continually tailored to the present and future needs of the society. It also aims at advancing, creating and disseminating knowledge through research. Also providing relevant expertise to assist societies in cultural, social and economic development. UNESCO aims at promoting and developing scientific and technological research, as well as research in social sciences, the humanitarian and the creative arts. It also has an objective to play a crucial role in HIV/AIDS awareness and preventive education. In this area, the aim of UNESCO is twofold: To contribute to reducing the spread of the epidemic through education and information; and assisting in confronting the impact of the epidemic on education systems, which in some countries of the region have been in a state of total breakdown because of the number of teachers stricken by the disease. A decision taken by the Executive Board of UNESCO at its 159th session in May 2000 called for the drafting of a strategic plan of action oriented towards objectives and results as part of the UN system strategic plan for HIV/AIDS for 2001-2005. Through education and science research, UNESCO would give very high priority to activities designed to meet the region's specific AIDS-prevention needs, with special emphasis on the countries hardest hit by the epidemic. This region would be a priority area, under the international partnership against AIDS in Africa.

UNESCO aims to ensure that preventive education is included as a key focus within the international agenda on HIV/AIDS issues. It collaborates closely with UNAIDS and its sponsors in the UN system. It targets NGOs, civil society and the private sector to win support and focus energy and resources on preventive education. UNESCO address the needs of the regions hardest hit, such as South Africa. It aims to enhance cooperation with and support for regional initiatives such as the South African Development Community (SADEC), the HIV/AIDS Strategic Framework and Programme for Action, the Association for the Development of Education in Africa (ADEA), and the Economic Community of West
African States (ECOWAS). UNESCO aims at closely involving its Institutes, Regional Education offices, cluster offices and national offices in the implementation of preventive education, and the sharing of information and monitoring of the effects of the epidemic. The key outcome hoped for is the reduction of the number of HIV/AIDS-infected young people. The expected results of preventive education are to found in effective advocacy, customized educational material, changed risk behaviour, enhanced care and better coping with the impact of the epidemic.

2.3 Theoretical Framework

This study is based on David Mitrany’s approach to global politics known as functionalism. For the last four decades or so, the study of International Relations has been characterized by the use of the state as the basic unit of analysis, and the dominant school of thought has been power politics or realist school. However, this paradigm has been under challenge for some time, and this challenge has consequently widened the scope of the study of international relations, to include non-state actors. A change from power politics to pluralism has necessitated the role of other actors in the international scene apart from the state. This confirms the great need to study international organizations in international relations, which have become politically significant and the global politics can no longer be reduced to inter-state relations.  

In his functionalism theory, Mitrany argues that the growth of technology and mass political participation within states will always create pressures. Once a system experiences pressure, it starts to look for solutions. There develops increased interdependence among states in their cooperation to solve problems, which proves to be more efficient. This cooperation among states leads to the formation of International Organizations. The new

physical infrastructure of global communications makes it easier for them to operate. In addition, when sessions of organizations take place, they become distinct structures for political communications.

International Organizations are politically significant. They form important systems for understanding global politics. State-centric writers accommodate transnational activity by distinguishing high politics of peace and security, taking place in military alliances and the UN diplomacy, from the low politics of other policy questions, debated in specialized UN bodies, other NGOs and International Non-Governmental Organizations (INGOs). This distinction is no longer important because low politics issues sometimes can be matters of life and death. As seen in this study, UNESCO is involved in such matters. It has acted as a forum for international relations through its contribution to peace and human development in an era of globalization through education, sciences, culture and communication. Its vision, aims and objectives are in fulfillment of the importance of the theory of functionalism at this global age.

CHAPTER THREE

3.0 The Role of UNESCO in Promoting Regional Co-operation for the Development of Education in Sub-Saharan Africa.

3.1 Introduction

UNESCO has to a great extent illustrated the efforts for regional cooperation in the development of education in Africa. It has helped African countries to adopt a common vision in education and to favour an alliance for African renaissance. It has enabled these countries to realize that unity is a powerful force in achieving a paradigm shift and the investments in education that are required for the envisioned transformation. To this end, educational planners in Africa have jointly planned and coordinated their strategies and activities, sharing their competence and resources. According to the Director of UNESCO - BREDAA, the objective of education for all Africans cannot be achieved unless it is sustained by a broad movement of society and viable partnerships among all actors in the field of education.34

One of the main trends in education systems worldwide is the growing recognition of the policy dialogue as a central and decisive element in the development of education policies. There is need for dialogue and interaction to deepen the societies’ understanding of the processes, conditions and factors involved in reform. Dialogue is also important for the purpose of exchanges on the strategic models and tools to implement change. In short, there is the need to capitalize on and share African and International experience and knowledge so as to meet more effectively the challenges posed in developing education in Africa. African regional cooperation in education has a long history. A number of regional and sub-regional institutions and organizations have been operating, providing the relevance and necessity of

34 Report on MINEDAF VIII. (UNESCO, 2005) p. 2
cooperation among African countries in the field of education. These are discussed in the following section.

3.2 Regional Office for Science and Technology in Africa (ROSTA)

UNESCO’s Regional office for Science and Technology in Africa was established in March 1965 in order to increase the effectiveness of UNESCO’s contribution to the implementation of science programmes in member states. This is particularly in the application of Science and Technology to development. In 1977, a branch of ROSTA was opened in Dakar at UNESCO Regional office for education in Africa to increase UNESCO’s efforts in the West African sub-region. ROSTA is in principle for promoting planning, execution and supervision of UNESCO’s regional science programmes in Africa, whether financed by regular budget or by extra budgetary sources, for instance, UNDP. ROSTA also has the responsibility for the stimulation, promotion, planning and supervision of national programmes and projects at the request of national authorities.

ROSTA mandates and activities have evolved along, strictly practical lines in reaction to priorities identified by African member states; also in keeping with the overall needs and capacities of the region. Since its coming into being, ROSTA has undertaken some specific actions in the African region to address the problems, starting from national level. It has facilitated the formation of academics of sciences by a number of countries with the objective of mobilizing the entire scientific community in the country for national development. Under these academics, associations or societies for specific subjects have also been established. Certain organizations have come up, for instance African Academy of Sciences (AAS), Pan-African Union of Science and Technology (PUST), the African Association of Advancement of Science and Technology (AAAAT), African Mathematics Union (AMU), Union of African Physics (UAP), African Union of Pure and Applied Chemistry (AUPAC), and others.

Through ROSTA, UNESCO is supporting various activities in basic sciences for the development of Africa. Some of these activities are: African Biological Network (ABN), African Network of Microbiological Resource Centres (MICRENS), Natural Products Research Network for Eastern and Central Africa (NAPRECA). Under NAPRECA, scientists are encouraged to promote and develop the science of natural products in chemistry, Botany and Biological activities. In 1992, UNESCO initiated the African Botany 2000 programme to support taxonomic studies of tropical pharmacological studies in those plants to be carried out in the tropical countries where they are found.

In the area of improving African agriculture, UNESCO has created a chair in Makerere University, in post-harvest technology. This facility is made to lead to the production of graduate scientists and experts capable of efficiently dealing with agricultural extensive work and harvest handling, storage and processing of food. This is meant to help countries develop the capacity to produce, preserve and distribute agricultural products to other neighbouring countries.

UNESCO’s Man and Biosphere programme supports a world-wide network of biosphere reserves, including 57 sites in 28 African countries. These aim to promote environmental conservation and research, education and training in biodiversity and problems of land use. Following the signing of the convention to combat desertification in 1994, UNESCO initiated an international programme for Arid Land Crops, based on a network of existing institutions, to assist implementation of the convention.36 Man and Biosphere programme has promoted applied research into the functioning of various ecosystems, for instance, forests, arid and semi-arid lands in various African countries. Efforts have also been extended to parks and protected areas, whereby protection is being named to various options of land use that promote conservation without stagnation or destruction, in the concept of

36 Regional Survey of the world, OP.CIT. p. 1235.
biosphere reserves.

UNESCO through ROSTA has also made effort in building capacity in sustainable technologies relevant to Africa's economy. A special programme on Biotechnologies for Development in Africa has focused on providing advanced training in microbial and plant biotechnology to researchers with particular emphasis on young scientists and women. In 1990, UNESCO set up the Biotechnology Action Council (BAC) to promote education and training in plant molecular biology, plant biotechnology and aquatic biotechnology in developing countries. Between 1995 and 1998, the Biotechnology Education and Training Centre for Africa (BTCA), based in Pretoria, South Africa, gave 17 courses for 163 scientists from 22 African countries. These courses which usually last one or two weeks provide basic training in the techniques used in, for example, tissue culture, or the use of molecular markers.

