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**IMPROVED ACCESS TO DEVELOPMENT INFORMATION  
IN AFRICA**

## **INTRODUCTION**

1. While the Africa region is clearly deficient in modern information technology equipment, there is no question that at least some sectors in Africa must participate in the information age in order to remain competitive and part of an international economic order. Development and utilization of information technology is inextricably linked with economic development according to the Board on Science and Technology for International Development:
2. "Economic development in Africa will depend heavily on the development of the information sector. Countries will need the ability to communicate efficiently with local and overseas markets to determine where they may have comparative advantages for supplying their products to consumers to purchase essential imports, based on current prices and services. Many of the economic development problems facing African countries have scientific and technological components that will require solutions to be developed in Africa by African scientists. It is thus essential that they obtain the means to carry on the necessary research and development and to provide realistic policy options to their governments and society: Lack of information is a critical constraint". (National Research Council, 1990).
3. Africa's development planning efforts have for too long been hampered by the lack of reliable basic data and information, numerical as well as non-numerical. For long, many African countries have groped in the dark due to an inadequate information base. "There has been too much of planning without facts and too much of policy making by hunches and intuition" (Adedeji, 1989). In regard to the sharing of information, African states have continued to live in a state of isolation from one another resulting in little knowledge about each other than they know about the countries of the North. Needless to say that the outside world knows more, much more, about Africa than Africans themselves know about each other.

4. While substantial progress has been made in the collection, analysis, storage, retrieval and dissemination of statistical data, very little was, until the last few years, done in the field of non-numerical data. For economical survival, Africa requires various types of information for development planning and for science and technology development. Development planning is an activity in which planners and decision makers develop policies, programmes, and projects which are aligned at improving the quality of life of a people within a given country. Such an activity involves the identification of options and the strategies for achieving development, as well as the selection of the best options and strategy based on available information. Data and information thus form a very important factor in socio-economic development planning exercises.
5. **Data** has been defined as "...the raw material of information, groups of non-random symbols which represent actions, quantities etc." (Methlie, 1978). According to the International Federation for Information processing, data is "...a representation of facts of ideas in a formalized manner capable of being communicated or manipulated by some process..."
6. **Information** on the other hand is the communication of intelligence knowledge... for the work of documentation and information facilities, information is new knowledge disseminated in accordance with the information requirements of the receiver for the fulfillment of his tasks in government, Science or technology (Schutz et al. 1975).
7. Institutions that manage data and information in Africa include; national and specialized libraries, documentation centers, information centers and data centers. Statistical offices perform data center functions in data analysis and dissemination but with much more responsibility in direct data collection.
8. The distinguishing features of the information handling centers described above are associated with the level of information and data collection and processing involved; the quality of products they generate and particularly the degree to which authenticity is ensured; the degree to which products are readily utilizable; and, the quantity of expertise and technologies required to do the job. Lately, the

terms "information system" and "information services" are used to refer to the collectivity of information handling institutions; libraries, documentation centers, information analysis centers, etc. Nevertheless, the term "information systems" is used to refer to those institutions that use modern methods and concepts of information handling, i.e., systems analysis concepts, computers, micro-reprography, etc. (Samuelson and Borko 1977), State:

9. ...**"Information Systems"** is that combination of human and computer based capital resources which results in the collection, storage, retrieval, communication and use of data for the purpose of efficient management (planning, decision making, reporting, control) of operations of organizations. Hence, information systems are not so much concerned with the nature of the information handled (documentary, statistical, etc), nor by the subject field. Rather, "Information systems" refer to the level of efficiency gained in retrieval, manipulation and communication of information by virtue of the modern information management technologies, tools and concepts that are put to use. Therefore, the information handling institutions described earlier will be operating an "information system" if they put to use computers and related technologies and concepts.
10. The types of information handled by such modern methods is growing tremendously. A brief list of qualifying objectives that appear before the term "information systems" will include: bibliographic, statistical, environment, monitoring, planning, project management, management, remote-sensing, early warning, banking, financial etc.

