





Embracing Digital Transformation In Agricultural Education Through Mobile And Web Based Applications Developed Under NAHEP

Indian Council of Agricultural Research National Agricultural Higher Education Project







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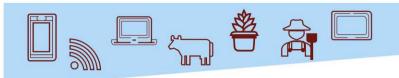
Foreword



Indian Council of Agricultural Research (ICAR), with financial assistance from the World Bank (WB), launched National Agricultural Higher Education Project (NAHEP) in 2017 with an aim to bring transformative reforms in agricultural higher education in country. Under NAHEP, the ICAR is in the process of bringing a fundamental change in its approach and control, financial sustainability, accountability, autonomy, transparency, and meritocracy to improve the quality and relevance of agricultural higher education in India. Since its inception, a collaborative and directional efforts are being made by NAHEP stakeholders to achieve the Project Development Objective (PDO) while addressing the improvement of policies, quality assurance through accreditation, common academic regulations and governance, effective curricula delivery systems, improvement of faculty competence, student development, attracting talented students, IT support and upgradation of infrastructure and facilities enabling the ICAR – AU system to catch up nationally and internationally.

I am happy to share that Project Implementation Unit- NAHEP has came up with a Document on 'Embracing digital transformation in agricultural education through mobile and web based applications developed under NAHEP'- to showcase the few digital initiatives in the form of mobile and web based applications developed under NAHEP. It's an already proven fact that the digital solutions have potential to shift the country toward deploying best technology interventions in meeting the dual goals of raising income for smallholder farmers as well as continuing to strengthen the competitiveness of Indian agriculture through data driven decision making. The compendium of mobile and web based applications developed in the emerging areas of agriculture and allied sector by partner AUs / institutes under NAHEP rightly addresses the current needs of market and industry. This will certainly help to create a ripple effect through achievement of the intended project outcomes of NAHEP and will create a new wave of digital technology led revolution in Indian agriculture.

I compliment National Director and his team for taking significant efforts in developing this publication.



Preface

National Agricultural Higher Education Project (NAHEP), with an aim to bring transformative reforms in agricultural higher education in the country. 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. NAHEP has been supporting to ICAR AUs through Institutional Development Plan (IDP), Centres for Advanced Agricultural Sciences and Technology (CAAST) and Innovation Grants component. 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 its different components together shall contribute to the achievement of the overall program objective. Till date, NAHEP has awarded sub-projects to 58 AUs and 3 ICAR institutes. I am happy to share that, under different sub-projects so far 20 mobile applications and 9 web based applications have developed. This document will act as knowledge repository for students, entrepreneurs, faculties, private players and other related stakeholders. The digital applications highlighted in this document have been playing a critical role in supporting the related stakeholders in conducting their routine business / farm operations effectively and thus ultimately enhancing the learning outcomes, research effectiveness, technology commercialization etc. through NAHEP. The aim of such digital initiatives is to widen the horizon of the teaching scope and providing global level learnings to the students. This improves the quality of education and helps the students to develop their skill sets to meet the demand of new age industries.

The support, guidance and motivation provided by Dr. Trilochan Mohapatra, Secretary, DARE and Director General, ICAR to PIU-NAHEP has been instrumental to the entire project team in effective implementation and securing achievements. The initiative for bringing this book by Dr. Hema Tripathi National Coordinator, M&E is highly appreciated. The support provided by all the National Coordinators; consultants is duly acknowledged.





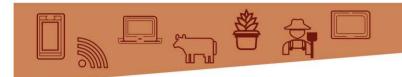
Background

Indian Council of Agricultural Research (ICAR) commenced National Agricultural Higher Education Project (NAHEP) with the assistance of World Bank (WB) in November 2017 with an overall objective to support participating Agricultural Universities (AUs) and ICAR in providing more relevant and higher quality education to the students. NAHEP endeavors increased agricultural productivity and support quality improvements of higher education to create a more skilled workforce that continuously improves the productivity of key sectors, including agriculture.

Overall, the project aims to develop resources and mechanism for supporting infrastructure, faculty and student advancement, and providing means for better governance and management of agricultural universities, so that a holistic model can be developed to raise the standard of current agricultural education system that provides more jobs and is entrepreneurship oriented and at par with the global agriculture education standards.

NAHEP is a Multi-Global Practice collaboration (Agriculture and Education) project and supports activities and results directly related to cross-cutting strategic areas of climate change, jobs and gender. NAHEP has been promoting efficiency and competitiveness through changes in working mechanism of AUs, raising the teaching and research standards through improved infrastructure, competency and commitments. 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.

Till March 2020, 58 Agriculture universities (AUs) have been awarded under NAHEP, wherein 18 AUs come under IDP, 16 AUs under CAAST and 24 AUs under IG in component 1. Besides 3 ICAR institutes i.e. ICAR- Indian Agricultural Statistics Research Institute (IASRI), ICAR-National Institute of Agricultural Economics and Policy Research (NIAP) and ICAR- National Academy of Agricultural Research Management (NAARM) have been implementing Component 2.