UNESCO-ROSTA in association with UNEP, FAO, the International Cell Research Organization (ICRO) and other NGOs', has set up a worldwide network of specialized research and training institutions (MICRENS), to promote the preparation and use of cheap biological fertilizers. Use of these products can increase food yield dramatically, while reducing the costly and environmentally damaging use of chemical fertilizers. A University of Nairobi laboratory serves as the MICREN for East and West Africa. The laboratory prepares tests and conserves 216 strains of bacterial cultures and manufactures a simple preparation to transfer nitrogen-fixing bacteria to plant seeds just before sowing.

UNESCO is also promoting the use of renewable energy. For millions of people in Africa, the only source of energy is traditional biomass, such as firewood. Outside the major cities, few are connected to the electricity grid. On the one hand, using firewood only

37 Science and Technology Initiative in Africa (UNESCO, 2005) p. 4.
worsens already serious deforestation and desertification. At the same time, the availability of electricity is a major factor in development, whether it be to power production facilities, refrigerate and medical supplies, run computers, or supply lighting. UNESCO’s Africa solar programme 1996 - 2005 is implementing a range of low-cost solar energy initiatives in sub-Saharan Africa. Within its special solar villages in Africa project, UNESCO has set up a demonstration solar village in V’Gaoundere (Cameroon) with 143,000 US dollars from its regular budget. Apart from introducing low-cost eco-technology for power generation, the project is involving school children, women and community leaders in information and training activities.

With extra budgetary financing, UNESCO through ROSTA is currently carrying out a study of the feasibility of converting Ganvi, in Benin, into a lakeside solar village, with public lighting, transport, tools and light manufacturing facilities all based on solar energy. UNESCO held the first World Solar Summit in Harare in September 1996 and nominated Robert Mugabe, the President of Zimbabwe, as Chairman of the World Solar Commission. The World Solar Summit signaled the start of the World Solar Programme (1996 - 2005) to implement an initial list of 300 priority projects in more than 60 countries. At the summit, Zimbabwe announced a 38 million US dollar investment in three new projects, including one to revamp curricula, ranging from primary to higher education to include the use and manufacture of solar technologies. UNESCO is producing a wide range of educational and

38 IBID. p. 5.
training materials, including a Renewable Energy post-graduate learning package made up of texts, videos, software and CD-ROMs designed by leading experts.

Another UNESCO-ROSTA project in science and technology is the multi-media virtual network for the strengthening and learning/teaching of sciences, mathematics and technology in sub-Saharan Africa. Launched in 1999, this project is being carried out jointly by UNESCO, the World Bank and a private United States body, Knowledge Enterprise. UNESCO and the World Bank signed an agreement for the implementation of the project, the main purpose of which is the setting up of a network to assist the African countries in the strengthening of education in the sciences, mathematics and technology. The first stage which is underway is a preparatory stage involving six countries - three English-speaking countries namely Kenya, South Africa and Zimbabwe, and three French-speaking countries, Burkina Faso, Cote D'Ivoire and Senegal. The activities of the first stage comprise; Briefing of the task managers within the World Bank; a systematic analysis for the purpose of evaluating contents, practices and infrastructure for the teaching of the sciences, mathematics and technology in the six countries.39

UNESCO-ROSTA is also working to promote the project of improvement of Science and Technology in Nigeria. Launched at the beginning of 2000, this project is a joint undertaking of the government of Nigeria, UNESCO and the Centre for International Technology and Education Network (CITEN) at Governors State University (United States). It addresses the problems of Science and Technology teaching in Nigeria. The main objectives of the project are; to promote reform by setting up centres of excellence in Science and Technology education; to strengthen institutional, regional and national capacity in regard to policy, administration, teacher preparation, employment and to support programmes

for the teaching of mathematics, science and technology. It also aims to develop, test and set up teaching materials in the field of science and technology. This includes teaching/learning modules in the areas of health, the environment, communications, engineering and entrepreneurship, which are to be incorporated into educational practice in schools and teacher training institutes; also to improve science and technology teaching networks through telecommunication and other media.

The main activities directly undertaken in this project are; the signing of an agreement between UNESCO and the CITEN with a view to the joint implementation of the project; setting up a task force to steer the project; a study to assess the needs with a few to the identification of the strong and weak points of science and technology teaching in Nigeria.\textsuperscript{40} Organizing Pan-African meetings on policy is another major undertaking of UNESCO-ROSTA. As part of its efforts to raise the profile of science and technology in Africa, UNESCO has organized, or co-organized several high-level meetings in the region. For example, it took the initiative, in cooperation with the Organization of African Unity (OAU) and the UNDP to convene the first congress of African scientists in Brazzaville, Congo, in 1987. One concrete result was the setting up of the Pan-African Union for Science and Technology (PAUST).

The February 1994, UNESCO, through ROSTA convened a symposium on Science and Technology in Africa, in Nairobi, Kenya. This was the first meeting of its kind, bringing together about 200 delegates from various African states, including ministers, rectors, vice-chancellors, professors, researchers, African members of UNESCO’s Executive Board and the Executive Secretary of the United Nations Economic Commission for Africa (UNECA). UNESCO used this meeting to launch its first ever World Science Report.\textsuperscript{41} At the request of the member states concerned, UNESCO has provided advice on science and technology

\textsuperscript{40} IBID, p. 10.
\textsuperscript{41} UNESCO S & T Initiatives in Africa (2005) p. 6.
policy and management issues to Namibia, Zambia and Zimbabwe. The Organization is continuing to support projects on the creation of technologies in Cote D'Ivoire and Senegal. UNESCO-ROSTA also organized the first Pan-African Conference on Sustainable Integrated Coastal Management (PACSICOM) in Maputo Mozambique in July 1998. Nearly all the region’s environment ministers attended the conference. The economies of 38 African states are closely linked to marine resources. Thus, Sustainable, Integrated Coastal Management is essential. UNESCO through ROSTA has tried to supply equipment and resource materials to Oceanographic Institutions in Africa. It has also assisted in the participation of African Scientists in International Conferences and training courses. It has organized seminars on coastal lagoons management, on remote sensing as applied to oceanography and on comparison of lakes and coastal Marine systems. A particular innovation has been the establishment of regional water resources library.

UNESCO-ROSTA has also been engaged in empowering the learning of earth sciences in Africa. African continent has enormous mineral wealth. There is also a high potential of ground water, oil and gas. The mineral resources in Africa have been developed under the initiative and with the know how of foreign companies in order to supply mineral raw materials mostly for industries outside the African region. Requirements for the mining industries in Africa, such as machinery, equipment, chemicals, spares and technical services have continued to come from outside, resulting in foreign exchange leakage of the African economies. UNESCO is working to communicate to the scientific community in Africa the results of earth science research essentially under UNESCO programmes. The International Geological Correlation Programme (IGCP) is managed jointly by UNESCO and the International Union of Geological Sciences (IUGS). It facilitates fundamental research on basic geological problems that are global in scope in order to improve human living conditions. It aims at helping countries identify and assess energy and mineral resources.

Also to promote research and to improve standards and methods in Geological research. UNESCO has initiated fundamental research on the influence of geo-factors on the environment. It has improved geological knowledge and understanding by compiling, publishing and disseminating information on geological findings, techniques and training opportunities. UNESCO in cooperation with the Commission for the Geological Map of the World (CGMW) has produced unique map compilations, for instance, the Geological World Atlas and Earth Science Maps on the African Continent.

The African Network of Scientific and Technological Institution was created under UNESCO's ROSTA for the purpose of promoting manpower development in Africa. It was created as an organ of cooperation that embraces African Institutions engaged in University level training and research in the field of science and technology.\textsuperscript{43} ANSTI had 87 member institutions by 1994. The increased level of funding for the network by UNESCO and other UN agencies has made it possible to execute activities that addressed all strategic objectives of ANSTI. The objectives of the network's work plan for 2002/2003 biennium were to: strengthen the staff of member institutions, build capacity for the local production of learning materials using the electronic media; promote the use of ICT in the delivery of science and engineering education; facilitate the sharing of scientific information and other resources in the region, and strengthen the coordinating mechanism of the network; strengthen research activities in relevant areas, of science and technology; increase the level of cooperation and strengthen linkages between ANSTI member institutions and the productive sectors of the economy in order to use the available science and technology capacity for sustainable development.\textsuperscript{44}

\textsuperscript{43} UNESCO Bulletin, 1994, OP.CIT p. 5
\textsuperscript{44} ANSTI Annual Report - 2003, (UNESCO, 2005) p. 10
ANSTI has also strengthened regional cooperation through the Staff Exchange Fellowships. These enable senior academic staff of ANSTI member institutions to visit other institutions in the region for a short period to undertake research and teaching. This activity serves two roles. First, it is a human resource capacity - strengthening activity because it enables individual scientists to acquire new perspectives on the teaching of their subjects and gather available research knowledge and data. Secondly, the staff exchange visit strengthens the teaching and research programme of the host institutions. At the time when there is a major problem of availability of staff in several African universities, the programme is most welcome. Conference grants are intended to support the research capacity building efforts. The grants enable researchers' subject their findings to peer review.