### ***Africa's data/information needs***

11. Africa's needs for data/information for socio-economic development planning fall into two broad categories. The first category comprises "socio-economic data/information which are strategic to plan development and execution". The data/information which make up this category consists of those facts and figures about human, financial, mineral and other resource needed as input for meaningful planning efforts on the one hand, and the political and economic

conditions which are critical to planning on the other. (Adeyemi 1988).

12. Another major category of Africa's information and data needs for socio economic development is in the area of science and technology information. In this respect, it is important to note that the formulation and implementation of projects and programmes designed to guarantee adequate food, shelter, health facilities, education and employment opportunities for the population of any given economy carry a high incidence of the products of science and technology. Africa's information needs in the area comprise the identification of the "Science and technology resources (which can be utilized) for raising African standards of living and for relieving misery in the rural areas" (Adeyemi 1988).

### **A NEED FOR DEVELOPMENT INFORMATION FOR DEVELOPMENT PLANNING IN AFRICA**

13. Africa's lack of development over the years is attributed principally to the information poverty that has characterized the socio-economic development planning efforts of many countries on the continent since their attainment of political independence. The prevailing situation is not because the planning mechanisms of these countries lack data to base various meaningful socio-economic planning exercises. Rather, the problem has been the inability of African countries to develop and maintain appropriate information infrastructure.
14. It is widely agreed that over the last years social and economic conditions in the continent have deteriorated mainly because of adverse climatic conditions, deteriorating international economic relations, civil strife in many African countries, and inept economic management by governments. Both the understanding of African development problems and implementing solutions, require substantial amounts of information input. But alterations in priorities cause corresponding changes in emphasis in information needs.
15. In sub-saharan Africa, Agriculture is regarded as a cornerstone of the economy. The present emphasis in development strategies in favor of agriculture and agro-

industry, therefore, becomes one of the foundations for the priorities in information activities. Many African countries already possess agricultural statistics units, libraries and documentation centers. The problem is how these largely traditional document-oriented institutions could meet the needs of multi-disciplinary, agricultural development concerns and the heterogeneous user environment. Only the recent technological advances in remote sensing, communication and data processing possess the potential that can meet the challenges of innovative information collection, processing and delivery methods, and continuous R&D and updating of those methods.

16. Trade, industrialization, transport and communication and natural resources exploitation is an important subject area requiring change. However, African governments and institutions do not possess in-depth knowledge of the extent of their natural resource base. In industrialized countries, this area is mainly the domain of the private sector, but the information needs and information seeking behaviors of the African private sector is still very little known or understood. This is due partly to the fact that the private sector in Africa has been excluded from the on-going exercises in information infrastructure building and policy formulation. It may also be seen as due to the fact that an indigenous private sector is only just emerging, and that the dominant foreign multinational concerns depend on their parent metropolitan companies for information.
17. It should also be noted that, in Africa today, trade and industrial information services are still at an embryonic stage of development. However, with the changing needs of information, current thinking and trends are in favor of a shift from the conventional approach to information handling that places emphasis on printed, textual sources in favor of information decision support systems that embrace innovative activities and services. Such systems may hopefully respond more adequately to the emerging developmental challenges.

### ***Improving Access to Development Information in Africa***

18. The availability of adequate information in certain areas of development is much different than in others. The work of central and sectoral statistical offices,

documentation centres and research establishments has led to the accumulation of a body of information that forms the basis for the present-day planning exercises, albeit the fact that accuracy and timeliness need to be improved and certain gaps have to be filled. This is particularly true of demographic, foreign trade, health, education, transport and employment statistics. On the other hand, information is by and large inadequate in areas such as natural resources (mineral, water, land, forestry, environment), private sector economic activity (informal sector, small business establishments;) etc. The inadequacy of information in these latter areas is partly explained by the difficulties of the data collection tasks (tools, methodologies) as well as by the level of financial resources required to undertake them.

19. In order to be used, information should not only be available, but also accessible. In order to improve access to development information, African countries and institutions should do the following:

- establish sources of information in close proximity to their user population in order to minimize delays in service delivery and for convenience.