Introduction

NAHEP under the guidance of ICAR and World Bank has been supporting AUs and ICAR institutes to provide the better quality and more relevance agricultural higher education to the students. With this aim, NAHEP has been sponsoring many activities for enhancing learning outcomes through academic and infrastructure development, enhancing system management and effectiveness with emphasis on industry-academia linkages, creating better employment and entrepreneurship opportunities by coordinating development of teaching, research and extension on emerging areas of agriculture and allied sector. Improving overall competencies for strengthening education through better institutional reforms like curriculum revisions, leveraging ICT infrastructure, human resource capacity development etc.

While India's agriculture sector has been acclimatizing to the changing economic and market conditions steadily, there is a need to set the agenda for the next level of growth and transformation. On the one hand, the sector is being driven by factors such as a growing population and increased demand for agriculture and food products, an enhanced focus on doubling farmers' income and a growing aspiration to become a major agri exporter at the global level. On the other hand, the overall ecosystem is being constrained by certain systemic challenges which are leading to reduced resource use efficiency and farm incomes. Small and fragmented landholdings, lower yield compared to global benchmarks, uncertainties and risks involved in traditional farming are some of the challenges faced by the agriculture sector. Given the complexity of the sector, digital technology could play an important role in optimising resource use efficiency and reducing labour cost, thereby resulting in improved farm incomes. Towards this endeavor, NAHEP has been encouraging and supporting partner AUs to take up the digital initiatives such as developing mobile and web based applications to address the emerging needs of agriculture and allied sector. This will not only support students, faculties, entrepreneurs but will also act as an advisory source for farmers. So far, 20 such mobile applications and 10 web-applications are developed partner AUs/Institutes.

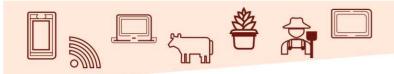
Few of the partner AUs have developed mobile applications to provide advisory services, majorly around agronomic and veterinary services. Whereas, few of the partner AUs have developed applications to strengthen the academic, teaching and research ecosystem at AU level.

Web based applications developed under NAHEP are mainly focused on strengthening the academic and administrative functioning at AU level. Such initiatives will certainly help NAHEP in improving quality and relevance of agricultural higher education in India.

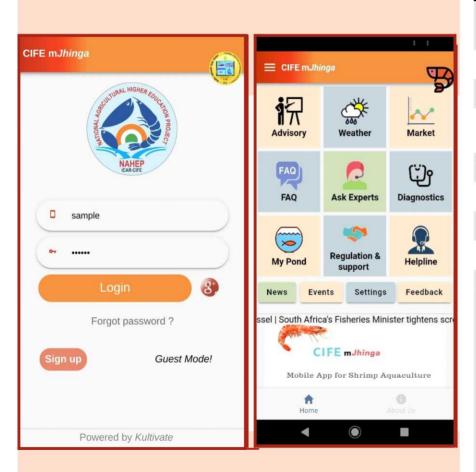
Mobile Applications







mJhinga



Application developer	ICAR-Central Institute of Fisheries Education
Year of development	2019
URL of the application	http://bit.ly/icarcifeapp
Objective of development	Advisory to farmers
Language	Hindi & English
Beneficiaries	Farmers
Platform	Android
Brief	

mJhinga is a dynamic feature rich mobile application in Hindi & English for empowering farmers with knowledge on shrimp aquaculture especially in inland salt affected area of Haryana, Punjab, Rajasthan and U.P. It has 9 modules: Advisory, Weather, Market, FAQs, Ask experts, Diagnostics, My Pond, Regulations and Schemes, and Helpline. mJhinga provides detailed advisory on: setting up new shrimp farms; growing healthy shrimp crop and current market price trends which allows farmers to self-identify diseases and ask experts when they are not sure.













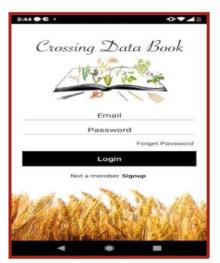
Crossing Data Book

Application developer	Chandra Shekhar Azad University of Agriculture & Technology, Kanpur
Year of development	2019
URL of the application	http:/play.google.com/store/apps/details2id=com.db.crossingdata
Objective of development	Real-time decisive data requirement
Language	English
Beneficiaries	Agricultural Researchers
Platform	Android

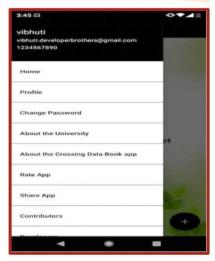
Brief

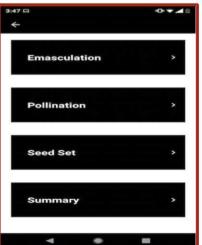
This first Digital Data Book application designed to meet the real-time decisive data requirement of the Agricultural researchers, particularly for plant breeders during the Succor time of Plant Hybridization. This application has the following core areas

- 1- Creating the Hybridization program
- 2- Emasculation
- 3- Pollination
- 4- Seed Setting

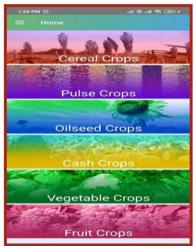












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MANGO	BANANA
POMOGRANATE	GRAPE
GUAVA	РАРАУА
KAGZILIME	SWEET ORANGE



Pomog	Dieases
	after the incidence, spray ole 10.26 % OD @ 750 ml/1000
	can marrigold arround field. At eason starting application of a cacke.
	after the incidence, spray ble 10.26 % OD @ 900 ml/1000

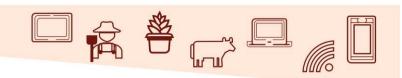
Phule Pest and Diseases Management

Application developer	Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra
Year of development	2019
URL of the application	https://play.google.com/store/apps/de tails?id=com.cumulus.ppdm&hl=en
Objective of development	Advisory to farmers
Language	English
Beneficiaries	Farmers
Platform	Android

Brief

The developed mobile application is informative and can help farmers get access to crucial information in context to plant protection measurement. This mobile application provides the detailed advisory with accurate doses of chemicals recommended by MPKV, Rahuri and CIBRC (Central Insecticide Board and Recommendation Committee, Faridabad) for the management of different pest and diseases of various crops.