ANSTI publishes several documents, brochures and posters in order to disseminate science and technology information, and publicize its activities. Two types of information are disseminated. These are: The general information on scientific activities that are of relevance to network members (For instance, conference announcements, information on resources and awards, and others). Also, the results of scientific research. This is disseminated through the African Journal of Science and Technology (AJST). This publication is the flagship of the network. It is published twice a year.

The general information on science activities is disseminated through the ANSTI newsletter and the website. The network has produced a report on the revitalization of continuing Engineering Education. Also produced is the directory of Grantees, which is a biennial publication that has in the past served as a report on ANSTI activities.

The network has also promoted regional cooperation through the organization of workshops and meetings. Between 2002 and 2003, ANSTI organized:
Workshop for providers of Continuing Engineering Education, which was titled “CEE Training of Trainers Workshop”. It was held in Cape Town in South Africa on 21st to 23rd of November 2002. This workshop attracted several participants from eight African countries. The objective of the workshop was to exchange hands-on experience on how to run short courses and how to facilitate the management and administration of the various activities.

Training workshop for the use of Information and Communication Technology in Science and Engineering Education. Between 20 - 25 October 2003, ANSTI, in collaboration with the University of Nairobi, organized a Training workshop on the use of ICT in learning in Scientific Discipline. The objective of the workshop was to build human resource capacity in selected institutions that will enable the conversion of lecture notes to electronic content for ICT learning process. There were fifteen participants from seven Universities (University of Nairobi, Makerere University, Jomo Kenyatta University of Agriculture and Technology (JKUAT), University of Dar-es-Salaam, Addis Ababa University, Kwame Nkrumah University of Science and Technology, University of Zambia and Moi University).\(^{45}\)

ANSTI is also in partnership with other organizations, which further promotes regional and international cooperation. It is closely associated with the International association for Continuing Engineering education (IACEE). The Coordinator of ANSTI is a member of the governing Council of IACEE. He is also a member of the 9th World Conference on Continuing Engineering Education (WCCEE) which was held in Tokyo from 15th to 20th of May 2004.

ANSTI also continues to have a good relationship with the Association of African Universities (AAU). The network participated in the AAU’s biennial conference of Rectors, Vice Chancellors, Presidents and Principals of colleges, which took place in March 2003 in

\(^{45}\) IBID. p. 14.
Mauritius. The network is also partner with Gender And Science And Technology (GASAT) network. The coordinator is member of GASAT board.

Apart from ANSTI, other African Science Networks have been created through UNESCO efforts, and have contributed towards regional cooperation in the development of education in Africa. These networks include the following: the Intergovernmental Oceanographic Commission (IOC). It has established regional groups covering Eastern and Western Africa; the African Network for Biological management of Soil Fertility, based in Nairobi. It supports 16 field projects in nine countries. It functions within the larger framework of the Tropical Soil Biology and Fertility Programme (TSBF); an African Hydrologists Association and International Journal of African Hydrology are the new offshoots of the International Hydrological Programme (IHP); a Federation of African Biochemical Societies (FABS) has also been created.

The Pan-African Network for a Geological Information System (PANGIS) promotes the exchange of data and cross-disciplinary activities in 33 countries. An African bibliography of earth science institutes has been published under a project called modernization of Geodata Handling in Africa. 30 countries have benefited from training or consulting services. A center for Aids Research in Africa has been established in Abidjan, in partnership with World Foundation for AIDS Research and Prevention. It houses both training and research facilities.

A new Regional Postgraduate School of Integrated Management of Tropical Forests has been established in Kisangani, Democratic Republic of Congo. The first training course organized by UNESCO in November 1996, welcomed 30 participants from ten countries. The

46 IBID. p. 16
school has since then relocated to Kinshasa. A new Biotechnology Education Centre was also created in South Africa in 1997.\(^{47}\)

### 3.3 Association for the Development of Education in Africa (ADEA)

The Association for the Development of Education in Africa was created in 1988. It is one of the initiatives that UNESCO has supported and worked with in enhancing regional cooperation in the development of education in Africa. It is made up of African Ministers of Education, Senior Officers from the development community, members of the working groups, and other education professionals. Every two years, ADEA organizes a meeting which brings its community together.\(^{48}\) It is meant to be a learning association through information sharing and use. The process of intensive cooperation between the Secretariat, the working groups and the ministers of education represents an immense learning experience about reform work in different African countries. The process has among other things, demonstrated how important it is to develop the concept of partnership.

There is, within ADEA, an accumulated body of knowledge and experience. There are manuals for analysis of the needs for statistics, for record keeping in schools. There is a wealth of experience about sector studies. There is material about education for girls, there are synthesis reports with experience about national education reforms, there are studies in higher education. There is also a lot of experience on contacts and forms of cooperation that need to be developed further. ADEA has an intra-African Exchange Programme, which is part of its efforts to take advantage of already existing expertise to further develop capacities in Sub-Saharan Africa. It was set up to help African ministries of education to use existing regional capacities and capitalize on each other’s best experience and expertise. ADEA encourages this by sponsoring exchanges enabling applicants to receive advice or technical

\(^{47}\) Science and Technology, OP.CIT p. 7
\(^{48}\) ADEA Newsletter, Volume 9, Number 1, (January - March 1997) p. 16
assistance from senior African education professionals. The exchange programme enables interested ministries to be visited by a specialist, or send a staff member to another country.

Since its creation in 1988, ADEA has met regularly to discuss a variety of education-related issues of concern to the community of African educators. To a great extent, this reflection takes place within ADEA’s nine working groups. Each group focuses on a specific theme and is made up of a consortium of African Ministers, funding agencies and other professional stakeholders in education. Among its other advantages, this variety in the make-up of the groups ensures that activities are more firmly rooted in the countries involved. The nine working groups are: Working group on female participation. (WGFP) Lead agency is the Rockefeller Foundation and the activities are implemented by the forum of African Women Education (FAWE); Working group on Higher Education (WGHE). The lead agency is the World Bank; Working Group on the teaching profession (WGTP). Lead agency is the Commonwealth Secretariat; Working group on Finance and Education (WGFE). Lead agency is the Canadian International Development Agency (CIDA); Working group on Education Statistics (WGES). Lead agency is the Swedish International Development Agency (SIDA). Its activities are implemented by UNESCO; Working group on Books and Learning Materials (WGBLM). Lead agency is the Overseas Development Administration (ODA); the Working group on Sector Analysis (WGSA). Lead agency is UNESCO; Working group on Research and Policy Analysis (WGRPA). Lead agency is the international Development Research Center (IDRC) and the Working group on Non-Formal Education (WGNFE). Lead agency is the Swiss Development Cooperation.49

The goal of the working groups is to foster reflection on policy in their chosen field, in order to help improve the education system in Sub-Saharan Africa. The working groups are also dedicated to promoting greater cooperation among agencies. This helps to build

49 IBD p. 6

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consensus among themselves and ensures that their initiatives in the field of African education are consistent with one another. For example, the working group on education Sector Analysis produced an inventory and analytical overview of 237 sector studies of education conducted in Africa between 1990 and 1994. The objective of the study was to provide an overview of the state of education sector analysis and a convenient reference to completed studies.

The ADEA biennial meetings provide a unique opportunity for networking and policy dialogue among African Ministers of Education and funding agencies. During these meetings, development agencies are exposed to education issues from the viewpoint of the African governments. Biennial meetings also provide an opportunity for a variety of groups - Ministers, Working Groups, Interest Groups and funding agencies - to exchange ideas and meet with one another outside the plenary meetings.

3.4 Ministers of Education of Africa (MINEDAF)

The conferences of Ministers of Education of African Member States of UNESCO (MINEDAF), organized by UNESCO have been held respectively in Addis Ababa (1961), Abidjan (1964), Nairobi (1968), Lagos (1976), Harare (1982), Dakar (1991), Durban (1998) and Dar-es-Salaam (2002). They have provided the opportunity to set up a network of ministers, which has played a significant role in the development of education on the African continent. Just as MINEDAF I held in 1961 in Addis Ababa ushered in a new era in the development of education in Africa, MINEDAF VIII constitutes a decisive contribution to education as Africa stood on the threshold of the twenty-first century. The conference was held in the year of the birth of AU, which represented a great step forward on the path of the
political and economic integration of the African continent, and the construction of a new Africa.\textsuperscript{50}

MINEDAF VIII underscored the imperative need for good quality and adequate human resources. It needed one of the lessons of African wisdom, namely, that “human beings are the remedy for human beings. The new Africa being built needs men and women who are in good health and well educated, who have managerial and productive skills, who are proactive and creative, who have positive cultural roots and an open mind, and who actively promote universally shared values, such as tolerance, peace, solidarity and democracy.”\textsuperscript{51}

The conference saw the urgency of engaging in a process of educational renewal for the promotion of good quality education for all, especially good quality basic education. “The education to build the new Africa” was to be based on six fundamental axes: Learning to understand, learning to share, learning to communicate, learning to participate, learning to be independent, learning to do and produce, learning to transform, learning to anticipate and learning to live together. These fundamental learning guidelines inform all branches of education, formal, non-formal and informal at all levels, from early childhood to postgraduate education. This new orientation was to help achieve the six Dakar goals, paying due regard to the different national situations.

