



**ICAR - NATIONAL AGRICULTURAL HIGHER EDUCATION PROJECT (IG) SUB
PROJECT ON NATIONAL KNOWLEDGE MANAGEMENT CENTRE FOR
AGRICULTURAL EDUCATION & RESEARCH**

ANNUAL REPORT 2019-2020

Lead Centre

PROFESSOR JAYASHANKAR TELANGANA STATE AGRICULTURAL UNIVERSITY, T.S

Coordinating Centres

ICAR-INDIAN AGRICULTURAL RESEARCH INSTITUTE, NEW DELHI

TAMIL NADU VETERINARY AND ANIMAL SCIENCES UNIVERSITY, CHENNAI, T.N

ICAR-INDIAN VETERINARY RESEARCH INSTITUTE, IZATNAGAR, U.P.

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I. Executive Summary

NAHEP is designed to strengthen the national agricultural education system in India with overall objective to provide more relevant and high-quality education to agricultural university students. This programme will promote efficiency and competitiveness through changes in working mechanism of agricultural universities, raising the teaching and research standards through improved research and teaching infrastructure and enhanced faculty competency and commitments, and making agricultural education more attractive to talented students. There are four key components under NAHEP, namely; Institutional Development Plan (IDP), Centres for Advanced Agricultural Sciences and Technology (CAAST), ICAR to support excellence in agricultural universities (AUs), and ICAR Innovation Grants to AUs. It is envisaged that improved AU performance through quality enhancement, better employment and entrepreneurship opportunities created for agriculture graduates, non-accredited AUs attaining ICAR accreditation, and institutional reforms implemented in education division of ICAR and AUs under these components together shall contribute to the achievement of the overall program objective.

II. Introduction

In India, National Agricultural Research & Education System (NARES) has a huge repository of knowledge and information on Crop Sciences, Horticulture, Resource Management, Animal Sciences, Agricultural Engineering, Fisheries, Agricultural Extension and Agricultural Education. Digital technologies, Easy online access to information resources have enabled increased usage of library and information services by the students, library professionals, faculty and research scholars.

For researchers, timely and quick access to the existing scientific data and archived scholarly information on his/her area of interest is crucial for acquiring knowledge on latest trends in their respective domains. The services rendered by the Library & Information Science professionals have gained prominence and have undergone drastic fundamental changes over the past few decades. Digital resources, Digital services and Access technologies have created new opportunities, new challenges and new expectations. Union catalogue, Digital Repository and Digital libraries are the new paradigms initiated under e-Granth have facilitated researchers, teachers, students, extension professionals to acquire knowledge in many agricultural universities. These existing facilities needed to be extended in a more efficient and effective manner. With this objective, the ICAR-NAHEP has

sanctioned a project entitled “National Knowledge Management Centre for Agriculture Education and Research to PJTSAU, IARI, TANUVAS and IVRI.

Lead centre

Professor Jayashankar Telangana State Agricultural University, Hyderabad, Telangana

PJTSAU was established in the year 2014 by an act of legislature, named in honour and memory of Professor Kothapalli Jayashankar, an eminent educationist and an ardent Telangana ideologue is the only Farm University of Telangana State. PJTSAU envisions itself as a Centre of Excellence, a one stop destination for agricultural innovation encompassing Education, Research and Extension among all its faculties. The vision of the University is to cater to the needs of an enterprising farming community of Telangana, which is endowed with abundant natural resources, diverse soil and agro-climatic conditions suitable for varied cropping systems and has the potential to become the 'Seed Bowl of India'.

Coordinating Centres

1. ICAR-Indian Agricultural Research Institute, New Delhi

The journey of Indian Agricultural Research Institute (IARI), popularly known as Pusa Institute, began in 1905 at Pusa (Bihar) with the generous grant of 30,000 pounds from an American philanthropist, Mr. Henry Phipps. The institute was then known as Agricultural Research Institute (ARI) which functioned with five departments, namely Agriculture, Cattle Breeding, Chemistry, Economic Botany and Mycology. Bacteriology unit was added in 1907. The name of ARI was changed to Imperial Institute of Agricultural Research in 1911 and, in 1919 it was renamed as Imperial Agricultural Research Institute. Following a devastating earth quake on 15th January 1934, the institute was shifted to Delhi on 29th July 1936. Post independence, the institute has been renamed as Indian Agricultural Research Institute (IARI).

2. Tamil Nadu Veterinary and Animal Sciences University, Chennai, Tamil Nadu

Realizing the importance of education research in animal and fisheries sciences so as to increase its productivity towards better income generation for the resource poor farmers, the government of Tamil Nadu established the first veterinary and animal sciences university in Asia on 20th September 1989 with its head quarters at Chennai with the name Tamil Nadu Veterinary and Animal Sciences University (popularly abbreviated as TANUVAS). The mandates of the University are to impart education, to ensure advancement of learning and prosecution of research and to undertake extension to rural people in cooperation with the government departments in different branches of veterinary and animal sciences.

3. ICAR-Indian Veterinary Research Institute, Izatnagar, Uttar Pradesh

Established in 1889, the Indian Veterinary Research Institute (IVRI) is one of the premier research institutions dedicated to livestock research and development of the region. The institute has a major mandate of research, teaching, consultancy and technology transfer activities. The institute with its long scientific heritage has always enjoyed a certain prestige, a tradition all of its own. The institute imparts quality post-graduate education to students not only from various parts of the country, but also from overseas. Today, the institute contributes immensely to human resource development in the discipline of veterinary sciences with skills and knowledge necessary for the challenges of the new millennium.

III. Objectives

- ❖ To act as a Digital Scholarship Centre to specialize on new technologies and tools such as data acquisition, visualization, digital asset management, digital preservation, training and consultations as a part of the suite of services and resources.
- ❖ To Automate Agricultural University Libraries using koha ILMS to facilitate sharing of digital library resources with a unified 'Online Union Catalogue'.
- ❖ To strengthen the Krishikosh platform - a digital repository for dissemination of agricultural knowledge generated under NARES to the users.
- ❖ To sensitize the stakeholders through capacity building programmes / workshops knowledge management in the networked digital environment and introduce new knowledge delivery models like MOOCs.
- ❖ To work on Altmetrics which are complementary metrics to traditional and citation- based metrics and sensitize the stakeholders through capacity building workshops.

