

25812
Distribution: General

ECA-IFLA/CONF./2/2

27 April 2007

**UNITED NATIONS
ECONOMIC AND SOCIAL COUNCIL**

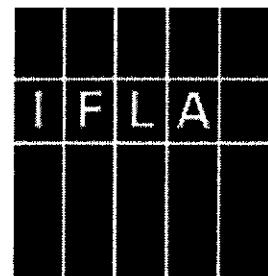
Original: English

ECONOMIC COMMISSION FOR AFRICA

Fifth Session of the Committee
on Development Information (CODI-V)

Addis Ababa, Ethiopia
29 April – 04 May 2007

**ECONOMIC INFORMATION LITERACY AND THE
DEVELOPMENT OF SUB-SAHARAN AFRICAN COUNTRIES**



ECONOMIC INFORMATION LITERACY AND THE DEVELOPMENT OF SUB-SAHARAN AFRICAN COUNTRIES

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A lead paper presented at the Sub-Saharan Regional Colloquium on Information Literacy organised by UNECA, Addis Ababa, Ethiopia from 29-31 March 2007

Introduction

It has been proven that information availability is a key factor in the development of a society. Brodnig and Mayer-Schönberger (2000) summarise this in the following words: *'indeed, accurate and reliable information is a key element for sustainable development'*. This means that for any society to attain economic growth, fight poverty, reduce disease, hunger, and improve on the life style of its people; information needs to be given enormous attention. This attention is needed in the identification of the kind of information required for development in that society and strategies need to be put in place to make that information available to members of that society in order to convert the societies into what Thioune (2003) calls *'the knowledge society'*. This requires a good information infrastructure. The ability to identify the necessary information, have access to it, interpret it and use it productively is what is referred to as information literacy. To assemble this kind of information requires a life long information literacy programme.

The 21st century has been widely acclaimed as being an age of information availability. Toffler (1980) contends that

a revolution has swept society into an 'infosphere' where information and communication technologies (ICTs) have drastically altered our social, political, economic and work environments. In this infosphere, information is the key resource for effective functioning and participation in society. In this infosphere, information is the key resource for effective functioning and participation in society.

Many are in the belief that given the advent of numerous modern information technologies: the internet, and other forms of electronic media including, telephone, radio and television, which seem to make information widely distributed around the world, there should be a boom in many, if not all aspects of human life, given the importance of this information in nationhood. Many countries, especially in the West, are significantly benefiting from the available information in areas of education, health, agriculture, economics and governance. But then, it is important to underscore that it is one thing for this information to be available through these various media: internet, radio, television, print media, telephone etc. and yet another thing entirely for the information to be received by the relevant audiences. As underscored by Davison et al. (2000), *'ICTs have, to a large extent, been developed in the context of, and for the cultural and social standards of, a few rich countries (Western Europe, North America, East and Southeast*

Asia, and Australia)'. UNDP (2001) on its part notes that *'these innovations can help meet market pressures but not the needs of the poor, who have very weak purchasing power'*. These information technologies need therefore to be adapted to the realities of African communities as succinctly summarised by UNDP (2001) quoted in Thioune (2003), who notes that one major problem is *'adapting ICTs to local conditions and uses in developing countries, and allowing each country to understand these innovations and adjust them to their own development needs'*.

Given the economic difficulties encountered by many developing countries and given the dearth of resources; coupled with alarming percentages of illiteracy and education that characterise developing countries and this problem of adaptability; budding economies like those in Africa, especially sub-Saharan, fail to benefit from the advantages of information literacy which is deemed indispensable for the improvement of life styles. The irony in all this is the fact in almost every country in this region, there is the desire to see these countries advance economically. Much effort has been made by various people at different levels to ensure that these countries attain economic advancement. In mind are the various efforts galvanised by the African Union in the millennium goals, the formation of NEPAD (The New Partnership for African Development; and the different structural adjustment plans put in place by various African governments to ensure that poverty is eradicated and life styles improved. All these efforts seem not to be yielding much fruit.

In this paper we demonstrate that while economic information literacy can be very instrumental in shaping and advancing a budding economy, sub Saharan African countries, unfortunately, do not benefit from the information that is readily available in the 21st century. The paper demonstrates that the stagnant economies of these countries can be blamed largely on the neglect of strategies of making relevant information available to the appropriate members of the society mainly because information literacy is not usually a significant issue in the developmental policies elaborated for these communities. This is preceded by the identification of the different kinds and sources of information. The fall out of the paper is that besides the lack of technological media of disseminating information, certain information that is available to members of a society which can be exploited by others in that same community and policy makers is not made available to them either because policy makers do not attach importance to information literacy in national development or because the target populations are unable to access this information because of certain handicaps, language being one of them. The paper ipso facto examines the possible barriers to economic information literacy and rounds off with possible suggestions as to what should be done to redress the situation in the economies of sub Saharan African countries.

Economic Literacy Defined

Before any discussion, it is important to situate and define what economic information literacy is all about. This question has been debated by specialists without a definite conclusion. Fettig (1999) points out that when participants at an economic literacy symposium were asked to define economic information literacy, it was evident that *'defining economic literacy proved more troublesome, in some ways, than determining action steps to promote it.'* He reports that some of the participants noted that *'this illustrates that economics is a "value-laden" term for many people, and these*

values are not easily separated from a discussion about established principles or ideas. One person's economics is another one's manifesto'. In fact, the symposium over viewer summed up the issue in the following words: *'Like it or not, economics has become the modern language of ethical and political discourse'* (Fettig (1999). Despite this debate, it is agreed that information literacy will include amongst many other things the following: economic literacy means that people have an understanding of economics that informs personal finance and public policy; economic literacy is a two-step process that begins with personal finance and leads to broader economic issues that all of society faces; economics ultimately leads to questions about what matters, it's "where the social and ethical rubber hits the road"; a better-informed public will allow for fewer mistakes in public policy; economic literacy is not just about teaching people how to react to certain policies or ideas, but how to put them into context and evaluate them.