- make information products and services easy to use. For example, information stored in data bases and banks, catalogues, maps, indexes, etc. has to be easily accessible and understandable if it is to be used.

- use common (compatible) access tools to enhance accessibility, particularly in the case of computerized sources. Such tools include user interfaces for computerized searches, indexing methods, and vocabulary, network protocols, library classification schemes, and statistical definitions;

- sensitize users on sources of information and how to access such sources;

- make it easier for users to acquire original (primary) sources of information;

- develop national information policies which should be closely linked to and, in fact, form an integral part of national socio-economic policy formulation;

- establish and develop national systems for exchange of development information;
- provide as much as possible development information which is more user-oriented. The form in which development information is transferred from abroad or disseminated inside the country should be such that the information can be assimilated by the end-users. In particular, it should take into consideration the language, customs and other peculiarities of the users to whom it is directed;

On the basis of the above mentioned principles, it is expected that African governments establish and/or strengthen national information focal points to guide, stimulate and conduct the development of information resources and services. The focal points should also assist the governments in the formulation and adoption of national development information policies as integral part of national development policies. Adoption of national information policies would provide planners with a checklist of factors to be taken into account in the development of a national information infrastructure, in the formulation of relevant projects and programmes and in regional and international cooperation.

### ***Africa's Access to Global Information Networks***

Global information networks like the INTERNET possess vast information resources which could be of much benefit to the African countries. The African countries agree that information is a crucial part of a nation's infrastructure. Without proper national information policies, strategies and implementation plans, African countries will not be able to participate fully in the global information economy.

If Africa wants to benefit from the information resources of global information networks, it should initiate information collection and processing activities at the national level in order to develop local capacities in information handling to be able to contribute Africa's own Scientific, technological, economic, financial, social and cultural information. Revolutionary advances in information technology reinforce economic and social changes that are transforming business and society. A new kind of economy- the information economy is emerging where trade and



investment are global and firms compete with knowledge, networking and ability on a global basis. A corresponding new Society is also emerging with pervasive information capabilities that make it substantially different from an industrial society; much more competitive, more democratic, less centralized, less stable, more able to address individual needs, and friendlier to the environment.

These changes dictate for African countries, a major adjustment to harness information for economic and social development. This adjustment requires urgent new policies, regulatory and institutional reforms, and investments to achieve macroeconomic balance, political stability, and growth amidst global information flows, competition, trade, and investment. The countries of the North are rapidly adjusting. African countries must do so as well or risk exclusion from the global economy and severe competitive disadvantage for their goods and services.

### ***Concluding Remarks***

Meaningful socio-economic development and integration of Africa is almost impossible without a sound information base for planning. By far the major obstacle to information infrastructure building in Africa is the inadequacy of financial and material resources available for information activities. Given the predominant role of African Governments play in social and economic life, the low priority they attach to information activities is the major cause of prevailing shortcomings. The situation has been exacerbated by austerity measures enacted as a result of their prevailing economic crisis in the continent.

If Africa has to achieve its socio-economic development goals and create an African Economic Community, then its countries must give priority to the development of their information infrastructure. They must strengthen existing establishments and create additional ones at national and regional levels on a continuing basis in order to ensure the availability of data/information relevant to their planning process. Greater emphasis must be placed on the use of appropriate information technology which ensures timely and well-processed information.

By the same token, African countries must place adequate emphasis on the acquisition and use of modern information technologies in view of the important role that these technologies play in the generation and dissemination of information for development planning. The capacity of these technologies to store, process, and disseminate large quantities of data with a high degree of speed and accuracy over time and space makes their use imperative in information activities. While the Africa region is clearly deficient in modern information technology equipment, there is no question that at least some sectors in Africa must participate in the information age in order to remain competitive and part of an international economic order. Development and utilization of information technology is inextricably linked with economic development. The heart and soul of information technology lies in the ability to transfer data from its source to where it is needed, using the fastest means possible.

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