IV. Expected Output

- ❖ Up scaling the four centres into the State-of-Art Digital Scholarship Centres.
- ❖ Automation and integration of agricultural libraries with koha Integrated Library Management System across the NARES.
- ❖ Development of user-friendly digital repository platform to submit, manage and access institutional repository including Theses produced by NARES researches, faculty and research scholars in compliance with open access policy of ICAR.

- ❖ At Krishikosh, researcher can have a unified access to content on all media types thereby making information retrieval much easier and faster.
- ❖ Application of bibliometric and scientometric analysis for technology forecasting. This will help in strategic planning of Science and Technology in Agriculture.
- ❖ Tools for dissemination of information through mobile app as push notification.
- ❖ Advanced AgriCat with more bibliographical records to serve the purpose of a national level Online Union Catalogue accessible 24x7x365 basis which will provide semantic Search and retrieval facilities to share library resources across the country.

V. Expected Benefits

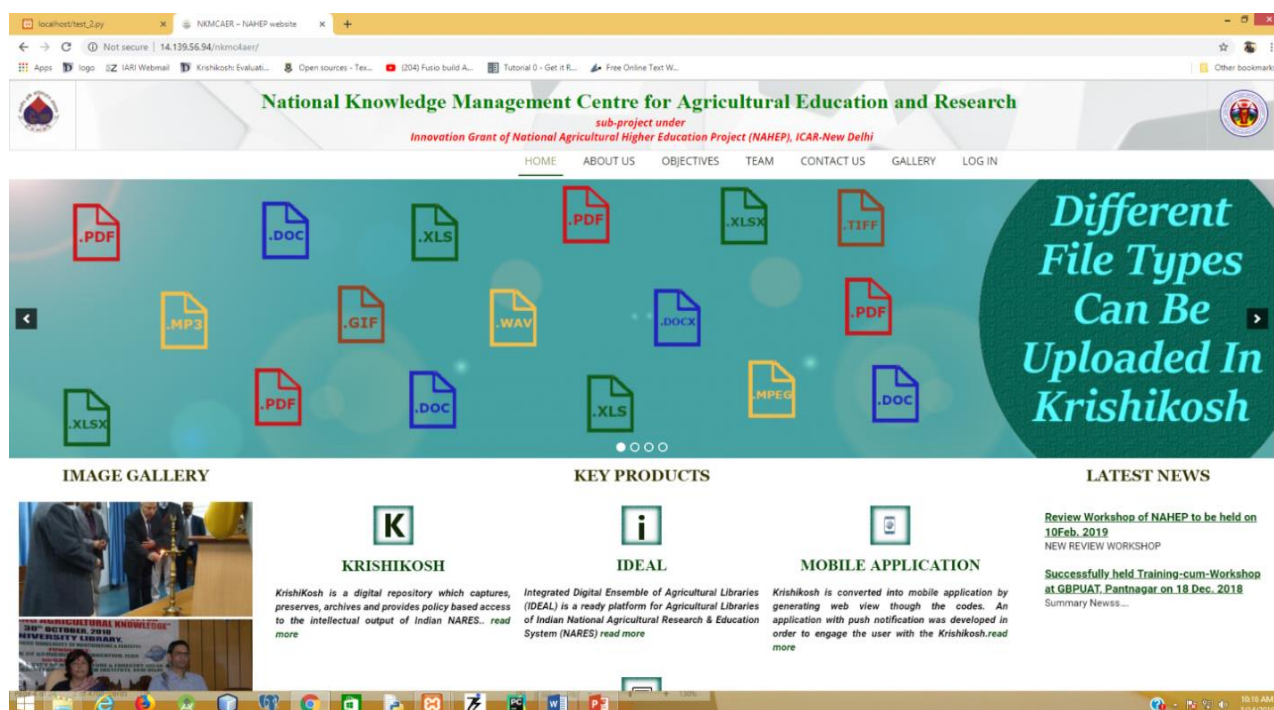
- ❖ Information Discovery (Searching in several modes and using several methods, indexing in a variety of ways).
- ❖ Preservation and archiving of valuable knowledge assets of NARES.
- ❖ Connecting libraries of the Agricultural Universities & ICAR institutes on a single platform.
- ❖ Delivery of data, images in jpg format and texts in usable modes including media streaming.
- ❖ Single window to access and share the intellectual scholarly outputs of NARES.
- ❖ Improvement in quality of research and academic standards of the intellectual outputs of NARES. It will be provide unified, easy, anytime/anywhere access to huge knowledge resources of NARES which is spread all over SAUs.
- ❖ Availability of National Level Online Catalogue of Major Agricultural Libraries of India in public domain.
- ❖ Text-mining, knowledge extraction and analysis.
- ❖ Combining digital objects and data to form new views, analyses, and expressions (e.g. Overlay of data in geospatial information systems approaches).
- ❖ Well trained and confident library manpower to manage NARES libraries.

Objective 1:

To act as a Digital Scholarship Centre to specialize on new technologies and tools such as data acquisition, visualization, and digital asset management, digital preservation, training and consultations as a part of the suite of services and resources.

- ✓ Organized Launch workshop of ICAR-NAHEP Sub Project on “National Knowledge Management Centre for Agricultural Education Research” on 8th August 2018 and prepared a Roadmap brochure.
- ✓ Purchased Disaster Recovery Management (DRM) Server and setup and configuration has been completed at PJTSAU, Hyderabad.
- ✓ NKMCAER website (<http://14.139.56.94/nkmc4aer/>) has been developed using WordPress approach which based on content management system (CMS).
- ✓ Designed & Developed ‘Mobile App for Library’.

Website of ICAR-NAHEP(IG) on NKMC4AER



Objective 2:

To Automate AU libraries using Koha ILMS to facilitate sharing of digital library resources with a unified ‘Online Union Catalogue’.

- ✓ Initiated in establishing centralized platform for providing cloud like service to NARES libraries to enable them to use Koha for their library operations and local user services at ICAR-IARI.
- ✓ Manual on Koha ILMS has been prepared for the reference of Librarians to implement Koha.
- ✓ Organized 16 Sensitization Workshops and Training Programmes on Agricultural Knowledge Management Tools in Networked Digital Environment in different parts of the country.

