



**Indian Council of Agricultural Research
National Agricultural Higher Education Project
Project Implementation Unit
Krishi Anusandhan Bhawan – II, Pusa, New Delhi – 110012**

**Invitation of Concept Notes for support under the National Agricultural
Higher Education Project (NAHEP)**

Background

ICAR, with the assistance of World Bank and Govt. of India on a 50:50 cost sharing basis, has launched the National Agricultural Higher Education Project (NAHEP). The investment will be made on infrastructure, competency development of faculty, and attracting talented students to agriculture with a total cost of US\$ 165 million (Rupees 1100 crore approximately) for four years starting from the financial year 2017-18 upto 2020-21. The overall objective of the project is to support participating Agricultural Universities and ICAR in providing more relevant and higher quality education to agriculture university students. The key to a successful education programme essentially lies in quality of faculty, learning-focused and career-oriented curricula and necessary laboratory and farm facilities leading to better employment outcomes for students. The project, therefore, aims to address majority of these areas by conceptualizing a number of important reforms under two broad categories, i.e. focusing on the working mechanism of the Agricultural Universities and raising the standard of campus teaching and learning in more non-conventional ways. This will be achieved through a number of schemes and provisions for up gradation of faculty, students and required infrastructure and partnerships with other academic institutions and private industry.

NAHEP targets Agricultural Universities in the ICAR System, including State Agricultural Universities, State Veterinary Universities, State Horticulture Universities and State Fishery Universities established under the Acts of State Legislative Assemblies and Central Agricultural Universities established under the Acts of Parliament, ICAR Deemed to be Universities, and Central Universities having Agricultural faculty.

Components to be funded: The NAHEP will have the following three components:

Component 1: Support to Agricultural Universities

This component will have three sub-components:

Sub-component 1A: Investments toward 21st Century Agricultural Universities (Implementation of Institutional Development Plan / IDP). Under this sub-component, grant will be given for institutional development to up to ten selected participating Agricultural Universities on a competitive basis. This will be implemented through Institutional Development Plans (IDPs) and will target reform-ready accredited State-level AUs. The IDPs would seek to improve:

- (a) learning outcomes and future employment for AU students for undergraduate education; and
- (b) faculty teaching performance and research effectiveness for knowledge generation.

Each IDP would be linked to performance and quality enhancement. The selected universities would act as a model to introduce reforms in other agricultural universities. Through the IDPs, the AUs would identify and prioritize key challenges, propose interventions to respond to these challenges, and set timelines and indicators for measuring achievement of greater quality and relevance attributable to these interventions. Each AU would receive specialized support from ICAR and the External Advisory Panel during IDP development. IDPs would draw on consultations with stakeholders, including faculty, administrators, students and industry. IDP funding would be performance-linked. Activities financed under each IDP would include:

- (a) capacity building and training for agreed governance reforms that promote AU autonomy and sustained accreditation;
- (b) improved infrastructure (i.e., renovation and modernization of existing facilities) for research and teaching;
- (c) faculty development (i.e., training, consultant services);
- (d) networking with industry and other learning institutions, both national and international;
- (e) increased vocational education through the launching of relevant programs;

(f) more effective student job placement;

(g) own-revenue generation through consultancies, testing and certification for AUs.

Each IDP would also specify a Twinning Plan with a recognized high-performing university, either in India or abroad.

A maximum of ten (10) IDPs will be funded on a competitive basis. The IDP would (a) demonstrate the role of reforms in governance and increasing system's internal efficiency through the piloted programmes/courses; (b) ensure compliance with ICAR's policies and reforms introduced, and strengthen quality assurance mechanisms; (c) enhance quality of human resource development and competence of faculty; (d) take up strategic planning, and (e) attract and shape young talent to agricultural education and profession.

