



Knowledge management, information and communication, publicity services, and social media are the areas on which ICAR is laying emphasis to extend outreach of agricultural research and education. Directorate of Knowledge Management in Agriculture (DKMA) undertakes these activities through a demand driven mandate, strategic work plans and supporting policies, and also acts as the nodal centre and 'hybrid clearing house' of research and general information related to agriculture and allied sciences. To achieve its objectives, working linkages have been developed across ICAR Institutes (108), KVKs (641), Agricultural Universities (71), CGIAR institutions, related ministries of the Government of India, scientific and educational institutions and international organizations in related fields. A wide range of activities are regularly undertaken that include development and creation of information and knowledge products in print and electronic format; maintenance and content management of ICAR, DARE and NAIP websites including social media; trainings and workshops in knowledge management and communication; organization of showcasing on ICAR technologies; library services including collection, storage, retrieval and dissemination of information; maintenance of network and connectivity infrastructure at ICAR headquarters (KAB-I, KAB-II and NASC); and publicity and public relation services. Facilitation provided to various media organizations, including public telecast/broadcast through Doordarshan and All India Radio, respectively in identification of relevant and topical themes and experts in agriculture and allied sciences. ICAR is also maintaining close linkage with Press Information Bureau, Government of India and its regional centres for coverage of various events of ICAR and of importance to Indian agriculture. DKMA has played a leading role in enhancing visibility and branding of achievements of ICAR in media through regular press releases, advertisements and facilitating interviews/talks of eminent scientists of the ICAR.

DKMA provides facilitation and event management support to ICAR headquarters, ASRB, NAIP, NAAS and ICAR Institutes for organization of various events of national and international importance. The facilitation includes special publications, photography services, publicity services, showcasing, live webcasting and other related activities.

New initiatives and highlights

- On the occasion of visit of Hon'ble Prime Minister of India on 86th ICAR Foundation Day and Award



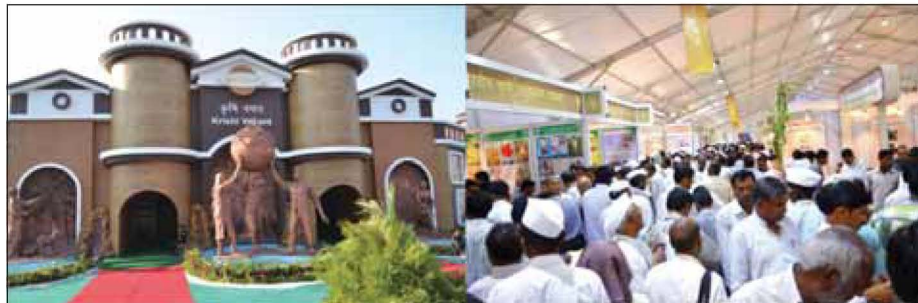
Ceremony, a special showcasing of agricultural technologies and products was designed and organized in which Prime Minister took keen interest. Live telecast, broadcast and webcast were also arranged on the occasion.

- On the conclusion of NAIP, DKMA undertook the responsibility of maintenance and implementation of activities under Consortium for e-Resources in Agriculture (CeRA), which was earlier a NAIP sub-project being implemented by the Indian Agricultural Research Institute, New Delhi.
- Social media was further strengthened with new initiatives to reach and interact with masses, especially youth, to respond their calls and queries. A photo contest on ICAR Facebook page on the theme 'Transforming Face of Indian Farm and Farmers', and a *Hindi Kavita Pratiyogita* were organized on the relevant theme to encourage use of Hindi on social media. Good numbers of quality entries were received in response to both the contests.
- A special media campaign was launched from January to June 2014 to highlight and disseminate major achievements and impact of NAIP on 'Indian agriculture and allied sectors'. This activity was undertaken under NAIP sub-project 'Mobilizing Mass Media Support for Sharing Agro-Information'.
- ICAR website and social media played a key role in dissemination of advisories and contingency plans during drought like conditions in early monsoon period and the cyclone Hudhud through regular updates and highlights.
- Revamped, redesigned and hosted NAIP website in CMS for better visibility and efficient content



management having user-friendly navigation for information.