- ✓ Organized 4 National Level Training Programmes on “Implementation of KOHA and User Friendly Interface OPAC” under NAHEP on “National Knowledge Management Centre for Agricultural Education and Research” (NKMC4AER).

Objective 3 :

To strengthen the Krishikosh platform- a digital repository for dissemination of agricultural knowledge generated under NARES.

- ✓ Digital Repository of NARES (with Open Access Mandate of ICAR).
- ✓ Uses open source DSpace customised.
- ✓ At present Krishikosh has more than 40 million digitized pages in more than 190,000 digital items (volumes) like old books, old Journals, reports, proceedings, reprint, research highlights, training manuals, historical records.
- ✓ More than 142,000 thesis are submitted at Krishikosh by various SAUs / Institutions and value addition has been done by making theses full Text searchable.
- ✓ Batch uploading tools has been developed (till 1 Dec., 2019)
- ✓ The prototype for key words extraction from documents using python language has been developed.
- ✓ The process for harvesting of data from other open access repository (within ICAR) are initiated.

Objective 4:

To sensitize the stakeholders through capacity building programme / workshops knowledge management in the networked digital environment and introduce new knowledge delivery models like MOOCs.

- ✓ Conducted technical meeting on requirements and roadmap for conducting MOOCs in Library Science.
- ✓ Developed 15 Digital Content Videos on various important topics in Library Science.
- ✓ Developed an online platform in MOODLE for launching of MOOCs in Library Science.
URL: (<http://14.139.95.56/>).
- ✓ Reviewing of videos by resource persons, finalizing assessments, promotion tools etc.

Objective 5:

To work on Alt-metrics which are complementary metrics to traditional and citation-based metrics and sensitize the stakeholders through capacity building workshops.

- ✓ The Knowledge Management Centre, PJTSAU has organized five day “National Level Capacity Building Workshop for Librarians of SAUs” from 5th to 9th February, 2019 under

NAHEP on “National Knowledge Management Centre for Agricultural Education and Research” (NKMC4AER). Dr. Narendra Singh Rathore, Deputy Director General (Edn.), ICAR, New Delhi and Dr. V. Praveen Rao, Hon’ble Vice-Chancellor, PJTSAU has inaugurated the workshop and addressed the Library Professionals working in SAUs.

- ✓ Organized Training Programme on “Digital Teaching Techniques” for faculty members (31) of PJTSAU from 16th July to 20th July 2019 under ICAR-NAHEP Sub Project on”NKMC4AER” in collaboration with ICAR-NAAR.

VI. Training Programmes 2019-2020

Sl.No	Programme	From	To
1.	National Level Training Programme on "Digital Teaching Techniques" organized at ICAR-NAARM, Rajendranagar, Hyderabad	16/07/2019	7/20/2019
2.	Sensitization Workshop on “Agricultural Knowledge Management in Networked Digital Environment” organized at College of Agriculture, Rajendranagar, Hyderabad	15/10/2019	15/10/2019
3.	Sensitization Workshop on Agricultural Knowledge Management Tools in the Networked Digital Environment, organized at VCRIO-TANUVAS	16/08/2019	16/08/2019
4.	Sensitization Workshop on Agricultural Knowledge Management Tools in the Networked Digital Environment, organized at CFDT-TANUVAS	19/08/2019	19/08/2019
5.	Sensitization Workshop on Agricultural Knowledge Management Tools in the Networked Digital Environment, organized at VCRI-TANUVAS	21/08/2019	21/08/2019
6.	Sensitization Workshop on “Agricultural Knowledge Management in Networked Digital Environment” organized by ICAR-IVRI	19/10/2019	19/10/2019
7.	Sensitization Workshop on Agricultural Knowledge Management Tools in the Networked Digital Environment, organized at UAS Bangalore	09/11/2019	09/11/2019
8.	National Training-cum-Workshop for Librarians of SAUs on “Implementation of Koha- Open Source (LMS) and Creation of User Friendly Interface-OPAC” organized at	15/11/2019	16/11/2019

	IVRI, Izatnagar, UP		
9.	Sensitization Workshop on Agricultural Knowledge Management Tools in the Networked Digital Environment, organized at UAS Raichure	28/12/2019	28/12/2019
10.	Sensitization Workshop on “Agricultural Knowledge Management in Networked Digital Environment”, organized at ICAR-Indian Veterinary Research Institute Izatnagar	19/10/2019	19/10/2019
11.	National Training-cum-Workshop for Librarians of SAUs, CUs organized at ICAR-Indian Veterinary Research Institute Izatnagar “Implementation of Koha- Open Source (LMS) and Creation of User Friendly Interface-OPAC”	15/11/2019	16/11/2019
12.	Sensitization Workshop on “Agricultural Knowledge Management in Networked Digital Environment”, organized at CSKHP Krishi Vishvavidyalaya, Palampur	15/11/2019	15/11/2019
13.	Brainstorm meeting on MOOCs Content Development	01/04/2020	01/04/2020
14.	National Level Training Programme on " Technology Enhanced Learning" organized at ICAR-NAARM, Rajendrangar, Hyderabad	25/01/2020	31/01/2020
15.	National Training-cum-Workshop for Librarians of SAUs on “Implementation of Koha- Open Source (LMS) and Creation of User Friendly Interface-OPAC” organized at CCSHAU, Hisar, Haryana	13/02/2020	14/02/2020
16.	National Training-cum-Workshop for Librarians of SAUs on “Implementation of Koha- Open Source (LMS) and Creation of User Friendly Interface-OPAC” organized at TANUVAS, Chennai, Tamilnadu	18/02/2020	19/02/2020
17.	Sensitization Workshop on “Agricultural Knowledge Management in Networked Digital Environment”, organized at RVSKVV, Gwalior, MP	22/02/2020	22/02/2020
18.	Sensitization Workshop on “Agricultural Knowledge Management in Networked Digital Environment”, organized at IGKV, Raipur, CG	29/02/2020	29/02/2020