The conference recommends the elaboration and implementation of specific strategies which were consistent with the principles of action adopted in the Dakar Framework For Action. These strategies were to include the following cross-cutting dimensions: the education of girls, women and disabled children; the teaching of science and technology; the

\textsuperscript{51} MINEDAF VIII, \textit{The Education to build New Africa}, (UNESCO, 2005) p. 2
impact of HIV/AIDS on education; the use of African languages; the use of ICTs and broadcast technologies for education; psych-social support and welfare; environmental education; and education for human values, including peace and tolerance.

The conference also realized the need for a strong political commitment of the state to education for all. Among the concrete measures to be adopted, particular attention was to be given to increasing the share of the education budget in the total budget of the state (not below 20%); increasing the percentage of the primary education budget in the education budget (not below 50%), not forgetting the pre-school level, non enrolled children and adult literacy; increasing the non-salary teaching expenses in order to provide pupils with proper teaching materials, thereby contributing to the quality of learning; increasing the budget for technical and vocational education at the secondary level in order to enhance access and increase the numbers of trained workforce; enhancing the initial and in-service training of teachers, as well as their salary levels and their motivation, in the interest of good quality teaching; aiming for a ratio of 40 pupils per teacher with a view to ensuring efficiency and quality; increasing retention and completion rates in the primary school cycle, in particular by improving learning and introducing organizational changes; allocating sizeable resources in order to ensure equity with regard to girls’ education and literacy and training of women by eliminating discrimination; encouraging the private sector to invest more in the national EFA effort; and supporting innovative strategies which reach the most marginalized and underprivileged members of society, such as children infected or affected by HIV/AIDS, children in conflict situations, nomadic children, street children and children with special needs.\textsuperscript{52}

MINEDAF VIII considered that these measures alone were not sufficient. There was need for sizeable external assistance with a broader field of intervention. The external debt,
whose yearly servicing in some countries exceeded the annual resources needed to achieve education for all needed to be counseled. The conference launched an appeal to the international community to accompany Africa in its strategy to achieve educational renewal and cultural renaissance for the building of the new Africa. Such solidarity founded on interdependence would help meet the supplementary funding needs. The conference appealed to both international community and African governments themselves to make education one of the pillars of development in Africa.

3.5 Educational Cooperation between UNESCO, OAU/AU and NEPAD

Cooperation between OAU and UNESCO dates back to 1968 when the two signed an agreement and started undertaking various activities in the development of education in Africa. It was noted that there was need for OAU to attach greater importance to periodic consultations conducted by UNESCO Director-General with a view to the preparation of the organizations programmes. The first session of the joint commission on cooperation between OAU and UNESCO headquarters in Paris from 5th to 7th December 1984.

Under science and technology, the meeting, taking into consideration the general debate on this item of the agenda, recommend certain areas of UNESCO-OAU cooperation, for instance, strengthening of the science and technology unit of the OAU Secretariat. Specific inputs of UNESCO in 1985 included a two week consultancy mission to advice on the organization of the Secretariat to meet its added responsibilities resulting from the exigencies of the implementation of the Lagos Plan of Action. It also included one study tour for the Director of the unit, so that he could be exposed to new ideas in the planning and management of science and technology activities; one fellowship for a staff member responsible for scientific and technological data bases and exchange of information at the unit; and also one fellowship for a general science and technology policy expert.

In the area of science and technology development, it was observed that many African countries had created and strengthened their science and technology centres. But still, many countries had not created national science and technology policy-making bodies. It was therefore, recommended that UNESCO with the cooperation of OAU, should double its efforts in assisting African states, including the sub-regional economic groupings, to increase and strengthen these national science and technology centres.

Project identification and planning was also considered; OAU and UNESCO were to cooperate in identifying regional projects within UNESCO’s field of competence. They were to prepare the relevant technical assistance project documents for submission to international financing agencies, such as UNDP, UN Fund for Support of Sciences and Technology Development, World Bank, African Development Bank (ADB) and others.

In Training and Research, both UNESCO and OAU agreed that lack of skilled manpower at all levels is one of the greatest bottlenecks to the growth of science and technology and its application to development in Africa. It was therefore, recommended that UNESCO and OAU should give very high priority to the identification of training and research needs of member states. They would draw the attention of those states to the options open to them in training their personnel, including the identification of suitable institutions/centres for training. UNESCO itself would endeavour to grant more fellowships to the states of Africa at their request, particularly in the least developed ones. In this respect, training in the informal sector of the national economy would not be overlooked.

In the area of International Co-operation, OAU and UNESCO would jointly or individually undertake measures that would make it possible for African states to play a more active role in regional and international co-operative ventures within UNESCO’s field of competence. For example, the man and Biosphere Programme, the International
Oceanographic commission Programme and the African Network of Scientific and Technological Institutions. Technical cooperation in developing countries would also be encouraged at the same time.

UNESCO special Fund for Research and Development in Africa is another area in which OAU agreed to cooperate with UNESCO in soliciting donations for the fund. This is particularly from African member states and regional and sub regional organization. It was understood that any donation, however small would have a great effect on the growth of the fund.

In the area of information, it was recommended that UNESCO, with the cooperation of OAU, should assist African member states willing to develop their national scientific information and documentation centres. This included the development of factual and bibliographic data bases. This was done in view of the importance of reliable information in the planning and execution of science and technological activities. In this connection, UNESCO was to reinforce its activities in the field of science and technology statistics, and surveys of national science and technology potentials at the national and sub regional levels. OAU and UNESCO would cooperate in the organization of African Regional Conferences and in the appropriate follow-up of African regional and intergovernmental meetings, such as CASTA AFRICA II and MINEDAF.

As far as African Scientific and engineering associations were concerned, OAU and UNESCO agreed that they could play a great role in the development of science and technology in Africa. Thus, they recognized the necessity of increasing their assistance, moral as well as financial, to these associations.54

54 ibid p. 12 - 13
Strong partnership between UNESCO and NEPAD in the development of education in Africa has also been witnessed. Education is a key priority within NEPAD. NEPAD was launched in 2001 as a programme of the African Union, aimed at evacuating poverty in Africa, and placing African countries on the path of sustainable growth and development. Its specific goals with respect to education are: to work with donors and multilateral organization to achieve the international development goal relating to universal primary education by 2015; to contribute to improvements in curriculum development, quality improvements and access to new information and communication technologies; to expand the secondary education and improve its relevance to Africa’s development; to promote networks of specialized research and higher education institutions; to support measures for conflict prevention and management and promote a culture of peace, reconciliation and tolerance.\(^{35}\)

UNESCO works with NEPAD to push forward the education agenda in Africa. Its activities focus, inter alia, on engaging NEPAD in the education for all process, promoting gender perspectives in education, elaborating database gathering information on African human resources on developing the capacities of teacher training institutions.

In line with the objectives of NEPAD, UNESCO has been organizing various sub regional conferences of the ministers of Education. Aim of these conferences has been to discuss the best strategy to use in making education an efficient tool for regional integration. For example, the second conference of the Economic Community of West African States (ECOWAS) Ministers of Education. It was held from 9\(^{th}\) to 10\(^{th}\) January 2004. Its aim was to reinforce the mobilization of ECOWAS member states towards the implementation of common education projects in the sub - region. Also, to permit the adoption of an ECOWAS education strategy that is in harmony with the objectives of NEPAD, the Decade of Education in Africa, and Millennium Development Goals.\(^{36}\) The conference acknowledged


the eminent role played by ECOWAS in the promotion of peace, stability and development in
the region. Its sub-regional dimension allows for a more adapted and sustained mobilization.
It also gives real added value to initiatives developed within the framework of NEPAD and
the decade of Education in Africa. There has been reinforced collaboration being put in place
between the different countries of West Africa in the domains of education and culture,
giving hope for more enlarged cooperation in other domains.

UNESCO and NEPAD also organized a meeting for the ministers of Education of
Portuguese - speaking countries in Africa. It was held on 13th January 2004. Theme of the
meeting was “Strengthening cooperation in education”. It was wholly in line with the process
of implementing the recommendations of the Dakar Framework of Action. The world
education forum advocated a new vision of African renaissance and a solid alliance at the sub
regional levels for it is clear that together, African countries are a powerful force capable of
achieving a genuine paradigm shift and ensuring the investment needed for reduction.