It Provides list of Insecticides, Pesticides and Fungicides with their trade name or market name available in market. It works in offline and online mode and published in Marathi, English etc.



Spatial ETr

Application developer	Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra
Year of development	2019
URL of the application	https://play.google.com/store/apps/details?id=com.caast.spatetr&hl=en
Objective of development	Advisory to farmers

LanguageEnglishBeneficiariesFarmersPlatformAndroid

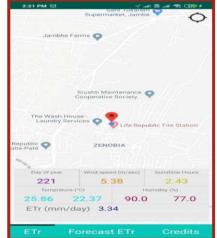
Brief

A determination of evapotranspiration is essential for irrigation management to plan system and develop irrigation schedules. This application estimates evapotranspiration through Penman-Monteith model. It uses the Spatial Google map on background and code based on Penman-Monteith model algorithm to estimate reference evapotranspiration in mm/day. It is user friendly and gives farmers and technicians the ability to evaluate daily evapotranspiration required for different water managements tasks on farms using Android mobile device. User can search the desired location by entering the name in search box or can drag and tap on the Google map to estimate the Evapotranspiration in mm per day.

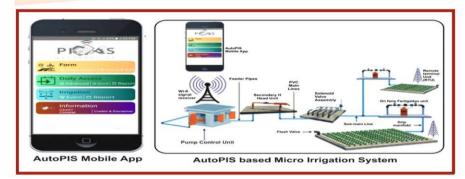




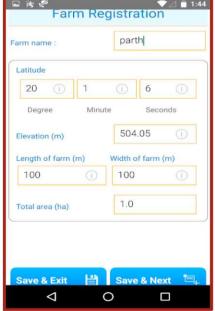












AutoPIS

Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra
2019
https://play.google.com/store/apps/details?id=com.caast.spatetr&hl=en
Advisory to farmers
English, Marathi
Farmers
Android

Number of users

Brief

The Auto PIS mobile Application is the integrated application of automatic pump controller and Phule irrigation scheduler that start the motor from anywhere for the specified time duration estimated on the basis of real time weather, crop, soil, farm and irrigation system information. After the specified time elapsed, pump automatically stops. Additionally through Auto PIS mobile Application, farmers can provide irrigation time to automatic pump controller from anywhere as per their own knowledge (if they does not want to use the estimates based on real time information)



Application developer	Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra
Year of development	2019
URL of the application	https://play.google.com/store/apps/details?id=com.caast.spatetr&hl=en
Objective of development	Student's Attendance and Teacher's Performance Evaluation
Language	English
Beneficiaries	Students
Platform	Android

Number of users

Brief

As per the objective of the CAAST-CSAWM to strengthen the existing higher education academic programmes of Mahatma Phule Krishi Vidyapeeth, this application has been designed and developed under the sub-project. It has two components viz. 1. Recording the attendance of the students in classroom using any one of the methods i.e. QR code, roll call or using NFC tags and 2. to collect and record the teaching faculties' feedback by the present students on real time.













Phule-SANMAN

Application developer	Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra
Year of development	2019
URL of the application	http://www.mpkv-caast.ac.in/ETR/spatialetr/details
Objective of development	Support farmers by providing farm machineries timely and at affordable cost
Language	English
Beneficiaries	Farmers
Platform	Android

Brief

Phule – SANMAN is developed for collection of farm infrastructure available with farmers to access the need mechanization and present mechanization solution available in the market i.e. custom hiring, repairs and maintenance and suppliers of agricultural implements.

Farmers will be benefited by suggestions for the mechanization solutions based on crop and operation, information of implements and machinery available in market at the minimum cost

















IVRI Vaccination Guide App

Application developer	ICAR-Indian Veterinary Research Institute and ICAR-Indian Agricultural Statistics Research Institute
Year of development	2019
URL of the application	https://play.google.com/store/apps/details?id=co m.icar.ivri.iasri.vcguideapp
Objective of development	To provide information on vaccination in all the livestock species, Pig, Horses, Camel, Mithun, Yak, Poultry etc.
Language	English
Beneficiaries	Farmers
Platform	Android

Brief

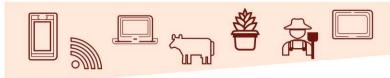
The application provides basic information about vaccination in all the livestock species viz., Cattle & Buffaloes, Sheep & Goats, Pig, Horses, Camel, Mithun, Yak and Poultry (Layers & Broilers) & Pets (Dogs & Cats). Apart from the basic information it covers specific information about vaccination related to all the major bacterial and viral diseases. For each of the disease in various species, the information on the causative agents, types of vaccines available, serotype / strain used for the vaccines, vaccination schedule and commercially available vaccines are provided in the application



















