

REVIEW PAPER

Consortium for e-Resources in Agriculture

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ABSTRACT

Consortium for e-Resources in Agriculture is a e-Consortium of Agricultural Libraries under the Indian Council of Agricultural Research for National Agricultural Research System libraries. The National Agricultural Research System of India comprises Indian Council of Agricultural Research and Central/State Agricultural Universities under Department of Agricultural Research and Education, Ministry of Agriculture, Govt of India. The paper discusses the background, main features, and advantages of the consortium for e-resources in Agriculture.

Keywords: Consortium in agriculture, indian council of agricultural research, national agriculture research system, information and communication technology

1. INTRODUCTION

National Agriculture Research System (NARS) comprises 41 State Agricultural Universities, one Central University, and Indian Council of Agricultural Research (ICAR), which again comprises 49 ICAR's Central Research Institutes including ICAR headquarter, five Deemed Universities, five National Bureaus, 12 Project Directorates, 30 National Research Centres, 77 All India Coordinated Research Projects and Networks, eight Trainers Training Centres, and 562 Krishi Vigyan Kendras (KVKs) [1].

Indian Council of Agricultural Research is a major agricultural scientific autonomous organisation in the country and unique in having concurrent responsibility for research, education, and extension. Formerly known as Imperial Council of Agricultural Research It was established on 16 July 1929 as a registered society under the Societies Registration Act 1860 in pursuance of the Report of the Royal Commission on Agriculture. The ICAR has its headquarters at Krishi Bhavan, New Delhi and is an apex body for coordinating, guiding, and managing research and education in agriculture including horticulture, fisheries, dairy, and animal sciences in the entire country [2]. ICAR has played a pioneering role in ushering Green Revolution and subsequent developments in agriculture in India through its research and technology development that has enabled the country to increase the production of food grains by four times, horticultural crops

by 6 times, fisheries by 9 times (marine 5 times and inland 17 times), milk 6 times, and eggs 27 times since 1950-51, thus making a visible impact on the national food and nutritional security. It has played a major role in promoting excellence in higher education in agriculture [2].

2. AGRICULTURAL LIBRARIES

An agricultural library is the special library, which primarily renders service to the policy makers, specialists, scientists, teachers, students, researchers, and farmers in agriculture and allied subjects. It is the nerve centre of all educational, research, trainings and extension activities in agriculture. Its collection and the clientele are discrete and pertaining to agriculture and allied subjects only. Agricultural libraries have now become highly complex centre with multiplicity of functions catering to a wide variety of clientele having divergent interests.

Every agricultural institute/university has got its own independent library with self-contained budget and resources to serve their users. Nowadays information explosion, diversity of user needs, multidisciplinary research, duplicity of resources, escalation in cost of foreign journals, and financial crunch have made self-sufficiency which lead libraries to opt for resource sharing. But advent of Internet, advancement of ICT facilities, easy and 24x7 accessibility have made the libraries to opt for

consortium of e-journals to get maximum coverage of journals to larger number of users with minimum amount of budget. To maximise discipline-wise coverage, relevance of journals to users, number of users relevant to publishers, economics of pricing models given by publishers for using additional advantages like unlimited access, unlimited downloads, easy accessibility, any where at any time accessibility, full-text downloads, etc., made the authorities of ICAR to think about formation of e-Consortium under the Project of NAIP Component I: ICAR as the Catalysing Agent for Management of Change in the Indian NARS, Sub-component I: Information, Communication and Dissemination System (ICDS), Module I: Information and Communication Technology (ICT) in the name of CeRA (Consortium for e-Resources in Agriculture) [3].

Sufficient infrastructure like hardware, software, networking, bandwidth to download full-text of article with images etc., are prerequisite of any e-Consortium. Since these facilities are already provided by ICAR to all its Institutes, Deemed Universities, State Agricultural Universities and Central University in the first phase of World Bank project National Agricultural Technological Project (NATP 1998-2005) the ICAR straight away considered to form e-Consortium under next phase of World Bank project National Agricultural Innovation Programme (NAIP 2006-2012). NAIP is the World Bank assisted agriculture project being executed by National Agricultural Research System (NARS) with lifespan of six years, starting from 24 July 2006 to 2012.