The meeting acknowledged that by adopting the Global Framework for Action for
EFA by 2015, the International Community undertook to support the universal provision of
basic education, while improving the quality of education. One year after MINEDAF VIII
and almost four years after the Dakar Forum, the time had come for the concepts developed
regionally and internationally to be firmly rooted in specific strategies that may be applied
locally. It was also required that the sub-regional level very often consists of well-rounded
economic, social and cultural bodies that foster debate on local problems. This enables
several countries to pool their resources - financial, intellectual, infrastructural and human-
to provide a most appropriate response to the national challenges facing each of these
countries. 57

57 Report on, The meeting of Ministers of Education of Portuguese - speaking Countries in Africa, UNESCO,
2004) p. 2
The meeting also aimed at examining joint cooperation programmes among countries. This is particularly on training for teacher trainers, training in educational planning, statistics and school mapping and the production of teaching materials.

Perhaps the greatest demonstration on partnership between UNESCO and NEPAD has been through UNESCO's international seminar held in Paris between 8th and 9th November 2001. It would enable UNESCO and Africa to work by mutual consent towards a new departure for the continent. This would involve revitalizing and enlarging the existing partnership system and creating at the same time, new, bolder and more extensive partnerships in the various priority fields. The purpose of the seminar was to bring an innovative, forward looking approach methods and strategies for fostering development in Africa in the twenty-first century. This would help the continent remedy the disquieting situation that had prevailed since the period of independence. It was further intended to enable Africa, by common international consent, to find a place and a role consistent with its ambitions.58

The seminar attracted participation at a very high level. It was attended by a number of ministers, parliamentarians and eminent figures from different parts of the world. Also present were representatives of such international organizations, as the UN, representatives of regional and sub regional organizations in Africa, panelists and speakers, intellectuals and specialists in African affairs, and representatives of a number of NGOs. The work of the seminar focused on certain education-related themes, especially the following:

The first theme was the African agenda and UNESCO; Building with NEPAD as a foundation. Recommendation was made to governments to spread information about NEPAD more widely. This would pave the way for a process of appropriation by Africa’s different

societies, in the spirit inherent in NEPAD itself. This dissemination should be accompanied by discussion within the civil society on the scope of NEPAD’s vision, with a view to the emergence of consensus based on NEPAD’s aims. Governments and UNESCO were recommended that efforts should be increased to allow women access to education and information. This was with the view to their participation in public life, development and culture, and to recognize the value of their role in conflict prevention. Recommendations were also made to UNESCO to support the efforts of the African states in the effective implementation of NEPAD’s aims. This was in particular in the field of education, which is essential requirement for sustainable development. NEPAD’s aims in respect of EFA tally with those of the Millennium Declaration of UNESCO and those of its Medium-Term Strategy for 2002 - 2007. This UNESCO should set about ensuring that adequate budget resources - a minimum of 5% - be devoted to the development of education in Africa.59

The second theme was on Education in Africa; issues and prospects. The seminar recognized that the primary responsibility of African states at the time was the 25% of the eligible children who were not enrolled in primary schools. The group needed to be assisted in getting basic education through a variety of innovative means. Improved access should go along with continuous improvement of quality. It was also noted that serious efforts should be directed to urgently and progressively expanding opportunities for secondary education. Priority would also be given to technical and vocational education addressing the world of work; also providing for learners who require specific skills for direct entry into productive life. Priority would also be given to the issue of women participation in higher education, teacher education and educational research. Education services at all levels would also be empowered for involvement in HIV/AIDS - related research activities.

59 I B I D. p. 8
Science and Technology for sustainable development in Africa. The seminar recommended the creation of scientific institutions and networks. UNESCO would enable African Scientists and Institutions to contribute to solving Africa’s problems concerning sustainable development. African expatriate scientists would be mobilized to contribute to the development of science and technology in the continent. Regional cooperation in science and technology would also be strengthened and encouraged. This would include co-ordination of programmes and South - South cooperation. In addition, UNESCO and NEPAD organized a seminar titled “from vision to Action”, that was held in Ouagadougou from 5th to 7th March 2003. Its purpose was to explore ways and means of applying the NEPAD plans of Action in UNESCO’s fields of competence. Subsequently, the science sector in cooperation with the African Department, has elaborated a strategic framework for UNESCO - NEPAD cooperation in natural sciences. This will ensure linkages between the priorities in UNESCO science and technology programmes and those identified in NEPAD process. UNESCO has been invited by NEPAD as key partner in the establishment of the African Forum on Science and Technology for Development (AFSTD). The forum aims at promoting the application of science and technology for economic growth and poverty reduction. It is comprised of three segments. These are: standing conference of Ministers and Presidential advisors responsible for Science and Technology; eminent persons review and advisory panel and networks of knowledge institutions and communities.

As part of this partnership, UNESCO has been cooperating with NEPAD Secretariat in the organization of Ministerial conferences. The first NEPAD ministerial conference, which was held in Johannesburg, South Africa, from 3rd to 7th November 2003, was a first step in a process to develop a regional action plan on science and technology for development.61

60 UNESCO Cooperation with NEPAD in science and technology. (UNESCO, 2005) p. 2
61 IBID p. 3

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These steps taken by UNESCO and NEPAD are all the more important in that it was a time when the African continent had just defined an African vision of development. In its efforts to make a valid contribution to assisting Africa’s governments and peoples in the development of education, UNESCO would put NEPAD into practice.

NEPAD has also enhanced the achievements of UNESCO educational goals in Africa, by facilitating the creation of the Forum of African Parliamentarians For Education (FAPED). Its creation took place in Dar-es-Salaam, just prior to MINEDAF VIII. The parliamentarians were joining the great alliance for the African renaissance. In a statement that was read during MINEDAF VIII conference, they declared that, “United in that great alliance, we constitute a powerful force capable of achieving a variable paradigm shift and ensuring more investment in education. To this end, we shall jointly plan and coordinate our strategies and activities, pooling our competences and resources, and monitoring and evaluating progress measured against regional targets.”62

This commitment to inter African cooperation entails strengthened dialogue among African countries on education policies, and more intensive exchange of information, experience and experts in the field of education in general including non-formal education for non-enrolled children and adult literacy. It also calls for strengthening the guidance, counseling and youth development centre for Africa as a centre of excellence for the advancement of capacity-building of regional programmes; geared towards meeting the needs of girls and adolescents at risk. It also entails the design and implementation of joint programmes within strategic fields, such as teaching in languages which are not shared by several countries. This was within the framework of the future academy of African languages, the production of teaching materials, teacher training, the use of new ICTs and the

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creation of centres of excellence for training, teaching and research. Making provision for accreditation and recognition of qualifications and awards within the region to promote mobility and maintain high educational standards, is another of its goal.\textsuperscript{63}

UNESCO also held a meeting for NEPAD on 30\textsuperscript{th} April 2005. It was a two-day meeting of the UNESCO committee for NEPAD held at the Tripoli-based seat of the World Islamic Call Society (WICS). The meeting was an occasion to devote more attention to African priorities in the spheres of development, notably, in teaching, education and culture.\textsuperscript{64} It discussed NEPAD agenda, the AU and the implementation of recommendations from the previous meetings of UNESCO committee for NEPAD (in Ouagadougou, Burkina Faso in March 2003; and in Paris in April 2004). It also reviewed the strategy to consolidate the inter-African partnership, and the international partnership in Africa with the contribution of UNESCO.

The UNESCO committee for NEPAD recognized the importance of WICS’ role in funding several educational and scientific development activities in Africa. It has contributed additional budgets to a number of projects for scientific development as well as literacy. UNESCO committed itself to support African populations, through the AU and NEPAD programmes. Africans have now understood the exact message that there is no possible sustainable development without Africans themselves. UNESCO and WICS signed a partnership accord on strengthening regional integration between African nations; and fulfilling NEPAD and AU priorities within UNESCO’s field of competence.\textsuperscript{65}

\textsuperscript{63} IBID p. 5
\textsuperscript{64} Panopress, The African Perspective, (UNESCO, 2005) p. 1
\textsuperscript{65} IBID. p. 3
CHAPTER FOUR

4.0 A critical Analysis of the implementation of UNESCO’s Educational Programmes in Sub-Saharan Africa

4.1 Failures of UNESCO

Despite UNESCO’s much effort to develop education in Sub-Saharan Africa, sadly for the region, some of what were considered key educational challenges some twenty years ago still linger on. These challenges are being compounded by new concerns in the region. It has been thus, quite difficult for this region to create an enabling environment that will help it tap the bank of knowledge availed to it by the wide range of UNESCO programmes.

This research found that UNESCO has not succeeded in making EFA a reality in most countries of Sub-Saharan Africa. According to the UNESCO Global Monitoring Report of 2002, half of the countries in the region would not attain EFA goal, at least not in the target time.66 Primary school enrolment and literacy rates in this region are among the lowest in the world USAID - Africa Report of March 2005 states that 42 million school children in Sub-Saharan Africa are not enrolled in school.67 Of those that do have access to school; the schooling they receive is of such poor quality that they are not able to acquire even the most basic skills of reading and writing.