19.	Sensitization Workshop on “Agricultural Knowledge Management in Networked Digital Environment”, organized at PVNRTVU, Rajendranagar, Hyderabad	13/03/2020	13/03/2020
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- ✓ Organized 19 Sensitization Workshops and Training Programmes on Agricultural Knowledge Management Tools in Networked Digital Environment in different parts of the country.
- ✓ Organized 4 National Level Training Programmes on “Implementation of Koha ILMS and User Friendly Interface OPAC” under NAHEP on “National Knowledge Management Centre for Agricultural Education and Research” (NKMC4AER).
- ✓ Organized National Level Training Programme on “Digital Teaching Techniques” for faculty members (31) of PJTSAU from 16th July to 20th July 2019 under ICAR-NAHEP Sub Project on”NKMC4AER” in collaboration with ICAR-NAARM.
- ✓ Organized National Level Training Programme on “Technology Enhanced Learning” for faculty members (06) of PJTSAU from 25th January to 31st January 2020 under ICAR-NAHEP Sub Project on”NKMC4AER” in collaboration with ICAR-NAARM.

VII. Highlights 2019-2020

Enhanced access to Knowledge Management Centre

All the students (including both Boys and Girls of all categories) studying in U.G, P.G and Ph.D. are encouraged to visit the Knowledge Management Centres after college hours, so as to enable them to utilize e-resources at optimum level. The e-Resources includes pre-existing as well as developed ones under NAHEP project. To this extent, the library timings were extended. e-Resource labs are kept open.

Ease of Accessibility to Disabled Students

Ramps to physically disabled persons have been established at all premises of institution including Knowledge Management Centres for easier approachability. On seeing few slippery incidents of users at KMC, non slippery groves were made over ramps.

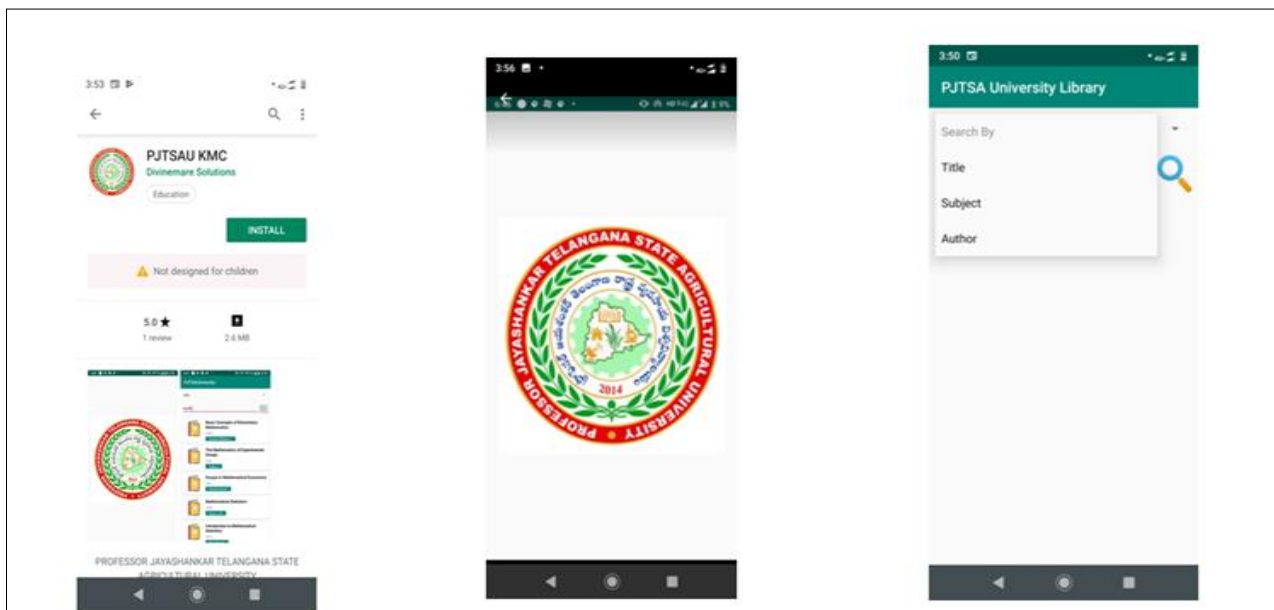
Grievance Redressal System

A Three-Tier Grievance Redressal Mechanism at Institute level, Project Implementation Unit (PIU) level and Apex Level has been set up and displayed along with other institution GRM Boards, to facilitate the students and staff to raise their grievances. The Head of the Department, Entomology, College of Agriculture, R’Nagar, PJTSAU has requested to train the students with searching

techniques i.e. Online Resources, KrishiKosh IRs, CeRA etc. To this extent, a training session was exclusively conducted to the P.G Students.

