

Influence of the NAHEP-IG Initiative on UASR: A Captivating Case Study

Shilpa S. Uplaonkar*

M. P. Singh**

M. G. Patil***

Agricultural enlightenment plays a pivotal role in nurturing adept human capital to tackle the trials confronted by Indian farming. In the past ten years, the allure of higher agricultural learning has surged due to the accessibility of superior education, desirability within the job market, and the broadening array of career prospects spanning social and geographical spheres. While persisting in bestowing superior and more pertinent agricultural instruction, ICAR, in collaboration with the World Bank, embarked on the National Agricultural Higher Education Project (NAHEP) in 2017, blazing a new trail. This endeavor aims to elevate the caliber and pertinence of advanced agricultural education across the nation. NAHEP has also embraced inclusivity by furnishing domestic and global tutelage to scholars and educators, fostering a sense of belonging. This discourse proposes pivotal strategies to propel this initiative and ensure its lasting impact on Agricultural Sciences.

Keywords: *NAHEP project, NARES, Agriculture university library, Agriculture education system*

1 INTRODUCTION

Within India, the National Agricultural Research & Education System (NARES) boasts an immense treasure trove of wisdom and insights spanning diverse domains, including Crop Sciences, Horticulture, Resource Management, Animal Sciences, Agricultural Engineering, Fisheries, Agricultural Extension,

* Assistant Librarian & Co-PI, (NAHEP-IG) University of Agricultural Sciences, Raichur, Karnataka

** Professor, Dept. of LIS, Babasaheb Bhimrao Ambedkar Central University, Lucknow Uttar Pradesh

*** Director of Education & PI, (NAHEP-IG) University of Agricultural Sciences, Raichur, Karnataka

and Agricultural Education. This collective knowledge forms a rich tapestry of expertise. Moreover, the digital era has ushered in a remarkable transformation, enhancing the accessibility and usability of this repository. The infusion of cutting-edge technologies and the seamless availability of information resources online have catalyzed a newfound vitality in libraries and information services. This transformative shift benefits students, library professionals, esteemed faculty members, and dedicated research scholars. Envision a dominion where scholarly pursuits are empowered by instant access to a wealth of wisdom, where information is not confined to dusty shelves but readily at one's fingertips. It's a landscape where learning becomes unshackled from the limits of physical spaces, and the boundaries of knowledge expand through digital avenues. This synergy between traditional expertise and modern convenience epitomizes the evolution of NARES into a dynamic hub of intellectual growth and exploration.

For researchers, timely and quick access to the existing scientific data and archived scholarly information on their area of interest is crucial for acquiring knowledge on the 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, challenges, and expectations among academia. Union catalog, Digital Repository, and Digital libraries are the new paradigms initiated under e-Granth have facilitated researchers, teachers, students, and extension professionals to acquire knowledge in many agricultural universities. These existing facilities need to extend more efficiently and effectively. With this objective, the ICAR-NAHEP has sanctioned a project entitled Digitalizing the Library to Enhance Information Services, fortifying and advancing competitive human capital at the Agricultural University.

2 ABOUT NAHEP

NAHEP aims to fortify India's National Agricultural Education System to deliver superior and more pertinent instruction to scholars in agricultural universities. This initiative will advance effectiveness and competitiveness by revolutionizing the operational methods of agricultural universities, elevating educational and investigative benchmarks through enhanced research and educational infrastructure, and bolstering faculty proficiency and dedication. Crucially, it seeks to enhance the appeal of agricultural education to gifted students.

In the vibrant territory of India, the National Agricultural Research & Education System (NARES) stands as a treasure trove overflowing with knowledge across an array of fields - from the intricate art of Crop Sciences and the flourishing world of Horticulture to the astute management of resources, the captivating realm of Animal Sciences, the innovative domain of Agricultural

Engineering, the aquatic wonders of Fisheries, and the far-reaching impact of Agricultural Extension and Education. Each facet weaves into a captivating narrative of expertise.

Now, picture a digital metamorphosis that has unfurled a dazzling tapestry of possibilities. In this digital age, the once-static library transforms into a dynamic hub where information is not merely stored but dances at fingertips. Fusing futuristic technologies and effortless digital access has breathed new life into the essence of libraries and information services. This renaissance is not just for students but equally empowers the custodians of knowledge - the library virtuosos, esteemed faculty members, and intrepid researchers.