Illiteracy remains an obstacle to African renaissance. According to the proceedings from the forum of African Parliamentarians for Education of November 2002, only 10 countries in Africa had achieved universal education by then. Adult literacy, the bedrock for life-long learning, continues to be the headache for many African governments. UNESCO estimates that 142 million African adults are illiterate in 2005, compared to 126 million in 1980, and some countries continue to have illiteracy rates close to 60 and 70 percent of the

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66 UNESCO and MINEDAF, Challenges facing African Education Ministers at MINEDAF, (UNESCO 2002) p. 1
adult population. This shows that despite UNESCO’s initiatives, commitment to literacy is lacking in Sub-Saharan Africa.

UNESCO has not quite fully succeeded in solving the problems facing higher education in Sub-Saharan Africa. Its funding has been declining and this has had adverse effects on student enrolments in higher education institutions. UNESCO has given more attention to basic while neglecting higher education. Yet all levels of education - primary, secondary, tertiary/higher are all interrelated and therefore, need to create a balance.

UNESCO’s efforts in capacity building have not quite sufficiently met the needs of the region. Education is still plagued with low quality of schooling, large class sizes and the average number of students per teacher higher than in any other region of the world. Teachers are often unqualified, teaching aids are few and text book production is desperately poor. As a result, learning achievement is low with unequal opportunities for rural and urban children.

UNESCO has also not been able to fully address gender imbalances in education in Sub-Saharan Africa. The gender gap yawns ever wider, with female literacy of below 30 percent in 19 Sub-Saharan African countries. The problem hinders economic growth and worsens health and poverty problems. Boosting female enrolment reduces child and maternal mortality, and promotes over all economic growth. Girls without education are more at a risk to the HIV/AIDS infection, sexual exploitation and trafficking.

Although UNESCO has come up with various programmes in science and technology, it has not fully managed to lift Sub-Saharan Africa to a level where it can build a critical mass of scientists and technicians to exploit its natural resources. The region needs relevant

65 Report on, Africa - Education for All, (UNESCO, 2005) p. 4
scientists, able to make the best choices of available technology, based on the needs of their countries for the long term economic development of the region.

The gender discrepancy is even greater in science and technical education. In most cases, textbooks do not relate to the daily life of girls and women, and socio-cultural biases discourage women from pursuing courses and careers in science and technology. Only a small percentage of girls enrolled in tertiary education pursue courses in science and technology. Only South Africa has a relatively better developed scientific and technological culture.\textsuperscript{71}

UNESCO seems to have left women out of science and technology. Yet, women not only make up 50 percent of the population, but they also play the multiple critical roles of mothers, producers (especially in agriculture) and custodians of family health, nutrition and general well-being. They are best placed to apply the benefits of science and technology in every day life.

Although UNESCO has put much effort in the preparation of HIV/AIDS awareness and preventive education programmes, the epidemic seems to be on the rise. It is forcing an increasing number of children to abandon school and care for their ailing parents and orphaned siblings. It is decreasing the opportunity for children to become educated, and less education deepens poverty. The epidemic is also decreasing Sub-Saharan Africa's already inadequate supply of teachers.

\textsuperscript{71} African Recovery - A United Nations Publication. (Department of Public Information, United Nations, 2005) p. 4
4.2 Accounting for the failures of UNESCO

Most of UNESCO’s educational programmes in Sub-Saharan Africa have been compromised because those countries have been plagued by crises. A number of constraints have hindered progress in the attainment of EFA objectives in the region. UNESCO has had to contend with high rates of population growth, which have made it difficult for the supply of educational resources to meet demand for schooling. According to the EFA Report for Africa, the region has the highest population growth rate of 2.6 percent, and the fastest urban growth rate of 4.3, intensifying problems of poverty and distress.\(^\text{72}\)

UNESCO’s literacy campaign has also been hampered by a general lack of motivation among teachers. Sub-Saharan African countries are failing to attract the brightest group in the profession because the teaching fraternity is one of the lowest paid in the region. It is widely acknowledged that African teachers are poorly paid and sometimes they don’t get paid for months. The profession does not pay and has lost its status in some countries. Graduates then opt to pursue other careers in which they can make more money. The teachers available have to handle large classes. Most of them are often unqualified and they have to work with few teaching aids. The provision of textbooks is desperately poor in most countries.

Failure of UNESCO to make a great impact in higher education in the region can be attributed to several factors. Low funding levels is one of them. There is low motivation and commitment of faculty members of most institutions of higher education. This is due to low salaries and unattractive conditions of service and benefits. Consequently, many faculty staff work part-time and spend little time on research and teaching. Low funding has also led to inadequate provision of library holdings, laboratory equipment and chemicals.

Furthermore, professors in Sub-Saharan African Universities have had difficulty making and maintaining contacts with colleagues in Universities in the developed countries due to high costs of travel to conferences as well as high costs for telephone calls, email and internet facilities. It is estimated that research capacity in African Universities has declined by as much as 50 percent since 1992.\(^7\)

UNESCO’s work in higher education is also hampered by lack of necessary funds to provide and maintain physical infrastructures and procure teaching materials such as spacious classrooms, laboratories and textbooks. This is due to the fact that large proportion of education budget is devoted to personnel and non-educational expenditures, such as salaries for non-teaching staff and students’ support. Less provision is made for procuring teaching materials and equipment.

In some instances, graduate students have had to abandon their thesis or research projects because of shortage of faculty supervisors or inadequate resource materials. Classrooms are overcrowded, libraries are inadequately provided and science and computer laboratories are ill-equipped and lack basic supplies because of lack of funding. Sub-Saharan African debt burden is shifting much-needed resources from social spending to debt repayments.

UNESCO’s failure in implementing EFA programmes also stems from the fact that its structures set up after Jomtien conference are too centralized in Paris. They lack legitimate representation from Southern governments or civil society. This has led to lack of ownership and a loss of momentum. Agreement needs to be reached to ensure strong representation of Southern governments and civil society in international EFA structures post Dakar forum.

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\(^7\) C.M. Magagula, *Distance Education: Is it a solution for Higher Education in Sub-Saharan Africa?* (2005) p. 8
Resources, technical expertise and monitoring of progress also need to be decentralized with major investment in a regional level EFA capacity, particularly for Sub-Saharan Africa.

UNESCO’s educational efforts in Sub-Saharan Africa are also hampered by inadequate coordination of international development agencies that provide technical and financial assistance to education. Poor donor coordination encourages competition between agencies and places high demands on the management and coordination capacities of the recipient governments. The effective coordination of agencies working for the development of education in the region would be greatly enhanced by the active participation of leaders of African education systems.

UNESCO’s development of science and technology in the region is also plagued by the problem of brain drain. The economic crisis has led to a dramatic growth in brain drain involving middle and high-level man-power, vital for the region’s education development. Many Africans have left the continent due to hostile domestic and political environments. This loss of Africa’s most gifted and capable scientists to developed countries have hampered UNESCO’s efforts in the region. An estimated 30,000 Africans holding PhD degrees are living outside the continent.

Also leading to UNESCO’s failure in education in the region is the fact that UNESCO’s Dakar Forum underestimated the costs associated with HIV/AIDS and other factors such as war. Due to HIV/AIDS problems, much more money requires to be added to the annual cost of achieving Universal Primary Education. The epidemic has turned out to be much more extensive than predicted, with almost every passing year seeing a revision upwards of estimates and projections. HIV/AIDS undermines the capacity of educational

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institutions to deliver quality education, as it drains the material and human resources of the system. It also makes it more difficult for students to attend school regularly. Indeed, UNESCO’s goal of quality education cannot be met until the challenges posed by the AIDS pandemic on education are addressed.

4.3 Achievements of UNESCO

Despite the many challenges and failures encountered by UNESCO in Sub-Saharan Africa, all is not doom and gloom. The organization according to the findings of this research has made some success in the development of education in the region. To a certain extent, UNESCO’s positive impact in some areas can be seen and experienced. Some progress towards EFA targets has been made with faltering success. According to the proceedings from MINEDAF VIII conference, school enrolments in Uganda, Malawi and Mauritania have doubled in a matter of five years.76 The forty-five African Country reports prepared for EFA 2000 assessment showed that governments had primarily focused on expanding access to education in the past decade. While some forty million African Primary School-age children were out of school by 2000, at least 20 million more school-age children were in school by then compared to 1990.77

By 2000, countries such as Cape Verde, Mauritius, South Africa and Zimbabwe had achieved enrolment rates of 90 percent or more. In Uganda where primary education was being given free for four children per family, enrolment from 2.6 million to 5.2 million in two years. The best results occurred in countries that were already on track in the previous decade.

