

MEMORANDUM OF UNDERSTANDING

This **MEMORANDUM OF UNDERSTANDING** (hereinafter 'MOU') is entered into on the 20th day of September 2014

BY AND BETWEEN

The Dutch Potato Cluster (hereinafter DPC)

The Dutch Potato Cluster (DPC) is the expertise cluster of the Netherlands Agro, Food & Technology Centre (NAFTC) – India. As the name suggests it represents the Dutch companies having specific expertise in the Potato sector at various levels of the potato value chain. These companies have long term commitment towards India and have special interest in the growth and development of the Indian potato industry for mutual benefits. DPC is committed to bring the Dutch expertise in potato to India, from the famous varieties in seedpotatoes and excellence, knowhow on farm practises to the world-class post-harvest technology, like handling, grading, storage and processing. The DPC represents its members collectively as well as individually.

NAFTC-India is a public private partnership representing Dutch Agriculture, Food & Agro/Food Technology enterprises in India. NAFTC-India is headquartered in New Delhi and strives to bridge the technical and the knowledge gap between the Indian and the Dutch agriculture sectors. NAFTC-India represents its Dutch members in India. NAFTC-India is supported by the Netherlands Ministry of Economic Affairs and the technological-industrial sector association FME-CWM. The center works very closely with the agriculture department of the Dutch embassy in New Delhi. Furthermore it also cooperates closely with various Indian state governments and relevant Indian agencies and associations.

And

The Chandra Shekhar Azad, University of Agriculture & Technology (herein after CSA), Kanpur, Uttar Pradesh, India.

*PROFILE OF CHANDRA SHEKHAR AZAD (CSA), UNIVERSITY OF AGRICULTURE & TECHNOLOGY,
KANPUR, UTTAR PRADESH, INDIA*

The Chandra Shekhar Azad University of Agriculture & Technology, Kanpur is recognized today as the premier institution of agricultural research and education in India. It dates back to 1893 when a small school was started to impart training to revenue officers. It rose step by step to the full-fledged Government Agriculture College (1906) to the U.P. Institute of Agricultural Sciences (1969) and finally to the C.S. Azad University of Agriculture & Technology in 1975. The University was created with the merger of its two constituent colleges, the erstwhile Government Agriculture College, Kanpur and U.P. College of Veterinary Science & Animal Husbandry, Mathura.

The present status of the University was attained through phases of growth of its constituent colleges. At present, there are three faculties in the University, viz., Faculties of Agriculture and Home Science at Kanpur, and Faculty of Agricultural Engineering & Technology at Etawah. The

University caters to the needs of the farming community spread over 29 districts of six divisions of Uttar Pradesh.

The climate of the jurisdiction area varies from sub-humid and semi-desert to semi-arid conditions prevailing in different districts. Soils are mostly represented by vast expanse of the alluvial developed from the river Ganga and its major tributaries. However, the soils of the Central Plateau are coarse loamy, sandy, red (Raker and Parwa) and black (Kaber and Mar). Wheat, Barley, Rice, Maize, Sugarcane, Gram, Pigeon pea, Lentil, Soybean, Potato, Mustard and vegetables are the main crops of this locality.

Recitals

1. NAFTC – India (and DPC) is committed to promote its members in India. Uttar Pradesh being one of the most important agricultural states in India is indispensable of NAFTC-India. The Dutch Potato Cluster (DPC) intends to focus its activities in Uttar Pradesh in order to promote the growth and development of the (seed) potato industry and cold chain industry in Uttar Pradesh, which in turn will be beneficial for its members.
2. The Dutch Potato cluster comprises of 7 Dutch companies having their interest in the Indian Potato industry. These companies have their intervention and expertise at different levels of the potato value chain, right from the seed potatoes to procession.
 - HZPC is one of the world's largest potato seed producers.
 - Broekemais a specialist in manufacturing crop conveyor belts for specialized uses.
 - Oldenhuis&Prinsen is a supplier of pre and post-harvest machinery for potato crops.
 - Hak& Partners does turnkey projects for the Potato Processing plants.
 - OmniventTechniek BV is a highly specialized company in cold storage and forced ventilation system.
 - Mooij Agro is involved in building and up-gradation of the cold stores with the state of the art ventilation technologies.
 - Kiremko BV is manufacturer of Potato processing machinery.

The Dutch Potato Cluster (DPC) is a non-exclusive group and other Dutch companies might join at later stages.

3. UttarPradesh is the largest producer of potato in India. The state enjoys favourable climate for the production of high quality potatoes. The state also has the largest number of cold storages for Potatoes in India. However the state could improve upon the low yield of potatoes, wastages, inefficient cold storages infrastructure, lack of value addition, excessive usage of water for irrigation, soil degradation to enhance the income of the farmers.

