MEMORANDUM OF UNDERSTANDING

BETWEEN

INTERNATIONAL FERTILIZER DEVELOPMENT CENTRE



AND

CCS HARYANA AGRICULTURAL UNIVERSITY, HISAR



MEMORANDUM OF UNDERSTANDING





COOPERATION IN AGRICULTURAL RESEARCH, EDUCATION AND TRAINING



BETWEEN

INTERNATIONAL FERTILIZER DEVELOPMENT CENTRE (IFDC)

&

CHAUDHARY CHARAN SINGH HARYANA AGRICULTURAL UNIVERSITY Hisar (CCSHAU-Hisar)

And

CHAUDHARY CHARAN SINGH HARYANA AGRICULTURAL UNIVERSITY (CCSHAU) established under Parliament Act 16 of 1970 on February 02, 1970 through the Presidential ordinance situated at Hisar, Haryana – 125004 (hereinafter called "CCSHAU, Hisar") represented by its Vice Chancellor which expression shall mean include its executors, successors and permitted assigns, of the "SECOND PARTY".

In this MOU, IFDC and CCSHAU, Hisar shall individually be referred to as "Party", and jointly as "Parties" hereinafter.

WHEREAS IFDC, an autonomous non-profit international research center is recognized as a global center of excellence empowering farmers and agribusiness through independent and innovative fertilizer and soil fertility research, technology transfer,

agricultural policy advocacy and market development. By virtue of Executive Order 11977, IFDC was designated as a public international organization (PIO) and established in 1977 with headquarters in Muscle Shoals Alabama USA;

WHEREAS IFDC's mission is to contribute to the improvement of livelihoods of the resource-poor farmers by enhancing food and nutritional security and alleviating poverty through research and partnerships to achieve sustainable increases in agricultural productivity and income, while ensuring the efficient and more equitable use and conservation of natural resources;

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WHEREAS IFDC works through a network of partnerships with national, regional and international institutions, universities, non-governmental organizations and ministries in the developing world and is committed to the advancement of fertilizer and agricultural research; free exchange of knowledge and information for research; protection of intellectual property rights, including indigenous knowledge of farmers; and poverty alleviation, particularly among women and children;

WHEREAS CCSHAU, Hisar is established in1970 in the Indian state of Haryana, is a state agricultural university in India. As a result of bifurcation of state of Punjab in the year 1966, CCSHAU, Hisar was established on February 02, 1970 through a Presidential Ordinance, later ratified as Haryana and Punjab Agricultural Universities Act, 1970, passed by the Lok Sabha on March 29, 1970. HAU was initially a campus of Punjab Agricultural University, Ludhiana. It is named after India's seventh Prime Minister, Chaudhary Charan Singh. It is a leader in agricultural research in India and contributed significantly to Green Revolution and White Revolution in India in the 1960s and 70s.

WHEREAS CCSHAU, Hisar is committed to impart teaching, research and extension education in agriculture and its allied fields. It has seven constituent colleges with three of those devoted to faculty of Agriculture, one to faculty of Agricultural Engineering and Technology, one to faculty of Home Science and one to faculty of Fisheries sciences. There are five directorates on research, extension, human resource & management, student welfare and estate office.

WHERAS CCSHAU, Hisar caters to the needs of enterprising farming community of Haryana, which is endowed with abundant natural resources, diverse soil and agro-climatic conditions suitable for varied cropping systems and is the potential 'Food bowl of India'.

THEREFORE, the parties, having common goals and expressing their mutual desire to cooperate in fertilizer and agricultural research and human capacity building, have agreed to formalize their relationship in accordance with the following Articles.

ARTICLE-I Objectives

The Parties hereby agree to promote cooperation in the field:

- a) Exchange of students, scientists, and technologists;
- b) Exchange of research technologies with mutual consent
- c) Exchange of scientific literature, information and methodology;
- d) Use of scientific equipment as available and required in programme of common interest as may be mutually agreed upon;

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e) Development and implementation of collaborative research, education, extension and capacity development projects in the identified areas and methodology to be used as mutually agreed upon, subject to IPR (Intellectual Property Rights) clause in Article IV;

Such cooperation shall be implemented by the following means:

- i. Establishment of mutual relation between the research, education and training streams of the organizations of the respective Parties;
- ii. Creation of facilities for exchange of students, scientists and technologists/experts.
- iii. PK briquette for deep placement to enhance efficiency
- iv. Develop innovative fertilizer molecules and products including N:Zn, NPK, N:P, biofertilizers with growth regulators, urea-P liquid fertilizers, hybrid N-C rich products as soil amendments: Nano urea-P composites, Facile coating of urea with ZnO powders-Dry nano, bulk, urea granule with ZnO powder and with ZnO nano-particle coating.
- v. Skill and Knowledge development on fertilizer and fertilizer technology through new Masters, PhD and Diploma course development to cater scientific and societal needs.