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77 EFA-AFRICA - Op.Cit p. 3
Although African women were yet to benefit from the improvements, girls' education figured high on most government agendas by 2000. Existing policies have been revised and new initiatives introduced in many countries to create a girl-friendly environment in schools. Benin had already introduced a bill that exempted girls in rural areas from paying fees. In Eritrea, 300 female teachers had been trained by 2000 to boost girls' enrolment. Many governments in Sub-Saharan Africa started allowing young mothers back to school after childbirth.

In response to the call of UNESCO, many countries have reoriented their educational systems. Kenya, for example, has made efforts in making education more responsive to the needs of the learners by introducing more vocationally-oriented subjects; also, concentrating on disadvantaged groups, particularly girls. In Mozambique, a democratic and participatory process is being used to develop a new curriculum. In Mali, Chad and Togo, community schools are successfully responding to local learning needs. Zimbabwe, Botswana and Kenya have increased their investment in teacher training. Despite difficult circumstances under which teachers often operate, they have started to be a priority of many governments.

The research also found that UNESCO has made a positive impact in areas such as early childhood and adult education. Although progress, remains limited, these areas have received increasing attention over the past decade. Several countries are establishing literacy classes in rural clinics and schools.

UNESCO Open and Distance Learning programme have been a solution to access to higher education in Sub-Saharan Africa. It is a powerful channel for reaching students anywhere in the region at anytime as long as the necessary infrastructure, equipment and expertise are available. The cost of learning through distance education is relatively lower.

78 IBID p. 3
than the cost of face-to-face learning. It enables students to work and study at the same time. It does not require students to pay additional costs for commuting. It also enables educators and trainers to meet a wide variety of learning needs. It increases access to education, improves educational quality and enables more efficient use of limited resources.

UNESCO’s achievement in promoting regional unity in the development of education in Sub-Saharan Africa cannot be overlooked. It has created partnership among all actors in the field of education, which is an added value to the development of education policies. This has helped countries to share knowledge and experience in meeting the challenges facing the region in the 21st century.

All in all, UNESCO has succeeded in voicing the Sub-Saharan African need to improve education for the 21st century. In the past ten years, an unprecedented number of education reforms, programmes and commissions have made education an issue, being discussed in buses and bars. This has made Africa to show commitment.
CHAPTER FIVE

5.0 Summary, Conclusions and Recommendations.

5.1 Summary of the findings

The research has been carried out with the major objective of finding out how much UNESCO has helped to rescue the Sub-Saharan African educational systems, which have almost been in a state of devastation for the last two and a half decades or so. In an attempt to realize this objective, the researcher has tried to gather information based on certain key areas of UNESCO’s educational activities in the region. These areas include: UNESCO’s role in the improvement of science and technology; its role in implementing EFA programme in the region including the fight against gender disparity in educational opportunities; its impact on higher education and capacity building, its fight against HIV/AIDS pandemic; and its role in the reconstruction of educational systems destroyed by conflicts. The researcher has also tried to find out the role of UNESCO in promoting regional cooperation in sub-Saharan Africa, for the purpose of educational development, especially UNESCO’s partnership with AU and NEPAD.

The research found out that UNESCO has been working under very difficult circumstances in the region, making it hard for the organization to realize its objectives, at least at the set deadlines. UNESCO has had to contend with high level poverty in some of these countries, exacerbated by external debt. Lack of will among national leaders to give education the first priority has led them to come up with poor educational policies which are not compatible with the development needs of the region. Education has also been allocated a small percentage of the national budget in most of these countries. UNESCO has also had to come to terms with the high rate of infection with HIV/AIDS. This has had adverse effects on the educational systems of Sub-Saharan African countries due to the number of teachers
infected, and the many children kept out of school because they have been orphaned. Worse still, UNESCO’s educational efforts in the region have been much challenged by civil strife. The persistence of conflicts in some of these countries has continually diverted the scarce national resources from important development programmes like education. Expanding populations in the region, leading to high demand for education; and also the problem of gender disparity in the provision of educational opportunities are also among the problems encountered by UNESCO in its educational development efforts.

This research found out that the many set backs experienced by UNESCO in its educational efforts in Sub-Saharan Africa have not thwarted the organization’s determination to meet its objectives. In its efforts to make education relevant to development needs, it appears that UNESCO has made several achievements through the establishment of various science and technology projects. For instance: Creation of ANSTI as an organ of cooperation that embraces African institutions engaged in University level training and research in the field of science and technology. It has enabled scientists in the region to share knowledge and ideas.

UNESCO’s ROSTA has also done much in trying to make education relevant to industrialization. Thanks to UNISPAR programme under ROSTA which has promoted cooperation between universities, industry and research institutes through joint research and development projects. UNESCO has also done much to assist African Universities to orient their training and research activities towards problems of local nature. For instance, by training highly qualified personnel particularly at the post-graduate level to tackle national socio-economic problems. This has benefited those countries that have realized the need to increase educational budget.
Further in meeting its objective to make education relevant to the needs of the people, UNESCO has created a chair at Makerere University in post-harvest technology. This facility has led to the production of graduate scientists and experts capable of dealing with agricultural extensive work and harvest handling, storage and processing of food. MICRENS programme has also been in the line with meeting the same objective. It has promoted the preparation and use of cheap biological fertilizers. Still in this area, UNESCO has produced a wide range of educational and training materials, including the Renewable Energy post-graduate learning package. UNESCO man and biosphere programme has also done much in promoting environmental conservation and research in the problems of land use.

These findings show that UNESCO has to a great extent strengthened science and technology in Sub-Saharan Africa. This knowledge, if well utilized, is likely to help the region exploit its vast natural resources for economic development.

The research also shows that UNESCO has made a positive impact in the eradication of illiteracy in Sub-Saharan Africa. In line with EFA goals, UNESCO has put much effort in implementing programmes to promote basic education for street children, and preventing children in difficult circumstances from succumbing to a life on the streets. In partnership with UNAIDS, UNESCO launched a project to promote access to basic education and vocational training for children in difficult circumstances in Southern and Eastern Africa. Seminars have also been organized to equip those with responsibility for children in difficult circumstances. Participants in these seminars can make an impact in their own countries with the willingness of their governments.

In meeting the EFA objective, UNESCO has also tried to upgrade professionals in textbook publishing, design and production, authorship of children’s books, skills in preparing teachers’ guides and appropriate research in book development and management of
printing. The UNESCO-funded BLMI for sustainable book development has supported training workshops in several countries.

UNESCO's ten years' programme for the development of education in Mali has helped to increase significantly, the enrolment rate at all educational levels in line with EFA objective. It has mobilized its resources to assist the government of Gabon in the preparation of a project support document, for the elaboration of an educational reform programme. It has also greatly supported programmes to improve the quality of education in SADC countries.

The research also found out that UNESCO has been working to strengthen the access of women and girls to science education. It has designated women as a priority group of action, in meeting its objective of narrowing gender disparity in education. It has come up with a special project on scientific, technical and vocational education of girls in Africa.

UNESCO has also made an achievement in establishing PEER, which has been devoted in the reconstruction of education in post-conflict areas. It has worked on such problems as the absence of standardized curricula, destroyed school infrastructure, need for reprofessionalization, and the need for peace, tolerance and reconciliation.

Research findings on UNESCO's efforts in Higher Educational development in the region have been promising. It has helped to strengthen the scientific capacities of African Universities through the training of Trainers in access to scientific and technological information. Training workshops have been organized in this connection. For instance, UNESCO, in partnership with RINAF organized an African regional workshop on Distance Education in Africa. It was held at the UNESCO Regional Office for Education in Africa, Dakar. The workshop focused on implementation and management of national policies in
distance education, focusing on ICT in higher education. The participants were equipped in principles and strategies of handling distance education.

The research also found that UNESCO has made a positive impact in capacity building for teachers in order to improve the quality of education in the region. UNESCO's establishment of IICBA has led to capacity building and training, research development and teacher education among other things. Through IICBA, Teacher Educational Network has also been established. It has been used to update teacher education curricula in Primary and Secondary schools and teacher education institutions.

A notable achievement made by IICBA's Teachers' Educational Network is the establishment of an electronic library, which is developing content in many educational areas. A programme for post-graduate diploma in distance education has also been started, together with Diploma and Masters Degree in teacher education. IICBA has also conducted seminars for ministers of education in Africa. It has also tried to improve communication between education planning and economic development. Success can be seen in the establishment of Open University of Tanzania, African Planning and Development Institute in Dakar and the University of Witwatersrand in South Africa.

