EVALUATION OF INFORMATION NEEDS AND CHARACTERISTICS OF CLIENTS OF CSIR-INSTI LIBRARY, GHANA

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Abstract

This study is an evaluation of the information needs and characteristics of clients of CSIR-INSTI Library, Ghana. It investigates what constitutes the information needs of the library clients, what services and resources are available in the library to meet their needs, what are the characteristics of the library clients and what challenges do they face in meeting their needs. The population for the study comprises all the registered clients of the Council for Scientific and Industrial Research- Institute for Scientific and Technological Information (CSIR-INSTI) library. From the total population of 1020 registered clients, a sample of 360 (30%) was drawn and used for the study. Questionnaire was used in collecting data. All the questionnaires administered were completed and returned. Descriptive statistics was used to analyze data using frequency counts, tables and percentages. The findings showed that the majority of library clients were students and they needed information that supports their education. The majority of the clients obtained their needed information from E-library section (AGORA, OARE and Science Direct Databases). The major constraint to accessing needed information was inadequacy of relevant materials. Periodic clients' studies and acquisition of current and relevant materials were suggested as possible solutions.

Keywords: Information Needs, Information Seeking Behavior, Special Library, CSIR-INSTI library

Introduction

A special library is normally stocked with literature of a particular subject or a group of subjects and extends its services to a particular type of clientele (Asghar and Farzana, 2012). The establishment/development of special libraries is necessary due to the knowledge expansion. No progress can be made in any field especially in science and technology without special libraries holding latest material/research. Special libraries serve as a "broadcasting station" which provides information of the latest development to the scientist, engineers, doctors, policymakers and traders (Misbah, 1971). In this age of rapid development, the importance of special libraries in intellectual, social and political sphere of life cannot be denied.

Special libraries are established in governmental and private institutions to help manage information resources for the benefit of workers and the institution so that the goals of these organizations can be attained. Special libraries can be grouped into the following categories: private educational institutions, inter-national organizations, foreign governments, in the governmental and professional associations (Ajibero, 2001). Special libraries contribute to national development by providing in depth and relevant information resources for scientists, researchers, government officials, business executives and lawyers so that they can have the necessary information at the right time to effectively and efficiently carry out their research and the duties that would impact positively on the development of the nation. This category of people is in constant need of quick and relevant information to resolve issues and take decision.

In this regard, special libraries house information resources such as books, periodicals, newspapers, magazines, pamphlets, documents, manuscripts, pictures, maps, musical scores, non-print media such as transparencies, slides, records, audio-cassettes, microfiches, microfilms, filmstrips, motion pictures, video cassettes and in recent times, computers and the associated peripherals. The foregoing review of the role of various types of libraries in education and national development present the invaluable contributions of libraries to national development.

This paper look at the true position of CSIR-INSTI library in Ghana so as to how resourceful the library is in providing the necessary information resources for building the right caliber of man power to engineer the wheels of national development.

Background Information of CSIR-INSTI Library, Ghana

The Institute for Scientific and Technological Information (INSTI) of the Council for Scientific and Industrial Research (CSIR) is the hub of integrated Scientific and Technical Information (STI) in Ghana that provides the major public research and academic institutions as well as the industrial sector with resources and services designed to improve dissemination of, and access to indigenous and international STI. The Institute serves as the main Science and Technology Information resources clearinghouse for the CSIR.

The Council for Scientific and Industrial Research-Institute for Scientific and Technological Information (CSIR-INSTI) Library was established in 1964 as Central Reference and Research library (CRRL) soon after the Ghana Academy of Science took over the functions of the dissolved National Research Council (NRC). It was established to provide a ready means of assembling

information for the commencement of new research prospects. Among its functions, the CRRL to a large extent coordinates the activities of libraries in the research institutes of the CSIR.