ARTICLE-II Implementation

CCSHAU-Hisar and IFDC may name any member of their staff to work out the practical details of cooperation between the two organizations and ensure proper and effective implementation of this MoU. The parties shall meet at least once a year, to discuss areas of cooperation, to develop work plans that describe more specifically the activities to be carried out under a cooperative program and to establish the specific procedures for implementation of those agreed activities.

ARTICLE-III Work Plans

This MoU will be implemented through development of Work Plans to be developed jointly, which describe specifically the activities to be carried out under this Cooperative Programme and which set forth the intended contributions of each party. These Work Plans may originate from either party but will require the full approval of both the Parties for implementation.

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ARTICLE-IV Intellectual Property Rights

General clauses:

- i. Each party will ensure appropriate protection of Intellectual Property Rights generated from cooperation pursuant to MoU, consistent with their respective laws, rules and regulations and international agreements to which both parties are committed.
- ii. In case research is carried out solely and separately by the Party or the research results are obtained through the sole and separate effort of the Party, the party concerned alone will apply for grant of IPR and once granted, the IPR will be solely owned by the concerned party.
- iii. In case of research results obtained through joint activities, the grant of intellectual property rights will be sought by both the parties jointly and once granted these rights shall be jointly owned by the parties.
- iv. The Parties shall not assign any rights and obligations arising out of the IPR generated to inventions/ activities carried out under the MoU to any third Party without consent of the other party.
- v. All intellectual property (defined as patents, designs, copyrights (including software code), database rights, trademarks, fertilizer molecules/technology, and other similar statutory rights (as well as their applications) and all information and results of research and development activities including without limitation data, software, inventions, process information, know-how, new molecule and confidential information, whether protected or not under any laws) in the Research Project shall be managed in accordance with the Principles on the Management of Intellectual Assets.
- vi. The party introducing any intellectual property owned before or at the time of the Term ("Background Intellectual Property") for use in the Research Project shall remain the property of that party which shall grant to the other party a license to use and sublicense it for the purposes of the Research Project. Where such Background Intellectual Property contains restrictions that may prevent its incorporation into, or use for the Research Project, the party introducing it shall inform the other party before the start of the activities or as soon as possible.
- vii. All rights to any intellectual property resulting out the Research ("Resulting Intellectual Property") shall be owned jointly and severally between the parties and each party shall grant the other a royalty-free, non-exclusive, worldwide, and irrevocable license to use and sublicense their respective share of Resulting Intellectual Property. Any request by third parties to use the Resulting Intellectual Property may be made to either party. Each party is free to use, and sublicense the Resulting Intellectual Property to third parties, without the express consent of the other provided that such use and subli-

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- cense do not prevent the other joint owner from using and/or sublicensing the same.
- viii. In the event that one of the parties decides to apply for any intellectual property protection on the Resulting Intellectual Property in its name, it shall consult the other before such application.
- ix. The parties shall work together to develop guidelines (including on attribution, authorship and data sharing) for the management of Intellectual Property created in the Research Project. In the event of early termination of the Research Project, all Resulting Intellectual Property at the date of termination shall continue to be subjected to this clause.
- x. All participants shall be asked to sign intellectual property and confidentiality agreement which CCSHAU, Hisar or IFDC shall provide before starting of the activity.

Commercialization:

In case of research results obtained through joint activities under this MoU both the CCSHAU, Hisar and the IFDC will apply as co-applicants for the protection of intellectual property rights subject to exclusive rights of both the Parties to commercialize the technology in their respective countries. Commercialization in any other country shall be done jointly through a separate agreement subject to approval by the competent authorities.

Publications:

Any publication, document and/or paper arising out of joint work conducted by the participants pursuant to this MoU will be jointly owned. The use of the name, logo and/or

official emblem of the participants on any publication, document and/ or paper will require prior permission of both the participants. It may however be ensured that the official emblem and logo is not misused.

