FORESTRY RESEARCH INSTITUTE OF GHANA (FORIG)

THE ROLE OF THE FORESTRY RESEARCH INSTITUTE OF GHANA'S LIBRARY IN SOCIO-ECONOMIC DEVELOPMENT

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ABSTRACT

The world has been daunted with many challenges especially that of poverty over the centuries. In order to confront these challenges more effectively, research institutions have been established by various governments (both developed and developing economies) with the aim of facilitating social development. Countries that have contributed greater percentages of their Gross Domestic Products (GDP) to research stand tall in socio-economic development among nations, while those that have contributed smaller percentages are confronted with many developmental challenges. Libraries in research institutions play an important role in mobilizing needed information for socio-economic development. Research is built upon existing knowledge. Libraries are the beginning and end of research activities. Perceived ideas for research are derived from available knowledge which the library stocks and enhances its dissemination. A research library continuously assembles, process, preserves and disseminates the evidence of research. Research and education are substantially improved when pursued in an environment with a library that provides access to deep and broad collections. Research libraries are mandated to build rich discipline-based collections in all formats (from manuscripts to digital objects) and to organize them to facilitate research. This paper examines the role of the Forestry Research Institute of Ghana's Library in the socio-economic transformation of Ghana

Keywords: Research Institutions; Special libraries; Information Management, Socio-Economic Development, Ghana

INTRODUCTION

Poverty is generally agreed to be complex and multi-dimensional in nature. Its causes are diverse, its manifestations are contextual, and it is not only a state of deprivation but also a set of processes (Carney, 1999; World Bank, 1999). In Kankwenda's (2000) view, poverty is almost never defined in itself, but described through other concepts such as growth, well-being, exclusion or equity. As a result, it is not easy to identify the key elements of poverty, especially when defined in relation to specific contexts, whether global, regional, national or local.

Successive governments have tried many strategies in managing the adverse effects of poverty and its associated problems of environmental degradation. One strategy adopted by various governments to tackle the problems confronting humankind effectively, is the establishment of research institutions. These research institutions are mandated to conduct studies in all aspects of human life with the aim of championing the process of socio-economic development.

Libraries are bed-fellows to academic and research institutions. The library plays an important role in the academic/research process of any academic/research institution. The library is often referred to as the "heart" of the parent institution, providing a place for scholars to do their research and advance knowledge. Access to information is a critical component of the research activities and has a great potential for social change and economic development. The primary role of a research library is to provide relevant information for personal and professional development.

Libraries of research institutions are particularly important in assembling needed information and making them available for research. Perceived ideas/thoughts for research are first and foremost derived from available knowledge which the library acquires, process, stores and preserves to enhance information and knowledge dissemination. Research is primarily built upon existing knowledge and again the finished products, (the research output) are disseminated through the library in the form of publications such as journal articles, books, manuals etc. A research library continuously assembles and preserves the evidence of research, and provides quick access to these resources for socio-economic development. Research libraries are mandated to build rich discipline-based collections in all formats (from manuscripts to digital objects) and to organize them to facilitate research and also play a key role in disseminating research results.

FUNCTIONS OF RESEARCH LIBRARY

Traditionally, libraries were seen as collection points for printed knowledge; in the form of books, journals and other recorded information (Freeman, 2005). However, as a result of the rapid technological development in Information and Communication Technology, the traditional concept of the library is being redefined to include one that also houses the most advanced electronic resources, including the Internet, digital libraries, and provides remote access to a wide range of information sources. Consequently, librarians and information professionals are increasingly combining traditional library duties with tasks involving information and communication technology. Research libraries are supposed to help people find relevant information and use it effectively for personal and professional development. Information professionals must therefore have knowledge of a wide variety of scholarly information sources and make them available to patrons.

Information professionals and librarians should understand the role of technology in information dissemination and be determined to accept changes and their frequency. In recent times, a successful librarian has to be computer literate, be able to publish educative information online, be skilled in searching the internet and other remote databases. This hands-on-approach would better arm the librarian to work in the ever changing environment in the application of computer technology in library work.

A research library adds value to the enterprise it serves through its expertise, services, and the resources it collects and preserves. Research libraries today are not like those of the past nor will research libraries look as they do now in the future. The more recent dramatic changes within libraries, as within the disciplines and research institutions themselves, are the result of information technology applications and the power of networking. Even as research libraries change in response to the environment, their core responsibilities remain the same, research libraries continue to collect, preserve, and provide services to enable discovery and use of research knowledge in all formats.