Kritrim Garbhadhan

Application developer	ICAR-Indian Veterinary Research Institute and ICAR-Indian Agricultural Statistics Research Institute
Year of development	2019
URL of the application	https://play.google.com/store/apps/details? id=com.ivri.iasri.aiapp
Objective of development	Advisory to farmers
Language	Hindi
Beneficiaries	Farmers
Platform	Android

Brief

The application is targeted to provide knowledge and enhance the skills of graduating veterinarians, field veterinary officers and para-vets about various aspects related to heat detection & artificial insemination (AI) viz., symptoms of heat, stages of estrus cycle, heat detection, AI kit, proper time of AI, common sanitary measures, thawing, loading of AI gun, semen deposition and post AI advise & follow-up. Additionally, it provides guidelines for semen handling and pregnancy diagnosis in cattle and buffaloes.













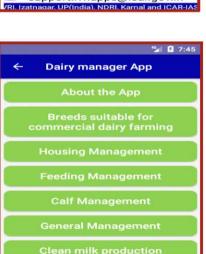
IVRI-Dairy Manager

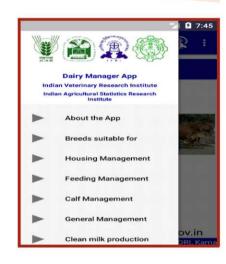
ICAR-Indian Veterinary Research Institute **Application developer** and ICAR-Indian Agricultural Statistics Research Institute Year of development 2019 https://play.google.com/store/apps/detail **URL** of the application s?id=com.ivri.iasri.dmapp **Objective of development** Advisory to farmers Language Hindi **Beneficiaries Farmers Platform** Android



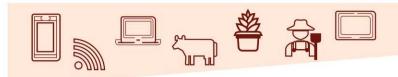
The application is educational in nature and provides complete support for establishing a dairy farm and its effective management. The app provides information on milch breeds of cattle and buffalo suitable for commercial dairy farming with their important characteristics. Further it focuses on housing management, feeding management, calf management, general management and health management along with hygiene milk production.





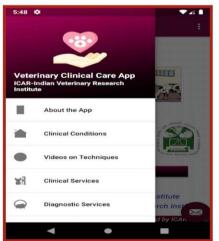














IVRI-Veterinary Clinical Care

Application developer	ICAR-Indian Veterinary Research Institute and ICAR-Indian Agricultural Statistics Research Institute
Year of development	2019
URL of the application	https://play.google.com/store/apps/de tails?id=com.icar.ivri.iasri.veterinarycli nicalcareapp
Objective of development	Advisory to veterinarians
Language	Hindi
Beneficiaries	Farmers
Platform	Android

Brief

It is targeted to impart knowledge and skills to graduating veterinarians & field veterinary officers about most frequent clinical conditions encountered in field conditions related to medicine (Mastitis, Bloat, TRP, Ketosis, Milk fever, Ruminal impaction & Calf diarrhoea), gynaecology (Pyometra, Anestrus, Repeat Breeding, Dystocia, RFM, Uterine torsion, Uterine prolapse, Cervico- vaginal prolapse & COD) & surgery (Urolithiasis, Caesarean Section, Hernia, Castration, Fracture & Wound)













IVRI-Pig (Shookar) Ration

Application developer	ICAR-Indian Veterinary Research Institute and ICAR-Indian Agricultural Statistics Research Institute
Year of development	2019
URL of the application	https://play.google.com/store/apps/details ?id=icar.iasri.ivri.pigration
Objective of development	Advisory to farmers
Language	Hindi
Beneficiaries	Farmers
Platform	Android

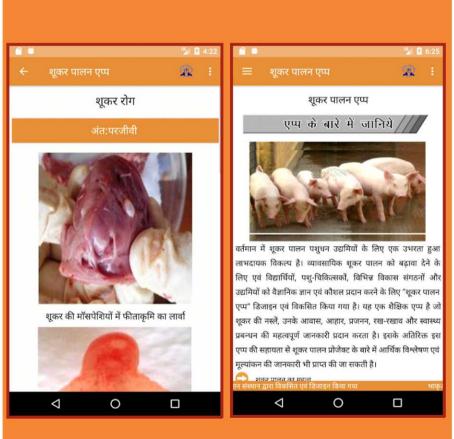
Brief

It is targeted to impart and promote scientific knowledge and skills about balanced pig ration formulation. Imbalanced feeding to pigs is a major problem in field condition. Animals on imbalanced ration show poor health, growth and reproductive performance thereby causing high cost of meat production. The IVRI-Pig Ration application can help the end users to formulate balanced ration for the various categories of pigs based on the locally available feed ingredients.