An examination of these points reveals that economic literacy relates to everything about life including financial policy, good governance, mass sensitisation and education of the masses on what is right and good for the advancement of community life and the improvement of standards of living. It will mean informing policy makers about what should be done to eliminate poverty, hunger, corruption and all other social ills that retard the progress of the society. It means identifying relevant economic information and tailoring it to suit the social context and educating the masses on how to make use of the information in an appropriate way and beneficially. It is against this background that the discussions in this paper are to couched.

An Overview of the Economies of Sub Saharan African Countries

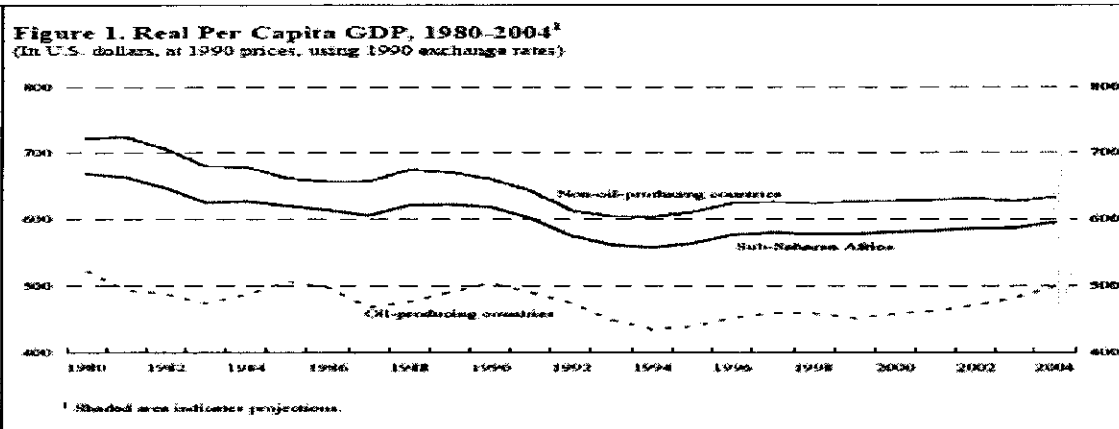
To appreciate the trend of arguments advanced in this paper, it is important to have in perspective the main and recurrent characteristics of the economies of sub Saharan African countries.

The economies of most African countries south of the Sahara largely depend on agriculture for survival. Most of the agriculture is carried out in rural areas and the produce ferried to the crowded urban centres where they are either sold or exported as is the case in Cameroon. Crop production is done using crude and strenuous methods. Industrialisation is minimal. A significant proportion of the population is illiterate and poverty is common place. Famine, civil strife, ethnic conflicts and civil wars are recurrent. Underscholarisation and child exploitation are rampant. Access to facilities of modern information technologies are rare, not considering people's ability to make use of them talk less of people being able to make use of them. Most of the regimes are dictatorial with corruption being the talk of the day. The good of the populace is in practice not an issue to policy makers. Corruption and embezzlement of state funds are practiced with impunity. The education sector is politicised and lacks professionalism. Many of the regions are enclaves and in areas where the soils are sufficiently fertile and suitable for the production of food and cash crops, there are no roads and means of transportation. These constitute a major set back to the growth of the economies of these countries.

Ironically, many countries in this region are abundantly blessed with natural resources: forest products, food crops and fertile soils etc. The rich cultures of the diverse

people, beautiful landscapes, and other natural endowments can constitute great attractions to tourists- a great source of income. It was probably this natural endowment that led Kwame Nkrumah, quoted in Forje (2003:6) to predict that African independence would lead to '*the new Jerusalem, the golden city of our heart's desire*'. But sadly after five decades most of the countries have become even poorer than they were during colonialism. The natural resources need to be transformed to be able to use them in national development. As Bamgbose (1994) and Chumbow (1998) note, national development can only be attained if the natural and human resources of the nation are combined. In other words following Chumbow's (1990:2) definition, national development is: '*the nation's human resources acting on its natural resources to produce goods (tangible and intangible), necessary to improve the quality of life of all citizens of the nation*'. He further notes '*it is not sufficient to have abundance of human and natural resources for development to take place*'. The human resources need to be skilled and trained through '*education*' and '*training*'. Put differently, information is needed to transform the human and natural resources prescribed in Chumbow (1990). The produced goods and services need to be sold and this requires appropriate markets. Unfortunately, the situation in sub Saharan Africa is so bad because these markets are not available. Lack of financial resources makes it difficult for the natural resources to be transformed into consumable goods. Many members of these communities lack the necessary knowledge to help them transform the natural resources. They equally need information about markets. They need to know where certain goods are needed and how to make the goods available there. Once this is done, it will be possible to create employment and fight poverty. Knowledge of health care delivery and wealth creation will help in boosting the economy and the improvement of livelihood. This means that for any substantial economic development to take place in this region, information literacy is of vital importance. It is important to note that the populations of the urban centres mainly engage in petty trading both in hardware and agricultural products which are mainly supplied by the populations of the rural areas which do most of the cultivation. From the look of things, one would expect that once this information is made available, Africa would be transformed into an El Dorado of riches and fine lifestyles; and that given the age of information technologies, one would expect an economic boom in sub Saharan African countries.

It is shameful that just the contrary is true. These countries are known, as mentioned earlier, for high rates of mortality, malnutrition and poverty. In fact, the World Bank reports that most of these populations live below the poverty line of less than US\$1 a day. In fact, the Sub-Saharan African Regional Economic Outlook reports that '*according to the 2003 Human Development Report of the United Nations Development Program (UNDP), the share of the Sub Saharan African population living on less than a dollar a day increased from 47.4 percent in 1990 to 49.0 percent in 1999*' and that '*the absolute number of people living on less than a dollar a day increased by 25 percent to 315 million*'. The Sub-Saharan African Regional Economic Outlook presents the following graph to illustrate the drop in per capita income within the period 1980-2004.