The CRRL was elevated to the status of an institute of the CSIR in 1991 and named Institute for Scientific and Technological Information (INSTI). The library then became a division within the institute as the Library and Documentation Division. The division is to provide library and documentation service for the CSIR and analogous institutions, learned and professional association and societies, the industrial sector, students and the general public with the following operational mandate, vision and objectives:

Mandate

INSTI has its mandate to develop a national capacity and capability for efficient and effective provision of scientific and technological information on demand for the benefit of research scientist, policy makers and industrialist in appropriately packaged form for national development

Vision

To become a national leader in making accessible the world's intellectual output of scientific and technological knowledge as well as resource development maps to support Research and Development (R&D) activities in Ghana.

Mission

To establish a sustainable national STI service that includes databases of thematic and synthesized maps in support of the country's scientific, technological and socio- economic development, as well as to assist with S & T acculturation at all levels of the society. INSTI will collaborate effectively with other national and international agencies to deliver its services with excellence.

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Objectives

- Development of an efficient system for the bibliographic control of existing and current indigenous scientific and technological literature through the creation of databases for the national network system.
- Improvement and development of systems for the marketing of available scientific and technological information, and maintenance of a national microfiche collection.
- Human resources development in modern library and information science and technology
- Provision in cartographic form of a comprehensive and scientifically organized inventory of the total national resource base such as is needed for development planning at both the national and local levels as well as for education and research.
- Providing referral as well as Question and Answer service to the scientific community.
- Publication and dissemination of the results of national research and development (R&D) activities which are crucial for the socio-economic development of Ghana.
- Provision of central publishing and printing services to the national science and technology system in Ghana.

Statement of the Problem

CSIR-INSTI library due to its nature is charged with the responsibility of catering for the diverse and ever-changing information needs of research scientists and other scientific information clients. However, it is generally believed that special libraries suffer the most neglect in terms of funding and CSIR-INSTI library is one of such libraries. Meanwhile, provision of needed information at the right time and format to its clients is central to its existence. Since the inception of CSIR-INSTI library, in 1964, research has been conducted on the information needs and characteristics of the clients of the library. It is against this backdrop, that this study evaluates the information needs and characteristics of clients of CSIR-INSTI library, what constitutes the information needs of the library clients, what services and resources are available in the library for meeting these needs, how do the clients meet such needs and what constraints are they faced with? These are the questions to which this study intends to answer.

Objectives of the Study

The objectives of this study are:

i.   Describe the demographic characteristics of the clients of CSIR-INSTI library
ii.   Find out the information needs of the clients of CSIR-INSTI library
iii.   Identify information sources mostly used by clients of the library
iv.   Ascertain the adequacy and relevance of the library resources in meeting clients' needs
vi.   Establish the constraints militating against meeting these needs of clients

Methodology

Survey design was used in this study because it was considered appropriate. It involves a systematic and comprehensive collection of information about the opinions, attitudes, feelings, beliefs, and behaviours of people. (Aina and Ajiferuke, 2002). The population for the study

comprises the registered clients of CSIR-INSTI library, and sample of 360 respondents were drawn and used for the study.

Questionnaire was designed and used for data collection. It was designed based on the objectives of this study. The questionnaire was in two parts, the first part was designed to gather personal and demographic information of the respondents while the second part of the questionnaire was administered to collect information needs and characteristics of the library clients, the adequacy of the library resources as well as the challenges faced by the library clients in meeting their needs. Out of 360 copies of the questionnaire administered, all were completed and returned. Data were presented for analysis using the descriptive statistics which include; frequency count, percentages and tables.

Results and Discussion

Demographic and socio-economic characteristics of the Respondents

Table 1 reveals that 210 respondents were males, representing 58.3% of the sample population, while 150 respondents 41.7% were the female library clients. This finding indicates that the females are not using the library as much as the males. The disparity in information literacy known to exist between adult male and female population in Ghana is replicating itself again among the youths.