IVRI-Pig Farming

Brief

Application developer	ICAR-Indian Veterinary Research Institute and ICAR-Indian Agricultural Statistics Research Institute
Year of development	2019
URL of the application	https://play.google.com/store/apps/details?id=com.icar.ivri.pig_app&hl=en
Objective of development	Advisory to veterinarians
Language	Hindi
Beneficiaries	Farmers
Platform	Android

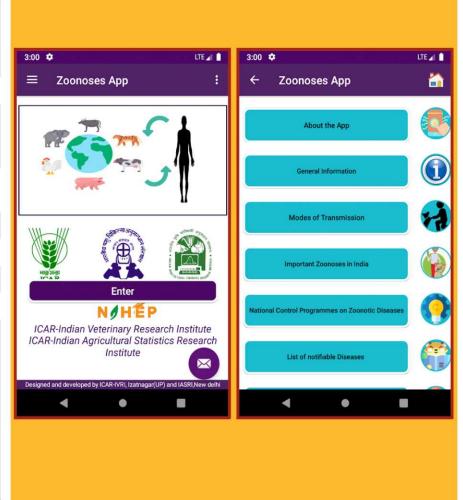
Pig farming has gained significant importance now a days and emerged as a profitable enterprise option for livestock entrepreneurs. The Pig Farming (Shookar Palan) App designed and developed by ICAR-IVRI, Izatnagar in collaboration with ICAR-NRC on Pig and ICAR-IASRI, New Delhi with support of NAHEP, ICAR is targeted to impart scientific knowledge and skills to the graduating veterinarians, field veterinary officers, developmental organizations and entrepreneurs for promoting pig farming. This is an educational application providing information on breeds, housing, feeding.

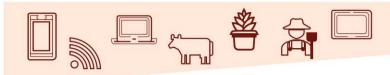




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Application developer	ICAR-Indian Veterinary Research Institute and ICAR-Indian Agricultural Statistics Research Institute
Year of development	2019
URL of the application	https://play.google.com/store/apps/details?id=com.icar.ivri.iasri.zoonosesapp&hl=en
Objective of development	Advisory to veterinarians
Language	Hindi
Beneficiaries	Farmers
Platform	Android
Brief	

It aims at providing basic information about important zoonotic infections including their modes of transmission, symptoms, prevention and control measures. The list of national disease control programmes w.r.t. zoonotic diseases has also been included along with the list of noticeable diseases in animals. It will be useful to students of veterinary and medical degree programmes, practicing veterinarians, health care workers and general public









IVRI-Waste Management Guide

Application developer	ICAR-Indian Veterinary Research Institute and ICAR-Indian Agricultural Statistics Research Institute
Year of development	2019
URL of the application	https://play.google.com/store/apps/details?id=com.icar.ivri.iasri.wmapp&hl=en
Objective of development	Advisory to farmers, vets
Language	Hindi
Beneficiaries	Farmers
Platform	Android
Brief	

To impart information and knowledge to graduating veterinarians, field vets, general public, farmers and other stakeholders about management of waste originating from agriculture, livestock and household activities this application developed. It covers information related to composting & its various methods viz., aerobic, anaerobic, rapid, large scale, in vessel & miscellaneous methods. It also provides information on various compost related products, vermicomposting , its various methods & procedure, nutrient profile & use of the vermi-compost for crops















IVRI-Landlly Pig App

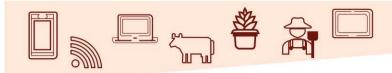
Application developer	ICAR-Indian Veterinary Research Institute and ICAR-Indian Agricultural Statistics Research Institute
Year of development	2019
URL of the application	https://play.google.com/store/apps/details? id=com.ivri.iasri.landlypig&hl=en
Objective of development	Advisory to farmers, entrepreneurs and vets
Language	Hindi
Beneficiaries	Farmers
Platform	Android
Brief	

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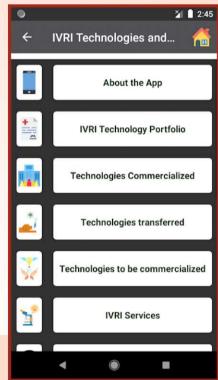
The basic objective is to impart knowledge about faster growing pig variety namely Landlly developed by ICAR-IVRI, Izatnagar. It is targeted to provide information on newly developed Pig Variety Landlly to the UG and PG students of Veterinary Sciences, Veterinary professionals and Entrepreneurs. The Landlly variety was developed by crossing exotic potential lines of Landrace with indigenous Bareilly Local pigs with inheritance level of 75% Landrace X 25% Bareilly local pig. The inter-se mating with intensive selection was followed for 6 generations to stabilize heterocyst effect











IVRI-Technologies & Services

Application developer	ICAR-Indian Veterinary Research Institute and ICAR-Indian Agricultural Statistics Research Institute
Year of development	2019
URL of the application	https://play.google.com/store/apps/details?id=com.ivri.iasri.landlypig&hl=en
Objective of development	Advisory to farmers, entrepreneurs and vets
Language	Hindi
Beneficiaries	Farmers
Platform	Android
Brief	

The major objective of the app is to promote and showcase the information about important technologies such as the features, utility, IPR status and inventors for its easy commercialization. The app mainly contains the technologies in the areas of Animal Health, Animal Feed, Animal Reproduction and Breeding, Animal Management, Surgical/Farm based equipment, Value Added Livestock Products and Miscellaneous technologies to all concerned stakeholders

NGT for Forecasting Pest and Diseases

Application developer	University of Agricultural Sciences, Bangalore
Year of development	2019
URL of the application	https://play.google.com/store/apps/details?id=com.ivri.iasri.landlypig&hl=en
Objective of development	Advisory to farmers and agronomists
Language	English
Beneficiaries	Farmers
Platform	Android
Number of users	
Brief	