4. To maintain its position as the top potato producer state in the country and emerge as the leading value-adding state to potato, the state of Uttar Pradesh needs to modernize its agricultural infrastructure and agricultural practices in order to enhance the productivity and minimize the losses. This requires modern technologies, know-how and experience. The Netherlands is a one stop shop for all these needs.

Government of India aims to double the food production in the next five years.

Potato is being seen as the food for the future therefore there is a lot of focus from the government towards the development, mechanization and professionalization of this sector.

CHANDRA SHEKHAR AZAD (CSA), UNIVERSITY OF AGRICULTURE & TECHNOLOGY, KANPUR, UTTAR PRADESH, INDIA one of the oldest agricultural universities of India. It caters to the needs of the farming community spread over 29 districts of six divisions of Uttar Pradesh.

The mandate of CSA, KANPUR, UTTAR PRADESH, INDIA is to enhance the R & D in the Potato sector and the introduction of the world class technology for the betterment of the entire potato industry in Uttar Pradesh and in India.

CSA, KANPUR, UTTAR PRADESH, INDIA and the DPC are natural allies. Both the parties see enormous scope and opportunity to establish synergies to achieve the common goals and therefore enter into this Memorandum of Understanding (MoU), in order to formalize the key features of the mutually agreed upon terms & conditions for providing support & facilitation and strategic partnerships. By signing this MoU both parties underline the possible areas of cooperation and timeframe of implementation between NAFTC – India and CSA, KANPUR, UTTAR PRADESH, INDIA, the following main areas:

1. **Technology transfer:** In order to enhance the productivity levels and reduced the pre and post-harvest losses the state of Uttar Pradesh requires adoption of additional farm mechanization. Mechanization is also important due to the scarcity of labour and related high cost of labour due to the government schemes like MNREGA. DPC and CSA, KANPUR, UTTAR PRADESH, INDIA will share market insights. This will be done by organizing seminars, conferences and high level round table meetings. Joint research will also be done in order to understand the local needs and market trends. There will be a provision of practical training disseminated the knowledge to the farmers working at the grassroots level. NAFTC – India members will be in touch with the CSA, KANPUR, UTTAR PRADESH, INDIA representatives, understand the local needs and customize their products according to the local needs. NAFTC – India may also facilitate the transfer of the technology (on the price agreed between the DPC members and CSA, UNIVERSITY OF AGRICULTURE & TECHNOLOGY, KANPUR, UTTAR PRADESH, INDIA representatives).

2. **Yield gap analysis:** In order to enhance the productivity levels it is important to understand the situation on the ground level. The yield gap analysis studies would be important to know what is theoretically possible, what is practically possible and what is being achieved. This will help in understanding what needs to be done to enhance the productivity levels.

Due to the commitment by the DPC members, researchers from Wageningen University from Holland will carry out these studies and research in cooperation with **CSA, UNIVERSITY OF AGRICULTURE & TECHNOLOGY, KANPUR, UTTAR PRADESH, INDIA**. The results of these studies will define the way forward for both the parties.

3. **Benchmarking of the existing agro-infrastructure:**As in case of crops in the fields it is also important to benchmark the existing agro-infrastructure. This infrastructure may include the cold storages, transport facilities, marketing portals. By obtaining sufficient information on the current situation and the bottle necks the baseline for the improvement and enhancement of the infrastructure can be defined. These studies can be carried out by the Dutch knowledge institutions nominated by the DPC members.
4. **Access to the existing infrastructure:** In order to carry out the above mentioned studies it is essential for NAFTC – India and the DPC members to have access to the existing infrastructure. It will be a responsibility of CSA, KANPUR, UTTAR PRADESH, INDIA to provide the DPC representatives access to the infrastructure.
5. **Seed Certification:** It is estimated that more than 90% of the Indian seed potatoes are not certified. It is important to certify the seeds in order to ensure the quality and have the buyer confidence. NAFTC – India will facilitate the interaction between CSA, KANPUR, UTTAR PRADESH, INDIA and the seed certification agencies in the Netherlands to help understand the importance of certification of the seeds and help get their services for certification of seeds in India or establish such agency.
6. **Variety development and IPR:** Indian potato varieties are not or minimally suitable for the processing industry. To support the growth of the processing industry it is important to have varieties suitable for processing into chips and French fries which are the fastest growing market segments of potato products. The winters are shortening in India in terms of days and the window for cultivation of potatoes is shrinking. It calls for the introduction of varieties which need shorter period to grow. Disease resistant varieties also need to be introduced and tested.
The seed breeding companies worldwide are reluctant to introduce newer seed varieties in India due to the non-protection of IPRs. NAFTC – India and CSA, UNIVERSITY OF AGRICULTURE & TECHNOLOGY, KANPUR, UTTAR PRADESH, INDIA will explore (new) business model where both the parties feel comfortable. The IPR negotiations are an important part of Government to Government (G2G) agenda between India and the Netherlands, however strong inputs are required from CSA, KANPUR, UTTAR PRADESH, INDIA and DPC in order for the governments to reach a mutually agreeable situation.

