



Memorandum of Understanding for Public-Private Partnership between g Government of Rajasthan, Monsanto India Limited and Monsanto Holdings Private Limited

This document represents the Memorandum of Understanding ('MoU') between Government of aRajasthan as represented by the Department of Agriculture ('DOA'), Department of Horticulture ('DOH'), Swami Keshavanand Rajasthan Agriculture University ('SKRAU') and Maharana Pratap University of Agriculture and Technology ('MPUAT') and Rajasthan University of Veterinary and Animal Sciences ('RAJUVAS'), collectively referred to as State Agriculture Universities (SAUs)), Rajasthan State Seed Corporation ('RSSC') and Monsanto as represented by Monsanto India Limited ('MIL') and Monsanto Holdings Private Limited ('MHPL') to engage in public-private partnership in potential areas as outlined in this document.

Monsanto Company is 100 per cent focused on agriculture with business activities and a well-established footprint in India. Monsanto's local activities in India include research and development, seed production, seed processing, packaging and supply of quality seeds to Indian farmers. The scope of this MoU extends to public-private partnership for the following

Maize: High-yielding hybrid maize seeds by Monsanto India Limited;

Cotton: High-yielding hybrid cotton seeds by Monsanto Holdings Private Limited;

Vegetables: Varietal and hybrid vegetable seeds (of hot pepper, tomato, cabbage, cucumber, cauliflower, watermelon) by Monsanto Holdings Private Limited.

For the purpose of this MoU, Maize, Cotton, Vegetables (hot pepper; tomato, cabbage, cucumber, cauliflower, watermeion), shall be collectively referred to as "Crops".

- 2. Department of Agriculture, Government of Rajasthan, through its letter dated June 23, 2010 invited private sector seed players to engage in public-private collaboration to help develop the Agriculture sector in Rajasthan. Based on subsequent discussions, it has been agreed that Government of Rajasthan will establish a public-private partnership with Monsanto as outlined in this MoU. Government of Rajasthan is committed to helping develop and promote the appropriate policy environment to encourage innovation in the field of Agriculture for the benefit of farmers in India and more specifically, the state of Rajasthan.
- 3. This public-private partnership will be guided by the following overall objectives:
 - Contribute to Rajasthan's agriculture economy through enhanced yields in the Crops;
 - Improve farmers' lives sustainably in growing conditions prevalent in Rajasthan by
 encouraging cultivation of Crops beneficial to farmers and through interventions with
 suitable seeds & technology, knowledge sharing and awareness building on agronomic
 practices in such Crops;
 - Help create seed production, quality assurance, research and seed processing infrastructure within the State.

Towards the achievement of the above mentioned objectives, the Government of Rajasthan will help create an appropriate package of policies, rules and incentives to attract the necessary investments from private sector players towards such development in Rajasthan.

- 4. Guided by the abovementioned overarching objectives, potential areas of collaboration could span different aspects of the seed value chain as described below:
 - Seed production: Involving undertaking field production of seeds (i.e. growing) in locations, where feasible in Rajasthan;
 - Seed processing: Involving infrastructure and processes such as drying, treatment and packaging of seeds produced for sale, supply and distribution to farmers;
 - Research & development: Broadly involving development, where feasible and extensive trialing / testing of Monsanto's proprietary germplasm in some / all of the abovementioned crops as per variety / trial norms and prescribed testing fee of the Universities;
 - Farmer development: Involving making available quality seeds and associated agronomic knowledge dissemination together contributing to productivity enhancement.

It is understood that Government of Rajasthan and Monsanto will undertake careful assessment of feasibility of engagement in each of the above mentioned components of the value chain and make guided decisions thereon.