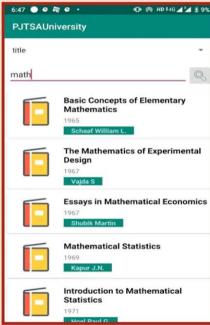
Next Generation Technologies (NGT) for Forecasting Pest and Diseases is designed and developed by UAS, Bangalore, aims at weather based forecasting of pest and disease and advisory to management at initial stage of the pest. The forecasting of pest and disease information's will be available of major pest and diseases of paddy, grape and Pigeon pea crops. Benefits of the application are to reduce the cost of cultivation, environmental pollution, and increase net profit to the farming community and good product quality. It will be useful to the farming community and agricultural extension workers.











PJTSAU KMC

Application developer	Professor Jayashankar Telangana State Agricultural University, T.S
Year of development	2019
URL of the application	https://play.google.com/store/apps/details?id=com.pjtsauniversity&hl=en_IN
Objective of development	Knowledge management services to students and staff of the AU
Language	English, Hindi
Beneficiaries	Farmers
Platform	Android
Brief	

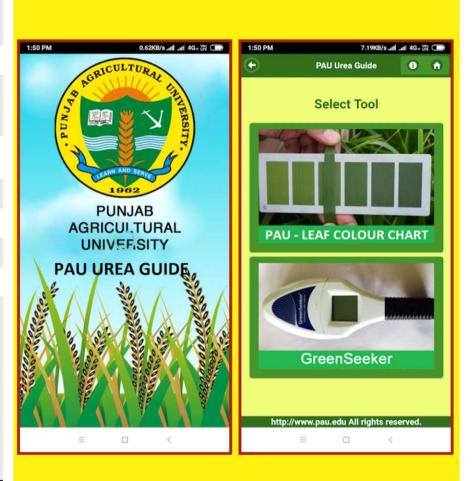
PJTSAU has designed and developed mobile application for Knowledge Management Centre. It is based on android platform and helps in browsing the bibliographical details and availability of books in the PJTSAU KMC. It supports simple search using keywords like Title, Author, Subject. It is being used by the students and staff of the University





Application developer	Punjab Agricultural University, Ludhiana, Punjab
Year of development	2019
URL of the application	https://play.google.com/store/apps/details?id=com.pau.soils&hl=en
Objective of development	Advisory to farmers
Language	English, Punjabi
Beneficiaries	Farmers
Platform	Android
Brief	

The application provides decision support system for site-specific need-based fertilizer N management in rice, wheat, maize and cotton using PAU-leaf colour chart and GreenSeeker optical sensor

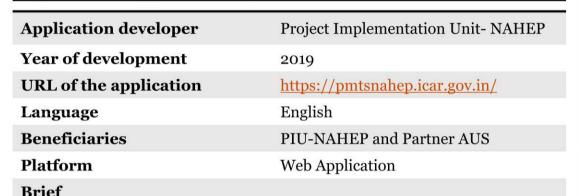


Web Applications





Project Monitoring and Tracking System (PMTS)



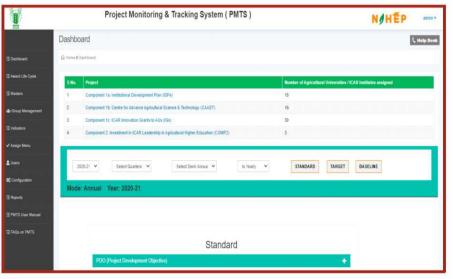
Project Monitoring and Tracking System (PMTS) is developed by Central Monitoring and Evaluation team of NAHEP. PMTS is a web application intended to provide automated solution to users. In case of NAHEP, the key functionalities will be to store data on server side of all the respondents, online monitoring of inputs / outputs and tracking, feedback to PME cells / PIU-NAHEP and to generate the various reports for decision-making levels. At the outset, broad functions identified for PMTS in NAHEP, are as follows: To facilitate the capture, storage and retrieval of a clear, quantified and

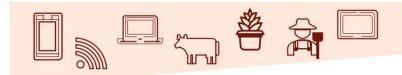
- To track the progress of various subprojects under components 1, 2 and 3 on an ongoing basis in identified Monitoring and reporting formats
- To monitor the progress of overall NAHEP project
- To regularly assess the performance of subproject staff
- To evaluate the output and outcome at mid-term and prior to completion
- Impact assessment

operational baseline data











18	72	144
No. of BSMA Group	No. of Discipline	No. of Courses (PG)
706	1771	2500
No. of Units	No. of Registered Users	No. of Applications Received
308	813	1379
No. of Applications (Course Reviewer)	No. of Applications (Unit Reviewer)	No. of Applications (Content Creation)

E-Learning platform

Application developer	ICAR-Indian Agricultural Statistics Research Institute
Year of development	2019
URL of the application	https://education.icar.gov.in/eLearning homepage.aspx
Language	English
Beneficiaries	Students & Faculties
Platform	Web Application
Brief	

The e-learning portal has been designed and maintained by IASRI. It provides learning platform to students & faculties of AUs under ICAR. The system has been opened for access from October 2019 to the AU nodal officers for content creations and review. So far, 891 users have registered and created the content for 144 courses.