According to Fahey (2003), the information revolution has vastly increased the importance of being able to access and utilize information from a variety of sources, including information published electronically. Research libraries provide unique opportunities for ensuring that all scientists acquire competence in knowing how to access potential sources of information, evaluate, organize

and use the information effectively (Doyle, 2003). In view of the importance of information to society, research libraries inculcate information literacy and life-long learning attitudes in patrons. (Tiefel, 1999)

COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH

Apart from the various research institutions hosted at the country's universities, the main and largest research body in Ghana is the Council for Scientific and Industrial Research (CSIR). The CSIR was established in its original form by NLC Decree 293 of October 10, 1968 and re-established by CSIR (Act 521) of November 26, 1996. The Council however, traces its ancestry to the erstwhile National Research Council (NRC) which was established by the Government in August 1958 to organize and co-ordinate scientific research in Ghana. In 1963, the NRC was merged with the former Ghana Academy of Sciences, a statutory learned society. Following a review in 1966, the Academy was reconstituted into, essentially, its original component bodies, namely a national research organization re-designated the CSIR and a learned society, designated the Ghana Academy of Arts and Sciences.

The mandate of CSIR among others includes:

- to pursue the implementation of government policies on scientific research and development; and

- to advise the sector Minister on scientific and technological advances likely to be of importance to national development.

The mission of CSIR is to generate appropriate innovative technologies that would act as catalyst for public and private wealth creation. The CSIR is made up of thirteen research institutes including the Forestry Research Institute of Ghana which are mandated to conduct research into specific issues (CSIR, 2009)

FORESTRY RESEARCH INSTITUTE OF GHANA

The Forestry Research Institute of Ghana (FORIG) started as a research unit within the Forestry Department in 1962. It attained a research status and named Forest Products Research Institute in 1964 and placed under the then Ghana Academy of Sciences. In 1968, the institute was re-placed under the council for scientific and industrial research. By an Act of Parliament (Act 405), the Institute was

transferred from the CSIR to the Forestry Commission in 1980. In 1991, the name of the Institute was changed to Forestry Research Institute of Ghana to reflect the widening scope of its research activities. In 1993, by another Act of Parliament (Act 453) the Institute was reverted to the CSIR.

The institute is mandated to undertake forest and forestry –related research to ensure sustainable management and utilization of Ghana's forest resources and to engage in the commercialization of research results and services. The vision of the institute is to become the centre of excellence in forestry research in the humid tropics. FORIG is to be recognised as one of the institutions in the tropics making substantial contribution towards sustainable development of tropical forests (FORIG, 2005).

Research at the institute is conducted under three main programmes: Forest Products and Trade; Environment, Biodiversity and Land-Use; and Forestry and Wildlife. Each programme looks at specific challenges in relation to the ecological environment

Over the years FORIG has developed a number of technologies and interventions through re-search. These are aimed at combating environmental degradation and safeguarding the sustainable use of the nation's forest resources. Technologies developed at the institute to support Forest Sector Development in the country include:

- Sustainable felling intensity and girth limits for timber tree species;
- Eco-physiological requirements for regeneration of many indigenous species;
- Improved seeds and seedlings for plantation development;
- Vegetative propagation techniques for some indigenous tree species;
- Silvicultural techniques for optimum growth of many forest tree species
  (spacing, thinning, fertilizer application, optimal irradiance);
- Site-species matching and techniques for plantation establishment;
- Economics of plantation establishment;
- Strategies for forest pest management;
- Code of practice for wood treatment plants: Quality control procedures and inspection for timber products in Ghana;

- End-use guide for Ghanaian timber species;
- Developed a set of promotional materials to support the marketing of lesser-used species;
- Training manuals for Snail farming, Bee keeping and Mushroom cultivation
- Development of plant-derived insecticides;

THE FORESTRY RESEARCH INSTITUTE OF GHANA'S LIBRARY

The Forestry Research Institute of Ghana's library was established to provide up to date information to support research activities of the institute. The Library's mission is to build a comprehensive collection of recorded knowledge on forestry and forest related disciplines, and to make its resources available to scientists and the general public. It is also aimed at ensuring that these resources are improved, sustained and preserved for posterity. The vision of the Library is to become an excellent repository for recorded knowledge on forestry and to provide useful and timely information for effective teaching, learning and research.

The library is currently housed at the top floor of the main administrative block of the institute. It has a book stock of 6,000 volumes and does not subscribe to any journal title. It however, has access to many free online journal titles including those provided by AGORA, EBSCOHOST and LAN TEEAL. The library can boast of many international databases such as FOREST SCIENCES, PROSPECTS, WOODS OF THE WORLD and the FORESTRY COMPENDIUM. The Library currently has a seating capacity of 15 and can boast of a few computers connected to the internet for accessing online resources. It has five staff members who are all professionals in their respective fields of specialties.

The library is responsible for the publication of the Institute's Annual Reports, flyers, Newsletters, Technical Notes and Bulletins as well as the Ghana Journal of Forestry (an international journal of repute in forest sciences).