Based on discussions between the Government of Rajasthan and Monsanto, potential areas of collaboration along the above value chain components have been summarized in the table below:

Crop	Potential Areas of Collaboration	Collaborating Partners
Maize	 Monsanto-owned breeding programme and station focused on developing high-yielding maize hybrids suitable to rainfed growing conditions in Rajasthan Evaluate cross-licensing options for hybrids developed by SAUs, RSSC and / or Monsanto 	_

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•	Testing	and	trialing	of	Monsanto's	proprietary	frybrid
seeds in collaboration with State Agriculture Universities							

- Production of Monsanto's hybrid maize seeds (identified by Monsanto) on grower fields in suitable locations in Banswara and scale-up, as feasible
- DOA, RSSC & MIL

SAUs & MIL

- Maize (cont'd)
- Set-up of seed processing infrastructure including drying, treatment and packaging facilities of appropriate capacity, if feasible, as and when substantial raw seed availability is established
- DOA, RSSC & MIL
- Fair opportunity for partnership in any seed distribution programme being considered and I or conceived by the Government of Rajasthan under its schemes for improving the lives of maize farmers as well as those aimed at improving productivity and maize availability in Rajasthan

DOA & MIL

Cotton

Production of Monsanto's hybrid cotton seeds (identified by Monsanto) on grower fields in suitable locations in Rajasthan and scale-up, as feasible

DOA, RSSC & MHPL

- Evaluate cross-licensing options for hybrids developed by SAUs, RSSC and / or Monsanto
- SAUs, RSSC & MHPL
- Fair opportunity for partnership in any seed distribution programme being considered and / or conceived by the Government of Rajasthan under its schemes for improving the lives of cotton farmers in Rajasthan
- DOA & MHPL
- Mechanical harvesting trials to evaluate and understand feasibility and help develop this technology towards taking cotton production in India to the next level. Mechanical harvest equipment will be brought in by Monsanto / third party equipment provider at no cost to the SAUs

SAUs & MHPL.

Vegetables

Fair opportunity for partnership in any seed distribution programme being considered and / or conceived by the Government of Rajasthan under its schemes for improving the lives of vegetable farmers as well as those aimed at improving productivity of vegetables in Rajasthan

DOH & MHPL

- Evaluate cross-licensing options for varieties /-bybrids, developed by SAUs, RSSC and / or Monsanto
 - MHPL DOH & MHPL
- Evaluate feasibility of Monsanto's protected culture seeds (formerly DeRuiter Seeds)

DOH & MHPL

SAUs, RSSC &

- Monsanto-owned breeding programme focused on developing suitable products in tropical cauliflower and hot pepper
- SAUs & MHPL
- Testing and trialing of Monsanto's proprietary varieties and hybrid seeds of cauliflower, hot pepper, tomato and watermelon
- DOH, RSSC & MHPL
- Production of cauliflower seeds on grower fields in suitable locations in Rajasthan, as feasible
- DOH & MHPL
- Participation in the horticulture "Centre of Excellence"

proposed to be established at Bassi

	 Awareness building activities under Monsanto's Gurukulam training package with recommended package of practices for Rajasthan 	SAUS, IHITC 8 MHPL
Vegetables (cont'd)	Joint evaluation of high-yielding hybrids (e.g. in Alwar region) aimed at meeting vegetables' demand	DOH & MHPL
Seed Distribution (for the Crops)	Seed supply and distribution arrangements involving leverage of extensive government-owned network	DOA / DOH RSSC & MIL / MHPL
Knowledge Transfer (for the	Visits to Monsanto research & development / seed processing sites for Government officials, University scientists and farmers Technology Demonstration Farms	DOA / DOH & MIL / MHPL
Crops)	Guest lectures by Monsanto's global experts & scientists	DOA / DOH/ SAU & MIL _\ / MHPL
. :	Internships for selected Agriculture university students	SAUs & MIL / MHPL
	Technology demonstration farms to showcase products, technology and agronomic practices on land made available by the Government of Rajasthan for this purpose	SAUs & MIL / MHPL
	 Training / knowledge dissemination programmes through Krishi Vigyan Kendras in mutually agreed areas and terms 	DOA / DOH 8 MIL / MHPL DOA, SAUs
	 Farmer focused Crop management advisory service (using appropriate platforms such as mobile telephony) 	MIL : :

It is understood that Government of Rajasthan and Monsanto will undertake careful assessment of feasibility of engagement in each of the above mentioned potential areas of collaboration and make guided decisions thereon.