Imagine a universe where learning knows no bounds, where the pursuit of knowledge transcends the confines of brick and mortar. The synergy between the traditional and the contemporary sparks an intellectual renaissance. NARES emerges as a repository and a vibrant ecosystem where wisdom thrives and exploration knows no limits. This captivating evolution paints NARES as a pulsating nucleus of enlightenment, embracing the allure of digital accessibility while keeping the bright flame of traditional wisdom. Assistance was provided to Agricultural Universities/Institutes to enhance the caliber and pertinence of agricultural education and research in pursuit of the agricultural revolution. This initiative comprises the subsequent three distinct constituents:

21 INCORPORATING THE ESSENCE OF INSTITUTIONAL DEVELOPMENT PLANS (IDPS)

This particular facet encompasses the educational achievements and prospective career pathways for Academic Units' (AUs) learners, along with the teaching prowess of faculty members and the impactful research capabilities of AUs prepared for transformation and chosen competitively.

22 A PIVOTAL INITIATIVE LIES AT THE HEART OF THE CENTER FOR ADVANCED AGRICULTURAL SCIENCE & TECHNOLOGY (CAAST)

This framework allocates funds to Agricultural Universities (AUs) to establish Centers for Advanced Agricultural Science and Technology (CAAST). These centers serve as hubs of diverse expertise, focusing on teaching, research, and outreach across essential and emerging domains of agricultural investigation.

23 INNOVATION GRANTS (IG)

In this subsection, financial awards are allocated to chosen non-accredited academic units (AUs) to execute Innovation Plans by facilitating technical guidance and consultancy services. The aid is geared towards enabling the University to achieve accreditation and foster academic collaborations during the Project's timeline and in the aftermath of its fulfillment.

An Innovation Grant (IG) receives World Bank and ICAR funding through the National Agricultural Higher Education Project (NAHEP). UAS, Raichur,

has been granted this allocation with a three-year budget in 2019-20. The primary goal of this endeavor is to enhance and sustain the caliber of advanced agricultural education. That would be achieved by establishing a digital library that offers information services, fortifying and nurturing a globally competitive pool of agricultural experts. The overarching ambition is to create resources and mechanisms that bolster infrastructure, faculty, and student progress and facilitate improved governance and management within agricultural universities. The ultimate aim is to construct a comprehensive model that elevates the prevailing agricultural education system to new heights. This reimagined system will be more employment-focused, entrepreneurship-oriented, and aligned with international agricultural education benchmarks.

The landscape of Libraries and Information Centers has undergone a seismic transformation due to the integration of information and communication technologies. These tools have reshaped the creation, arrangement, storage, and dissemination of information and have become indispensable instruments for education and research. As technology perpetually redefines instructional and service delivery models, the University Library is dedicated to establishing a contemporary, knowledge-centered library that caters to the educational pursuits of students in agriculture and related domains within the Kalyana Karnataka Region. We are amidst a monumental shift where libraries are transitioning from physical edifices to digital domains, from conventional repositories to interconnected platforms. This metamorphosis under scores the University Library's commitment to embracing this evolution and serving as a dynamic hub for knowledge exchange and exploration.

The library is evolving into a more

- (i) Disseminator of knowledge and instructor in information technology
- (ii) Advocate for outreach endeavors concerning the establishment of the database, issuance of multimedia and other records, and the dispersal of documents
- (iii) An integral component of the worldwide information network to streamline interaction among scholars and researchers across the planet
- (iv) Fostering connections among establishments and individuals through information services accessible with a simple mouse click.

Given this context, the initiative focusing on Library Digitization has been formulated with subsequent aims.

3 OBJECTIVES OF THE PROJECT

- (i) Enhancing the caliber of agricultural education by enabling students to utilize digital amenities for information retrieval
- (ii) Empowering students to convey more intricate messages via the utilization of multimedia and hypermedia technologies

- (iii) Empowering fellow universities to unlock information reservoirs and propel digital library advancements
- (iv) They are fortifying the libraries of University-affiliated colleges with electronic resources, streamlining the accreditation process.

4 SCOPE AND PURPOSE OF THE PROPOSED IG PROJECT

The domain of Libraries and Information Centers stands at the forefront of a monumental shift driven by the advent and integration of information and communication technologies. This dynamic metamorphosis has revolutionized the creation, organization, storage, and distribution of information and has emerged as an indispensable arsenal for advancing education and research. In an era where technological innovations perpetually redefine the landscape of instructional and service delivery models, staying aligned with the rapid progress of Information and Communication Technology (ICT) is essential to meet the lofty expectations of users.