Sub-component 1B: Investments in Centres for Advanced Agricultural Science and Technology (CAAST). This sub-component would provide grant to selected reform-ready, ICAR-accredited Agricultural Universities. The AUs will be competitively selected for the establishment of CAAST for knowledge generation and teaching aids for post graduate and doctoral level. The sub-component would finance: (a) research and teaching equipment (i.e., goods); (b) faculty and scientist development fellowships, (c) student scholarships, primarily at the postgraduate level; and (d) costs associated with twinning arrangements with similar centres (e.g., universities, research centres) both outside and within India (i.e., training, consultant services, and non-consultant services)..

CAAST would support AUs in setting up interdisciplinary Centres in the areas of importance and present state-of-art technology. Based on an assessment of key knowledge challenges expected to be faced by Indian agriculture in the coming years and the expected need for skilled graduates and postgraduates in these areas in the future, thrust areas will be selected for setting-up CAAST. The emphasis will be on participation of industries in these centres for skill development for enhanced education, employability and entrepreneurship.

Suggested theme of CAAST

A maximum of ten (10) Centres of Advanced Agricultural Science and Technology selected

from different sub-sectors of Indian agriculture will be funded on a competitive basis. Suggested themes would include- : Conservation Agriculture, Precision farming / Farm Mechanization, Secondary Agriculture, Specialty agriculture, Renewable Energy Sources, Integrated Farming System (IFS), Agriculture Market Intelligence, Good Agricultural Practices, Hitech/Protected Cultivation, Climate Resilient Agriculture, Food Safety, Big Data Analysis and -Genomics-assisted Breeding. The above list is only indicative and Agricultural Higher Education Programme Committee and Project Management Committee will take the final decision on the relevance and importance of the theme while considering a proposal. An indicative list of activities to be financed under Subcomponent 1b includes:

- New PG course development and existing PG course revision, with emphasis on applied problem solving and entrepreneurship.
- Development of certificate courses for skill development in areas such as high-tech horticulture, food processing and precision farm technology.
- Master and Ph.D. students sandwich program to facilitate student exposure to national and international universities.
- Modern research facilities to conduct high-quality advanced research by faculty and students.
- Faculty upgradation through international and national training with mentor universities.
- Targeted research collaboration with national and international centers of excellence to increase both faculty/student productivity and research quality and relevance.
- Adjunct/Visiting Professorship opportunities to stimulate innovation in ongoing PG research and to mentor PG students.
- Distinguished Lecture Series/Special lectures to bring about much needed vibrancy in the academic atmosphere and inspire students and faculty to perform better.
- Collaboration with private sector, industry and civil society organizations related to the specialized areas to develop market-oriented programs and produce industry-ready graduates.
- Transfer of technology to end users, e.g., farmers; this can be done effectively through KVKs in that region so that the research-education-extension synergy is revitalized.

In addition to reform readiness (i.e., accreditation), AUs would be required to verify the qualifications and experience of faculty and staff to successfully establish and maintain the proposed CAAST, including:

- *Faculty and Research Staff Strength*: At least ten permanent multi-disciplinary faculty with demonstrable expertise and research accomplishment relevant to the proposed CAAST;
- *Scientific partnership* with national and international professional institutions.
- *Existing and functional advanced center* in the proposed thematic area.

Note : Sub-components 1A & 1B are only for the accredited Agricultural Universities /Colleges/Programs on a competitive basis and they are mutually exclusive i.e. any AU selected for both can avail either IDP or CAAST.

Sub-component 1C: ICAR innovation grants to AUs. Would provide Innovation Grants to selected participating AUs for the carrying out of Innovation Plans. The innovation Plans would support technical assistance and consultant services, including those required to: (a) make AUs reform ready (i.e., attain accreditation); and (b) promote mentoring of non-accredited AUs by existing reform-ready AUs and other interstate and international academic partnerships. The Sub-component is primarily meant for those AUs that has not yet attained ICAR accreditation

Component 2: Investments in ICAR for Leadership in Agricultural Higher Education

The component would finance the carrying out of institutional reforms within ICAR in order to enhance ICAR's effectiveness in coordinating, guiding and managing agricultural higher education and its interactions with AUs and key stakeholders nationwide through interventions that increase the quality and relevance of agricultural higher education. As ICAR is responsible for national coordination and quality assurance of agricultural higher education, the component would leverage ICAR's comparative advantage in assessing systemic challenges across the ICAR- AU System and incubating solutions.

The component would finance goods, training, consultant services and non-consulting services and incremental operating costs and would include: (a) assessing options in the administration and award of ICAR's technical and financial assistance to

AUs; (b) structuring dialogue with State governments to catalyze their participation in raising the quality and relevance of agricultural higher education; (c) providing assistance to participating AUs for the development of IDPs, CAASTs and Innovation Plans; (d) establishing partnerships with globally recognized agricultural higher education institutions; (e) developing digital information systems for agricultural data collection, analysis and dissemination; (f) improving curricula review processes and methods to consolidate and disseminate global best-practices in agricultural education; (g) improving the all-India entrance examination in agriculture, including an on-line national examination system; (h) adopting next-generation management systems covering information, procurement, contract and financial management areas; (i) coordinating an External Advisory Panel of renowned agricultural education experts; (j) assisting agricultural universities to strengthen their linkages with industry; and (k) promoting the establishment of centers for career development at agricultural universities.

Component 3: Project Management and Learning

The major activity of Component 3 will be project implementation and monitoring at New Delhi, with a full-fledged Project Implementation Unit headed by the Deputy Director General (Agricultural Education), ICAR as the National Director.

Shortlisting of Concept Notes:

Concept Notes for Component 1a, 1b and 1c will be invited and selected through a competitive process. Full project proposals will then be invited from the successful and selected Agricultural Universities. Format on which the Concept Note is to be submitted by the AUs is attached as **Annexure A**. The Concept Notes will be screened and evaluated the NAHEP Technical Committee and recommended for preparing full proposals. Eligibility criteria for shortlisting of Concept Notes are attached as **Annexure B**.

Expenditure to be funded:

In general, expenditure on goods & equipments, capacity building, renovation of labs and TA/ DA, workshops/ meetings, contractual staff, operational costs and institutional charges will be considered for funding. The financial limits will depend on the nature of the full proposals and will be decided by the Competent Committee(s).

General information about submission of Concept Notes:

1. The Concept Notes have to be submitted in a prescribed format available on the website electronically by email to ddgedn@gmail.com or by post to Deputy Director General (Agri. Education), Room No. 207, Krishi Anusandhan Bhawan II, Pusa Campus, New Delhi-110012.
2. The decision of the Competent Committee will be final.
3. Submission of a Concept Note will indicate that the proponent agrees to abide by the eligibility criteria of the NAHEP.
4. The last date of submission of Concept Notes is 31.08.2017 upto 4.00 PM.

NATIONAL AGRICULTURAL HIGHER EDUCATION PROJECT

Format for submitting the Concept Note

A: Participating AU Details

- 1. Name of the AU:**
- 2. Name of the Vice-Chancellor**
- 3. Postal Address of the AU:**

Telephone Number (With STD Code):

Fax No.:

Email Address:

4. Nodal Officer Details

Name of the Nodal officer:

Designation:

Telephone No.:

Email:

Fax No.:

- 5. Number of affiliated or on campus college and college-wise number of students:**
- 6. Number of college-wise faculty/scientist strength:**
- 7. Major contribution of the AU in relevant field of teaching, research and extension (not more than 10 bullet points including patents, technologies developed, etc.)**

8. Total Annual Budget of the AU (for the last 5 years in Rs. lakhs):

B: Project Details

1. Title of the Project:

Proposal Team Members and Title:

2. Background :

3. Rationale:

4. Objectives:

5. Proposed plan of action (please give details based on an analysis at the University level on weakness and strength of the AU)

a) IDP

b) CAAST

c) Innovation Grant:

6. Stakeholder/Industry participation plan

7. Proposed Duration of the Project

8. Total Funds proposed: (Rs. in lakh)

A. Revenue/recurring costs (including operational cost, contractual services and travel cost, etc.):

B. Capital Cost (equipment and only essential minor civil works)

C. Consultancy, if any

9. Expected outputs/Outcome

(Including the anticipated improvements in revenue generation, employment opportunities of the students, improved faculty competence for better performance, creating state of the art infrastructure, enhanced quality of research for knowledge generation, increased student placement rates, enhancing student-faculty diversity, and industry-academia interface.)

NATIONAL AGRICULTURAL HIGHER EDUCATION PROJECT

Eligibility criteria

Component 1A - the Institutional Development Plan (IDP):

- Any ICAR-accredited (both UG & PG) Agricultural Universities/Colleges/Programmes will be eligible to participate.
- Institutional Development Plan (IDP) to be submitted using the prescribed format.
- The IDPs should demonstrate the AUs commitment to introduce voluntary academic, financial, organizational and management reforms and their continuance after termination of the project supported by a plan of action.
- Any IDP will have a project outlay up to a maximum of Rs.35/- crores. The benefits of the faculty development programme are limited to only full faculty members associated with teaching and belonging to the applicant AU.
- The selection will be on a competitive basis and will be based on the general eligibility criteria of the AU and quality of the Concept Note, as assessed by the NAHEP Technical Committee.
- A full proposal will be submitted by the universities in the prescribed format in case of shortlisting of the concept note. AHEPC and PMC would consider the full proposals for approval. The Technical Committee and the Steering Committee are the committees that will evaluate and approve, respectively, the IDP proposals.

Note: Institutions participating in this Sub-component can apply for Sub-component 1B but if selected for both, can avail only one i.e. either IDP or CAAST. In other words, they are mutually exclusive in availing or participation by an AU.

Component 1B – Centre for Advanced Agricultural Science and Technology (CAAST):

- Any ICAR-accredited (for PG) Agricultural Universities/Colleges/PG Programmes will be eligible to participate.
- Only an existing multi-disciplinary team working on a theme as evident by research publications, technologies developed and commercialized, number of patents granted/filed, etc. will be funded to evolve into a CAAST.
- Each CAAST will have a budget outlay up to a maximum of Rs.25/- crores. The benefits of the faculty development programme is limited to only PG students and faculty associated with teaching and research of the proposed CAAST and belonging to the applicant AU.
- The accredited Agricultural Universities should prepare the proposal for CAAST based on the qualifications and experience of faculty and staff. To successfully establish and maintain the proposed Centre, the AU should have the following strength:
 - Faculty and Research Staff Strength: At least ten permanent multi-disciplinary faculty with demonstrable expertise and research accomplishment under one administrative control relevant to the proposed theme;
 - Scientific linkages with national and international professional institutions.
 - AUs with an existing functional advanced Centre in the proposed theme area would be preferred.
 - The AU should clearly specify the need and significance of the proposed Centre.

Component 1 C: ICAR innovation grants to AUs

- NAHEP would provide grants to selected AUs for carrying out Innovation Plans for scaling, up scaling, skilling and speeding up innovations in agricultural education and completing ICAR requirements for accreditation.

- This Sub-component is open for any accredited or non-accredited Agricultural University in competitive mode and will have a total budget outlay of about Rs.5.00 crores per University.

General Evaluative Criteria (applicable to 1a, 1b and 1c):

- Major Research Achievements; Publication Record, Research publications with NAAS Scoring of more than 6.0; Citation of publications, Awards at National Level, etc.
- Technology Commercialization & Transfer to Private Sector or to National or International Organizations, Patents obtained/filed, Consultancy provided, and Revenue generation
- Teaching quality standard and faculty strength; Best Teacher Awards at AU or ICAR level or National Level, Number of JRF and SRF selected, Students selected in ARS, Number of students who were admitted in foreign universities, Upper 5% percentile in GATE, etc.
- Student Placement records and awards bagged by students, e.g., National Young Scientist Award, ICAR's Jawaharlal Nehru thesis Award, Awards at Agri-unifest, Agri uni sports meet, etc.
- UG/PG Programme Accredited
- Excellence achieved in specific research theme(s), Impact of the work done in quantifiable terms, Technologies that have gone to farmers on large scale
- Linkages developed with National and International Organization/Universities and how effective these have been in quantifiable terms
- AU's future plans, strategic development plan, vision, etc. with documentation