3. FORMATION OF CONSORTIUM FOR E-RESOURCES IN AGRICULTURE

CeRA was launched successfully on 30 April 2008 at its headquarters at IARI with the following objectives [4]:

- ❖ To develop the existing R & D information resource base of ICAR institutes/agricultural universities, etc., comparable to that existing in world leading institutions/organisations.
- ❖ To create an e-access culture among scientists/teachers in ICAR institutes/SAU.
- ❖ To develop a *Science Citation Index (SCI)* facility at IARI for evaluation of scientific publications.
- ❖ To assess the impact of CeRA on the level of research publications measured through *SCI* (Fig.1).

CeRA is being hosted at Unit of Simulation and Informatics, A-0 Block, Lal Bahadur Shastri Building, IARI, New Delhi-110 012. Its functioning is being monitored by the following Committees:

Steering Committee

- ❖ Advisory in nature.
- ❖ Policy issues.

Negotiation and Monitoring Committee

- ❖ Negotiate with publishers.

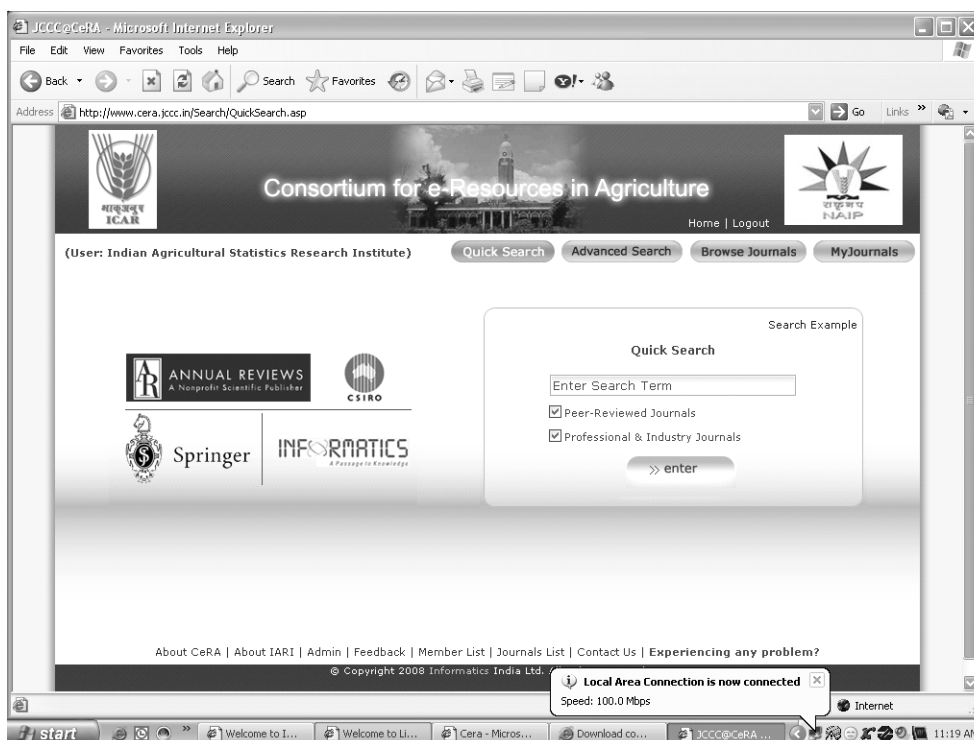


Figure 1. Home page of CeRA for IP-based user.

- ❖ Monitor progress of activities.

Working Committee

- ❖ Discuss current activities.

Access to CeRA was initially given to the following 124 institutes through IP addresses:

- (i) Deemed Universities of ICAR: 05.
- (ii) ICAR HQ (Krishi Bhavan, Krishi Bhavan I, Krishi Bhavan II): 03.
- (iii) ICAR Institutes: 42.
- (iv) National Bureaus: 05.
- (v) National Research Centres: 21.
- (vi) Project Directorates: 09.
- (vii) State Agricultural Universities: 38.

Out of 124 institutes, 114 institutes successfully received access through IP address, but institutes/SAU located in remote and north-eastern areas got access through user name and password [4]. Consortium initially entered into agreement for three years under centralised funding and subscription of NAIP by maintaining print subscription of individual libraries who are members of the consortium for the journals of the following publishers on Agriculture, Veterinary Science, Fisheries, Crop Science, Computer Science, Soil Science, Animal Science, etc. (Fig. 2).

- ❖ Springer Link: 1300.
- ❖ Annual Reviews: 33.
- ❖ CSIRO Australia: 08.
- ❖ ScienceDirect: More than 300.