Confidential Information:

- (i) All information and documents to be exchanged pursuant to the Memorandum of Understanding will be kept confidential by the Parties and will be used subject to such terms as each Party may specify. The parties will not use the information for purposes other than that specified without the prior written consent of the other party.
- (ii) All Confidential Information shall remain the exclusive property of the disclosing party. The Parties agree that the 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 Party.

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(iii) Unpublished information, whether oral, in writing or otherwise, discovered or conceived by the scientists or technicians and exchanged under the provisions of this MoU will not be transmitted to a third party, unless otherwise agreed by the Parties.

ARTICLE-V Disclosure of Information

- a) CCSHAU, Hisar and IFDC agree that except for a Court Order requiring disclosure, neither shall disclose to any third party without the written consent of the other, any information made available to the Parties, in the performance of work and/or generated by the performance of work, under this Agreement, except information which at the date hereof was:
 - (i) in the public domain
 - (ii) known to either prior to the date hereof, as evidenced by written documents subsequently.
- b) All data generated through this MoU with assistance by CCSHAU, Hisar or a collaborating institute in India from IFDC's work programme shall be subject to explicit written approval signed by IFDC before publication of same by CCSHAU, Hisar and/or the collaborating institute.

All data generated through this MoU with assistance by IFDC from CCSHAU, Hisar work programme or the work programme of a collaborating institute in India shall be subject to explicit written approval signed by CCSHAU, Hisar or the collaborative institute before publication of same by IFDC.

The provisions in this Article shall survive termination or completion of the MoU.

ARTICLE-VI Amendments

The parties to this MoU may, by mutual consent, add, modify, amend or delete any words, phrases, sentences or Articles in this MoU. Any changes to the terms and conditions of this MoU, including the scope of the work or duration, will be made in writing and will be attached as an amendment to this MoU, which shall become an integral part of the Agreement.

ARTICLE-VII Institutional Links

Both Parties will establish inter-institutional links between their respective similar scientific research institutes and centres.

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ARTICLE-VIII Joint Working Group

A Joint Working Group will be set up with representatives from both Parties to review the progress and follow up the execution of this MoU and suggest necessary measures for its development.

ARTICLE-IX Financial Arrangements

- Subject to funding availability and in accordance with specific agreements between the two parties, IFDC may fund the following:
 - (i) Training programmes at CCSHAU-Hisar for IFDC nominees or vice-versa.
 - (ii) Selection and facilitation
 - (iii) Travel conveyance, boarding & lodging, etc.
 - Subject to funding by IFDC, CCSHAU-Hisar would:
 - (i) Conduct training of the participants nominated by IFDC.
 - (ii) Provide the boarding and lodging for participants etc.
 - (iii) Facilitate field visits as required.
 - (iv) Provide office space and other facilities for IFDC in Haryana state.

Under this MoU, all finance involved in the exchange of students/faculty/training/diploma courses etc. will be met from the funding available in the joint/Individual projects under this MoU on mutual consent.

The Parties expressly acknowledge that this MoU does not in itself represent financial commitment. Any activity agreed between the two Parties and involving financial resources, will be the subject of a specific written agreement, approved by the Parties, which will stipulate the conditions and modalities of the implementation of the activity, the resources, time frames, and related deliverables

ARTICLE-X Validity / Termination

The parties would act strictly according to the relevant provisions of law while implementing this MoU. In case of any dispute that may crop up during execution of MoU, the matter would be settled through arbitration by referring it to a committee appointed by the Vice-Chancellor, CCS HAU and the President, IFDC, USA on mutual consent. The place of arbitration will be at Hisar. The MoU shall be effective from the date of its signing by both the Parties and will be valid for a period of five years.

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Thereafter, it can be renewed for a further period as decided by the parties if they intend to do so. The Memorandum of Understanding shall stand terminated by giving at least three months prior written notice to the other party. However, the termination of this Memorandum of Understanding shall not affect the validity or duration of specific collaborative programmes already being undertaken thereunder, unless decided otherwise by the Parties by mutual consent.

As agreed by the contracting parties and signed by their authorized representatives as shown below,

Signature:	Signature:
Name Dr. M. S. Sidhpuria	Name Mr. Albin Hubscher
Title: Director, HRM	Title: President and Chief Executive Officer
Chaudhary Charan Singh Haryana Agricultural University Hisar, Haryana, India	International Fertilizer Development Center, Muscle Sholas Alabama, USA
Date: 05/08/2021	Date: 9)04 100)