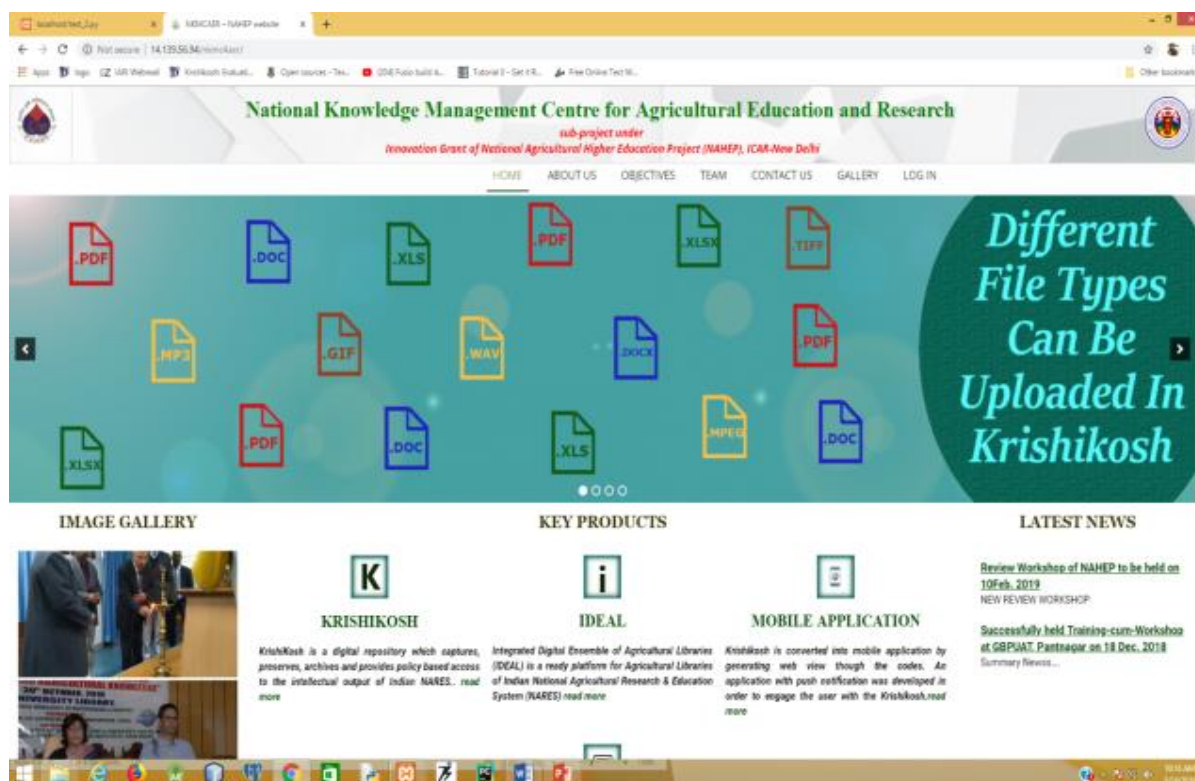
Development of Mobile App for Library for library at Professor Jayashankar Telangana State Agricultural University, Hyderabad

To enable the stakeholder to access the library resources any where any time access to library a mobile app was developed for Library. It reduces printing of hardcopies of documents in the library and saves paper.



Accessing these deliverables by the students and staff has in-turn reduced the usage of paper. The hazardous material viz. Printer Cartridges were discarded in accordance to the dry waste management procedures laid down by the Municipal Corporations.

Created website for NKMC4AER subproject at IARI, New Dehi for updating project activities, events, upcoming programmes.

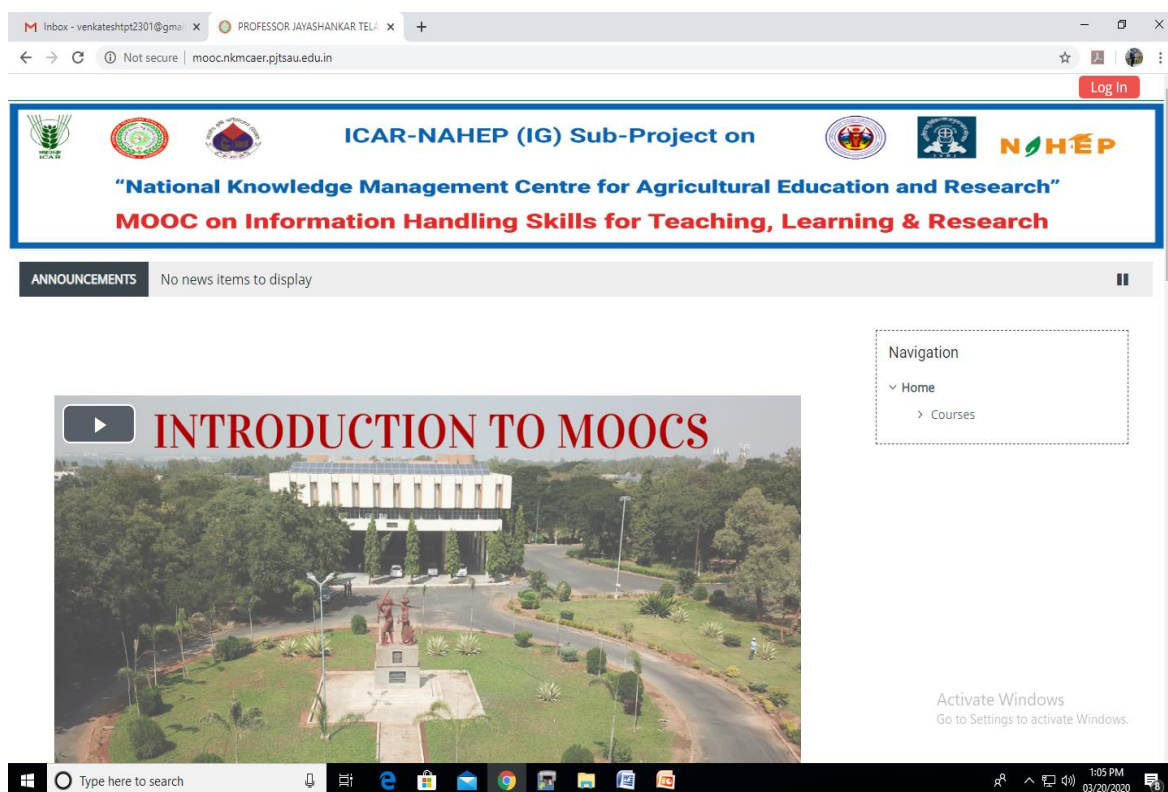


Environmental Friendly Measures

- ✓ The Knowledge Management Centre has established Solar Power Panels to produce Solar energy in order to save the expenditure on electricity as well to safeguard the environment.
- ✓ The Knowledge Management Centre at PJTSAU has installed LED lighting for enabling less power consumption.
- ✓ As a part of the NAHEP (IG) project, Digital Scholarship Centres (4), Automation of Library Operations using Koha ILMS in all SAUs were facilitated and Mobile App for KMC was developed. Accessing these deliverables by the students and staff has in-turn reduced the usage of paper. The hazardous material viz. Printer Cartridges were discarded in accordance to the dry waste management procedures laid down by the Municipal Corporations.
- ✓ Extensive Tree plantation was carried out to make the campus greener, which in-turn reduces global warming.

