# Role of Library and Information Professionals as Teachers and Trainers in Agricultural Education: an Experience of the Kerala Agricultural University, India

A.T. Francis*, C. Abdul Razak* and Humayoon Kabir#

## Introduction

Latest developments in Information and Communication Technologies (ICT) have made the concept, "Libraries without walls", into a practical reality. This has posed several challenges to the information work force and the information users. At the same time, we have noticed the issues related to the information overload and information quality. In this juncture, efforts are strengthening to develop means to persuade and equip the users and information specialists to achieve maximum efficiency in information services. It was observed that one of the important reasons for the under utilization of electronic information is the lack of requisite level of working knowledge and consumption skills among customers and information intermediaries (Sridhar, 1997). To improve the situation, the conventional user education programmes need be redefined and reengineered, to be it more technology oriented. It should be designed in such a way to provide confidence to the user in locating desired information (Francis, 2005).

## Kerala Agricultural University (KAU)

Agricultural Universities in India are formed by special Acts and Statutes, either of the Government of India or of different State Governments. At present there are 38 Agricultural Universities in the country. All these universities are functioning in more or less similar pattern as provided in the Model Act, framed by the Government of India. The area of activities of these universities are not only confined to the conventional fields such as agriculture, agricultural engineering, veterinary science, fisheries, etc. but also include other areas such as co-operation, rural management, biotechnology, bioinformatics, environmental science, intellectual property rights, etc.

KAU is the only one agricultural university in Kerala with the authority to operate in the entire State of Kerala. The KAU has 10 constituent colleges, six Regional Agricultural Research Stations, 26 Research Stations, three Centres of Advanced Studies, 10 Instructional Farms and six specific Centres of Research and Studies. The KAU Library and Information System (KAULIS) have a three tier structure as the University Library in its apex and College Libraries and Research Station Libraries in the second and third levels respectively. The University Librarian is the professional head the system.

As libraries world over are on the verge of rapid changes due to the reasons such as explosion of knowledge and literature, emergence of new subjects, advent of modern ICTs, etc., the KAULIS also had witnessed several changes in this line. But, these changes create lot of problems to the users, staff and management. Initially, though there was some resistance to accept the changes and adopt the new technologies, the positive factors like easy availability, accessibility, flexibility, etc. of the digital documents have created an overwhelming response from the users and this has necessitated a total change in the tools and service procedure of the libraries. So, several new skills, related to ICTs, have to be acquired by the users and

staff to cop up with the situation.  Ultimately, this will enable the students and scientists to get maximum benefit of the digital information resources (Carey and Gregory, 2002).

From the management side, the whole operations of the libraries need to be changed to suit the requirements warranted by the modern environment. The operations such as acquisition, classification, cataloguing, journal subscription, reference work, documentation service, financial management, etc. have to be thoroughly reengineered in the context of modern ICTs.  The concepts such as library cooperation, centralized and cooperative classification and cataloguing, digital document delivery, etc. have emerged in different forms.  Online Journals and Library Consortia became a prominent and effective approach now.  The library management and professionals can play an important role to manage the changes in an effective way.

The Indian Council of Agricultural Research (ICAR), the controlling agency for agricultural universities in India, has implemented a special project with the assistance of the World Bank to modernize the Library and Information Systems of all agricultural universities and the ICAR Institutes in the country.  The project included special funding, technical assistance and training for the library staff, teachers and students.  Substantial improvement in the operations and performance has been achieved with this project. The university libraries have automated most of their operations and many of them could develop digital libraries of theses and dissertations.

## Academic Role of Library and Information Professionals

As part of the above project, several training programmes have been conducted in KAU to orient the teachers and research students in the modern methods of information processing. In the changed context, educating the library users as well as staff became an important and continuous task to achieve maximum results.  As an ex-officio member of the Academic Council, the University Librarian is actively participates in the process of designing course curriculum, academic regulations, etc. of the University.  Through this, the Librarian gets an effective chance to assist in the implementation of library centered education in the university.