7. **Up-gradation of the current infrastructure:** Several DPC members have ability to upgrade the current agro-infrastructure or build new infrastructure; for instance in the cold chain section of the potato industry. CSA, KANPUR, UTTAR PRADESH, INDIA can recommend the services of the DPC members to its own members while upgrading the cold chain infrastructure. The DPC members from time to time will showcase the added value of the modern and the upgraded infrastructure by conduction studies from time to time and organizing training program. This will help in capacity building and professionalization of the cold chain sector in Uttar Pradesh.
8. **Training and capacity building.** Research and Innovation. Training on Good agricultural practices, pre and post-harvest handling of crop, storage and transport are some of the important areas where the NAFTC – India members can provide training to the CSA, KANPUR, UTTAR PRADESH, INDIA members and their work force. NAFTC – India and CSA, KANPUR, UTTAR PRADESH, INDIA will work together in order to organize such training and capacity building programs from time to time.
9. **Subsidy programs:** DPC and CSA, KANPUR, UTTAR PRADESH, INDIA will try to combine their activities in such a manner that the members can take benefits from the (local) government schemes and subsidy programs by the respective governments. The DPC (NAFTC-India) is the implementing body for the Indo Dutch Joint Action Plan signed between the Government of India and the Netherlands in May 2012. DPC will design its activities in order to make the best use of this bilateral cooperation agreement for mutual benefit.
10. **Co-operations during delegation visits, events, seminars and similar activities:** Based on the proposed activities, NAFTC will organize various delegation visits to Uttar Pradesh with relevant Dutch participants. The organization, coordination and respective funding are the responsibility of NAFTC. Contribution of CSA, KANPUR, UTTAR PRADESH, INDIA towards the delegation visits will primarily be in kind by facilitating relevant visits and/or contacts. These programs include the organization of the Dutch Potato Week (proposed in the months of November 2014), Agro Tech 2014 (November 2014), Studies and research conducted by Wageningen University, diplomatic missions (G2G) and other annual potato related events in the state of Uttar Pradesh and other parts of India. CSA, KANPUR, UTTAR PRADESH, INDIA will organize various delegation visits to The Netherlands with relevant participants. The organization, coordination and respective funding of these visits are the responsibility of CSA, UNIVERSITY OF AGRICULTURE & TECHNOLOGY, KANPUR, UTTAR PRADESH, INDIA. Contribution of NAFTC towards the delegation visits will primarily be in kind by facilitating relevant visits and/or contacts.


Terms of Reference

1. This MOU would remain valid for a period of three (3) years from the date of signing, and thereafter may be renewed mutually in writing, on such terms and conditions as may be agreeable to the Parties. This MOU shall stand terminated on the signing of the definite Agreement between the Parties wherein the terms and conditions of this MOU shall be incorporated and shall stand merged.
2. Except for any media and other activity agreed in this MOU, both the Parties hereby agrees and undertake to keep all information exchanged as confidential. Further, NAFTC-India agrees that this MOU or the contents thereof shall not be disclosed by NAFTC-India to any third party without the prior written consent of CSA, KANPUR, UTTAR PRADESH, INDIA and vice versa.
3. In respect of all activities established under this MoU, CSA, UNIVERSITY OF AGRICULTURE & TECHNOLOGY, KANPUR, UTTAR PRADESH, INDIA is responsible for the representation of the relevant stakeholders (public and private) from its membership, whereas NAFTC will be accountable for the representation of relevant Dutch stakeholders, public and private.
4. No amendment or other variation of this MOU shall be binding, unless the same is duly affected by an instrument in writing signed by the Parties hereto and expressed to be for the purpose of such amendments.
5. This MOU shall be binding upon, and to the benefit of, the Parties hereto and their respective successors and permitted assigns.

This Memorandum of Understanding is signed by both the parties on the said date in the presence of the following authorized representatives and witnesses:



(Authorized Signatory)
For CSA



(Authorized Signatory)
For NAFTC-India

Witness:


Witness:

