



MEMORANDUM OF UNDERSTANDING BETWEEN
ICAR- CENTRAL INSTITUTE OF AGRICULTURAL ENGINEERING, BHOPAL
AND
INSTITUTE FOR EXCELLENCE IN HIGHER EDUCATION, BHOPAL

This Memorandum of understanding ("MOU") is entered on this 2nd day of Nov, 2023 at Bhopal effective from 02/11/2023.

Between

ICAR - Central Institute of Agricultural Engineering (hereinafter referred) "**ICAR- CIAE**", Berasia Road, Nabi Bagh, Bhopal, Madhya Pradesh 462038 is part of Indian Council of Agricultural Research (ICAR) is an autonomous organization under the Department of Agricultural Research and Education (DARE), Ministry of Agriculture and Farmers Welfare , Government of India on one part.

and

Institute for Excellence in Higher Education, Bhopal (MP) (hereinafter referred to as "**IEHE**", which expression, unless repugnant to the context thereof, shall mean and include its successors and assignees) through the Director, IEHE, Bhopal on the other part.

ICAR-CIAE and **IEHE** shall be individually referred to as "**Institution**" collectively be hereinafter referred as "**Institutions**".

Background

ICAR - Central Institute of Agricultural Engineering, Bhopal, Madhya Pradesh

The **ICAR-CIAE** is an ISO 9001:2015 certified flagship institute under the Indian Council of Agricultural Research to provide engineering solutions for overall prosperity and sustainability of farming systems. It is promoting development and transfer of agricultural engineering and food processing based technologies including Research & Development leading to technology development, their validation, dissemination through demonstration, multi-location evaluation followed by commercialization through suitable industries/manufacturers. The **ICAR-CIAE** also does HRD & capacity building leading to promotion and adoption of process technologies for increasing food and nutritional security and setting up of agri-business enterprises in the different aspects of food processing and allied sectors. Whereas, one of the mandates of the **ICAR-CIAE** is

undertaking and facilitating the technology incubation, commercialization and transfer of technologies to private and public sector industries and other enterprises for commercial exploitation and for social benefit.

Institute for Excellence in Higher Education, Bhopal (MP)

Institute for Excellence in Higher Education is an 'A+' grade state level academy, envisioned to be a centre for academic excellence by the govt. of Madhya Pradesh since its inception in 1995. It is autonomous in academic, administrative & financial matters. Institute offers well-structured Post-Graduate Courses, Honours Courses in Science, Arts & Commerce and short term Vocational Courses with industry integrated curriculum and state-of-the art facilities like well-equipped laboratories, digitalized library, ICT enabled services etc. which provide a congenial academic ambience for empowered and diverse learners. An ideal teacher-student ratio, robust track record of placements, effective and transparent Continuous Comprehensive Evaluation (CCE) scheme with its regular round of Seminars, Presentations, Group Discussions, Pedagogical Innovations and Visionary Leadership make the Institute a virtual 'Excellence in Action'.

The significant milestones like Accreditation by NAAC in 'A' grade in 2004, reaccreditation by NAAC in highest 'A' Grade in Jan 2011, followed by third cycle of re-accreditation by NAAC with 'A' Grade in 2016, the prestigious conferment of 'College with Potential for Excellence (CPE)' status in March 2010, embarkment on 2nd phase of CPE status spanning between 2014-2019, recognition as a nodal centre for CEQUIC (Cluster for Enhancing Quality through Innovation and Collaboration) - a scheme initiated in 2014 by the Government of Madhya Pradesh to realize international standards in research and teaching through qualitative changes, are some of the monumental achievements of the Institute.

1. Objective

The goal of this Memorandum of Understanding (MoU) is to provide a framework for long-term collaboration and advancement of research as well as knowledge sharing based on reciprocity and mutual interest/benefit in the broad domains of agriculture engineering, rural development and other allied fields/areas through joint/collaborative academic programmes, research supervision, research projects, training/ capacity building programmes, consulting assignments and other such activities.

Institutions agree to explore the possibility of collaboration/cooperation in the following areas:

1.1 Academic Programmes

- 1.1.1** Guiding students of IEHE & its constituent colleges for M.Sc. & Ph.D. research with ICAR-CIAE.
- 1.1.2** Exploring the possibilities to jointly offer Short-term certificate programmes in online/offline mode in the domain of agriculture engineering, rural development, livelihoods and other allied fields/areas of mutual interest.
- 1.1.3** Offering internship opportunities/ **Post graduate and Ph.D projects, etc.** in the domain areas to the students pursuing graduate/post-graduate/doctoral programmes in the "**Institutions**". The period and nature of the internship to be engaged in by the student are to be agreed upon by the "**Institutions**".

- 1.1.4 Faculty members from “**Institutions**” may be mutually involved in joint thesis/project guidance for the undergraduate/postgraduate students.
- 1.1.5 Extending cooperation through guest sessions in various academic programmes, access to laboratory facilities and other equipment along with technical support, library services and other academic infrastructure of ‘**institutions**’ as agreed upon by the “**Institutions**”.
- 1.1.6 Faculty/Scientists from each institution **will collaborate in developing** proposals for external funding as appropriate.
- 1.1.7 **General guideline** for Masters/Doctoral programme may be as follows:
- a) All those who wish to register as trainees or for Master/Doctoral programme under this MoU must have admission at the IEHE. The allocation of Major Guide/Co-guide/ Additional Major Guide/Advisor/Chairman/Co-chairman would be governed by the guidelines of the IEHE and association from ICAR-CIAE would be governed by ICAR guidelines.
 - b) The number of student(s) at any particular time will be subjected to the availability of research facilities and scientists' time to guide thesis research at the ICAR-CIAE.
 - c) Admission, Course work and the award of degrees will be the responsibility of the IEHE. The student shall complete the course work at IEHE, as per approved academic programme and research work shall be decided in consultation with the Major Guide/Co-guide/Additional Major Guide to be carried at ICAR-CIAE.
 - d) If, a student registered with IEHE intends to carry out the research work at ICAR-CIAE, latter may not charge any fee from the registering institution/student, except the hostel accommodation charges. This fee exemption is applicable as per NARS guidelines Letter No. 2-8/2012-HRD dated 25.04.2014 “guidelines for the students to conduct research for their programmes as trainees at ICAR institutions” amended from time to time.
 - e) If, a student registers with IEHE by qualifying through competitive mode of ICAR's All India Entrance Examination for Admission to Master's /Ph.D. and is awarded fellowship for pursuing Master's or Doctoral degree programme by any sponsoring institution [e.g. ICAR-JRF/ ICAR-SRF/ CSIR-UGC-JRF/ CSIR-SRF, etc], the contingency grant awarded to the student may be transferred to the institution where major part of the research work would be carried out and regulated by the provisions contained in the guidelines of sponsoring institution.
 - f) The respective institutes will bear the expenses of TA/DA of the Teachers/Scientists visiting Bhopal or any other place of the institute and the students will bear their own expenses.
 - g) The research student shall be required to submit ‘No Dues Certificate’ from Major Guide/Co-guide/ Additional Major Guide of ICAR-CIAE before the submission of thesis.
 - h) A copy of the thesis/dissertation will be provided to the ICAR-CIAE after the award of the degree by the IEHE.
 - i) Any student(s) admitted to the ICAR-CIAE for training/postgraduate research, if found violating the rules and regulations laid down by the ICAR-CIAE or indulge in such activities that amount to tarnishing the image of the Institute, or cause damage to the property, the registration of such student(s) would be summarily terminated. The IEHE will not complete

the formalities of issuing the certificates to such students until they compensate the losses to the ICAR-CIAE.

In the above activities, the operationalization of the collaboration including the modalities related to the structure, curriculum, resource commitment, criteria for guidance, sharing of costs and fees and other related matters may be worked out and agreed upon separately by the “Institutions” on a case-to-case basis as per guidelines of ICAR.

1.2 Exchange of Human Resources

- 1.2.1 The “Institutions” agree to explore ways of encouraging collaboration between researchers/faculty members to undertake short visits for lectures, facilitate research projects at either end and other similar academic activities.
- 1.2.2 The terms and conditions for each visit or an assignment, including those concerning stipend, travel, and housing, would be worked out between the “Institutions” on case to case basis.
- 1.2.3 The resource sharing of the reading/training materials at the library can also be accessed mutually by the “Institutions”.

2. Implementation

2.1 Research, Training and Consulting Activities

For joint research, training and consulting activities, broadly the focus areas will include Computer application in farm mechanization, Development of Artificial Intelligence/Machine Learning based solutions, Design of Automated systems, Intelligent computing with Big data handling, Data Analytics, Water and Climate, Food systems: food security, agricultural processing, Food storage systems with sensors and IoT, Climate system: resilience building, Agriculture waste utilization, Carbon sequestration, Extension activities for rural community, AI/ML algorithms for plant disease detection and seed viability, Drone and image processing-based solutions, ICT-based prototype and product development, Precision Agriculture, Efficient Samplings and Clustering for Plant Data (hereinafter referred to as “relevant areas”) and other areas of mutual interest.

3. Work Plan

- 3.1 **Institutions** will Jointly identify and pursue opportunities for formulation and submission of new research project proposals in the “relevant areas” for possible funding by government and national/international external agencies.
- 3.2 **Institutions** will Jointly hold collaborative programmes in the form of lectures, seminars, workshops, panel discussions, symposia, webinars, and training programmes in the “relevant areas”.
- 3.3 **Institutions** will Jointly conduct short-term training programmes/capacity building programmes/ skill development programmes/ management development programmes in the “relevant areas”.

- 3.4 Jointly bid for training programmes being offered by various central/state government, ministries and departments building on and complementing the strengths of the expertise of the **"Institutions"**
- 3.5 Jointly prepare and publish background papers, and policy documents in the **"relevant areas"** to be submitted to the government/policymakers/regulators which could provide inputs in designing, framing and implementing the policies.
- 3.6 Jointly organize seminars, conferences, workshops, and webinars in the **"relevant areas"** and publish the proceedings of such events.
- 3.7 Jointly bid for Expression of Interest (EoI) and tenders for consultancy assignments in the **"relevant areas"** building on and complementing the strengths of the expertise of the **"Institutions"**.

In the above activities, the operationalization of the collaboration including the modalities related to the resource commitment, sharing of costs and fees and other related matters may be worked out and agreed upon separately by the **"Institutions"** on a case to case basis.

4. Publications and Intellectual Property

It is recognized by the **"Institutions"** that the allocation of publications and intellectual property rights will be as per following points of agreement:

- 4.1 Any joint research outcome will be jointly published/patented, and the outcome of the publication and patent will be jointly shared in mutually agreed proportions through signing a separate project wise mutual agreement.
- 4.2 The outcome of the research in the form of publications should be shared by the **"Institutions"** and should have the authorship from the **"Institutions"** (both faculties and or students, as the case may be) with proportional credit to contributors.
- 4.3 The upfront fee and royalty accrued from licensing of any intellectual property arising from the collaboration shall be shared between the **"Institutions"**, the terms and conditions of which shall be the subject matter of a separate agreement.
- 4.4 The **"Institutions"** shall not assign any rights and obligations to any other party(ies) without consent of the other **"Institution"** on any assignment that has its origin in this MoU.
- 4.5 **"Institutions"** shall not use the name, logo or any other designation of the other **"Institution"** without prior written consent.
- 4.6 The **"Institutions"** shall not use any of the confidential information, which is required to be held in confidence for any purpose other than the performance of their obligations under this understanding.

5. Confidential Information

- 5.1 All information and documents to be exchanged pursuant to this MoU will be kept confidential by the parties and will be used subject to such terms as each party may specify.



- 5.2 It is agreed by the **"Institutions"** to undertake not to disclose, divulge, part with, copy in any form for the period as specified in the MoU/agreement any scientific research document, planning, execution and appropriate financial, legal documents involved in the MoU. All personnel involved in collaborative projects are subject to this non-disclosure clause for the period of this MoU.
- 5.3 All confidential information shall remain the exclusive property of the disclosing **Institution**. The **Institutions** agree that disclosure of the confidential information do not grant or imply any license, interest or right to the recipient in respect to any intellectual property right of the other **Institution**.
- 5.4 Unpublished information, whether oral, in writing or otherwise, discovered or conceived by the **Institutions** and exchanged under the provisions of this MoU will not be transmitted to a third party by either **Institution**, unless otherwise agreed by the **Institutions**.