The information science professionals working in the constituent colleges are also take active role in the education and research programmes.  The syllabus for the undergradute, postgraduate and research courses contains modules such as library classification, cataloguing, online and CD-ROM databases, library and information technologies, information retrieval, etc.  In some other agricultural universities, this education is offered as a full credit course as part of the curriculum.  This is a better opportunity to educate and train the students in their effort to search and retrieve the required information.  In building and exploiting intellectual capital, the information system manager, is not only catalyst, but also a collaborator (Bailey, 1998).  Regular and special training courses of short duration are also being conducted by the KAULIS to prepare students, teachers and library staff to orient them in the changing environment.

## Objective and Methodology of the Study

In order to assess the effectiveness and relevance of these academic and short term programmes, a study was conducted among the teachers, students and library staff of KAU. It was also intended to review the involvement of the library and information science professionals in academic programmes.  The utility of such programmes to re-design the

operations of the library and information system for the modern environment is also examined.

The study was mainly based on personal interview, discussions, observing the library users and staff and their methods and procedures in information retrieval, etc. Data was also collected from participants of the short term courses on Information Retrieval, conducted by the university during the last three years. Records of library services and operations were also compared to validate the facts received.

**Major Findings**

1. Ninety per cent of the users have some knowledge on modern ICTs and digital information resources. But, all of them are admitted that this knowledge is highly inadequate to locate desired information from CD-ROM databases or Internet. It was also disclosed by many users that lot of time is being wasted by the inefficient methods of information retrieval.

2. All teacher as well as student users stressed the need for regular library instruction / user orientation courses and such programmes should be more oriented towards the application of modern ICTs with topics such as database search, information retrieval, search engines, retrieval softwares, formulation of search strategies, sorting, printing and downloading of records, etc.

3. Seventy per cent of the total respondents revealed that these programmes had helped to increase the efficiency in searching the databases. Eighty five per cent of the students expressed that the formal academic programmes as part of course curriculum are very helpful to locate the documents from the libraries and retrieve information from digital databases.

4. All library staff stressed the need for formal as well as short term courses for all types of users. They felt that such courses are helpful for the users to raise the reference queries clearly. This can also provide a platform to establish close relationship with the users.

5. Sixty five per cent of the library staff opined that these courses helped to update their technical knowledge and service efficiency. But, fifteen per cent has pointed out the problem of increase in the work load for preparing for classes and study materials, organizing work for short term courses, etc.

6. There is a normal tendency by the users and staff to resist the changes in the beginning and when convinced and accustomed by sufficient induction, orientation and training programmes, all are becoming happy to adapt to the modern technologies.

7. Detailed study of the topics such as ICTs, content development, digital libraries, knowledge management, online journals, digital document delivery, etc. should be included in the courses designed for the users and staff. More stress should be given for practical training. It was also observed that a frequent revision is needed in the topics included in such courses.

**Conclusion**

The study revealed that there is a strong relationship between the user orientation and use of information resources, particularly the digital resources. It is also realised that many of the problems created by the transition of information documents from print to electronic medium could be better managed with the help of proper user education courses with stress on ICTs. Because of this, the teachers and students have shown special interest to absorb knowledge on modern methods of information retrieval. Academic courses as part of the curriculum will add weight and importance to such programmes. The library and information science professionals are also opined that such programmes will help in re-defining and re-engineering the Library and Information System for the modern era. Their involvement as teachers and trainers will have an over all impact on improving the performance of the libraries and ultimately the user satisfaction.