Another finding from the research is that UNESCO has made some contributions in the area of HIV/AIDS awareness and preventive education in Sub-Saharan Africa, despite the high rates of infection. The rising numbers of infected people in the region is not an indication that UNESCO has failed. There are indications that it has made a positive impact in the fight against the scourge. It has contributed to reducing the spread of the epidemic through education and information; also, assisting in confronting the impact on education systems, which in some countries have almost been in a state of total breakdown because of the number of teachers stricken by the disease.
The Executive Board of UNESCO's strategic plan of action for the fight against HIV/AIDS for 2001–2005 has made some accomplishments. For instance, organization of workshops on the effects of AIDS on educational planning, attended by researchers, planners and representatives of assistance agencies, working in African countries seriously affected by the disease. Such workshops have also come up with measures that can be taken to protect the progress already made in regard to school enrolments, in a situation marked by high rate of infection by the virus; also the needs in respect of research and training. In addition to this, UNESCO has established a resource centre at which all the studies on the implications of HIV/AIDS virus for education systems are to be carried out.

It can also be argued that UNESCO has succeeded in the implementation of a cultural approach programme to HIV/AIDS prevention. It has tried to identify the socio-cultural factors that must be taken into account in developing prevention programmes and strategies, in order to improve effectiveness. Two sub-regional workshops have been organized to train specialists from various countries, who would in turn train planners and other professionals to adopt a cultural approach in their work. Inter-regional conferences on a cultural approach have also been organized. The UNESCO-sponsored World Foundation for AIDS Research and Prevention established in Abidjan also marks a great achievement for the organizations efforts in AIDS awareness and preventive education.

Another research finding points towards the role of UNESCO in promoting regional cooperation for the development of education in Sub-Saharan Africa. UNESCO's belief is that the objective of EFA in the region cannot be achieved unless it is sustained by a broad movement of society and viable partnership among all actors in the field of education. Therefore, UNESCO has been working to fulfill the need for dialogue and interaction, to deepen the region's understanding of the process, conditions and factors involved in the education reform. A number of regional and sub-regional institutions and organizations have
been operating in the field of education. Through UNESCO’s efforts, MINEDAF conferences began and recently took up the issue of developing education to build the new Africa. UNESCO has also to a great extent, worked with NEPAD to push forward the education agenda in Africa. It has engaged NEPAD in EFA process, promotion of gender perspectives in education and in developing the capacities of teacher training institutions.

From this research, it appears therefore that UNESCO, given more time and with more financial support from donors and willingness from national governments, would be in a position to achieve its educational goals in Sub-Saharan Africa. UNESCO’s educational efforts in the region can be viewed with great optimism, if certain problems in the region such as war, political commotions, poverty, external debt and disease were properly managed.

5.2 Conclusions

Out of the findings of this research, the following conclusions were made:

UNESCO has undertaken a giant and unique role in the development of education in Sub-Saharan Africa. It seems that the educational situation in this region would have continued to deteriorate, with greatest losses in those countries engaged in war and civil conflicts that have engulfed nearly one-third of the countries in the region. UNESCO has a vision for this region, that if the twenty-first century is going to be characterized as a truly African century for social and economic progress of the African people, the century of peace and sustained development, then the success of this project is dependent on the success of education systems’ development. It is almost impossible for sustained development to be attained without a well-functioning system of education, without universal and sound primary education, without an effective higher education and research sector, without equality in educational opportunities and without advancement of science and technology. All these issues have been UNESCO’s areas of interest in Sub-Saharan Africa.
UNESCO believes in education as the main tool for empowering Sub-Saharan African people to participate in and benefit more effectively from the opportunities availed in the globalised economy of the twenty-first century. UNESCO’s optimism lies on the recent political progress and increased investment in education in some parts of the region, and the opportunities offered by new information and communication technologies. Out of the wake up call made by UNESCO, the education sector in the region is likely to address more seriously, the urgent social issues, such as HIV/AIDS and violence that are a threat to education’s progress and prospects.

Although UNESCO may have not met all the educational needs of the region, it has made a great step in the journey towards crossing the dark tunnel of hopelessness, and seemingly, there is no turning back until the achievement of the light at the end of the tunnel. Through the organization, it has dawned on many countries of the region that education is a basic right and a basic need for all African children, youth and adults, including those with disabilities. These countries have recognized that investment in quality education is a prerequisite for the empowerment of Africans to fully participate in and benefit in globalised economy.

Through UNESCO, African educational planners have changed their mindset concerning girls’ and women education. They have been encouraged to remove all social and cultural barriers that hinder African women from having access to education. They have also recognized the necessity for curriculum transformation to provide quality education, with a goal to liberate themselves from psychological, economical and technological dependency. UNESCO has therefore, sharpened the African vision and influenced it to design policies and programmes; and mobilize partnership and resources for the realization of African renaissance in the twenty-first century. Through its networkings and partnerships, UNESCO is sounding the loudest wake up call, summoning the region to get up and move from
commitment to action. Its satisfaction seems to lie in the development of educational systems which offer relevant and quality learning experiences and programmes, which in addition, prepare citizens to fit into a more globalized context.

UNESCO seems to suggest that literacy and access to information have become a matter of survival for Sub-Saharan Africa. Denying these people education is choosing to keep them ignorant and consigning them to underdevelopment and economic oblivion. Choosing to give them education is investing in every individual, ensuring their basic right, social and economic development of the country, guaranteeing it a role in the global economy. Without education, there will obviously be no integration of the region’s economies into the world market. NEPAD could end up as another African pipe dream.

It is almost certain that UNESCO has proved wrong the common misconception that Africa’s abundant natural resources will translate into viable economic boom. It is not so much the availability of natural resources as the knowledge and skills to translate these resources into national wealth, by moving from exporters of raw materials into an industrial region. For UNESCO therefore, literacy is a prerequisite to participation in the knowledge industry of the future.

UNESCO therefore deserves to be thanked and congratulated for its crucial role of leadership, in trying to keep the EFA ship on course in Sub-Saharan Africa. It is not without many challenges that UNESCO has taken these initiatives; it seems to have been sailing through the currents of many problems facing the region; but the organization seems to fulfill the proverb that goes, “anyone who decides to walk through the thickets cannot complain of being pricked by thorns.” UNESCO seems to have made a commitment in the educational development of the region and cannot walk away from it. Thanks to UNESCO for raising the awareness in the region; that education is the springboard for economic and social progress;
the engine for development; the single most crucial weapon to eradicate poverty; and perhaps the most powerful force in combating HIV/AIDS.

5.3 Recommendations

From the general findings of the research, the following recommendations can be made.

Educational needs should rank more higher in Sub-Saharan African countries’ priorities and budgets. These countries should know that unless they put greater efforts to mobilize domestic resources, not everyone can hope to receive their expected financing from external sources. National plans need to be more realistic. Africa needs to learn to be resourceful, creative and innovative to tap on its abundant resources and not wait for outside help. Educational systems of the region should not be allowed to collapse simply because of lack of external resources and promised funding that has not materialized.

In order to build a strong educational base in the region, UNESCO should pressurize other bodies for help, for instance, the World Bank and the Commonwealth Educational fund. However, their declarations should be harmonized and consistence with UNESCO’s EFA goals. Concerted efforts are required to meet the challenges that Sub-Saharan Africa faces in educational development. UNESCO therefore should appreciate and encourage the efforts of the civil society in genuine partnerships from policy formulation to monitoring of programmes. UNESCO should also support the efforts of NEPAD in the field of education. It should ensure that adequate budget resources are devoted to the development of education in the region.

It would also be recommendable for UNESCO to try and strike a balance in meeting all the EFA goals. This is because the emerging picture from the financing patterns and areas of focus within national activities portray much more weight being thrown behind two EFA
goals; universal primary education, and to a lesser extent, girls’ education. There is no
dispute that these are absolutely crucial investments. However, sidelining the early childhood
development; and basic education for youths and adults might not yield the desired
sustainable development which cannot wait until tomorrow. Anyone would recommend on
indivisibility of EFA goals because of their dialectical relationships. Otherwise, action at one
level that overlooks the link to action at other levels may be unlikely to produce sustainable
results.

It is also recommendable for UNESCO to improve the management of complex
programs. Jomtien goals have proven to be complex to implement, particularly those aimed at
improving institutional management, quality and effectiveness of learning processes, and
organizing partnerships between agencies. It should concentrate on activities that have a good
chance of being successful; programs that have realistic goals, based on earlier successes and
failures, should be emphasized to avoid wastage of time, energy and resources.

It is also true to the research findings that UNESCO’s programs in higher education
have suffered from shortage of funds. UNESCO should make the funding agencies realize
they have an important role to play in the revitalization of African universities. They should
recognize the legitimacy of higher education as a development investment. University
development has national capacity building implications that reach far beyond the education
sector. UNESCO should shape donor assistance to university programs in accordance with
the institution’s strategic vision.

Finally, UNESCO and Sub-Saharan African governments need a stronger voice to
sensitize parents to send their children to school. The rural poor should also be provided with
poverty reduction facilities to boost their incomes. Political will among leaders is also
necessary for these ideas to translate to reality. This calls for a shift from huge military
spending to a focus on education. The EFA goals can have the dual benefit of fostering development in Africa and discouraging wars and civil strife at the same time.
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