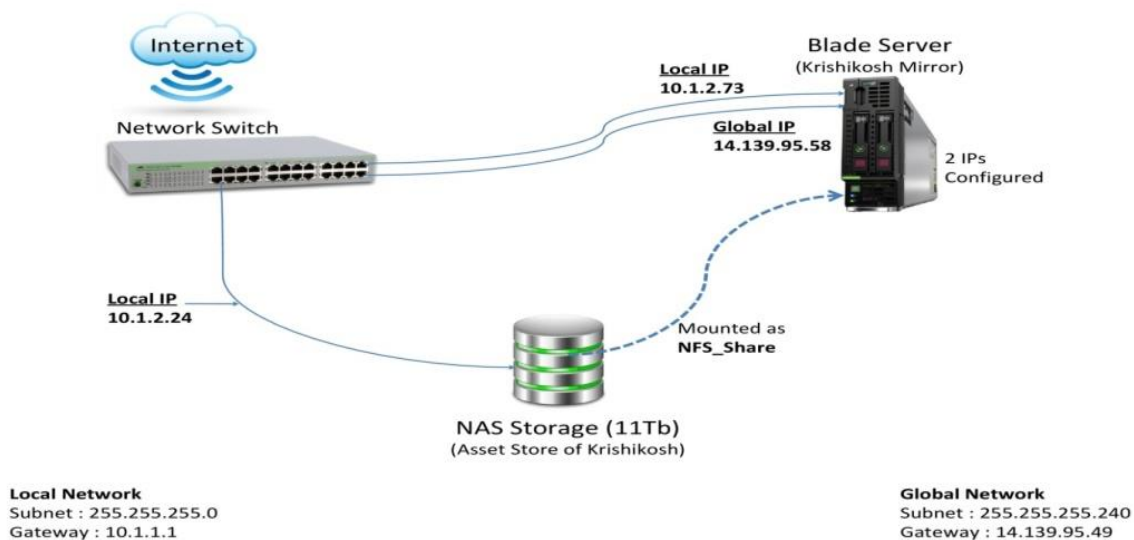
- ✓ During sensitization workshops, stakeholders were sensitized to avoid usage of printers and if necessary printer usage should be done in econ mode to reduce consumption of chemicals.

Designed and Developed video contents based on Moodle LMS Platform for conducting Massive Open Online Course on “Information Handling Skills for Teaching, Learning & Research” for Students as well as Faculty.



Disaster Recovery Management (DRM) Server, setup and configuration has been completed at PJTSAU, Hyderabad.

Network Diagram Krishikosh Mirror (PJTSAU), Hyderabad



0Sharing information about knowledge resources and identification of appropriate areas to train the Stakeholders and Library Professionals working in SAUs and ICAR Institutes.

As part of NAHEP Project, Sensitization workshops, Capacity building workshops were organized for stakeholders of agricultural institutes to share information and equip the users about knowledge resources.

- ✓ Organized 19 Sensitization Workshops and Training Programmes on Agricultural Knowledge Management Tools in Networked Digital Environment in different parts of the country. Organized 4 National Level Training Programmes on “Implementation of Koha ILMS and User Friendly Interface OPAC” under NAHEP on “National Knowledge Management Centre for Agricultural Education and Research” (NKMC4AER).
- ✓ Organized National Level Training Programme on “Digital Teaching Techniques” for faculty members (31) of PJTSAU from 16th July to 20th July 2019 under ICAR-NAHEP Sub Project on”NKMC4AER” in collaboration with ICAR-NAARM.
- ✓ Organized National Level Training Programme on “Technology Enhanced Learning” for faculty members (06) of PJTSAU from 25th January to 31st January 2020 under ICAR-NAHEP Sub Project on”NKMC4AER” in collaboration with ICAR-NAARM.

VIII. Equity Action Plan

Equity Action Plan							
Sl.No	Activities	Target	Achieved	Social Category		Gender	
				SC/ST	Others	Female	Male
1.	Virtual Sensitization Workshops & National Programmes	30 Programmes	25 Programmes Total Participants: 3862	962	2900	1036	2826

S.No.	Item	Actions	Implementation Agency	Frequency	Monitoring Indicators
1	Automation of AU Libraries using Koha ILMS to facilitate sharing of Digital library resources with a unified Online Union Catalogue.	Support will be provided to Automate the SAUs Libraries where Koha is not implemented	P.I., PJTSAU CPI, ICAR-IARI CPI,ICAR-IVRI CPI,TANUVAS	Need Based/ Continuous	63 SAUs Libraries will be brought to Koha ILMS and update the SAUs in Union Catalogue of NARES.
2	To sensitize the stakeholders through capacity building programmes on knowledge management in the networked digital environment.	Organization of sensitization programmes for stakeholders through capacity building programmes on knowledge management in the networked digital environment. All partnering centres will organize the workshops for about 150-200 students/faculty at their respective centres and neighboring states. More participants will also be considered.	P.I., PJTSAU - 4 CPI, ICAR-IARI - 4 CPI,ICAR-IVRI - 4 CPI,TANUVAS - 4	Periodically	40 to 50% increase in usage of Online Resources, Searching Skills, Institutional Repositories, Soft Skills etc.
3	Capacity Building Workshops for Agricultural Library Professionals and Training Programmes	Organization of Capacity Building Workshops for Agricultural Library Professionals on Koha ILMS, Institutional Repository Management and other relevant topics. 1 programme at each centre for 25-30 participants. More participants will also be considered.	P.I., PJTSAU - 2 CPI, ICAR-IARI - 1 CPI,ICAR-IVRI - 1 CPI,TANUVAS - 1		50 to 60% increase in skills on automation of library activities, online library operations, Institutional Repository etc.