Table 1: Distribution of Respondents by Gender

Gender	Frequency	Percentage
Male	210	58.3
Female	150	41.7
Total	**360**	**100**

Table 2 shows the age range of respondents. It was observed that majority of the clients (77.5%) of CSIR-INSTI library were between the ages 16 and 30 while 10% were above 30 years. Only 12.5% were between 10 and 15 years. This implies that the majority of the people using the library were youths.

Table 2: Distribution of Respondents by Age

Age Range	Frequency	Percentage
10-15	45	12.5
16-20	177	49.2
21-30	102	28.3
31-50	36	10.0
Total	**360**	**100**

Table 3 shows that the majority (78.9%) of the respondents were found unmarried, implying the predominance of the young singles as constituting majority of the library clients while 21.1% of the respondents were found married.

Table 3: Distribution of Respondents by Marital Status

Marital Status	Frequency	Percentage
Married	76	21.1
Single	284	78.9
Total	**180**	**100**

The results in Table 4 show that 40.0% of the respondents were students who are in higher institutions of learning and secondary schools. Distantly followed were farmers, 25.78% and University lecturers, 13.1%. Extension agents were 11.4% while Research Scientists were 9.7%. The results are expected as all the research institutes within the CSIR have their own libraries. Also student category of clients formed the majority of the library clients. The predominance of students especially those in higher institution may be due to the fact that there are more science students in the University of Ghana, Accra polytechnic and secondary schools in the Accra Metropolitan area where the library is situated.

Table 4: Distribution of Respondents by Occupation

Occupation	Frequency	Percentage
Research Scientists	35	9.7
Extension officer	41	11.4
University lecturer	47	13.1
Farmer	93	25.8
Student	144	40.0
Total	**360**	**100**

Information needs relating to research (50.0%), crop production (11.1%) and personal use (8.3%) indicated their predominance among the respondents while information needs regarding agro-processing (6.9%), lecture/address (6.1%), policy development (5.6%), community education (5.0%), animal production (3.6%) and Marketing information (3.3%) were in the minority. The finding indicates that, students who were the majority of the library clients needed information to support their academic programmes and their research (Table 5).

Table 5: Information needs of the respondents in the library.

Information Needs	Frequency	Percentage
Marketing information	12	3.3
Animal production	13	3.6
Community education	18	5.0
Policy development	20	5.6

Lecture/address	22	6.1
Agro processing	25	6.9
Personal use	30	8.3
Crop production	40	11.1
Research	180	50.0

*Multiple responses

According to the study, AGORA (15.9%) featured prominently in satisfying the information needs of respondents. This could be as a result of the information type of journals that are found in the AGORA database. This was followed by OARE (15.6%) and Sciencedirect (15.5%) respectively. It was noted that HINARI (8.4%), CSIR-INSTI Databases (8.0%), Oxford (7.2%) and SAGE journals (5.8%) were not averagely used by clients of the library. On the other hand only a small percentage of the clients used Ovid online, Journal of Extension, Academic Journals, Journal Storage, Emerald and BIOONE databases as indicated by Table 6. The low response rate for the rest of the sources is however expected as those sources contain different subjects as a source of wider reach among majority of respondents.

Table 6: Information sources used by clients

Sources in the library	Frequency	Percentage
BIOONE	20	3.2
Emerald	20	3.2
Journal Storage (JSTOR)	21	3.4
Academic Journals	22	3.5
Journal of Extension	32	5.2
Ovid Online	32	5.2
SAGE Journals	36	5.8
Oxford University Press, Journals	45	7.2
CSIR-INSTI Databases	50	8.0
HINARI	52	8.4
Science direct	96	15.5
OARE	97	15.6
AGORA	98	15.9

Multiple responses

Table 7 show that majority (45.6%) of the clients indicated that resources in the library were highly adequate meeting their information needs. On the other hand, 33.6% also specified that the resources were very adequate while 13.9% said the resources were fairly adequate. Only 6.9% were of the view that the resources were poorly adequate. Provision of information in the manner most useful to its clients is the ultimate test of all libraries. However libraries are not able to adequately provide information to all clients.