The University Library at UAS, Raichur, stands as a beacon of distinction, amassing an impressive repository that spans Agricultural Science, Agricultural Engineering, and allied disciplines. This treasure trove comprises 57,000 volumes, enriched by 142 contemporary journals encompassing national and international acclaim. The collection is further enriched by 2,600 meticulously curated theses and dissertations, 450 seminar scripts, 310 institutional annual reports, 110 comprehensive conference/workshop proceedings, and an additional 4,500 invaluable gift books and reference materials. Additionally, the University Library administers a Book Bank Scheme, housing 2,425 volumes dedicated to enriching SC/ST students' academic journey. However, the libraries affiliated with the constituent colleges, including the College of Agriculture in Bheemarayanagudi and Kalaburagi, indicate a potent infusion of electronic resources. This strategic augmentation is poised to pave the way for the accreditation of these constituent colleges under the esteemed umbrella of UAS Raichur.

Aiming to stand as a trailblazer, the University Library ardently endeavors to establish an avant-garde knowledge management hub. This hub, in turn, would serve as a bastion catering to the intellectual pursuits of students engaged in higher education within the agricultural and allied domains in the Kalyana Karnataka Region of the state. As the very essence of a library undergoes a revolutionary evolution, transitioning from a tangible entity to a virtual realm, from analog to digital, and from a mere collection to a web of meaningful connections, the University Library remains steadfast in its pioneering pursuit of excellence.

5 IG INITIATIVES AND ACTIVITIES

Agricultural education in India continues to play a more significant role in improving agricultural growth by producing globally competitive human

resources, developing innovative technology, and establishing linkages with different stakeholders, particularly industry and resource organization, for entrepreneurship and employability. The immediate requirement is to produce high-quality agricultural graduates who, along with a degree, also can analyze the problems and accordingly comprehend, alter, and develop new techniques and technologies to enhance the productivity of agriculture and allied sectors. Besides the technical and generic skills, graduates require leadership and entrepreneurial skills to raise leading teams, further acknowledging the competitive environments and putting innovations into actual use.

An agricultural library being a pivotal agricultural institution, must be developed to cater to students and staff, including research workers. This will go in a long way to advance the skills and effect changes in their attitudes in the desired direction. Deshmukh (1980) stated that a well-equipped library run by an efficient organization is, in fact, the soul of an educational institution. He further stressed that faculties, however well equipped and manned by competent staff, would soon find themselves in a morass of intellectual stagnation, and backwardness, if those were not supported by a dynamic, modern, up-to-date, and efficiently managed library.

6 FRAMEWORK OF NAHEP-IG INITIATIVE AND ACTIVITIES

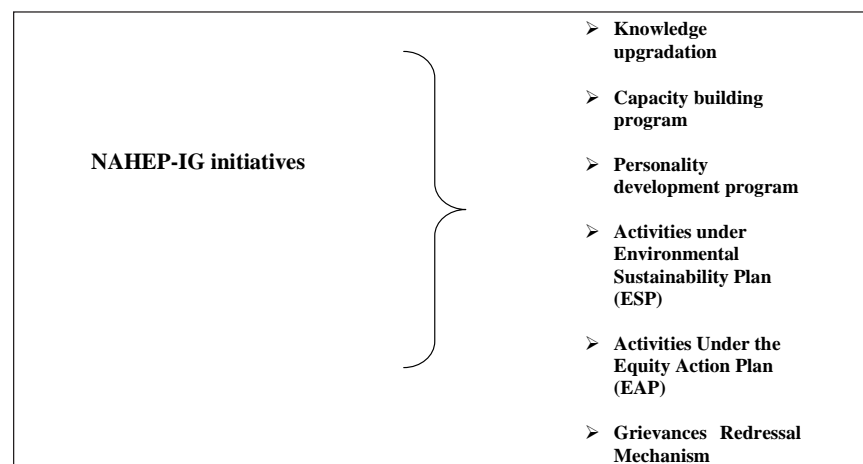


Fig 1. Frame work of NAHEP-IG Initiative and activities

7 BENEFICIARIES OF NAHEP-IG

71 STUDENTS

The students of the university/ sub-campus are benefited from a movement from teaching to learning-centered education. The Project also brings an overall improvement in the learning and academic environment that enhancement in exam outcomes by approximately 5-10% in competitive assessments like Junior

Research Fellow, Senior Research Fellow, Agricultural Research Service, Competitive Scholarship, and Civil Service Examination.