6. General Provisions

- 6.1 **"Institutions"** may submit collaborative programmes for assignments on a complementary basis. However, each case will be decided on its merit, and expertise available with the **"Institutions"** and with mutual consent.
- 6.2 The structural composition of team members from **"Institutions"** will be decided mutually and each programme and case will be decided on merit and mutual understanding and separate agreements will be signed for each assignment after negotiations on case to case basis agreed upon through mutual consent.
- 6.3 The implementation of areas and forms of cooperation identified under appropriate heads shall be subject to the availability and convenience of faculties and infrastructure facilities available at the **"Institutions"** workplaces.
- 6.4 Research instrumentation, academic infrastructure and library facilities available at the **"Institutions"** shall be made available to the faculty, research scholars and students as per the rules of both the **"Institutions"**. In case where testing charges to be paid, it should be done on bill basis.
- 6.5 Nothing in this understanding is intended to affect other cooperation or collaboration between the **"Institutions"**.
- 6.6 All the collaboration activities according to this agreement shall be conducted following the laws and regulations of the land.
- 6.7 Both the parties shall maintain their sovereignty and share no liability of whatever nature unless agreed through mutual consent, by way of a separate agreement drawn for the purpose.
- 6.8 The costs, revenue sharing and financial obligations for any activity will be discussed and decided separately by the **"Institutions"** as and when need arises.
- 6.9 Each **"Institution's"** rights, title and interest in its confidential information remain unaffected by the existence of this MoU.



- 6.10 Neither "**Institution**" is obliged to disclose any confidential information to the other "**Institution**" according to this MoU and each "**Institution**" undertakes to observe confidentiality and secrecy of any information and other data received from the other and any outputs jointly obtained, except as mutually consented to in writing by the other "**Institution**" during the period of the implementation of activities under this MoU.

7. Amendments, Effective Date and Termination

- a) This MOU represents the entire understanding between the "**Institutions**" and supersedes any understanding either oral or written hitherto concerning the subject of this understanding.
- b) Any issues that are not addressed or stipulated in this MoU shall be discussed and resolved through negotiations in good faith and such resolution will be incorporated as written amendments to the MoU by mutual agreement between the "**Institutions**".
- c) No amendments or modifications of the MOU shall be valid unless the same is made in writing by the "**Institutions**" and specifically stating the same to be an amendment of the MOU. The modification /changes shall become part of the MOU and shall be effective from the date on which they are made/executed unless otherwise agreed to.
- d) This MoU will take effect from the date it is signed by representatives of the "**Institutions**". It will remain **valid for FIVE years from the date of signing**.

8. GOVERNING LAW AND DISPUTE RESOLUTION

- a) That both **Institutions** would try and settle amicably any dispute arising during the course of this MOU, without referring to or involving any other Party and out of court.
- b) If the dispute has not resolved through consultations within fifteen days (15 days) after one **Institution** has served written notice on the other **Institution** requesting the commencement of such discussions, either **Institution** may in writing demand that the dispute be finally settled by the arbitration in accordance with Arbitration and Conciliation Act, 1996. Arbitrator shall be appointed by ICAR/Director, ICAR CIAE. However, the decision(s) so arrived at shall be final and binding on the **Institutions** to this MoU. This MOU shall be subject to the courts of Bhopal, Madhya Pradesh and shall be governed by laws of India.

9. TERMINATION

Either "**Institutions**" may terminate the MoU by giving written notice to the other "**Institution**", three months in advance. Once terminated, neither "**Institution**" will be responsible for any losses, financial or otherwise, which the other "**Institution**" may suffer. However, all joint activities not completed at the time of expiration or termination of this agreement may be continued until their completion under the same terms of understanding.



This MOU has been executed in two originals, one of which has been retained by ICAR-CIAE and the other by IEHE.

IN WITNESS WHEREOF, the 'Institutions' have executed this MOU and represent that they approve, accept and agree IN WITNESS WHEREOF, the undersigned have signed (in duplicate) this MoU on this 02-day of Month 11, Year 2023 in English herein above mentioned.

For ICAR-CIAE Bhopal


(Dr. C.R. Mehta)
Director

Central Institute of Agricultural Engineering, Bhopal,
Madhya Pradesh

Seal:

DIRECTOR
ICAR-Central Institute of
Agricultural Engineering
Nabi Bagh, Berasia Road,
BHOPAL - 462038 (M.P.)

For IEHE, Bhopal



(Dr. Pragyesh Kumar Agrawal)
Director


Institute for Excellence in Higher Education, Bhopal
Madhya Pradesh


Seal:


Director
Institute for Excellence in Higher Education
Bhopal

In the presence of


1.Name: Dr. UR Badegaonkar
Title: Principal Scientist & Head, TTD
Address: ICAR-CIAE, Bhopal


1.Name: Dr. Mahendra Kumar Singhai
Title: Administrative Officer & Professor,
Department of Commerce
Address: IEHE, Bhopal


2.Name: Dr. V.Bhushana Babu
Title: Senior Scientist & Incharge, ITMU
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2. Name: Dr Ram Krishna Shrivastava
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