4	Introduce new knowledge delivery models like MOOCs for Students, Teachers and Librarians.	Massive Open Online Courses (MOOCs) on Library Science: Content development, Hosting, Management and Certification including organization of capacity building programme/workshop on MOOCs. 1 programme for 500 students/faculty/librarians.	P.I., PJTSAU CPI, ICAR-IARI CPI,ICAR-IVRI CPI,TANUVAS	Periodically	40 to 50% increase in Searching Skills, Basics of Internet & ICT, Copyright, Literature Search and review, Reference Management Tools.
5	To work on Altmetrics which are complementary metrics to traditional and citation-based metrics and sensitize the stakeholders through capacity building workshops.	Organize capacity building programme/ Workshop on Altmetrics tools for the stakeholders of SAUs. 1 programme for LIS Professionals. 40-50 participants. More participants will also be considered	P.I., PJTSAU - 1 CPI, ICAR-IARI - 1 CPI,ICAR-IVRI - 1 CPI,TANUVAS - 1	Periodically	40 to 50% increase in Skills on different online reference management tools, citation indexing, h-index, Impact Factor.
6	Grievance Redressal Mechanism	Publicity of GRM by displaying boards at two places of KMC along with Grievance drop box. On receipt of the grievances, they will be acknowledged and redressed within the prescribed time of GRM. If not solved within stipulated time, it will be forwarded to next level and so on.	Nodal Officer, GRM and P.I., NAHEP	Continuously	All the grievances are 100% will be redressed within the stipulated time frame. Proper review by GRO at PIU level.
7	Labor Management Plan (Minor Repair and Renovation Work)	Ensuring the following in tender document, labour license for the requisite number of labour deployed in Minor Repair and Renovation Works. A copy of labour license will be collected from contractor to submit to P.I. No child labour will be involved in the work. Minimum space with ventilation and washing facility will be provided. Caution boards will be displayed at construction zones.	Estate Officer, PJTSAU Engg. Division, IARI Engg. Division, IVRI Engg. Division, TANUVAS	One time activity	Increases safety measures for labor, students and staff. Compliance will be ensured by the Nodal Officer, SS and the cost of compliant should be reckoned in the bidding 100% of labor satisfied with the work environment.
8	Facilities for Physically Challenged & Women	Ramps and user friendly facilities are available in the campus.	P.I., NAHEP, PJTSAU CPI, ICAR-IARI CPI,ICAR-IVRI CPI,TANUVAS	Needbased	Increase in facilities at Project Implementation Centres (4) for access to KMC by Physically Challenged users.

IX. Output-outcome monitoring

S. No.	Particulars	Apr'19 to March'20	
		Plan	Achievement
1.	Number of innovation grants given	124.59	98.97
2.	Number of e- enabled learning activities initiated in AU (MOOC platform, virtual labs, video lectures)	1	1
3.	Number of trainings (national and international) undertaken for faculty upgradation	2	2
4.	Number of international trainings undertaken by faculties under IG comp	1	0
5.	Number of national trainings undertaken by faculties under IG comp	4	4
6.	Number of national trainings undertaken by students under IG comp	18	18
7.	Number of direct beneficiaries of the project	5000	3862
8.	Number of female beneficiaries out of total direct beneficiaries	2000	1250

X. Input and activity monitoring

Input / Activity indicator	Sub- head / category	Apr'19 to March'20	
		Expenditure / input in INR lakhs	
		Utilization	Planned
Goods and equipments	Equipment, Plant & Machinery	0.00	0.00
	Office equipment	0.00	0.00
	Laboratory equipment	3.07	5.20
	Furniture & fixtures	0.89	2.70
	Computers and Peripherals	0.00	0.00
	Books and Journals	0.93	1.40
Civil works	Minor repair and renovation works	2.58	10.00

Human capacity building	National level training	9.76	15.60
	International level training	-0.14	28.00
	Short visit/ seminars	0.00	0.00
	Meetings and workshops	0.00	0.00
Consultancy	National level consultancies	0.00	0.00
Recurrent cost / Miscellaneous	Travel	5.36	10.40
	Contractual services	44.93	73.84
	Operational costs	25.81	39.30
	Institutional charges	5.78	5.79
Total		98.97	192.23

XI. Photographs



Organized National Level Training Programme on “Digital Teaching Techniques” for faculty members (31) of PJTSAU from 16th July to 20th July 2019 under ICAR-NAHEP Sub Project on “NKMC4AER” in collaboration with ICAR-NAARM, Hyderabad.



One day Sensitization Workshop on “Agricultural Knowledge Management in Networked Digital Environment” on 19 October, 2019 at NLVS Auditorium, ICAR-IVRI, Izatnagar.



Release of DVD on manual of “E-Resources under NARES” during One day Sensitization Workshop on “Agricultural Knowledge Management in Networked Digital Environment” on 19 October, 2019 at NLVS Auditorium, ICAR-IVRI, Izatnagar.



“National Training cum workshop for SAUs, CUs, DUs & ICAR-Institutes for Implementation of KOHA & User Friendly Interface OPAC”, 15-16 November, 2019



Release of KOHA Installation Manual during “National Training cum workshop for SAUs, CUs, DUs & ICAR-Institutes for Implementation of KOHA & User Friendly Interface OPAC”, 15-16 November, 2019



Release of KOHA LIVE DVD during “National Training cum workshop for SAUs, CUs, DUs & ICAR-Institutes for Implementation of KOHA & User Friendly Interface OPAC”, 15-16 November, 2019



Successfully installed Koha Integrated Library Management System & Customization of OPAC at University Library & 04 Constituent College Libraries, P.V. Narsimha Rao Telangana Veterinary University Rajendranagar, Hyderabad, Telangana in the month of December, 2019.



Koha ILMS Live DVD was released by the National Coordinator during the first National Training program organised by TANUVAS @ SVVU, Tirupati. It's a user friendly Live DVD to implement Koha in Libraries.



Organized One day Sensitization Workshop on “Agricultural Knowledge Management Tools in the Networked Digital Environment” was held at Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chattisgarh on 29th February, 2020. About 430 participants including students, faculty and library professionals were attended and made it great success.



One day Sensitization Workshop on “Agricultural Knowledge Management in Networked Digital Environment” on 08 February, 2020 at Maharana Pratap University of Agriculture and Technology (MPUAT), Udaipur Rajasthan.



Release of CD on manual of “E-Resources under NARES” during One day Sensitization Workshop on “Agricultural Knowledge Management in Networked Digital Environment” on 08 February, 2020 at Maharana Pratap University of Agriculture and Technology (MPUAT), Udaipur Rajasthan.