FORIG LIBRARY IN TECHNOLOGY TRANSFER

The Forestry Research Institute's library is supposed to play a key role in the transfer of technologies developed by the institute. It is the application of technologies developed through research

that positively transforms society. Research outputs or research findings are normally communicated through channels such as academic journals and book publications, conference and seminar proceedings, etc. Scientific information published through these media is presented using technical language that makes it difficult for the non-scientific community to comprehend and apply. In order to get down the message of research findings to the larger population, it is incumbent on the library (in collaboration with the technology developers/authors) to synthesize and simplify the information to the comprehension of the common man. This is normally achieved through the use of appropriate publication tools such as extension materials, flyers, tit bits, manuals and other highly illustrated publications.

The Forestry Research Institute's library has been active in this sphere. It has been playing an active role in the publication of the Ghana Journal of Forestry (GJF), the Institute's Technical Bulletin, Annual Reports as well as the Quarterly Newsletter, which are the main media through which scientists of the institute publish their research findings. The library also assists in the publication of various conference and seminar proceedings that are hosted at the institute. Furthermore, the library publishes extension materials to meticulously teach the 'step by step' methods of applying research output especially in the areas of afforestation, wood preservation as well as the sustainable use of the forest resources of the nation. Many of the technologies developed at the institute have been adopted by industries and private developers through this means.

In addition to the publications, the library is actively involved in the organization of conferences, seminars and colloquia for scientists to converge and share ideas and expose new developments in their areas of operation. Over the years, many of such meetings have been organized.

Furthermore, the library is involved in the organization of training workshops for clients to transfer simple and easy to use technologies for socio-economic improvement. Some of the training workshops include mushroom cultivation, snail farming as well as bee-keeping. Other activities included in this programme are training in rural wood preservation methods, the use of bamboo in construction and the use of lesser-known tree species as alternatives to the hard – to - find and expensive prime species.

Again the library has taken it upon itself to video document and photo album major research activities, research findings as well as their applications as a means of archiving the institute's mandates and also as a method of education. This is done to ensure that research activities at the institute are captured in pictorial form for storage and preservation for posterity. The video coverage and the photo album activities are also used as an instructional method for transferring technology to clients. It is believed that the mind captures and recollects information presented in pictorial forms more easily than in other forms such as the audio or in written. Clients appreciate our technologies most when the video and photo album methods are used in transferring the technologies.

Furthermore the library organizes in-service training particularly in the field of information and communication technology for its scientists and other staff from sister institutes of the CSIR. Training is normally conducted on how to use the internet and other remote databases to search for relevant information, CD-ROM searches using the Boolean operation, the use of Microsoft word for document creation, and the use of presentations application software such as the power-point. The use of Excel software and other software for analyzing data and drawing inferences are also taught.

CHALLENGES OF THE FORESTRY RESEARCH INSTITUTE'S LIBRARY

The library like any other organization needs certain facilities to operate effectively. These include but not limited to;
Space: Libraries are supposed to be housed in a well-designed, comfortable and all inclusive building that can combine traditional library functions as well as that of modern information and communication technology. It must have facilities for carrying out instructional programmes such as teaching library skills to scientists, conference rooms for seminars and workshops. However, not withstanding the importance of space for effective library operation, not all the libraries of the CSIR institutes can boast of requisite space to facilitate information retrieval and dissemination. Most CSIR institutes' libraries are housed in make-shift buildings with obsolete machines to work with. FORIG is however, fortunate to have a modern library and a conference room with a seating capacity of hundred and other facilities for training. The reading space at the library is however, limited to only 15 which need to be expanded to accommodate more clients.

Staff/Personnel: A library needs people to operate efficiently. Many directors of the CSIR institutes are of the view that the library does not need much staffing, in reality however, it does. Adequate staff is needed to manage the service desk, the collection development, and the processing of materials, IT professionals are necessary to make available online resources and exposing local databases online. A library operation is labour intensive. It is therefore necessary for a library to have a large complement of professionals as well as other staff to carry out activities in the library. The staff/personnel at FORIG library are all professionals in their areas of specialities. They easily complement one another's work to ensure effective service delivery. They work together to ensure that the objectives of the library are achieved. There is however, the problem of high turn-over of staff in most CSIR libraries. Management   should make sure that competent staff are hired, trained, motivated and retained. Staff members should have opportunities for professional development to enhance service delivery.   Failure in recruiting competent staff/ personnel to man the various functional areas of the library could have serious consequences for the library.

Financing: Library financing is an influential area that determines the success or otherwise of the library. Every research library should have funds to finance all aspects of the library's activities. This means making sure that adequate funds are allocated to the library annually to ensure sustainable collection development and for its outreach programmes. The FORIG library is allocated an annual budget to run its activities even though inadequate. The major challenge of the library is with the annual budgetary allocation. Funds allocated often turns to be inadequate for the successful implementation of all the programmes of the department. Many libraries of the CSIR institutes are starved of funds and there is no annual budget for some of the libraries. Directors of institutes should ensure that adequate fund is allocated for the smooth operation of the libraries.