African countries south of the Sahara are therefore constantly characterised as poverty stricken societies, fighting for survival. Yet, it is evident that there exist the necessities to naturally build a strong economy. Cameroon for example has been termed Africa in miniature. It has fertile lands and rich forest products with vast plantations that feed European industries with raw materials. It has other minerals like gold, Basalt, and petroleum. The logical question to answer is: what else is needed to boost the economies of these countries?

This paper holds the opinion that the economic policies in place in these countries are inappropriate. In other words, a greater proportion of the population does not know what they are supposed to do to create wealth. The high rate of unemployment results from the fact that there is no knowledge on how to transform the rich natural resources into needed goods and services. Many efforts have been put in place, suggestions made in international symposia and conferences and yet the much desired positive change is not forth coming. Neba et al (2006:40) cite the example of NEPAD (the New Partnership for African Development) put in place by the African Union at the beginning of the third millennium, but whose goals could not be realised at the dead line (five years after) and the deadline only had to be extended. In the next section, we start by examining the kind of information that is crucially relevant for these communities before addressing the question related to the availability of this information.

What Information is needed from which Source by sub Saharan African Countries?

The local (rural) farmers who produce food crops in large quantities are unable to sell these excesses for several reasons, one of which is the lack of appropriate ready markets. They lack farm to market roads and the means to transport of this produce to the cities are not available. They need information on how to improve on their yields, and on what kind of goods to produce for ready consumption. In areas where the soils are not fertile, the local populations need information on how to improve on the fertility of the soils. People in the city, on their part, need information on trade and how to boost agricultural production in engaging in urban agriculture. Besides knowing how and where to export the commodities at more profitable rates, they need to learn from the experiences of those who have benefited from this kind of experience before. As observed by Jackson and Kassam (1998), *'knowledge shared equals results shared'*. Consider for example the Cuban case (reported in Cruz and Medina 2003) where the

rural population is engaged in sugar cane cultivation and the nation largely depended on the importation of food to meet its needs. Due to economic factors, an economic crisis set in which saw the scarcity of both imported and nationally produced goods which then required as much expenditure as was spent on the importation of oil. The result of this economic crisis was a drop in feeding standards and life standards in general. Cruz and Medina (2003) present the following statistics to illustrate the drop in feeding habits as a result of the economic crisis.

Comparison of Daily Calorie Consumption per Capita in Different Years

	1985	1990	1993	1996
Calories/person/day	2,929	2,728	1,863	1,996

Source : Centro de Investigaciones de la Economía Mundial (CIEM). Investigación sobre desarrollo humano y equidad en Cuba 1999. Havana, Caguayo, 2000.

These figures clearly show a drop of calorie intake from 1985 to 1996 during which time the economic crisis set in. At the moment, it is believed that the intake of calories in Cuba has risen to 2400 calories. This improvement is largely attributable to the introduction of urban agriculture which Cruz and Medina (2003) point out, is currently supplying urban centre communities 'with 150 to 300 grams per capita of fresh vegetables and culinary herbs daily and has largely eliminated the use of small refuse dumps for urban garbage'. The lessons learned from this experience are relevant to the countries of sub Saharan African countries which are characterised by poverty, malnutrition and unhealthy cities. It is also reported by the same source that the introduction of urban agriculture offset the employment structure as shown in the following figures:

Employment Structure

	1981	1996	1997	1998
Total of employed people	100.0	100.0	100.0	100.0
Government Entities	91.8	77.7	76.6	75.0
Cooperatives	1.1	9.6	9.1	8.8
Joint Ventures and Corporations	—	3.0	3.6	4.1
Political and Social Organizations	—	1.1	1.0	1.0
Private Sector (National)	5.5	5.3	6.2	8.1
Self-Employed	1.6	3.3	3.5	3.0

*In percentages.

Source: *Cuba en cifras 1998. Oficina Nacional de Estadísticas, August 1999.*

Notice from this table that the private sector has steadily increased its employment rate due to the introduction of urban agriculture. This example of a dramatic turn in events can benefit the economies of sub Saharan African countries, of course, only if the information that led to this positive change is made available. Information literacy is ipso facto crucially necessary if poverty is to be rolled back, ethnic and tribal conflicts eliminated, civil strife checked, health care delivery ensured and the economies strengthened.

One revelation made by this discussion is that in African communities, needs for information vary, in some way, as one moves from the urban to the rural areas. In other words, the information problems in urban centres may be of a different nature from those in rural areas. We consider these in turn below.

The Urban Centres

In many urban centres, information is readily available through many media: radio, television, internet, print, graphs, libraries, notice boards, etc. Sometimes, the information is so much that one finds it difficult to select what is necessary. As noted by Ford (1994):

Today most of us have too much information. Each year the number of books and journals published increases; radio and television stations broadcast non stop. A daily edition of many newspapers includes more information than a person would have come across in her or his whole lifetime in the 17th century. In this data rich environment, information consumers must learn to overcome information anxiety and to sift through the information chaos to digest, interpret, and utilize information for sensible decision making.

This means that urban centres may have the information available but one problem is that people have problems selecting the appropriate information and using it creatively. The major problem here therefore is essentially information management. Other people however have difficulties in getting this information because they lack the technical knowledge that will enable them to make use of the internet for example, to gain access to the information. In some cases, access to the available information is impeded because the form in which the information is available is not digestible. It may be presented in purely economic jargon making it difficult for the target population with very low levels of English and/or French to read and understand. It requires, as we will notice below, that the form in which the information is presented will have to be seriously in consideration.

Rural Areas

In the rural areas, the situation is a little different from the one in the urban centres. Perhaps, it is more grave. The level of illiteracy is much higher in the rural areas, there is no electricity, and unlike in the urban centres where the information is relatively available and some people find it difficult to select the appropriate information, in rural areas the information is not even available. The media of information is not available nor do the people understand the main languages of modern information technology. Besides this, these people, as mentioned earlier, need information of a different type such as information related to food crop and cash crop cultivation, information about soil fertility, information about transportation. Most essentially, they need information on sustainable forest management and environmental management as a whole. As recommended in a United Nations report (1993),

information must be accessible to poor populations for general education purposes, to further participatory action leading to empowerment, and to inform small-scale enterprises about applications for credit, product diversification, market conditions, product specification, price and availability of inputs, transportation alternatives and schedules, and alternative production techniques. The poor should have help in gaining access to existing information sources in structured and intelligible forms useful for basic-needs satisfaction.