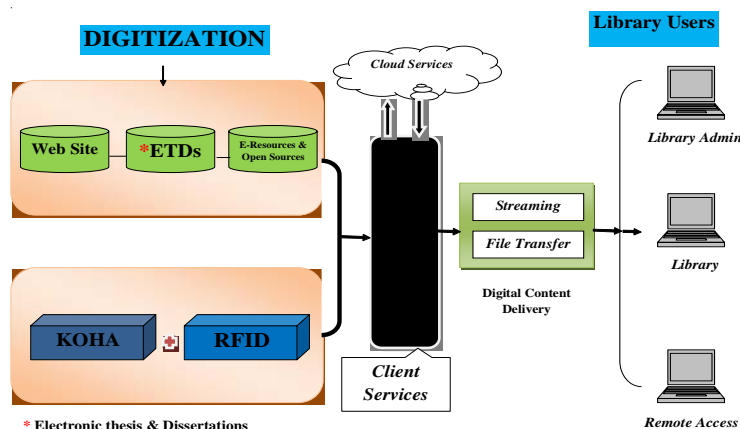
72 FACULTY

Increased collaboration at the national and international levels with other universities to raise research quality and training and capacity-building programs to improve education delivery and its learning outcomes are envisaged for the benefit of faculties.

73 INSTITUTIONS

Governance and transparency, infrastructural development, productive campus culture, and intensive use of technology-enabled learning and establishing global recognition for the University and cultivating a reputable brand associated with excellence in education and knowledge provision, accomplished by soliciting evaluations and rankings from diverse organizations to assess and acknowledge the University's standards.

NAHEP-IG approach for Digital Library at UAS, Raichur



UAS Raichur Proposed Digital Library

Fig. 1 Triumph Tales within NAHEP-IG, UAS, Raichur: Inspiring Narratives of Achievement

8 NAAC ACCREDITATION

With a remarkable and proud journey, UAS Raichur has garnered accolades that shine as bright as its commitment to excellence. The endorsement of its endeavors by the World Bank during the mission review on June 24th, 2020, was a resounding testament to its dedication. Encouraged by its ICAR accreditation at the Project's inception in 2019, the University embarked on a transformative path, bolstering its libraries with cutting-edge e-resources like e-books, pioneering RFID integration with KOHA, introducing the innovative Kindel Smart Library,

establishing an English Language Lab, and even providing remote access to e-resources for its constituent colleges through the Myloft platform.

Pursuing competitive human resources at UAS Raichur was diligently nurtured through capacity-building initiatives by NAARM and MANAGE, Hyderabad, synergizing seamlessly with the journey toward NAAC accreditation. This journey yielded substantial results, as evidenced by the University's meteoric rise from the 60th position in 2018 to the impressive 21st position in 2019 and a proud 25th position in 2020 in university rankings. This trajectory of success marked a significant milestone, a testament to the dedication, collaboration, and unwavering vision that defined UAS Raichur.

Taking the initial stride towards NAAC accreditation, the University applied for the UGC 12B Certificate, an achievement that echoes its pursuit of excellence. The visit of the UGC Peer Review Team, led by the esteemed Prof. Anil Kumar Singh, and their comprehensive assessment of the educational, research, and extension activities across campuses culminated in a profound dialogue with students, faculty, administrative staff, and vital stakeholders. The result was a resounding affirmation, as UGC bestowed the coveted 12B status upon UAS Raichur. This accolade brings forth the benefits of financial grants and sets the stage for the forthcoming NAAC accreditation, amplifying the University's resonance as an institution of eminence and distinction.

The University, with the support of NAHEP-IG, has attended the following activities successfully for NAAC accreditation.

- Establishment of IQAC - December 30th, 2020
- SSR - Submitted date - April 21st, 2021 Cleared date - April 6th, 2022
- PRT - Team Visit during 07-09 June 2022; the preparation for the team visit is going on



Fig. 2

The endeavor has been conceived with the pioneering intention of enhancing and perpetuating the excellence of advanced agricultural education. This is to be achieved by establishing a digital repository, serving as a fount of informational resources, thereby fortifying and cultivating a globally competitive pool of agricultural experts. The undertaking strives to forge resources and mechanisms that bolster the foundational infrastructure, elevate faculty and student progression, and furnish avenues for enhanced governance and administration of agricultural universities. The ultimate goal is to craft a comprehensive framework that elevates the prevailing agricultural education system to new heights, characterized by increased employment opportunities and a pronounced entrepreneurial orientation harmonized with worldwide standards of agricultural education.