AU -Project Information Management System (PIMS)

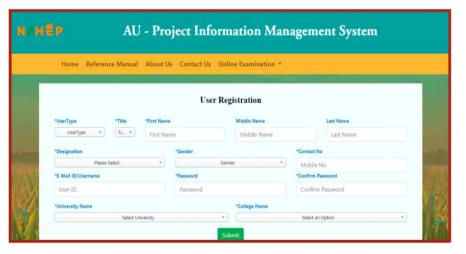


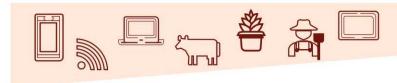
Brief

AU - PIMS is an online system which enables automation and streamlining of all the academic activities of a university. The system has been designed in a modular approach with in-built workflows. This system facilitates in information management and improved decision making with long term objective to check duplication in research projects at AU level. It allows all ICAR Deemed Universities to follow the best standards and builds a repository of the academic records and e-learning resources.

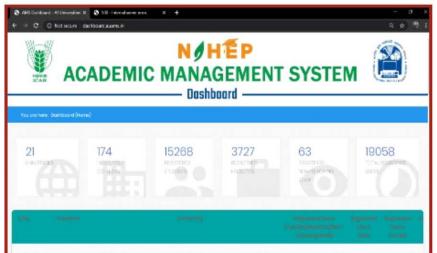












Academic Management System Version 2.0

Application developer	ICAR-Indian Agricultural Statistics Research Institute
Year of development	2019
URL of the application	http://auams.in/
Objective of development	Management of Academic Activities
Language	English
Platform	Web Application
Brief	

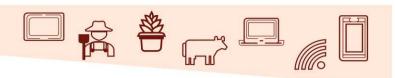
Academic Management System (AMS) has been implemented and customized under NAHEP Component 2 for participating Agricultural Universities under NAHEP. AMS has already been implemented in 22 AUs. It is a web enabled system for management of various academic activities of the university. The system caters to the needs of multiple users such as: Dean, Registrar, Professor, Head, Guide, Faculty, Teacher, Student, Administrators and Officials for performing their assigned tasks. AMS has been designed in a modular approach with in-built workflows. AMS ensures that the individuals responsible for the next task are notified on timely basis and receive the data they need to execute at their stage of process. At present, five modules have been incorporated in AMS viz., Student Management, Faculty Management, Course Management, Administration Management and E-Learning.

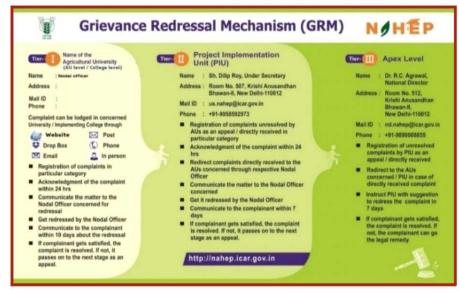


Application developer	ICAR-Indian Agricultural Statistics Research Institute
Year of development	2018
URL of the application	https://nahep.icar.gov.in/GRMSubmit.aspx
Objective of development	To raise complain and ensure grievance promptly registered, responded and redressed
Language	English
Platform	Web Application
Brief	

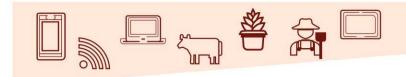
A three tier Grievance Redress Mechanism (GRM) has been put in place for use by stakeholders, as per the Environmental and Social Standard (ESS 10), an important constituent element of World Bank's 2016 Environmental and Social Framework.

The objective of the Grievance Redress Mechanism is "to provide an access to stakeholders to complain and ensure grievance promptly registered, responded and redressed to, and problems and solutions are identified by working together".

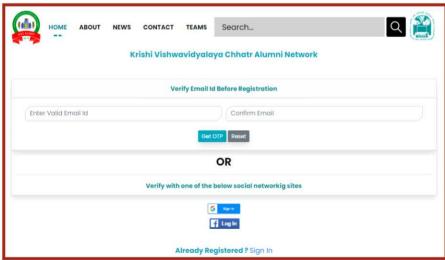












KVC Alunet

Application developer	ICAR-Indian Agricultural Statistics Research Institute		
Year of development	2020		
URL of the application	https://alumni.icar.gov.in/		
Objective of development	To get connected globally, for sharing of information, networking among alumni, providing wide-array of networking opportunities		
Language	English		
Platform	Web Application		

Brief

Krishi Vishwavidyalaya Chhatr Alumni Network is designed & implemented under NAHEP Component-II. This portal is a medium to get connected globally, for sharing of information, networking among alumni, providing wide-array of networking opportunities, for updates of activities & events. Offering an exclusive opportunity to meet alumni, employers, industry leaders, passed out colleagues, "KVC Alumni Network", facilitate the expansion of professional network, for individuals, to stay in touch with their fellow alumni, from various fields of expertise. Developed to foster communication for easy exchange of information, this provides, its alumni a virtual opportunity, to get in touch in real-time, for harnessing good relationships, develop resources, progress skills and profit from the expertise of others.