- ICAR participated in the mega showcasing event of Indian agriculture *Krishi Vasant* (February 2014) at Nagpur in which DKMA played a central and leading role in organizing and designing the ICAR Hangar. Special issues of ICAR periodicals were published on this occasion.



- A *Hindi Sangoshthi* on the theme 'Role of Hindi in Dissemination of Science and Technology' was organized at ICAR (headquarters) during *Hindi Chetna Mass*. Experts from various academic and media organizations delivered theme oriented lectures to motivate audience for wide spread use of Hindi in scientific communications. Nearly 100 personnel from ICAR (headquarters) and its Institutes participated in the event.
- The internet network of KAB I, KAB II and NASC was upgraded to IPv6 compliance network equipments. Wireless network was established in KAB I, KAB II and NASC. To facilitate and integrate the network facilities, an exclusive network centre was established at KAB I having state-of-the-art infrastructure.
- An exclusive website of ICAR library was designed and hosted to facilitate and encourage

potential users. KOHA library management software was implemented with Web-OPAC facility.

Window to the world

The website of ICAR (www.icar.org.in) was maintained with its bilingual (Hindi and English) character in presenting knowledge and information for a wide range of stakeholders that include researchers, students, policy planners, farmers and civil societies. The website is updated on real time basis with news, success stories, announcements, circulars, tenders and other relevant content. Currently, on an average over three lakh hits per month from visitors across the globe were recorded; India, USA, Spain, Indonesia, United Kingdom being the top five countries among the 202 countries. On an average 1.7 lakh unique visitors were recorded per month during the reporting period. Nearly 1,100 new pages were added to the website and more than 1,700 pages were updated with latest inputs. Specific weather based agro-advisories and contingency plans for agricultural activities are updated on the website regularly to benefit farmers and extension functionaries. With regular uploads, the number of videos on YouTube Channel of ICAR has increased to more than 130 that include video films, lectures/interviews by dignitaries and eminent scientists, proceedings of national and

Capacity Building in Knowledge Management and Communication

ICAR imparts training and conducts workshops through DKMA in various areas of knowledge management and communication. Some of the key activities in this regard are as under:

- Training-cum-workshops under CeRA for users across the NARS. Experts and functionaries sensitize users to avail and maximize the potential use of CeRA for academic purposes.
- Training programmes on data indexing for AGRIS database of FAO using WebAGRIS software and preparation of input for AGRIS database for the participants from ICAR Institutions and Professional Societies.
- Training-cum-workshops for editorial staff of professional societies/academies for online publication of research journals.
- Workshops for scientists and extension functionaries on writing of news and success stories for ICAR website and mass media.
- Lectures and presentations on knowledge management and communication for scientists of NARS.

Highlights of Media Campaign on NAIP

Comprehensive activities were undertaken through print, electronic and web media including media visits. Some of the key accomplishments are as under:

- Created the content and got published nearly 40 in-depth stories and 65 articles in English, Hindi, Malayalam, Gujarati, Marathi and Telugu in national and regional media.
- Created the content, designed and published five sponsored features in national English magazines.
- Created the content, designed and published advertisements in 17 national newspapers in Hindi and English.
- Developed 10 video spots in Hindi and English for telecast on national and regional channels.
- Developed audio spots in Hindi, English, Tamil, Gujarati, Telugu, Bangla, Marathi and Haryanvi for broadcast on FM channels.
- Organized media visits to Kochi, Hyderabad, Srinagar, Pune, Coimbatore, Anand, Nagpur and Bhopal including press conference at New Delhi. Each of the media visit culminated in extensive coverage through print and electronic media.



**Major accomplishments under CeRA**

- Currently 147 institutions in NARS have 24x7 online accesses to important journals in CeRA platform through IP authentication.
- Online accessibility of articles from more than 2,900 journals related to agricultural sciences comprising consortium subscribed, library subscribed and open access journals.
- To assist researchers to access full text of library subscribed journals (which are not subscribed by CeRA), the document delivery request system has been introduced.
- Clarifications on specific problems on CeRA accessibility through live chat and online interactions.
- Permanent archive of the subscribed e-databases.

international events etc. During the period more than 1.44 lakh hits were recorded on the channel.