6. Specific role(s) of each of the collaborating partners will be discussed and decided upon on mutually acceptable terms and the same will be detailed in the form of an agreement between the parties as outlined in clause// hereinbelow. It is broadly understood that:

Monsanto's proprietary tools, techniques, technology, knowhow and intellectual property
rights with respect to the Crops shall remain the property of Monsantp although utilized in
any of the activities outlined as part of the MoU;

 Government of Rajasthan will make available land and facilities, wherever feasible for Monsanto to undertake proposed activities on terms and conditions to be specifically agreed upon for every location / site;

 Monsanto will be helped in the establishment of infrastructure towards the fulfillment of the collaboration objectives specified above, through access to relevant capital subsidy and other schemes of the Government of Rajasthan aimed at encouraging the activities outlined above and / or specifically discussed and agreed upon;

Monsanto will undertake detailed feasibility assessment of activities proposed to be
engaged in based on its own established and standard processes prior to decision making
on suitability of land / infrastructure, as the case may be. This will be included but not
restricted to site visits by Monsanto and / or third party personnel engaged by Monsanto;

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- Research, training and extension activities in mutually agreed areas could also be funded
 jointly by the nominated agency of the Government of Rajasthan and Monsanto as
 discussed and decided upon.
- 7. All parties to this MoU agree that this MoU is non-binding, and that they will take reasonable efforts to develop a mutually agreed-upon acceptable implementation and action plan within three months (extendable upon the mutual consent of the parties) of the date of signing this MoU. Based on the action plan so developed, the parties will perform the necessary activities to evaluate the feasibility of different areas of collaboration and where they deem fit enter into a formal agreement outlining terms and conditions for each specific area of collaboration.
- 8. In order to facilitate development of the implementation and action plan as well as coordinate this public-private partnership, the Steering Group as described below will constitute a team for the same within one month of the signing of this document:

Government Representatives	Monsanto Representatives
Commissioner, Agriculture	Managing Director, MIL
Managing Director, RSSC	Corn Business Lead, MIL
Director, Research, SKRAU	Vegetables Business Lead, MHPL
Director, Research, MPUAT	Technology Development Lead, MIL
Director, Research, RAJUVAS	Seed Production & Manufacturing Lead,
Director, Horticulture	MIL

- Monsanto and Government of Rajasthan shall operate in true spirit and execute this MoU with mutual trust and confidence.
- 10. This MoU represents the final understanding between Government of Rajasthan and Monsanto and supersedes all previous understandings in this regard. No amendments or waivers shall be effective unless made in writing and consented to by Government of Rajasthan and Monsanto.
- 11. It is understood that all activities envisaged under this MoU will adhere to relevant laws of the Government of India and Government of Rajasthan and rules formulated thereunder.
- 12 This MoU shall be governed by Indian laws, and Government of Rajasthan and Monsanto represent and warrant that they will take no action that would be in violation of, or would expose either/all of them to any liability or penalty under, the applicable laws and regulations of India, including, but not limited to. The Prevention of Corruption Act, 1988 and any amendments thereto. In addition, Monsanto represents and warrants that it will take no action in connection with this MoU, which would be in violation of the United States Foreign Corrupt Practices Act.
- 13. Neither Monsanto nor Government of Rajasthan shall be held responsible for non-performance of their obligations on account of force majeure.

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14. The contents of this MoU shall be kept confidential ("Confidential Information") and the parties shall not make use, disclose or disemminate, or in any way share any Confidential Information to any person without the prior written consent of the other party. Each party shall treat all Confidential Information with the same degree of care as it accords to its own confidential information and shall not disclose the same except where it is required to be so disclosed by Law.

Shri. S. Ahmad Additional Chief Secretary, Agriculture, Horticulture & Agriculture Education, Government of Rajasthan

Shri. Amitabh Jaipuria **Wanaging Director** Monsanto India Limited

Shri. 3. C. Mohanty

Commissioner, Agriculture,

Commisionerate of Agriculture, Government Private Limited of Rajasthan

Shilpa Divekar Nirula Authorised Signatory, Monsanto Holdings

Professor A. K. Gahlot Vice Chancellor, RAJUVAS, Bikaner

Shri. Gyanaram Director, Horticulture, Rajasthan, Jaipur

Shri. Y. S. De? Managing Director, RSSC, Jaipur

Director, Research, Representative of Vice Chancellor, SKRAU, Bikaner

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Dr. P. L. Maliwal Zonal Director, Research, Representative of Vice Chancellor, MPUAT, Udaipur



Memorandum of Understanding

This Memorandum of Understanding (hereinafter referred to as "MOU") is made and executed amongst:

The Department of Agriculture, Government of Rajasthan, (DOA) Rajasthan State Seed Corporation (RSSC), Swami Keshwanand Agriculture University, Bikaner (SKRAUB); Maharana Pratap University of Agriculture & Technology, Udaipur (MPUAT), and Rajasthan University of Veterinary and Animal Science, Bikaner (RAJUVAS)

And

JK Agri Genetics Ltd (JKAL), a Company incorporated under the Companies Act 1956, having its registered office at #7, Council House Street, Kolkata - 700001 and Admn. Office at 1-10-177, 4th Floor, Varun Towers, Begumpet, Hyderabad - 500016 (A.P.).

The Rajasthan State Agriculture Department & Universities and JKAL hereinafter together may be referred to as the "Parties" and each individually as a "Party".

The terms "Affiliate" means and includes any corporation, firm, limited liability company, partnership, or other entity that directly or indirectly controls, or is controlled by, or is under common control with a party to this Agreement. For the purpose of this definition, control means ownership, directly or through one or more Affiliates, of fifty percent (50%) (or such lesser percentage which is the maximum allowed to be owned by a foreign entity in a particular jurisdiction) or more of the shares of stock entitled to vote for the election of direction in the case of a corporation, or fifty percent (50%) (or such lesser percentage which is the maximum allowed to be owned by a foreign entity in a particular jurisdiction) or more of the equity interests in the case of any other type of legal entity, or status as a general partner in any partnership, or any other arrangement whereby a party controls or has the right to control the board of directors or equivalent governing body of a corporation or other entity.

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1. INTRODUCTION AND INTENT

- A. DOA, RSSC, SKRAU, MPUAT and RAJUVAS share a mission for the achievement of excellence in research, education and extension programs in agriculture and allied fields, are leading research and educational institutions of national importance in India engaged in conducting world-class research across a broad range of basic and applied sciences including biological sciences, genetics, agricultural biotechnology, crop improvement and breeding.
- B. JKAL is a leading commercial supplier of agricultural seed products in the country and has research, breeding and crop production programs in important food, feed and fuel crops including corn (maize), soybean, pearl millet, sunflower, mustard, sorghum, cotton and vegetable seeds.
- C. DOA along with the state agricultural universities & authorities stated above and JKAL desire to establish a collaborative research program in crop improvement and breeding, agricultural biotechnology, product development, production, promotion and distribution of various seeds hybrids particularly pearl millet, corn, mustard, soybean and sorghum, cotton to advance scientific knowledge, discover new genes and traits and develop new biotechnologies, to enable the introduction and marketing of better hybrid seeds of the crops mentioned herein. It is understood that DOA & the agricultural universities may undertake collaborative research programs with JKAL, either as a consortium or as independent members thereof.
- D. This MOU outlines the intent of the parties and is intended to provide a framework for definitive agreements that will be negotiated by the parties, the terms of which will govern the program and its conduct.