Table 7: Adequacy of the library resources

Adequacy of information	Frequency	Percentage
Poorly adequate	25	6.9
Fairly adequate	50	13.9
Very adequate	121	33.6
Highly adequate	164	45.6

Majority of the clients (45.0%) reported that resources in the CSIR-INSTI library were relevant to their information needs. Similarly, 28.3% of the clients also indicated that the resources were highly relevant while 15.6% said the resources were fairly relevant. Only 11.1% were of the view that the resources at CSIR –INSTI library were not relevant to their information needs. This is evident in Table 8

Table 8: Relevance of library resources

Relevance of information	Frequency	Percentage
Not relevant	40	11.1
Fairly relevant	56	15.6
Very relevant	102	28.3
Highly relevant	162	45.0

Table 9 indicates that the major constraints that hindered meeting users' information needs include no computers for clients to search for information (38.1%) and clients are not allowed to use the internet (21.6%). Similarly, 20.8% clients claim that they are not allowed to charge their laptops in the library while 19.4% of clients said textbooks in the CSIR – INSTI library were too old and outdated. The response may be explained against the backdrop of the general state of neglect of special libraries in Ghana. The results confirms Iwhiwhu (2008), who reported that major of the problems inhibit the provision of efficient library services in Nigeria include lack of physical infrastructure, lack of information and communication technologies (ICT) tools and the Internet.

Table 9: Constraints to meeting respondents' information needs

Constraints	Frequency	Percentage
No computers for clients to search for information	137	38.1
Clients are not allowed to use the internet	78	21.7
Clients are not allowed to charge their laptops in the library	75	20.8
Textbooks are too old	70	19.4
Total	**360**	**100.0**

In order to ameliorate these constraints, most respondents suggested that the library should acquire more computers and relevant books (64.9%), improve Internet access to clients (47%).

Conclusion

The CSIR-INSTI Library as a specialized library was generally concerned with provision of science and technology information to a particular type of clients. The Library provided services to clients, aiming at satisfying the organizational goals through the provision of appropriate information resources and services. The library also provides activities according to the needs of clients of the library.

Findings from the study revealed that more males use the CSIR-INSTI library than female while clients are in their youthful ages. Again it was revealed that majority of the clients were students followed by farmers. Thus information sought for by clients was for research and crop production.

The study further revealed that Access to Global Online Research in Agriculture (AGORA), Online Access to Research in the Environment (OARE) and Science direct databases were the most use databases for information retrieval by clients.

Furthermore, 45.6% and 33.6% of the clients claim that the resources in CSIR-INSTI library were highly adequate and very adequate in meeting their information needs.   Additionally, clients 45.0% and 28.3% rated the resources in CSIR-INSTI library as highly relevant and very relevant respectively.

Moreover, clients were faced with the situation where there are no computers for clients to search for information on their own. Similarly clients are not allowed to use the internet and also charged their laptops in the library.

Recommendations

Based on conclusion drawn above, the following recommendations are hereby made:

1. More females should be encouraged by the staff of CSIR-INSTI library to make use of the facility.
2. The management of CSIR-INSTI library should subscribe to more science based databases to enable clients to have varied sources of information to help them in their research activities.
3. The library must as a matter of policy periodically re-assess the information needs of their clients. This is even more imperative now that the clients have developed sophisticated information needs which are constantly changing
4. The Ministry of Environment, Science, Technology and Innovation must ensure that the minimum standard required for CSIR – INSTI library to provide effective and efficient services as recommended by IFLA/UNESCO, is adhered to. The recommendation cuts across staff, nature of collection, services, structure, equipment, policy and management.
5. The Ministry of Environment, Science, Technology and Innovation must be committed towards CSIR-INSTI library development. Adequate and timely release of funds is essential and necessary for the library to be comfortable in discharging their responsibilities to their clients. Adequate budgetary allocation is needed to stock library building with current and relevant materials and for staff capacity building.

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