The ICAR website provides links to inter-related national and international organizations and academies and also connects to various national schemes and policies of interest to stakeholders. The website also hosts e-publishing platform (<http://epubs.icar.org.in/ejournal>) of the Council that includes *The Indian Journal of Agricultural Sciences*, *The Indian Journal of Animal Sciences*, *Indian Journal of Fisheries*, *Indian Farming* and *Indian Horticulture*, alongwith 15 Journals of related professional/academic societies. In sync with Open Access Policy of the ICAR, the website hosts various publications and reports in open access mode, such as *ICAR Reporter*, *ICAR News*, *ICAR Mail*, *ICAR Chitthi* (Hindi), *Agbiotech Digest* and *India-ASEAN News on Agriculture and Forestry*. Two and half yearly issues of *Indian Agricultural Science* and *Indian Animal Science* abstract journals were published and posted on ICAR website in open/online access mode.

The availability of research journals in open access mode has been able to capture the attention of global agricultural as well as animal science researchers. Number of registered users for *The Indian Journal of Agricultural Sciences* are 21,472 out of which 3,233 are new, and in case of *The Indian Journal of Animal Sciences* 11,607 and new ones 1,846 respectively. Highest user in a single day in *The Indian Journal of Agricultural Sciences* was 582, and in the reported period the page-views were 636,336; and 53% visitors are revisiting to check on the information available in the journal. The age-wise analysis of data of both the journals showed that young students, researchers as well as senior scholars of 55 to above 65 of age are also using the facility. Similarly, in case of *The Indian Journal of Animal Sciences* there were 57% re-visitors and 450,049 viewers. The online system has helped in reducing the article processing time in research journals. H-index as well as the quality group of both journals has improved in SJR database.

Knowledge and information products

The DKMA, ICAR continued to publish twelve regular publications that include research journals, semi-

technical (popular) periodicals and in-house newsletters in which eight are in English and four in Hindi. A total of nearly 30,000 pages were published during the period under report covering nearly 230 publications of various categories, such as technical books, monographs, textbooks, handbooks, technical bulletins, brochures etc. Special emphasis was laid to develop the content of these information products in demand driven mode to make it more informative and specific to meet the requirements of identified target audience such as researchers, students, farmers and other stakeholders. Review research papers from leading experts appear as a regular feature in research journals and special/accent issues of semi-technical periodicals were brought out on topical themes. Special issues of *Kheti* and *Indian Farming* were brought out on 'World Food Day' and *Krishi Vasant*. Besides *Indian Farming* published special and dedicated issues on 'World Congress of Agroforestry', 'Maize' and '125 years of IVRI'; *Indian Horticulture* on 'Tropical Roots and Tubers', 'Seed Spices' and 'Plantation Crops'; and *Phal Phool* on 'Seed Spices'. Besides, e-publications were also developed on various issues of interest and importance. The DKMA also provided expertise and consultancy to various constituents of ICAR for printing and publishing of special publications.

Outreach activities

The ICAR-DKMA organized and participated in nearly 20 exhibitions/showcasing of ICAR technologies on the occasion of national and international events across the country, notable among these are Indian Science Congress, Jammu; Agriculture Science Congress, Bhubaneswar; *Krishi Vasant*, Nagpur; National KVK Conference, Bengaluru; NAIP AgrIn Innovation Conclave, New Delhi; Global Conference on Animal Nutrition, Bengaluru; Global R&D Summit 2014, New Delhi; Indian International Trade Fair, New Delhi; and 6th Agrovision, Nagpur. In addition, Directorate coordinated and facilitated participation of ICAR institutes in Agri-Expos at national and regional level.

DKMA is the designated national input centre for the AGRIS database of the FAO, and under this activity 1,350 inputs were prepared and supplied to FAO electronically for merging into on-line AGRIS database of FAO in WebAgris software to enable on-line search by users all over the world. Under library services, about 10,000 publications were bar-coded. Library facilities also provided news clippings service to senior officials of ICAR headquarters.

As a way forward, ICAR is reorienting its strategies and activities to fully explore the potential of digital media and social media for quick dissemination of agricultural information and knowledge to the target audience. Special efforts are being made for global exposure of the major achievements of NARS by utilizing a mix of traditional and web tools and developing linkages with international scientific and media organizations.