In both rural and urban centres there is need for information on funding avenues. Quite often people are held down by the lack of capital to start an activity which could

lead to employment. If they could have information about financing their activities they would get going. Unfortunately, this information is never made available to them. Some people need information on project writing and submission. Some have the projects but they do not know the appropriate places to submit them. Sometimes this information is a stone's throw away but they still cannot have access to it.

The conclusion that can be drawn from this discussion is that whether in urban centres or rural areas the information available for sustainability and livelihood is insufficient and needs vigorous economic information literacy programmes. This will not only involve making knowledge from abroad available to the local communities but also local information available to everyone in the locality who does not have access to this information.

Impediments to Access to Information

There are a number of obstacles to information literacy. These are examined in this section.

Language and Illiteracy

One of the major hindrances to economic information literacy in particular and information literacy as a whole in Africa is language. Information that may be available on radio or television is not easily accessed because most of the people do not understand most of the exoglossic languages through which this information is propagated. The situation is worse in West Africa where the use of indigenous languages in official business is minimal in most of the countries of the region. In Eastern and Southern Africa, this situation is better given that Swahili is used in East Africa as a National Language while Zulu, Afrikaans, and Xhosa are used in South Africa. People can easily gain access to this information. Following UNESCO (1953), learning is faster and better if the learner is taught in his home language. We therefore expect that people should face problems in getting available information since it is available in languages which the people neither read nor understand. Besides this, as will be discussed below, for sustainable development to be possible, indigenous knowledge is crucially relevant. This knowledge cannot be obtained without the appropriate use of language. As Grenier (1998) asserts, language is crucial for indigenous knowledge research. She points out that translation can greatly impede research in indigenous knowledge or information gathering because *'each step can introduce error'* and recommends that *'accurate translation is needed throughout the research process'*. This is indicative of the fact that there is no way that appropriate vital indigenous information can be obtained if the question of language is not answered. The issue of language becomes even more poignant when one considers that the articles which occur either on radio, in print, on television, or on the internet are presented in crude financial and economic jargon which discourages readership given that those who attempt to read must go through an arduous task to understand.

Illiteracy is a related major problem to information literacy, be it in indigenous languages or exoglossic. According to the Educational For All (EFA) report (2006), literacy *'...confers a wide set of benefits and strengthens the capabilities of individuals, families and communities to access health, educational, economic, political and cultural opportunities.'* The same EFA report notes that on an average less than 60% of the total

adult population in sub Saharan Africa can read and write with understanding and that the region registers the lowest adult literacy rates in the world. According to EFA (2006), for rapid economic growth to take place, the literacy rate of a country must reach the threshold of 40%. Unfortunately, for most of the countries in sub Saharan Africa like Benin, Burkina Faso, Chad, Mali, the Niger, Senegal and Sierra Leone; the literacy rate is below this 40% threshold. It is projected that 22 countries are at risk of not achieving significant literacy even by 2015. These countries include: Benin, Botswana, Burkina Faso, Burundi, Chad, Côte d'Ivoire, Eritrea, Ethiopia, the Gambia, Ghana, Guinea, Kenya, Madagascar, Mali, Mozambique, Namibia, Niger, Senegal, Swaziland, the United Republic of Tanzania, Zambia, and Zimbabwe. This means that if we depend on literacy rates for information literacy then many countries will still not be information literate by 2015. Given the role of information literacy in economic development, these countries will not improve economically in 10 years to come. Illiteracy, therefore, has to be conquered at all costs if any strides are to be made in economic development in the region as it plays a central role in information literacy.

The Mass Media

While the mass media can constitute a veritable tool in the enhancement of economic information literacy, it can constitute a serious stumbling block if not appropriately exploited.

The journalists who report on economic issues are sometimes themselves economic information illiterate. The consequence is that this sometimes leads to misinformation. Imagine for example an economic illiterate journalist making informative commentaries on the economic crisis that a country has just experienced. What will this journalist tell the population? The tendency is for the journalist to probably read from an economic textbook and represent the information crudely presented without contextualizing it and without even making it easily understood by the basic reader or listener. Fetting (1999) cites examples of newspapers which because of the way the articles are written,

...missed stories not because they didn't get the facts right, but because they didn't put the story into context, or get the additional facts that would tell the complete story. In part, he said, that's because there are all kinds of reporters—especially political reporters—writing about economics, largely because those issues cross over into so many other areas.

Sometimes, the economic information is presented in a too simplistic manner often due to space pressure as is the case with news papers. Fetting (1999) quoting a participant at an economic literacy symposium summarises in the following words:

The media, including newspapers, are often criticized for making the news too simplistic, and Berry agreed that the issue was a real concern, especially when it comes to reporting on economic issues. "I confront it every day with my editors who, like everybody else, like nice, simple easy things to understand," he said. Berry cited a particular case relating to Social Security and how, if he were to tell the story simply, it would be wrong, but if he told it with all its complexity it would never make it into the paper. In the end, he said, "I

am not writing that story. It is too complex to put in the newspaper. I've almost never reached that conclusion before, but in this case I have."

As shown in this excerpt, it is evident that for certain reasons economic information is published in distorted form. In such a case, the media can impede economic literacy impediment. As a conclusion, the situation and the role of the media is summed up by the following excerpt which is an extract from a report on a symposium on an economic literacy.

In her keynote speech that kicked off the Symposium, Federal Reserve Board Vice Chair Alice Rivlin suggested that TV viewers are given more contextual reporting about the weather than they are about business and economics news. Newspapers, on the other hand, have more time, or space, for context, but they face other issues, like inflexible editors and writers who don't understand economics, according to the three members of the post-lunch media panel, who were moderated by Farrell.