డిజిటల్ నాలెడ్జ్ మేనేజ్‌మెంట్‌పై శిక్షణ
 రాజేంద్రనగర్, మార్చి 13 (ఆంధ్రజ్యోతి) : సేవసల్ అగ్రికల్చర్
 రల్ హ్యూర్ ఎడ్యుకేషన్ ప్రాజెక్ట్
 (ఎన్‌హెచ్‌ఈపీ)లో భాగంగా పీపీ
 సర్కిులార్‌పై వెటర్నరీ విశ్వవిద్యాలయం
 విద్యార్థులకు శుక్రవారం డిజిటల్
 నాలెడ్జ్ మేనేజ్‌మెంట్‌పై అవగాహన
 కార్యక్రమం నిర్వహించారు. ప్రొఫెసర్
 జయశంకర్ తెలంగాణ రాష్ట్ర
 వ్యవసాయ విశ్వవిద్యాలయం
 లైబ్రరీయన్ ఎస్పీ రవికుమార్
 ఆధ్వర్యంలో ఈ శిక్షణ నిర్వహించారు.
 కార్యక్రమంలో పాల్గొన్న పీపీఎస్ వెటర్నరీ
 విశ్వవిద్యాలయం రిజిస్ట్రార్ డాక్టర్ ఎస్‌టి
 వీరజిరావు మాట్లాడుతూ డిజిటల్
 మాధ్యమాల ద్వారా విద్యార్థులు త్వరితగతిన
 సమాచార సేకరణకు అవకాశమేర్పడుతుందన్నారు.
 డిజిటల్ ఉపకరణాల ఉపయోగంపై
 విద్యార్థులకు అవగాహన కల్పిస్తున్నట్లు
 తెలిపారు. ఈ వర్క్‌షాపులో
 వెటర్నరీ విశ్వవిద్యాలయం అధికారులు
 డాక్టర్ డి.ప్రమోద్‌కుమార్, డాక్టర్ ఎల్.అచ్చమాంబ
 తదితరులు పాల్గొన్నారు.

కృషి జ్ఞాన एवं तकनीक को समाज से जोड़ने की जरूरत : डॉ. पाटील

डिजिटल यातायात के संजाल में कृषि ज्ञान प्रवर्धन के साधन पर कार्यशाला सम्पन्न



रायपुर (विश्व परिचर) : इंदिरा गांधी कृषि विश्वविद्यालय, रायपुर और प्रोफेसर जयशंकर तेलंगाना राज्य कृषि विश्वविद्यालय, हैदराबाद के संयुक्त तत्वावधान में नेटवर्कड डिजिटल यातायात में कृषि ज्ञान प्रवर्धन के कार्यशाला आयोजित की गई। कार्यशाला के मुख्य अतिथि इंदिरा गांधी कृषि विश्वविद्यालय के कुलपति डॉ. एस.के. पाटील ने कहा कि ज्ञान एवं तकनीक सभी उपयोगी है जब यह समाज के हर तकनीक तक पहुंचे। कृषि संबंधी ज्ञान एवं तकनीक को कृषक समग्र तक पहुंचाने की जरूरत है। उन्होंने कहा कि आज के डिजिटल युग में सूचना एवं ज्ञान प्रवृत्त मात्रा में उल्लेख है लेकिन यह वास्तविक उपयोगकर्ताओं तक नहीं पहुंच पा रहा है। अतः उल्लेख ज्ञान व तकनीक की समग्र-समय पर समीक्षा की जानी चाहिए और इनका प्रवर्धन इस प्रकार किया जाना चाहिए कि यह जनतामें तक पहुंच सके। कार्यक्रम के विचार अतिथि इंदिरा गांधी कृषि विश्वविद्यालय प्रबंध मंडल के सदस्य श्री आनंद मिश्रा ने पुस्तकालयों की महत्ता बताते हुए कहा कि किताबें हमारी सच्ची दोस्त होती हैं। किताबों के द्वारा हमें ज्ञान एवं सूचनाओं के

समय-समय संवेदनाओं का विकास भी होता है। आज के डिजिटल युग में ज्ञान एवं सूचनाओं की भरमार है किन्तु मानवीय संवेदनाएँ बिलुप्त होती जा रही हैं। उन्होंने भारतीय संवेदनाओं को बचाने की आवश्यकता बताई। इस अवसर पर भारतीय कृषि पुस्तकालय संघ के अध्यक्ष एवं पुस्तकालयवाध्यक्ष डॉ. के.वी.जे.नेम्लु ने डिजिटलाइजेशन की कृषि ज्ञान में उपयोगिता बताई। उन्होंने संसर्पनों जैसे सेग, कृषि कोर्स, एग्रीकैट, आइडिल, युविनन कैटलॉग तथा टूल्स की जानकारी दी। कृषि पुस्तकालयों को सुदृढ़ बनाने के लिए भारतीय कृषि अनुसंधान परिषद, नई दिल्ली द्वारा सहयोग दिया जा रहा है। राष्ट्रीय कृषि उन्नयन शिक्षा परियोजना के मूलाग्र अन्वेषक एवं विश्वविद्यालय पुस्तकालयवाध्यक्ष श्री एन. पी. रविशंकर ने परियोजना के बारे में जानकारी दी। कार्यक्रम के प्रारंभ में स्वागत भाषण देते हुए पुस्तकालयवाध्यक्ष डॉ. माधव पाण्डेय ने कहा कि नेहरू पुस्तकालय की राष्ट्रीय स्तर पर सराहना मिलती है। यह पुस्तकालय जलसिंचाई, पुस्तकालय अधिपिनय के अंतर्गत राज्य शासन द्वारा प्रारंभ किया गया है। तकनीकी स्तर में पं. रविशंकर शुक्ल विश्वविद्यालय, रायपुर के पुस्तकालयवाध्यक्ष डॉ. सुपुर्ण सेनगुप्ता ने माहिलिक ने पोरी एंटी फेगर्निंग पर विस्तार से जानकारी दी। इस अवसर पर कृषि महाविद्यालय, रायपुर के अधिष्ठाता डॉ. एस.एस. राम, विदेशिक शिक्षण डॉ. एम.पी. जकर, मीरुद बे। इस कार्यशाला में देश भर के 400 से अधिक प्राध्यापक, वैज्ञानिक, पुस्तकालयवाध्यक्ष, छात्र-छात्राएँ उपस्थित थे। कार्यक्रम का संचालन डॉ. माधुरी गौतम ने किया। आभार प्रदर्शन प्राध्यापक डॉ. एम.एल लखेर ने किया।