2 CONDUCT OF THE PROGRAM

A. Under the Program, the parties will identify and conduct collaborative research projects ("Research Projects") that are of interest to the Parties. The Research Projects are envisioned to be in such topic areas as:

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Joint development of various seeds hybrids of commercial agricultural importance and based on parameters like high yield, resistance to insects, diseases, environmental (biotic/abiotic) stresses such as water deficiency (drought), cold etc.

Breeding, Development and Identification of crops/ hybrids having improved agronomic performance and increased economic returns.

Development of silage in corn, pearl millet and sorghum, cotton, fodder beet in collaboration with RAJUVAS for which facilities will be created under RKVY scheme.

iv. Trials and testing of JKAL varieties in SAU as per university norms.

v. Establishment of pearl millet, corn, wheat, mustard and vegetables research and seed production centers on suitable Government

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tarms on mutually agreed terms.

Imparting training on DNA fingerprinting facilities for testing varietal purity.

The Program envisages scientific exchanges including exposure visits of farmers, officials and scientists and students to each Party's facilities and for various forms of training.

- Publication of program results in scientific journals and meetings is envisaged after such disclosures are reviewed by the Parties for potential patent filing. The Parties will agree on procedures for facilitating publication and ensuring the filing of patents prior to any disclosure.
- The parties will establish a Coordination Committee (CC) comprising of technical representatives of the Parties, to manage and oversee the scientific aspect of the Program and Research Projects and activities related to the collaborative Research Projects, including visitor exchanges, training and publication. The CC shall decide upon the Program components and it is the common understanding of the Parties that the Program may be undertaken either as a whole or in components or in parts thereof in accordance with the decision of the CC.
- MOU will be effective for a period of three years but may be extended by mutual consent of the parties.
- Each Party will comply with all applicable laws, rules, guidelines and regulations in conducting its activities under the Program, including those relating to use and transport of materials and the protection of the environment.

CONTRIBUTIONS

Each Party will contribute its expertise and resources to each Research Project with necessary intimation to the Project Director/ICAR as per the applicable guidelines and without infringement of any third party Intellectual property Rights as appropriate for the specific project and in accordance with the written research plan. In addition, each Party will make available to the other Party certain technology (materials and/or technical data) and other information that the supplying Party certain technology (materials and / or technical data) and other information that the supplying Party believes to be necessary for individual Research Projects (altogether, "Supplied Property"). The receiving Party will respect and protect the supplying Party's Supplied Property.

B. JKAL's contributions will include both cash funding and access to

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certain JKAL resources and technology necessary for the Research projects. It is envisioned that JKAL's cash funding would be used by DOA to support the Research Projects and the training students/personnel with Agriculture Universities, RAJUVAS and other related State authorities.

- C. More specifically the parties shall contribute to the Program as follows:
 - Bikaner will conduct joint research and or sponsored a. SKAU, research projects with JKAL for Corn , Cotton, Pearl millet and vegetables

b. MPUAT, Udaipur will conduct joint research and or sponsored research projects with JKAL for Corn and Cotton.

c. JKAL has introduced fodder beet for the first time in India, RAJUVAS will conduct feeding trials, assess the nutritive value and utility of fodder beet.

d. IIHTC Durgapura, Jaipur will conduct joint trainings with JKAL for vegetables.

4. INTELLECTUAL PROPERTY

- A. Each Party owns its Supplied Property.
- B. New data, information intellectual property and materials developed in the Program(Program Results") will be owned by the Party, or Parties (as the case may be) that conceived, created or developed the Program Results, such that any Program Results conceived created and developed solely by one Party will be owned by that Party and any Program Results conceived, created or developed jointly by any State University / Authorities and JKAL will be jointly owned by the contributing Parties. Each Party will exclusively own its existing and developed germplasm, plant variety protection certificates and any other intellectual property related to that party's respective proprietary plant varieties.