- ❖ Open J-gate: 613 (It is an open portal).

4. MAIN FEATURES/FACILITIES OF CONSORTIUM

4.1 Springer Link

It is a platform of Springer and bouquet of e-journals on different subjects like Biomedical Sciences, Life Sciences, Agriculture, behavioral Sciences, Economics, Chemistry, Material Sciences, Engineering, Humanities, Social Sciences, Mathematics, Statistics, Veterinary Medicine, Physics, and Professional and Applied Computers published by Springer. Through this user can access the full text of around 1300+ journals since 1996. (Fig. 3) [5].

4.2 Annual Reviews

Annual Reviews are authoritative, analytic reviews in 33 focused disciplines within the Biomedical, Life, Physical, and Social Sciences etc. CeRA is subscribing 33 Reviews in agriculture including Biochemistry, Biomedical Engineering, Biophysics, Cell and Developmental Biology, Entomology, Genetics, Immunology, Microbiology, Nutrition, Pathology, Pharmacology, Toxicology, Physiology, Phyto pathology, etc., since 1990 onwards (Fig. 4) [6].

4.3 CSIRO

CSIRO Publishing is an autonomous business unit within Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO). It publishes globally reputed journals on agriculture, the Plant and Animal sciences, and Environmental Management. CeRA is subscribing 08 journals in Agriculture and Plant Sciences with complete package access (Fig. 5) [7].

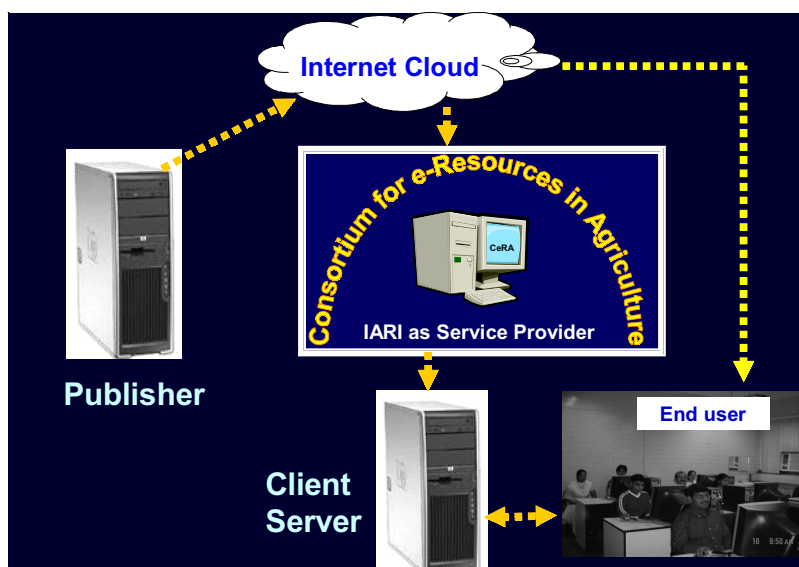


Figure 2. Schematic functioning of CeRA.

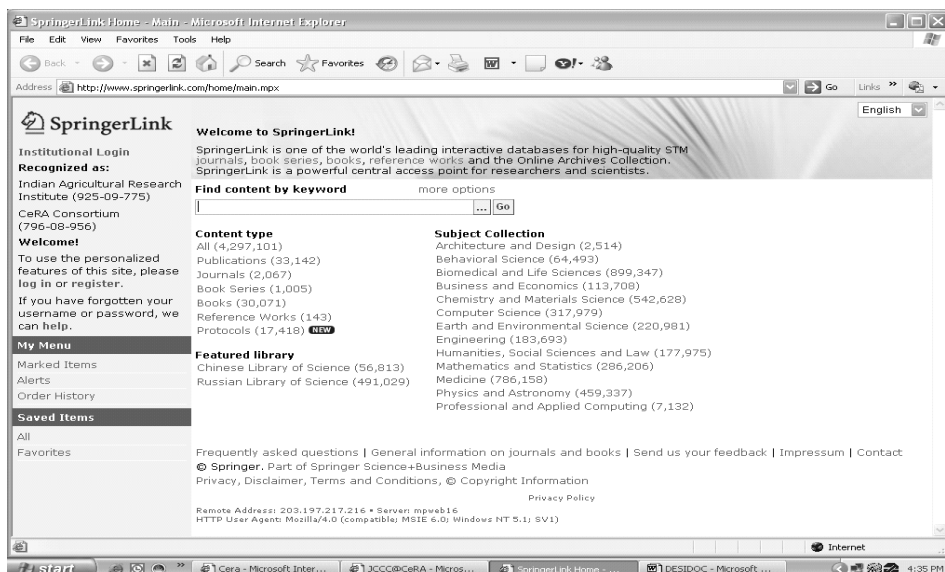


Figure 3. Home page of Springer Verlag.