Poverty

One other factor which may hinder access to information in Sub Saharan African countries is the level of poverty. Many people find it difficult to have access to some of the necessary gadgets that could give them access to this available information. They cannot buy news papers (for those who are literate), they cannot have access to the internet because they cannot afford computers. Where information may be available on radio and television the populations cannot afford these gadgets. Some of this information has been published in text books and the population can gain access to if they read. Unfortunately, the books are not available in these countries. Those books whose authors are Africans are published abroad and sold at prices which are beyond the reach of the local populations. There are no libraries available. So it is not possible for these people to gain any access to this information. If the populations of these countries will ever be information literate, strategies will have to be put in place to ensure that these resources are made readily available.

Attitudes

In some areas the libraries are available with books in them albeit limited in nature. There are people around there who are literate enough to read them and get the information; yet no body reads because of bad attitudes towards reading. Many people in Africa do not have a reading culture. Someone will prefer a bottle of beer to buying a text book. It has even been said that the best way to hide information from the basic African is to publish it in a book. This state can be attributed to the ignorance about the necessity of economic information in livelihood. These ideas present serious handicaps to economic information literacy in these countries. For a few who read news papers and books, they do not bother about those that carry economic news. We visited some news paper stands in some localities in Cameroon and realised that news papers which were dedicated to the treatment of economic issues were hardly ever bought whereas those that treated issues such as politics, football, horoscopes, fashion sold tenfold over. This is clear evidence that the population is very ignorant about the necessity of economic information literacy in the growth of the society. This calls for concerted action on the part of economists to

sensitise the population on the importance of this information in the advancement of African countries.

Bad Governance

Government policy is not helpful either. There is no policy which controls what information is given to the populations. Some of the information is adulterated and given in different forms to the population which only makes them more confused. Information is allowed to get to the people as hearsay. If the real information is circulated on radio or television, it is not adapted to the realities of the indigenous populations, so that the people get it in its crudest form and then struggle on their own to interpret it. Some times it is the government that poses difficulties in the sense that some information may be twisted to suit the regimes' whims and caprices to enable them to hold tight to power. Some of the information may even be held back because making it available to the population may make them wise and educated and they may start making demands which the regimes cannot satisfy. In some cases, lies are told to the populations under the pressure of some foreign partners who may want to prevent the production of some goods because the foreign partners intend to sell their own products in the home markets. For example, in many of the countries in this region, attitudes towards home produced goods are relatively bad compared with attitudes towards foreign produced goods. How can it be explained that frozen chicken is imported from Europe to Africa when large quantities of that chicken can be produced locally? How does one explain the fact that African countries import petrol when they have large oil wells? This can be blamed partly on the fact that there are no severe policies that actually protect home industries and partly on the way that information has been manipulated. The regimes are so corrupt that people have been made to believe that there is no reason for them to strive for initiative in producing goods and that corruption is the only way. This lack of enthusiasm towards wealth creation with reliance on corruption deters people from information literacy. People believe that only bribery can lead them anywhere. As a result, they have developed negative attitudes towards life long information literacy. The point being made here is that bad governance hinders the desire to be information literate.

Bad economic policies are also factors that contribute to the lack of information acquisition. In many of these countries, the taxation policy is simply terrible. Taxes levied on some commodities make it difficult for people to acquire the necessary tools to use modern information technologies. The import tax on computers, radios, telephones and television sets are sometimes so high that the prices of these commodities are generally too high for the local populations. Given that industrialisation is low in these countries importation is the only option (but which is highly) taxed. Information literacy is not even recognised as an essential element in economic policies. People are therefore not being encouraged to acquire information. This means that the infrastructure necessary for effective information literacy is blatantly absent.

The Digital Divide

One of the often quoted hindrances to access to information in the digital age is what has been termed the digital divide. As succinctly put by Gyamfi (2005), '*The digital divide hinders the peoples of Sub-Saharan Africa from becoming beneficiaries of the information age.*' By digital divide is meant the gap between those who have access to

information and those who do not. Sub Saharan Africa has been identified as the least advanced of all the regions of the world in information technology which has left the region in the deepest end of the digital divide. Nulens et al. (2001: 318) quoted in Gyamfi (2005) notes that if Sub Saharan African countries do not *'surf the great wave of the information revolution; they will be crushed by it'*. Access to Information Communication Technologies (ICTs) is crucial given that, following the UNDP's (United Nations Development Programs) definition, ICT include the full range of electronic technologies used to manage information and knowledge. Kebede (2004) adds that ICTs are the core tools through which information is captured, processed, stored, manipulated and exchanged in the information age. The quest for information literacy will remain a dream if there is an absence of these ICTs. For information literacy to be attained for all in the societies in this region, strategies must be put in place to ensure that this digital divide is done away with as succinctly encapsulated by Ford (1994) in the following words:

As information overload increases, as information resources further fragment, and as the need to access information globally grows, the ability of individuals and groups to control their future will be further eroded. The impact will be felt most quickly by those who are already socially, educationally and economically challenged. The gap will widen as a new information elite emerges. Ultimately we will all suffer, because the social and economic drain of nonfunctioning citizens will exact a heavy toll upon society.

Formal Education

The education system is not designed to train students as lifelong learners. At some points the endeavour by teachers especially in Universities to train students as independent thinkers is considered as teaching libel information. Molem (2006) describes this in the university system in Cameroon and reports that state centrism has led to the death of critical thinking given that people define themselves only in relationship to the state. This has instilled sycophancy and lecturers do the will of the state and have little desire to train level headed individuals capable of moving the nation ahead. The curriculum is therefore not designed to train the student how to select the most appropriate information effectively and efficiently. Such students are unable to implement effectively designed search strategies. In short the students graduate without being information literate and therefore being unable to develop a culture of information lifelong learning. Francis Nyamnjoh (1999:107) summarises the picture in higher educational institutions in many African countries as follows:

The system has little regard for virtue and meritocracy and proves to have more room for loyal mediocrity than critical excellence. ... A second- or third-rate academic, for example, who provides the regime with the conceptual rhetoric it needs to justify its excesses and high-handedness, is more likely to be promoted to professor (with or without publications) and made dean, vice chancellor or even minister, and to accumulate port folios, than his more productive but critical counterpart who is denied promotion and recognition for being a genuine intellectual.