For Program Results that lead to the filing of patents, inventorship will be determined according to the laws of the country in which the particular patent application is filed.

It is envisioned that the Parties will file patent applications on new inventions developed in the Program. The parties will discuss whether to file patents on new inventions. Upon JKAL's agreement to file in or outside India. JKAL will handle and manage, and pay all reasonable and necessary expenses for the drafting, filing, prosecution and maintenance of such patent applications and patents. Additional terms regarding patent prosecution and enforcement will be as per the

Definitive Agreements.

E. The guidelines of the Biological Diversity Act 2002 of Govt. of India may be followed.

5 RESEARCH AND COMMERCIAL RIGHTS OF THE PARTIES

The Definitive Agreement will specify each Party's rights to use Program results. However, subject to protection of proprietary and shared intellectual property rights as may be agreed to between the parties, it is the Intent of the parties that:

- A. Each party will be able to use Program results for research purposes in their respective field of use and territory.
- B. DOA, RAU MPUAT, RAJUVAS and JKAL will have a nonexclusive right to make, use, develop and sell seed, fodder and grain products resulting from the Program in India and abroad.
- C. JKAL will have (i) the nonexclusive right to make, use, develop and self seed and grain products resulting from the Program in India, and (ii) the exclusive right to make, use, develop and self seed and grain products resulting from the Program in all countries of the world other than India.
- D. JKAL will pay mutually acceptable fair and reasonable fee on products if commercializes using Program Results that are covered by an applicable issued patent in which DOA or RAU or MPUAT or RSSC or RAJUVAS has ownership.

6 NON-BINDING NATURE OF THE MOU

The Parties acknowledge and agree that this MOU is not meant to be and is not legally binding and is only being provided to express the intent of the Parties to develop a collaborative partnership, to define the nature of the collaborative research Program, and to provide a framework for the contemplated Definitive Agreements, the terms of which will govern the Program and will be binding on the Parties. However, neither Party is under any obligation to enter into any agreement because of either this MOU or any statement or action of either Party, prior to signing a Definitive Agreements. Execution of the Definitive Agreements will be subject to the approval and signature by authorized representatives of the Parties.



7 OTHER TERMS

The Definitive Agreements will be executed for the agreed components of the

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Program between the relevant parties and shall contain other customary provisions including Confidentiality, Warranties, Disclaimers, Publicity, Export Control, Governing Law. Dispute Resolution, Termination and Assignment. JKAL shall be entitled to execute separate Definitive Agreement for one or combination of different components of the Program.

8 TIMELINE

This MOU is intended to provide a framework for the Parties' discussion leading to the Definitive Agreements and will be in effect for a period of three (3) years or until earlier terminated in part of full by either Party upon written notice, or superseded by the Definitive Agreements signed by both Parties. The Parties agree to work diligently and in good faith to execute the Definitive Program Agreement by 17th Day of August, 2010.

The Parties have caused this Memorandum of Understanding to be executed by their respective authorized representatives.

Shri S. Ahmad

Addl Chief Secretary, Agriculture, Horticulture & Agriculture Education, Government of Rajasthan

Shri AC. Mohanty

Commissioner Agriculture
Commissionerate of Agriculture
Government of Rajasthan

Professor A.K. Gahlot Vice Chancellor, RAJUVAS Bikaner

Director Horticulture Rajasthan, Jaipur

Shri Y.M.S. Deo Managing Director, RSSC, Jaipur

Director Research, Representative of Vice Chancellor, SKRAU, Bikaner

Director Research,
Representative of Vice Chancellor,
MPUAT, Udaipur

M/s J.K. AgriGenetics Ltd.(JKAL)

Shri S.K. Gunta.

Shri Vikram Yadav Business Manager M/s J.K. AgriGenetics Ltd. Rajasthan, Jaipur

Chief Operating Officer

Dr. D.K. Rana, Associate Breeder, M/s J.K. AgriGenetics Ltd. R&D Centre, Jaipur