The Libraries and Information Centres have undergone a revolutionary transformation catalyzed by the evolution and integration of information and communication technologies. This transformation has not only revolutionized the generation, arrangement, retention, and dissemination of information but has also become an indispensable instrument for instruction, learning, and scholarly inquiry. As novel technologies perpetually redefine the paradigm of dispensing knowledge and services, they align themselves with the swift advancements in Information and Communication Technology (ICT), catering to the burgeoning expectations of users.

9 OUTCOMES OF THE PROJECT

- (i) Elevate performance levels by an impressive 5-10% margin in challenging assessments, encompassing prestigious competitions like Junior-Research-Fellow, Senior-Research Fellow, Agricultural Research-Services, various Competitive Scholarships, and the Civil Service Examination.
- (ii) Witness a flourishing surge in student enrollment, projected to grow by 5-8% annually, specifically within Agricultural education. This remarkable progress will be accomplished by ingeniously harnessing the University's strengths, spotlighting them through dynamic websites, and fostering seamless connectivity with a network of educational institutions.
- (iii) Embark on an exciting journey towards global prominence as the University solidifies its distinctive brand identity, synonymous with unparalleled education and cutting-edge knowledge services. This aspiration is underscored by the strategic pursuit of esteemed rankings from diverse organizations, ensuring meticulous evaluation of standards and subsequent recognition on a worldwide scale. Anticipate a future where the University's reputation resonates on the global stage.

10 CONCLUSION

The NAHEP-IG initiative, spearheaded by ICAR and backed by the World

LIBRARY HERALD

Bank, stands as a visionary response by the Indian government to enhance the educational framework. This forward-looking endeavor seeks to revamp the educational landscape while fostering the growth of agriculture and its related sectors. The initiative's crux lies in enhancing and perpetuating superior higher agricultural education. This objective is to be realized by establishing a digital repository, catering to informational needs, thereby fortifying and nurturing a globally competitive agricultural workforce. The venture aspires to forge resources and mechanisms that bolster infrastructure, elevate faculty and student progression, and furnish avenues for elevated governance and administration in agricultural universities. By doing so, a comprehensive blueprint is envisaged to elevate the status quo of prevailing agricultural education. The ultimate goal encompasses generating enhanced employment opportunities, nurturing an entrepreneurial spirit, and aligning with international benchmarks in agricultural education.

ACKNOWLEDGEMENT: We express our gratitude to the Indian Council of Agricultural Research, New Delhi as well as the World Bank and the Government of India, for their invaluable financial assistance for this work.

REFERENCES

1. PRABHAT KUMAR (2021) and others. National Agricultural Higher Education Project was bringing dividends for quality Education to develop globally competitive Human Resources in Indian Agriculture. AGRIVISION "Souvenir and Abstract book" 5th National Convention on "Krishi Evam Atamnirbhar Bharat."
2. BAGHERI, B., MOSLEHI, A., JANABIAN, N., AND BEIGIM, B., 2015. Investigating the Scientific Relationship with Students' Academic Effectiveness, *Social Development Quarterly*, 10 (2), 100-79. <https://uasraichur.karnataka.gov.in/>
3. DESHMUKH, P.P. (1980). Role of an agricultural university library in technology transfer in agriculture. *Annals of library science and documentation*.
4. WORLD BANK. 2020. Learning for All-Investing in People Knowledge and Skills to Promote Development. World Bank Group Education Strategy, 2020. <https://nahep.icar.gov.in/>
5. AGARWAL, R. C. et al. (eds), Response Catalogue of International Training under NAHEP. Project Implementation Unit (PIU), National Agricultural Higher Education Project (NAHEP), Agricultural Education Division, Indian Council of Agricultural Research (ICAR), New Delhi, 2020
6. NAHEP, Annual Report, PIU, NAHEP, Agricultural Education Division, ICAR, New Delhi, 2020-21; <https://nahep.icar.gov.in>
7. GOI, National Education Policy. Ministry of Human Resource Development, Government of India, 2020, pp. 41-42; <https://www.education.gov.in>