The higher education system is therefore not playing its role as trainers of information literate individuals as approved in the Information Literacy Competency Standards for

Higher Education by the Board of Directors of the Association of College and Research Libraries (ACRL) on January 18, 2000.

Absence of Indigenous Knowledge

One major problem in having structural adjustment programmes and other strategies of economic development successfully implemented is failure by policy makers to recognise indigenous knowledge. The error constantly made is to think that only orthodox knowledge will do the magic and that indigenous knowledge is primitive and non productive. Grenier (1998) summarises this as follows:

'In the recent past, rural development planners often did their work without community consultation. When they included consultation, they used quantitative surveys and did not communicate the results back to the people who had shared their knowledge. The consequences were often impractical, ineffective, and culturally unacceptable management decisions. Furthermore, extensive survey research often took a long time.

The author cites Hatch (1993) who appropriately encapsulates the point in the following words: 'The development profession suffers from an entrenched superiority complex with respect to the small farmer. We believe our modern technology is infinitely superior to his. We conduct our research and assistance efforts as if we knew everything and our clients nothing.' These excerpts portray the kinds of errors often made by researchers which lead to the sidelining of indigenous information.

Many other researchers do not even know that there exists indigenous knowledge. Grenier (1998) summarises the differences between indigenous knowledge and international science or modern knowledge.

It is important to recognise that indigenous language exists and seek it because it is crucial for the development of any community. To make the point clearer, consider these examples cited by Wilk (1995). He presents a file containing 25 separate project proposals, feasibility studies, implementation plans, and project assessments which considered commercializing the production of edible palm oil from a tree native to the Belizean rainforest. As noted by Grenier (1998), in each of these initiatives, imported cracking and rendering technologies developed for use in other tropical palm-oil industries were tried and despite easy access to dense, high-yield tree stands, all the projects failed, even those with direct government subsidies.

It is also reported by the same author that throughout this period, household production of edible oil by indigenous people, using a variety of simple, local technologies, never stopped. This led to the following illuminating questions from Grenier (1998):

Did anyone bother to ask local people the who, how, where, when, and why of their local palm-oil production system? By learning about the local production system, could the proponents have avoided any of these costly failures? If the entrepreneurs had established joint ventures with the communities, could development objectives and sustainable-development goals have been served? If participatory technology-development techniques had been tried, could hybrid technologies (a combination of indigenous and foreign inputs) have yielded successful ventures? What would have been the outcome had any of these proponents worked with Indigenous Knowledge?

Consider also this interesting example described by the same author in which an agroforestry project in the Philippines, initiated by the International Institute of Rural Reconstruction, carried out a nursery operation that relied on exotic species and it failed to live up to expectations. This pushed the scientists to consider working together with village farmers to identify locally growing (indigenous and introduced) tree species. The result was that local informants were made to identify the most important species, list the criteria used for classifying a species as “important” — hardiness, fire resistance, general utility, and seed availability — and then ranked the species according to the criteria. This led to positive results and the community is currently reported as having its own action plan for reforestation.

The lessons that can be learnt from these two examples are that there exist indigenous knowledge that can be harnessed and used for economic development but which is not being exploited. Policy makers are often unaware of it or simply just neglect it. The consequence is that meagre resources are wasted on projects which never succeed. The sad thing about all this is that with the information owned by indigenes not being tapped and documented, the informants die with it, given that it is essentially oral.

If all the impediments enumerated above are redressed appropriately, then information literacy will become reality and this will lead to the expected economic boom and the poverty alleviation. The question is how can this be done? In the next section, we suggest a number of strategies in the belief they will initiate committed thinking that will result in an exhaustive eradication of these.

Possible Solutions

In this section, attempts are made to propose what can be done to resolve the problems mentioned above.

One of the crucial things to be done is the recognition of indigenous knowledge. Efforts should be put in place to ensure that local information on livelihoods in various locations are adequately and appropriately documented and subsequently put into appropriate use. It is important to document this information because most of those who have the information are the elderly who are dying out. It should be remembered that as the old African saying goes, *‘When a knowledgeable old person dies, a whole library disappears’*. Secondly, indigenous populations should be involved in the governance of their societies. It is common practice that things be imposed on people because they are said to be ‘primitive’. Policy making should involve those governed. Thirdly, as underscored by Grenier (1998), Intellectual Property Rights need to be protected. The knowledge owned by indigenes needs to be protected and once used, it should be duly acknowledged and the people compensated for it. In this way the information will not only be made readily available but also useful in attaining economic leap forwards for African communities.

As far as the question of language is concerned, many solutions have been proposed. Neba et al (2006) for example argue that in Cameroon for example it will be better to make this information available to people in Pidgin English which is widely used in Cameroon. This will solve the problem of multiplicity of languages (there are 298 in Cameroon and 460 in Nigeria (Grimes 2000, Gordon 2005)) that is encountered in such countries. In general, efforts should be galvanised and strategies put in place to make the relevant information available to local populations in the languages that they

best understand. It is certain that this will pose a number of problems. Solutions have been proposed to these by various specialists (see Neba et al 2006, Bamgbose 1991, Chumbow 1990, 1998).

Given that most of the people are not literate and uneducated, and given what it will take to gain literacy and education, short term solutions could be adopted. This entails laying an effective infrastructure for information dissemination. This can be done by getting those who can access the information to get appropriate information, analyse it, simplify it to a level that can be understood by the populations and translate it in indigenous languages and make it available to the people using several media: radio, television and even through stage presentations. This will ensure that the appropriate information gets to the target populations and in the right forms. It may require the involvement of Common Initiative Groups (CIG) and Non Governmental Organisations (NGO). This requires careful structuring and planning which only a regime that has the interest of its people at heart can do.