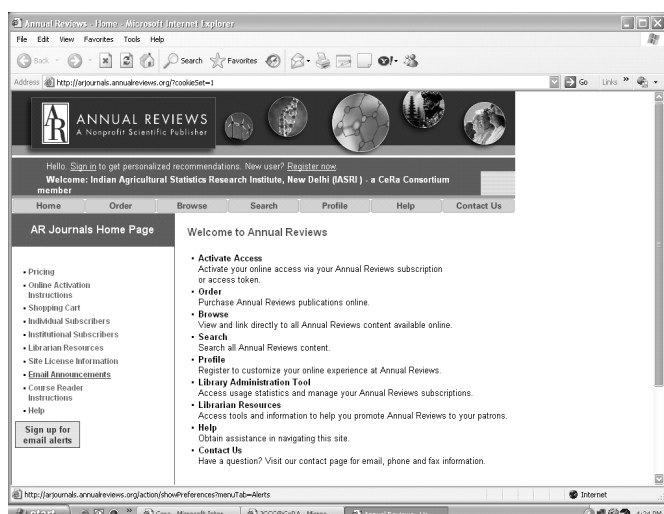


Figure 4. Home page of Annual Reviews.

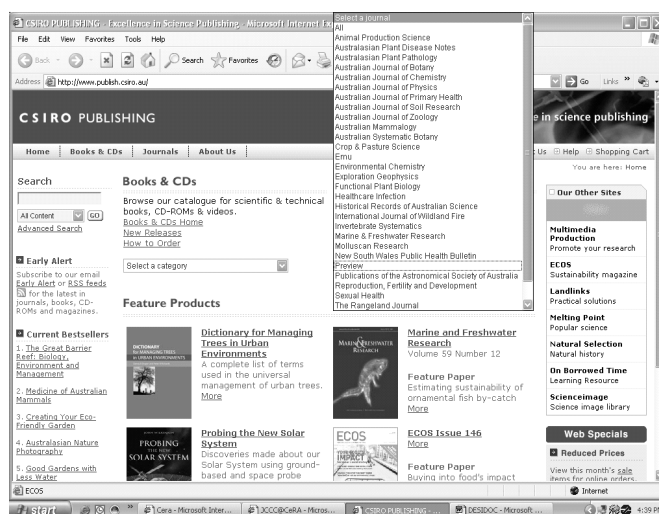


Figure 5. Home page of CSIRO.

4.4 ScienceDirect

ScienceDirect is the world's leading scientific full text database of Elsevier developed by articles/chapters from more than 2,500 peer reviewed journals and more than 10,000 books. CeRA is subscribing 300+ journals from the field of Agriculture and Biological Sciences (Fig. 6) [8].

5. ADDITIONAL FEATURES/FACILITIES OF CeRA

Apart from having above main feature of CeRA the JCCC Service (Journals Customs Content of Consortium) of Informatics, which covers contents of about 28, 770 journals at present (likely to be increased by approximately 50, 000 during the 2009) for all 123 member libraries is also available as an value added service. This service is being covered from Consortia journals, subscribed journals of member libraries, and

also open access journals of open j-gate since CeRA was implemented through consultancy of Informatics, Bangaluru. Creation and maintenance of CeRA website, promoting, organising user awareness programmes, trainings to users and librarians are also part of its consultancy activities.

When user try to access home page of CeRA, it will be verified with the IP provided by CeRA to Publishers. One official/Librarian has been identified as Administrator from each institute/university and has been assigned User Name, Password to open the admin login. Administrator is also responsible for Document Delivery Service. Members which could not get access through IP address are provided with User Name and Password separately. All functionalities available to Administrator can also be accessed by user except "Admin" functionality.