**References**

1. Asefeh Asemi (2005). Familiarity and use by the students' of digital resources available in the academic libraries of medical science university of Isfahan (MUI, Iran. In *Multilingual computing and information management in networked digital environment*. Third International Convention on Automation of Libraries in Education and Research Institutions – 2005, Kochi, India, February 2-4, 2005, organized by the Inflibnet Centre/UGC and Cochin University of Science and Technology, edited by Murthy et al. Ahmedabad: Inflibnet Centre. 648-657 pp.
2. Bailey, Robert L (1998). Information management training and education: a vital need for society of tomorrow. In *Towards the new information society of tomorrow: innovations, challenges and impact*. 49th FID Conference & Congress, New Delhi, India, October 11-17, 1998, edited by Malwad et al. New Delhi: INSDOC. II.130-135 pp.
3. Carey, J and Gregory, V (2002). Students' perceptions of academic motivation, interactive participation and selected pedagogical and structural factors in web based distance learning. Journal of Education for Library and Information Science, 431, p.6-15.
4. Francis, AT (2005). Library consortia model for country wide access of electronic journals and databases, Iran. In *Multilingual computing and information management in networked digital environment*. Third International Convention on Automation of Libraries in Education and Research Institutions – 2005, Kochi, India, February 2-4, 2005, organized by the Inflibnet Centre/UGC and Cochin University of Science and Technology, edited by Murthy et al. Ahmedabad: Inflibnet Centre. 497-504 pp. = Sridhar, MS (1997). Need for imparting consumption skills to customers and information intermediaries for better utilization of electronic information. In *Access to Electronic Information*. Sixteenth annual Convention and Conference of Society for Information Science, Bhubaneswar, India, January 29-31, 1997, edited by Mahapatra et al. Bhubaneswar: SIS. 321-330 pp.
5. Sridhar, MS (1997). Need for imparting consumption skills to customers and information intermediaries for better utilization of electronic information. In *Access to Electronic Information*. Sixteenth annual Convention and Conference of Society for Information Science, Bhubaneswar, India, January 29-31, 1997, edited by Mahapatra et al. Bhubaneswar: SIS. 321-330 pp.

**Authors**

*      A.T. Francis
Kerala Agricultural University, Thrissur – 680 656, India
e-mail: francisaloor@yahoo.com

**\***      C. Abdul Razak
Kerala Agricultural University, Thrissur – 680 656, India
e-mail: razaklib@yahoo.co.

\#      Dr. Humayoon Kabir
Cochin University of Science and Technology,
Cochin – 682 022, India

# Role of Library and Information Professionals as Teachers and Trainers in Agricultural Education: an Experience of the Kerala Agricultural University, India

A.T. Francis*, C. Abdul Razak* and Humayoon Kabir#

## Extended Abstract

One of the important reasons for the under utilization of electronic information is the lack of requisite level of working knowledge and consumption skills among customers and information intermediaries. So, the conventional user education programmes need be redefined and reengineered with more emphasis on Information and Communication Technologies (ICT). It should be designed in such a way to provide confidence to the users in locating desired information.

There are 38 Agricultural Universities functioning in India and they are formed by special Acts and Statutes, either of the Government of India or of different State Governments. The Kerala Agricultural University (KAU) is the only one such university in the State of Kerala. It has 10 constituent colleges, six Regional Agricultural Research Stations, 26 Research Stations, three Centres of Advanced Studies, 10 Instructional Farms and six specific Centres of Research and Studies. The KAU Library and Information System (KAULIS) has a three tier structure consisting of the University Library, College Libraries and Research Station Libraries. The University Librarian is the professional head the system.

As modern libraries world over are on the verge of rapid changes, the KAULIS also had witnessed several changes in this line. Though there was some initial resistance to accept the changes and adopt the new technologies, the positive factors like easy availability, accessibility, flexibility, etc. of the digital documents have created an overwhelming response from the users and this has necessitated a total change in the tools and service procedures of the libraries. Consequently, several new skills, related to ICTs, have to be acquired by the users and staff. From the management side, the whole operations of the libraries need to be changed to suit the requirements warranted by the modern environment. The concepts such as library cooperation, centralized and cooperative classification and cataloguing, etc. have emerged in different forms. Online Journals and Library Consortia became a prominent and effective approach now. Here, the library management and professionals could play an important role to manage the changes in an effective way.

