

Indian Council of Food and Agriculture, New Delhi, India

Date of signing the MoU: 23/12/2017

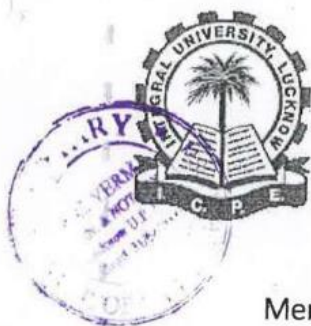
Objectives of MoU

- The Integral University, Lucknow will provide registration facility to the Indian Council of Food and Agriculture sponsored candidates for pursuing the Ph.D. degree programme.
- Beside regular degree programme, the Integral University will also provide short-term course training to students and staff members of Indian Council of Food and Agriculture, Lucknow in their respective area of specialization.
- The Indian Council of Food and Agriculture will provide research and training support in the front line areas as per the mandate of the council.



उत्तर प्रदेश UTTAR PRADESH

CW 543559



भारतीय कृषि एवं खाद्य परिषद्
INDIAN COUNCIL OF FOOD AND AGRICULTURE

Memorandum of Understanding (MoU) between

INTEGRAL UNIVERSITY

Uttar Pradesh, India

and

Indian Council of Food and Agriculture

New Delhi, India

INTEGRAL UNIVERSITY
KURSI RD.
LUCKNOW,
UTTAR PRADESH-226026
INDIA

INDIAN COUNCIL OF FOOD AND
AGRICULTURE
B-WING, 2ND FLOOR,
NAURANG HOUSE, KG MARG,
NEW DELHI, INDIA



Following discussion and exchanges of correspondence between Integral University, Lucknow, India and the Indian Council Of Food And Agriculture, a Non-govt council in New Delhi, a formal memorandum of understanding is hereby made between the Integral University (hereinafter "IU") and the Indian Council of Food And Agriculture (hereinafter "ICFA"). Collectively, IU and the ICFA will hereafter be known as the "PARTIES".

IU and ICFA both recognize that the world is facing one of the most urgent problem of our time that is how to feed a rapidly ballooning population. It is estimated the world's population will grow one-quarter by 2050 and reach 9.6 billion people. This means that we will have to double our food production by 2050 in order to feed this expanded population. It has been shown that given our present capability to annually increase crop yields we are going to fall far short of enough food to feed the world's population by 2050. Therefore, a new strategy is needed other than just producing more food. The UN FAO has shown that one-third of the world's food that we already produce is actually lost after it is harvested and before it is consumed. The logical solution to the world's pending food shortage is to find ways to save more of the food that we already produce.

There are a number of good programs in place to reduce the postharvest loss of food in developing countries. However, most of these are dependent on the continual input of experts from the developed world with uncertain budgets in order to be sustainable. Also, because we have invested only 5 % of our agricultural resources into the preservations of food as opposed to 95% into its production, we find ourselves with a shortage of competent postharvest professionals in developing countries and a paucity of technologies that we can recommend to developing countries for the preservation of their food.

In order to address the shortcomings, IU and Indian Council of Food and Agriculture are partnering with a mandate for policy research, advocacy and enterprise development in food and agriculture sector.

INDIAN COUNCIL OF FOOD AND AGRICULTURE

The Indian Council of Food and Agriculture ICFA is a national level platform in India with a mandate for policy research, advocacy and enterprise development in food and agriculture sector. Besides, ICFA is engaged in business and trade facilitation, farm services and providing a platform for global partnerships. ICFA emerged out of the long felt need for a comprehensive approach to address issues in food and agriculture sector and tapping of emerging global



business opportunities overcoming compartmentalized approach and absence of coordination and dialogue among various stake-holders. Currently in India, various stakeholders in the food and agriculture sector like the national and state governments, policy makers, research and academic bodies, extension agencies, value addition industry, NGOs, financial bodies, developmental institutions and farmers groups think in silos, often with contradictory approaches for the same ultimate cause. ICFA aims to foster convergence and greater communication between different stakeholders and work towards bringing India aggressively into the loop of global trade and commerce. Headquartered in New Delhi, India, ICFA has drawn in the vast experience and expertise of a number of professionals cutting across various subsectors in the food and agriculture sector and has constituted a number of working groups and national councils to represent the interests of various stakeholders. It has also incorporated several state specific working groups.

INTEGRAL UNIVERSITY:

IU, the first enacted Minority University in the country, started functioning from 1st April, 2004. The President of the Islamic Council for Productive Education, Dr. Seed-Ur-Rahman Azmi, and its General Secretary, Prof. Syed Waseem Akhtar, respectively took over as Founder Vice Chancellor of the University. Integral University was accorded recognition by U.G.C under section 2 (f) of U.G.C. Act, 1956. The University stated its journey for providing quality education in 2004. The existing faculties in the University were re-organized and new faculties of Science, Pharmacy, Education, Management Studies, Health & Medical Sciences, Agricultural Science & Technology, Humanities & Social Sciences, Computer Applications, Medicinal Sciences & Health Allied Sciences, College of Nursing and Faculty of Law were added. Besides this, progressively, a number of new programmes were added, including Master Level programmes in Biotechnology, Industrial Chemistry, Electronics Circuits and Systems, Bioinformatics, Instrumentation & Control, Microbiology, Production and Industrial Engineering, Machine Design, Computer Science, Civil Engineering, Power Systems and Drives etc. At present the University has 11 faculties and 38 departments. It offers 35 Undergraduate programmes, 48 Postgraduate programmes and 22 Diploma courses, 3 Certificate courses and 2 PG Diploma Courses. The University has also taken up research programmes on a priority basis in almost all faculties of study. At present 343 research scholars are enrolled in the university under the PhD programmes and 201 scholars have already received doctoral degrees in the last 6 years. All courses conducted are approved by the concerned statutory bodies like CoA, PCI, NCTE, MCI, IAP, BCI. The University is accredited by NAAC. The University has a marvelous ambience and academically lively and vibrant environment, highly conducive to higher and dedicated academic pursuits. "Go Green" is one of the mottos of Integral University.

Relevance of the Memorandum in the current scenario of Indian Agriculture:

The Indian subcontinent is situated in the tropical region of the world, where excess of rainfall and temperature prevails throughout the year. This leads to the development of heavy moisture to the climate. The humidity present in the atmosphere is responsible for a lot of agriculture related aspects in which storage and postharvest of the cereal crops, staple crops and vegetable crops are most affected.

Nearly 60% of the grain, annually produced in the country is retained by the farmers for their own food, cattle feed, seed etc. The farmers generally store their grain in traditional storage structures. According to a World Bank Study (2009), postharvest losses of food grains in India are 8-10% of the total production. The losses during storage are estimated at 6.6% out of which insects alone cause around 2.5% losses. The monetary value of these losses amounts to more than Rs. 50,000/- crores per year (Singh, 2010). The postharvest losses have an impact at both the micro and macro levels of the economy by affecting the per capita food grain availability and hence threatening the Food Security of our Nation. Among biotic and abiotic factors which affects grains in storage, insects play a major role in the deterioration of food grains causing both quantitative and qualitative losses. It is well proved that no granaries can be filled with grains without insects as the harvested produce contain egg (or) larvae (or) pupae in them because of field carryover infestation which cannot be avoided in developing countries like India.

There is a worldwide need for a "Storage Revolution" in recognition of the fact that in hot, humid climates crop yields and crop production have been greatly increased by the "Green Revolution's", breakthroughs in crop yields, but the problem of storage losses which often reach 25% (and in some cases exceed it), has received very little attention.

2. Parties of the MoU

2.1 Integral University located at Lucknow-226026 Uttar Pradesh, India through its authorized signatory Prof. Jamal Mohammed Arif, Vice Chancellor (Acting), Integral University, Kursi Road, Lucknow-226026, U.P., India

2.2 The Indian Council of Food and Agriculture, a Non-govt ICFA in New Delhi, India, through its authorized signatory Dr. M.J Khan, Chairman, ICFA, New Delhi, India.

Both the parties have mutually agreed upon the following terms and conditions:



3. Aim of the MoU

3.1 The primary aim of this MoU is to promote and assist in research of the most advanced methodologies and technologies for the postharvest preservation of food and to formulate a framework for active cooperation on the research and academic activities of the two institutions.

3.2 This MoU aims to strengthen the mutual understanding, foster friendly cooperation, and provide a World-class education to young students/researchers of IU and ICFA and conduct research on new technologies and models for faster growth of food and agriculture sector in the country.

3.3 This MoU encourages the exchange of students/ researchers of IU and the Indian Council of Food and Agriculture and also the faculty in order to provide better exposure to all.

4. Scope of the MoU

In contemplation of achieving the aims as provided under this MoU, the parties agree as follows:

4.1 This agreement replaces all previous agreements between the parties, and subsequent discussions, agreements and understanding, whether verbal or in writing, is subsumed by this agreement.

4.2 Integral University to support the agribusiness management and entrepreneurship development programme and training course offered at Indian School of Agribusiness Noida, the academic institution of ICFA.

4.3 Collaborate to establish a Food Preservation Center at Integral University.

4.4 To collaborate for technical, intellectual and other additional support for the Food Preservation Center at the IU and for the formulation of research agenda of the same.

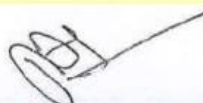
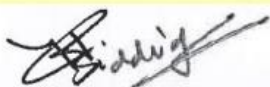
4.5 To work jointly for the formulation of postharvest curriculum for IU.

4.6 Collaborate to explore and work out the opportunity to license the registered trademarked name Food Preservation Center.

4.7 Parties will work together to provide scholarships to students attending the Food Preservation Center at IU and ISAB at Noida.

4.8 Collaborate to organize the conferences on various subjects of food and nutrition security.

4.9 IU to become a Corporate / Institutional member of the ICFA.



5. Commencement and Duration

5.1 This memorandum will come into effect from the date of signature by both the parties and will remain in force for an initial period of five years.

5.2 This memorandum may be amended /extended by the written agreements and mutual consent of both the parties.

5.3 This agreement may be renewed for a period by mutual consent of the IU and ICFA. Renewals shall be in writing and subject to the same terms and conditions set forth herein, and shall be contingent upon a satisfactory performance evaluation by the parties. The evaluation will be initiated by the respective International Programs offices.

6. Confidentiality

Both the parties acknowledge that any information disclosed by or on behalf of any of the parties which is not in the public domain is confidential and may not be used or disclosed to any other party (whether before or after the termination of this MOU) for any reason whatsoever save as may be strictly necessary for the due and effectual rendering of the services. Any scientific data exchanged/shared between the parties for joint research/supervision will not be transferred to third party without consent of the parties.

7. Intellectual Property

7.1 Any and all research derived from the collaborative efforts of the two parties will be the joint property of both the parties proportionate to the parties respective contributions.

7.2 In the event of IP generated out of joint efforts that IU, Lucknow and ICFA will be joint holders of IPR/patents.

7.3 The parties of this MoU shall recognize and respect the pre-existing intellectual property (IP) rights in any data, images, analysis or any other form owned and contributed by either parties to the projects or activities contemplated by this MOU.

7.4 The parties further agree that all the IP Rights arising out of the activities or projects at IU by either of the parties shall have separate written agreements to be entered into by the parties which will include details on patent filing, maintenance of IP, Commercialization and benefit sharing before filing of the patent.





8. General Terms & Understandings between Parties

8.1 This agreement provides the foundation and framework for, the particular projects developed by academic and administrative units from the two PARTIES and embodied in the implemented agreements.

8.2 Both PARTIES are committed to the policy that all persons shall have equal access to programmes, facilities, admissions and employment without regard to personal characteristics, performance, or qualifications as determined by the respective IJ and ICFA policies.

8.3 Resources in form of equipments, machineries, apparatus, tools, experts and intellectual required for the smooth and adequate implementation of the aims and scope of this MoU may come from either party, depending upon terms and conditions discussed and negotiated between the parties. Neither party is obligated to expand any resources in connection with this agreement. No implementation of any portion of this agreement or commencement of any specific projects may be initiated prior to the written assurance of adequate resources.

8.4 This agreement shall not be construed to create a relationship of brokers, employees, servants, joint ventures or agents as between the parties. The parties to this agreement are acting as independent participants.

8.5 This agreement shall be governed by and construed under the laws of India with respect to IU, and the ICFA. The parties shall cooperate mutually to resolve any dispute or misunderstanding by collaboration and discussion.

8.6 Either party shall have the absolute right to terminate this agreement with or without cause upon sixty (60) days prior written notice to the other party. Such termination shall not become effective to students already enrolled and participating in a programme at the Host Institution.

8.7 This MoU does not constitute any legal or contractual obligation on the part of either party. It reflects an arrangement that is currently satisfactory to the parties involved. The parties agree to negotiate amendments to this memorandum as needed to meet the evolving requirements.

8.8 As a part of this MOU both Integral University, Lucknow and World Food Preservation Centre, USA have jointly agreed upon to host the 1st All Asia Postharvest Congress & Exhibition at Integral University, Lucknow, India from 11th November'2019 to 13th November'2019. Other formalities and modalities will be discussed and finalized as and when required from time to time.

Handwritten signature of K.C. Verma.

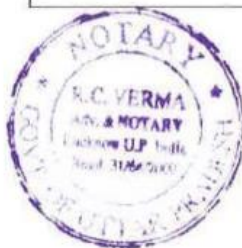
Handwritten signature.

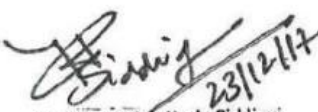
Handwritten signature.


Handwritten signature.


IN WITNESS WHEREOF the authorized representatives of IU and ICFA have executed two (2) copies of the agreement.


Signed at Lucknow, India on Saturday 23 rd December of 2017	Signed at Naurang House, New Delhi on Saturday 23 rd December of 2017
Integral University  Prof. Jamal Mohd. Arif Vice Chancellor (Acting)	Indian Council of Food and Agriculture  Dr. M. J. Khan Chairman




Dr. (Er.) Mohd. Haris Siddiqui
Director
Integral Institute of Agricultural
Science & Technology (IIAST)
Integral University, Lucknow,


REGISTRAR
INTEGRAL UNIVERSITY
LUCKNOW

Sworn and Verified
Before me

R.C. VERMA
Adv. & NOTARY
Lucknow U.P. India
Regd. 31/04/2000


I know and identify the deponent
who has signed put his name before me