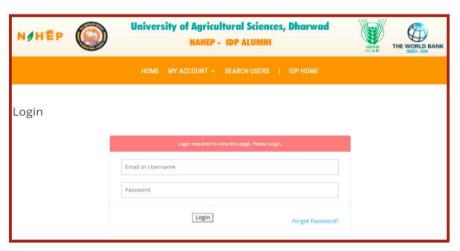


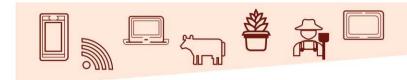
NAHEP-IDP Alumni

Application developer	University of Agricultural Sciences, Dharwad
Year of development	2020
URL of the application	https://alumni.nahep-idpuasd.in/
Objective of development	To strengthen the alumni network and develop academia - industry linkages
Language	English
Platform	Web Application
Brief	

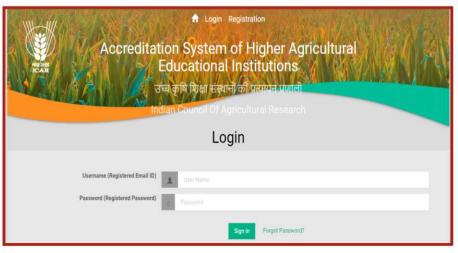
UAS, Dharwad has developed this web application as a part of 'Annual Global and Regional Alumni Meet'. The platform provides UAS, Dharwad alumni to register for the event, get notified on the event schedules and connect with current batch students. The ultimate aim of this platform is to strengthen the alumni network and support in developing academia-industry linkages.











Accreditation System of Higher Agricultural Educational Institutions

Application developer	ICAR-Indian Agricultural Statistics Research Institute	
Year of development	2020	
URL of the application	https://education.icar.gov.in/	
Objective of development	To make ICAR accreditation process more transparent, accountable and shall reduce time and requirement for physical file movement.	
Language	English	
Platform	Web Application	

Brief

Accreditation System of Higher Agricultural Educational Institutions is designed & implemented under NAHEP Component-II. This online system will make ICAR accreditation process more transparent, accountable and shall reduce time and requirement for physical file movement.

All of the following HAEIs can apply for accreditation online:

- State Agricultural/Veterinary/Fisheries/Horticultural Universities
- Central Agricultural Universities
- Central Universities with Agricultural Colleges/Departments
- State General/Private Universities having agricultural colleges
- Deemed Universities with Agricultural College.







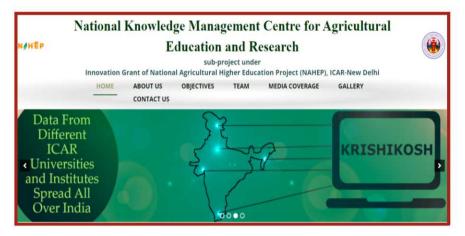


National Knowledge Management Centre for Agricultural Education and Research

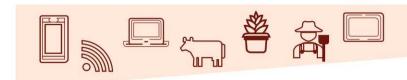
Î		
Application developer	PJTSAU-Hyderabad, ICAR-IASRI, ICAR-IARI, TANUVAS-Chennai, ICAR-IVRI	
Year of development	2019	
URL of the application	https://krishikosh.egranth.ac.in/	
Objective of development	To link various libraries under NARES and provide more efficient and effective facilitation of digitised documents	
Language	English	
Platform	Web Application	
TOTAL NEW YORK		

Brief

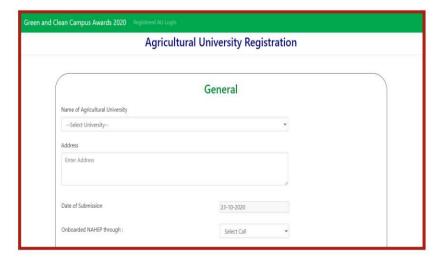
PJTSAU-Hyderabad, ICAR-IASRI, TANUVAS-Chennai, ICAR-IARI and ICAR-IVRI has developed the NKMC for Agricultural Education and Research, has been developed using WordPress approach which based on content management system (CMS). National Agricultural Research & Education System (NARES) is a huge repository of knowledge and information on crop sciences, horticulture, resource management, animal sciences, agricultural engineering, fisheries, agricultural extension and agricultural education. This platform links various libraries under NARES. Key products of NKMC are Krishikosh, Keyword Extraction, IDEAL, Mobile Application, Similarity measure tool, OCR Conversion Tool etc.











Green and Clean Campus Awards

Application developerProject Implementation Unit- NAHEPYear of development2020URL of the applicationhttps://nahep.icar.gov.in/greencleancampus/LanguageEnglishBeneficiariesPIU-NAHEP and Partner AUSPlatformWeb Application

Brief

Greening the campus is all about turning around wasteful inefficiencies and using conventional sources of energies for its daily power needs, correct disposal handling, purchase of environment friendly supplies and effective recycling program. Institute has to work out the time bound strategies to implement green campus initiatives. Through this platform, PIU will call the applications, screen and facilitate the award. Online initiative for this award will make procedure more transparent and easy to access.

Green Campus emphasizes on the following aspects:

- Greenery to provide pollution free air and carbon sink
- Establishing feeding points for bird and animals and creating shelter for them
- A Clean campus
- Minimize Waste and consumption of water and energy
- Adoption and Deployment of Environment friendly activities
- Impact of use of digital technology and management to reduce consumption of natural resources paper, gas, water, energy etc.











Indian Council of Agricultural Research

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https://nahep.icar.gov.in