Collection Development: Collection development and management is a key area that makes a library attractive to patrons. For, it is the materials available in a library that draws most patrons to the library. Traditionally, this means the quality and quantity of the printed books and periodicals (journals, magazines, and newspapers) in a library's collection that determines its usage. This notion has however, changed dramatically in recent times.   Majority of patrons now expect libraries to make available online materials to them. However, since the capital investment needed to

access online resources are expensive; most CSIR libraries with limited financial resources find it extremely difficult in meeting the demands of their patrons. The library of FORIG is fortunate to have a few facilities (even though inadequate) for accessing online resources. FORIG library like many other CSIR libraries does not have any collection development policy. Most materials in the library are donations and a few ones purchased through a project funded by DFID of the UK. Currently the library does not subscribe to any paid electronic journal but rely on free e-journals for information. There is a need for all CSIR libraries to have one policy for collection development to ensure that the resources of these libraries meet the expectations of their clients.

RECCOMENDATION

Recognizing the importance of research libraries to scholarship and socio-economic transformation, it is recommended that research libraries in Ghana should focus on the following:

- Since no one library can be self-sufficient, Research libraries in Ghana should enter into partnerships and forge strong co-operation to promote and advocate for barrier-free access to research and educational information resources in the country and to build a strong relationships with other international research organizations and associations with the aim of sharing information.

- The library needs adequate funding to enable it fulfill its mission. Inadequate funding in the face of astronomical increase in material cost could easily cripple the library. As recommended by the University Rationalization Committee's Report (1988), at least 10% of all funds   mobilized at the institution should be allocated to the library. Directors of CSIR institutes should provide adequate funding for the development of the libraries.

- It is important to engage the services of well qualified, experienced, competent and dedicated staff for smooth and effective operation of the library. Directors of CSIR institutes should make sure that competent staff are hired, trained, motivated and retained. Staff members should have opportunities for professional development to enhance service delivery.

- Material resources provided by a library to a large extent determine its usage. Research libraries must strive to have a collection build up of useful materials in both print and non-print formats. The development of the library's collection should be a joint responsibility handled by the staff of the library and the scientists to ensure that relevant materials are purchased to avoid waste. In addition, the library should have a written collection development policies with details of what to select, in what quantities, at what level and how much to spend on acquisition. The policy should however, be subjected to periodic reviews.

- User education should be an integral part of the research library. This activity is performed to equip users with the necessary skills to cope with information communication technology of the 21st century because the proliferation of unfiltered information resources has made information literacy even more urgent and important to the information consumer. It is the duty of the research library to equip patrons (particularly scientists) with the necessary skills to enable them access useful information effectively and to meet the challenges of the information age.

CONCLUSION

The discussion has emphasized the importance of libraries in research and development. The primary mission of a research library is to make available useful information to facilitate research and to assist in disseminating research findings through publications and technology transfer activities. The libraries of CSIR, the main research body in Ghana are making all efforts to achieve this laudable aim. However, there are a number of limitations militating against the smooth operation of these libraries. These include; inadequate staff, limited financial resources, as well as insufficient ICT facilities for accessing online resources. This write up has highlighted some of the problems encountered by these libraries and it is hoped that by implementing the recommendations suggested, the libraries could easily lift themselves up and perform their core functions in a more effective manner.

REFERENCES

Carney, D. (1999): **Formal farmers' organizations in the agricultural technology   system: current roles and future challenges**. ODI, London

C.S.I.R. (2009) **CSIR handbook**. Accra: CSIR

Fahey, N. (2003): "The importance of addressing accepted training needs when designing electronic information literacy training" **In Information Science vol. 26 (2003): 173-185**

FORIG (2005) **The Forestry Research Institute of Ghana: Brochure.** Kumasi: CSIR-FORIG

Freeman, T. (2005): **The library as Place: Changes in Learning Patterns, Collections, Technology, and Use.** Washington, D.C.: Council on library and Information Sources, 2005

Kankwenda, M. (2000): **Poverty Eradication; Where Stands Africa**. UNDP, London

Republic of Ghana (1988); **University Rationalization Committee's Report;** Accra: Ministry of Education

Snavely, L. & Cooper, N. (1997) "The Information Literacy Debate," **In Journal of Academic Librarianship 23 (January 1997): 9-14.**

Tiefel, M. (2004) "Library user education: examining its past, projecting its future". **Library trends. 44(2): 318-338**. University of Fort Hare.

World Bank (2003) **World Development Indicators**. World Bank, Washington, D.C.