The Indian Council of Agricultural Research (ICAR), the controlling agency for agricultural universities in India, has implemented a special project with the assistance of the World Bank to modernize the Library and Information Systems of all agricultural universities and the ICAR Institutes in the country. The project included special funding, technical assistance and training for the library staff, teachers and students. Substantial improvement in the operations and performance has been achieved with this project. The university libraries could automate most of their operations and many of them developed digital libraries of theses and dissertations.

**Academic Role of Library and Information Professionals**

As part of this project, several training programmes have been conducted in KAU to orient teachers and research students in the modern methods of information management. As an ex-officio member of the Academic Council, the University Librarian is actively participates in the process of designing course curriculum, academic regulations, etc. of the university. Through this, he gets an effective chance to assist in the implementation of library centered education in the university. The information science professionals working in the constituent colleges are also take active role in the education and research programmes. The syllabus for the undergraduate, postgraduate and research courses contains modules such as library classification, cataloguing, online and CD-ROM databases, library and information technologies, information retrieval, etc. In some other agricultural universities, this education is offered as a full credit course as part of the curriculum. This is a better opportunity to educate and train the students in their effort to search and retrieve the required information. Regular and special training courses of short duration are also being conducted by the KAULIS to prepare students, teachers and library staff to orient them in the changing environment.

**Objective and Methodology of the Study**

In order to assess the effectiveness and relevance of these academic and short term programmes, a study was conducted among the teachers, students and library staff of KAU. It was also intended to review the involvement of the library and information science professionals in academic programmes. The utility of such programmes to re-design the operations of the library and information system for the modern environment is also examined. The study was mainly based on personal interview, discussions, observing the library users and staff, review of literature, etc. Data was also collected from participants of the short term courses on Information Retrieval, conducted by the university during the last three years. Records of library services and operations were also compared to validate the facts received.

**Major Findings**

1. Ninety per cent of the users have some knowledge on modern ICTs and digital information resources. But, all of them are admitted that this knowledge is highly inadequate to locate desired information from CD-ROM databases or Internet. It was also disclosed by many users that lot of time is being wasted by the inefficient methods of information retrieval.

2. All teacher as well as student users stressed the need for regular library instruction / user orientation courses and such programmes should be more oriented towards the application of modern ICTs with topics such as database search, information retrieval, search engines, retrieval softwares, formulation of search strategies, sorting, printing and downloading of records, etc.

3. Seventy per cent of the total respondents revealed that these programmes had helped to increase the efficiency in searching the databases. Eighty five per cent of the students expressed that the formal academic programmes as part of course curriculum are very

helpful to locate the documents from the libraries and retrieve information from digital databases.

4. All library staff stressed the need for formal as well as short term courses for all types of users. They felt that such courses are helpful for the users to raise the reference queries clearly. This can also provide a platform to establish close relationship with the users.

5. Sixty five per cent of the library staff opined that these courses helped to update their technical knowledge and service efficiency. But, fifteen per cent has pointed out the problem of increase in the work load for preparing for classes and study materials, organizing work for short term courses, etc.

6. There is a normal tendency by the users and staff to resist the changes in the beginning and when convinced and accustomed by sufficient induction, orientation and training programmes, all are becoming happy to adapt to the modern technologies.

7. Detailed study of the topics such as ICTs, content development, digital libraries, knowledge management, online journals, digital document delivery, etc. should be included in the courses designed for the users and staff. More stress should be given for practical training. It was also observed that a frequent revision is needed in the topics included in such courses.

The study revealed that there is a strong relationship between the user orientation and use of information resources, particularly the digital resources. It is also realised that many of the problems created by the transition of information documents from print to electronic medium could be better managed with the help of proper user education courses with stress on ICTs. Because of this, the teachers and students have shown special interest to absorb knowledge on modern methods of information retrieval. Academic courses as part of the curriculum will add weight and importance to such programmes. The library and information science professionals are also opined that such programmes will help in re-defining and re-engineering the Library and Information System for the modern era. Their involvement as teachers and trainers will have an over all impact on improving the performance of the libraries and ultimately the user satisfaction. This paper provides a detailed account of the study and its findings.