Once the question of language is answered, attention can then be turned to real and direct issues in the long run. Such issues include: reducing or completely eliminating the digital divide between the haves and have nots. This will require the putting in place of a number of strategies most of which have been elaborately outlined in Gyamfi (2005). We mention a few here which include, provision of computers and internet connections in schools of the entire region as already being done in some of these countries by organisations like SchoolNet in Namibia, the UNAID Leland Initiative etc. Of course, the availability of computers and internet will have to be accompanied by the development of information literacy skills. Again, Gyamfi (2005) provides a wide variety of strategies of developing these literacy skills some of which are: the training of teachers to teach information literacy skills, the involvement of libraries in information literacy skills development, instituting mass education programs for information literacy skills development etc. A key technical support required here which is closely related to the problem of indigenous language above is that of computer key board development. It should be pointed out here that the literacy development mentioned above has to be solved by not only training people to be literate in foreign or exoglossic languages but also and mainly in indigenous languages. This means that the provision of computers and internet connections has to be accompanied by a development of keyboards in local languages. (Gyamfi 2005:27). He points out that while key boards have been developed for such languages as Amharic, Tswana, Xhosa, Yoruba and Zulu; many of the 800 languages of Africa have not received this attention. The author underlines the reasons necessitating home language keyboards as a simply the fact that the internet will be more attractive to the peoples of this region as it will enable them to present and key in data on indigenous knowledge in the way they see it.

As far as the media is concerned, it will be important to ensure that the economic information available in the media is void of the kind of jargon that only economists can understand. Economists should acquire more space in multidisciplinary newspapers where economic information can be published rather than depend on specialised economic news papers which many people will not read. A mass sensitisation should be carried out in which the populations are given awareness of the necessity of economic information in daily life. This kind of sensitisation can be carried out on radio and television. As has been proposed elsewhere, improvement of journalists' knowledge in

economics is crucial and journalists should be encouraged to have interest in reporting economic activities among major professional organisations on radio and television.

The government will equally have to involve the local populations in the generation of information. This is crucial because the information that goes to the people must be relevant to their own setting. It may not require that all the people be asked to say what they want o since they sometimes do not even know what they want or need. Rather specialists could be selected who will study the people ant their environments to discover what is necessary for that locality and then the necessary information given to them. It will also be necessary that information data bases be created and information both locally and internationally is collected and stored for dissemination. Custodians of this information will therefore need to be identified and entrusted with the responsibility of managing this information. This is only possible if there is transparency and accountability. Ills like tribalism, nepotism, discrimination must be eradicated. In other words, there must be a genuine will to render the entire population information literate irrespective of provenance, ethnic group, sex, race, religion etc.

Democratically elected governments will also have to be put in place so as to avoid the shrouding of government information with secrecy and attempts to hold back or adulterate information as a method of political manoeuvre. Government budgets will have to pay attention to information literacy. Such budgets will only be possible if there exists a good parliament and the budget is appropriately debated in parliament. When such budgets are adopted, it is important to make information about projects, micro loans, etc available to the populations. Very often, there exist avenues for funding but the populations are unaware of it. Such information should be made by governments to get down to the people. It should not be kept in drawers and given out only to those who can offer kick backs. So long as governments are not forced to account to the people, they will not provide information. Government information will remain the mystery that it is many of these countries.

Governmental departments charged with the responsibility of information and labour should be obliged to execute their functions diligently. It is regrettable that in many African countries there exist ministries of information and ministries of employment, funding and research and yet it is difficult to have information related to these areas available anywhere. Yet the personnel are there on fabulous salaries and huge budgets. These structures will have to wake up if the information on funding is to be made available. The question of information dissemination is a complex one requiring all multiple solutions. Parkinson (2005) summarises the dissemination endeavour using the diagram.

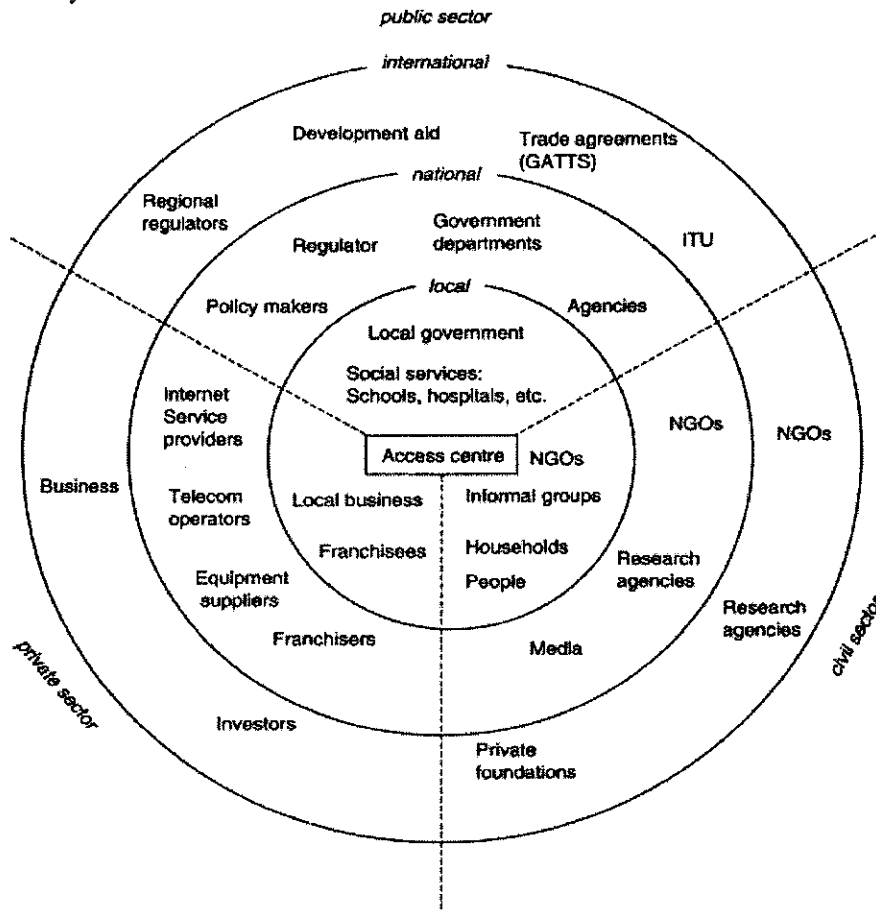
According to this author, information dissemination will involve the private, civil and public sectors. In the private sector, key actors are business investors. These crucially should include internet service providers, telecom operators, equipment suppliers etc. In the civil sectors, private foundations, research agencies, Non Governmental Organisations, and the media should be actively involved. In the public sector, at international level, it is expected that regional aid, development aid and trade agreements should play a central role.