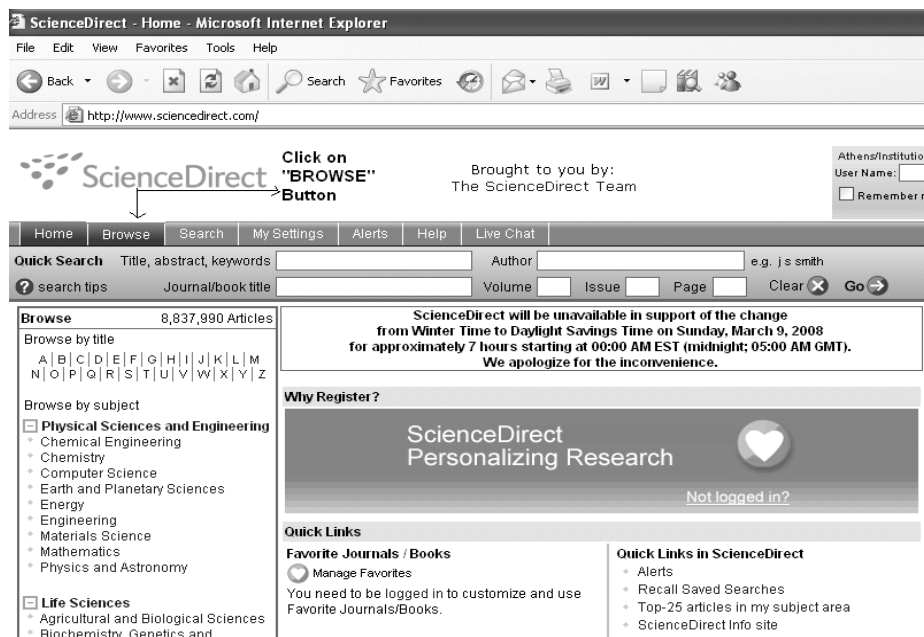


Figure 6. Home page of ScienceDirect.

5.1 Functionalities/Facilities for Administrator

This module is accessible only to Consortia Administrator or Institute Administrator [7]. The Consortia Administrator has the following rights:

- (i) Create new members.
- (ii) Edit the contact details, login details and IP details of other members.
- (iii) View region wise consolidated report of Document Delivery Request (DDR).
- (iv) View Statistics of DDRs sent.
- (v) View statistics of DDRs received.
- (vi) View and fulfill the DDRs received.
- (vii) View the status of DDRs sent.
- (viii) View Journals subscribed by consortia or his own library subscription on click of "Journal Configuration" button.
- (ix) Get the usage statistics on click of "Usage Statistics button".

The Institute Administrator can have all the facilities except (ii), (iii), and (iv) (Fig. 7).

Apart from the above privileges, institute Administrator can also see the following functionalities when login to "admin" functionality where facility is not accessible to User.

User: Organisation-wise and state-wise institute's details can be seen.

Usage Statistics: Service-, Journal-, Publishers-, and User-wise usage statistics can also be seen from this feature.

5.2 Journal's Configuration

Through this service Administrator can see the list of journals under open access, Consortium subscribed journals and individual library subscribed journals covered under JCCC.

5.3 Inter-Library Loan

Through this feature Administrator can have the following facilities:

- (i) Request received from users for document delivery between any particular date with details such as bibliographical details of article, requested by which institute/university, request date, its status like whether it is available in library or not available, if its is available whether it is dispatched or it is pending.
- (ii) Request sent by user from his own institute for document delivery between any particular date or range of dates with details such as bibliographical details of article, requested to which institute/university, request date, its status like received communication from other library, whether it is available in their library or not available, and if its is available whether it is dispatched or it is pending.
- (iii) Request received by his library from users of different/individual institute for document delivery in report form with details like institute's name, number of requests received, document delivery fulfilled or pending or unfulfilled.

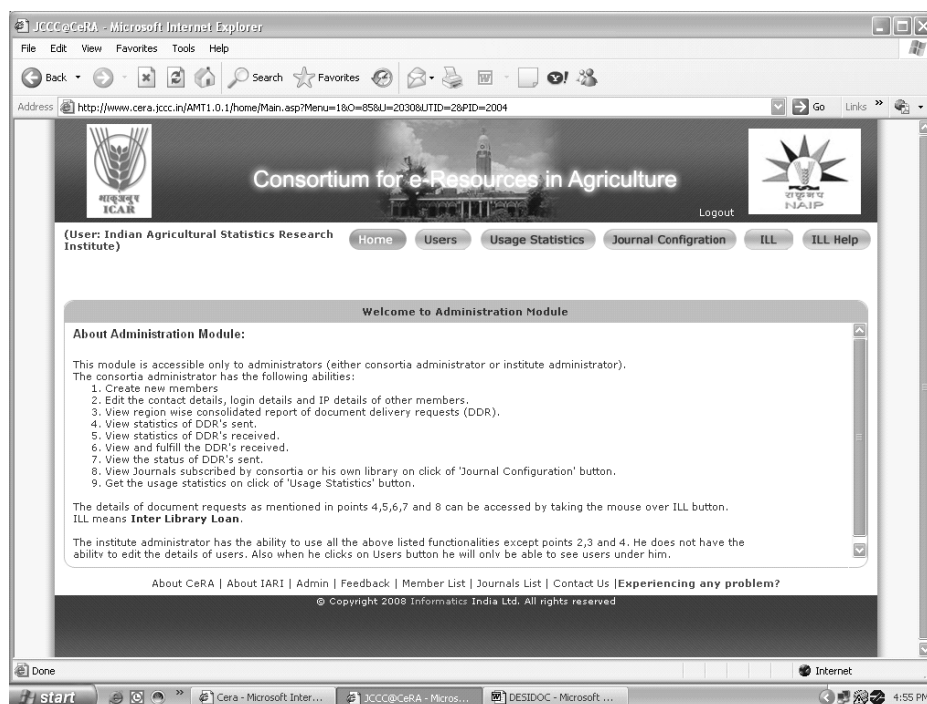


Figure 7. Screen shot of Administrator's page.

- (iv) Requests sent by user of his own institute to different/individual institute for document delivery in report form with details like institute's name, number of request sent, document delivery fulfilled or pending or unfulfilled.
- (v) Consolidated report of both requests made and received by own institute and their status in period of different dates.
- (vi) Consortium Administrator can see status of document delivery of any library.

6. FACILITIES FOR ADMINISTRATOR AND USER COMMUNITY UNDER JCCC SERVICE

The administrator and users have following facilities under JCCC [7]:

6.1 Quick Search

User's query like author, keyword, title can be searched in all peer reviewed journals and/or professional and industry journals. User can simplify his search by selecting subject either by agricultural and biological sciences, arts and humanities, basic sciences, biomedical sciences, engineering and technology, and social and management science or all subjects.

6.2 Advanced Search

It will search in all peer reviewed journals and/or professional and trade journals in advanced features by

using booleans operators as well as title, keyword, abstract, author, institute/address and selecting subjects on agriculture, biological sciences, arts and humanities, basic sciences, biomedical sciences, engineering and technology, social and environmental sciences, etc., and also by selecting publication year range or latest updated like last one week or last one month.

6.3 Browse Journals

User can browse the journals by subject, title or publisher in alphabetical order hyperlink.

6.4 My Journals

User will get the alerts of his interest after registering his name by creating his profile with mandatory details.

6.5 Experiencing Problem

User can interact with Consortium administrator through online chat about problem facing. When user made query and retrieve search results each article/journal will be indicated whether it's a Consortium Subscribed Journal (CSJ), Library Subscribed Journal of CeRA members (LSJ) or Open Access Journal (OAJ). If it is CSJ and OAJ, then user will have full text facility, if it is LSJ then Request for Article feature will be displayed with Name of the Institute where that particular journal is available so that user can simply click on it for requesting copy of an article so that request will go to particular library's admin account where this journals is available. When Institute Administrator login into "admin" module,

the details of articles requested by user to his Institute/ University and requests send by his Institute to other Institute / University and its status can be seen online to enable him take necessary action accordingly. Above all Consortium administrator has the right to see any Institute Administrator module.

6.6 Members list

Institute members under this consortium are listed alphabetically. By clicking on Institute the user can see the details of administrator/librarian/contact person like Department, Address, Phone/Mobile/Fax, E-mail, Institutes Website, etc., for requesting for article or document delivery.

7. CONCLUSION

CeRA has helped in developing the world class R&D information base of ICAR Institutes/agricultural university, and an e-access culture among scientists/teachers. Efforts are being made to bring journals of , John Wiley and Taylor and Francis's, and two journals of Nature. ICAR may also subscribe Web of Science and Indiajournals.com to further increase the scope of information retrieval.

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