At the national level, policy makers, regulators, government departments, and agencies constitute the central actors while at the local level the local government structures, social services, schools, hospitals etc should be actively involved. With regard

to what these actors should be doing, United Nations report (1993) makes the following suggestions:

The international community can make major contributions by collecting and disseminating information in the following ways:

Policy arena

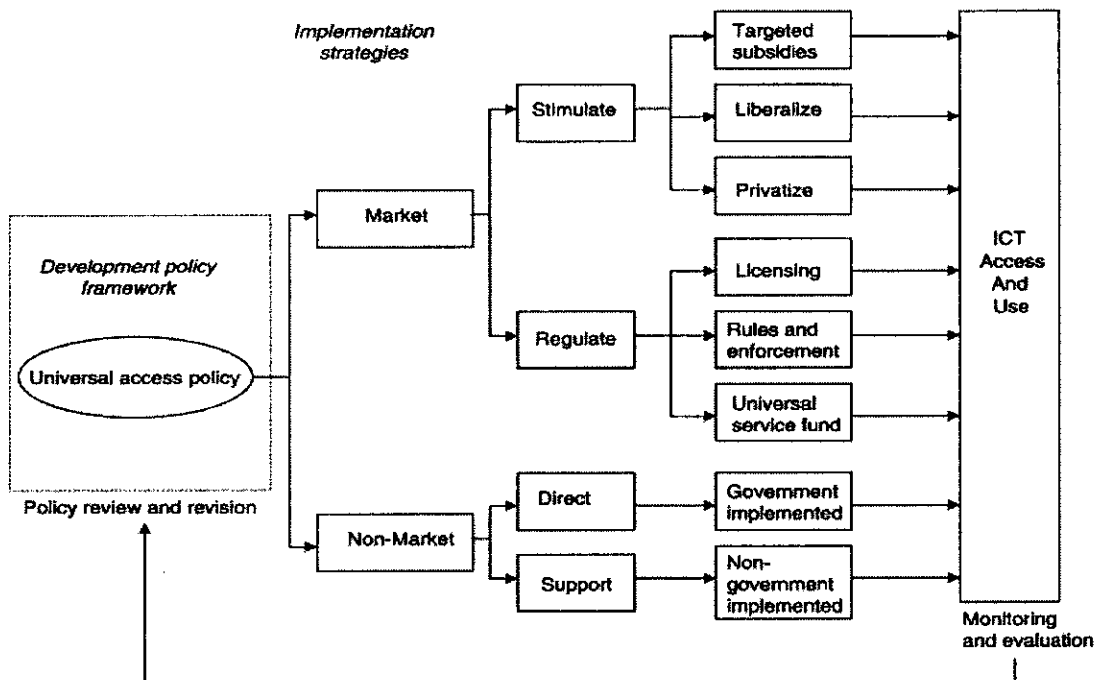


-Monitoring the most significant basic-needs indicators for the world's poor populations;

-Offering a one-stop service to refer people to information networks; and

-Monitoring new technologies for those that are particularly promising for satisfying basic needs.

As far as the formulation of access policy and implementation is concerned, Parkinson (2005) suggests the following guiding model.



She notes that the main components of this diagram are in operation in South Africa and Uganda (her case study). While the implementation of each component might vary from country to country, it is crucial that every country should have a policy of its own as far as information dissemination is concerned (the interested reader should read Parkinson 2005 for details on how this model has worked in Uganda and South Africa and what strides have been made in these countries with this kind of policy in force). Once these strategies are put in place, tele-centres will be generated and access to information will be guaranteed.

As far as the **attitude** problem is concerned, the governments should start by educating people on cultivating reading habits. Literacy programmes should be put in place in schools and colleges. Adult literacy programmes should be set up. After this, incentives should be given to people who read. For example, some category of information should only be made available in news papers so that people will be obliged to read so as to make a living. Public libraries should be made available in all localities and books in various languages should be made available there. We are of the opinion that once people are made to realise the value of reading, that ones survival is determined by how much information he has, a reading culture will be established and once the literacy rate is improved, reading attitudes will also improve.

At universities, government interference should be minimised. The educational system should be completely independent with good syllabuses and well trained staff to build and equip graduates who are capable of reasoning independently. Information acquisition as a life long process should cultivated at school. Students should be given the room and infrastructure necessary for them to do independent research in which they learn how to identify relevant information, resource it, put it to appropriate use and be able to transmit that information to other members of the society. Such students therefore should not be trained in dogma as is expected of them in most African countries. The result is education that stifles rather than advances economic growth.

Conclusion

The discussions in this paper have revealed that even though information availability characterises the third millennium, it is not readily available to many African countries south of the Sahara. This accounts for the poor economies that characterise these countries. The paper has demonstrated that for this information to be made available it is important to identify the kind of information that each community requires. In urban centres, information facilities are available but there is a problem of selection and management. Many others lack the good attitudes to enable them to resource information. Some of that information may be, as is the case in the rural areas, on farming methods, funding, transportation, etc. A number of impediments have also been identified. These include illiteracy, poor attitudes towards information literacy, poor governance, inappropriate education in higher education, non exploitation of indigenous knowledge, lack of appropriate government policies on information dissemination etc. Some of the remedies proposed include the selection, collection and dissemination of information using appropriate languages. There is also need for governments to set up good economic policies which cater for information acquisition and the elaboration of strategies of resourcing indigenous knowledge. Government information secrecy must be dealt with and accountability of government officials guaranteed. Corruption will also have to be done away with if the information must be made available. We do hope that these points will trigger the kind of debate that will lead to a resolution of the problems identified here and else where to ensure that information literacy should impact positively on the economies of sub Saharan African countries.

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