## Punjab's Roadmap for Crop Diversification with Maize Drawn in *Sustainable Agriculture Conclave 2019*

Chandigarh, December 10, 2019: Joining Punjab in its fight against groundwater depletion, Federation of Indian Chambers of Commerce and Industry (FICCI) in association with NABARD and Department of Agriculture, Punjab defined prospects of maize for crop diversification in the State, in *Sustainable Agriculture Conclave 2019* on December 10, 2019 at The Taj Hotel, Chandigarh.

Punjab currently battles the issue of groundwater depletion on account of paddy-dominant cultivation pattern. Paddy, which makes up for 39.64% of the State's total crop production, has water consumption of 2500-5500 litres/kilogram. This high-water demand is ripping Punjab of its groundwater resources to the level that if countermeasures are not taken, there would not be enough water to sustain agriculture in next 20 years. Responding to this critical concern, Punjab Government and State Branches of Central Bodies, under crop diversification models, are promoting less-water consuming crops like maize among farming community.

Taking it one step further, Sustainable Agriculture Conclave not only sensitized farmers & FPOs on benefits of shifting from paddy to maize, but also closed the demand-supply gap by bringing maize-producers closer to the market, specifically maize-consuming and allied industry. More than 150 participants from farming community, maize consuming industry (poultry & cattle feed, starch, ethanol, silage etc), agri-business industry, Government and research/academic institutes joined aboard for this initiative.

The program was inaugurated by esteemed panel of guests -- Dr. Sujay Rakshit (Director, Indian Institute of Maize Research), Mr. Sriram Kannan (Managing Director, CLAAS India Pvt Ltd), Dr. Balwinder Singh Sidhu (Commissioner Agriculture, Punjab), Mr. Inderjit Singh (Director, Dairy Development, Punjab), Guest of Honour, Mr. K.S. Pannu, IAS (Secretary, Department of Agriculture) and the Chief Guest, Mr. J.P.S Bindra (Chief General Manager, NABARD Punjab). While Dr. Rakshit opened the session with an expert outlook over maize for crop diversification, Mr. Kannan represented industry's stand. Terming maize "the crop of future", Mr. B.C Sidhu called for a system perspective for looking at maize. Similarly, Mr. Inderjit Singh highlighted the strong connection between maize and dairy by setting a much-needed perspective for developing Punjab as a fodder State. An honest reflection of farmer's standing was shared by Mr. K.S. Pannu, who emphasized on the need of developing a holistic market for maize and creating a demand corpus to supplement crop diversification. Addressing the participants, Mr. J.P.S Bindra explored the social and economic aspect of crop diversification. Offering integrated

farming as a catalyst to ensuring sustainability of diversification models, he said, "I would suggest farmers to not only grow maize, but also engage in dairy or poultry for direct value-addition of their crop."

The current status of maize cultivation, its challenges and opportunities were explored in the panel session moderated by Dr. Sujay Rakshit. Dr. S.K. Sandhu (Senior Maize Breeder, Punjab Agricultural University) vouched for improvement in existing technology, hybrid productivity and marketing practices to enhance economic returns to maize cultivation, which at the moment faces loss of around 17,739 rupees/hectare in comparison to rice. Role of maize in animal nutrition found voice in Dr. Manju Wadhwa (Senior Nutritionist and Former HOD-Animal Nutrition, GADVASU), as she shared benefits of maize residue management with the participants. Similarly, need of crop protection was emphasized by Mr. Govind Sharma (Head of Agronomy, Syngenta India). Both Mr. Rahul Shrivastava (Senior Vice President-Grains, COFCO India) and Mr. J.S. Nagi (Proprieter, Kulwant Nutritions Pvt Lts) assured the participants of positive maize consumption trends in future.

Equally knowledgeable was representation of maize-consuming industry in the second panel session, moderated by Dr. Jaswinder Singh Bhatti (President, Fodder Manufacturer Association). He opened the session by enlightening the participants on current maize demand pattern, issued faced and suggestive measures. During discussion, the panelists mapped high moisture content, resultant fungal growth as well as high susceptibility to high aflotoxin level as reasons behind non-procurement of Punjab's maize. To solve the issue, while Mr. Naresh Mehta (Proprieter, Kanchan & Leader Cattle Feed) appealed to the Government to either build reliable infrastructure or allocate yards to the farmers to sundry and display their harvested maize crop to buyers, Mr. Harsh Rawat (Purchase Management-North, Cargill India) offered support in terms of research labs, education & training, partnership channels for uptaking crop improvement and Mr. Kushal Mittal (AMD, BCL Industries) offered a further investment of INR 170 crore if the standard-qualifying supply of maize increases. Considering the direct impact of feed nutrition on dairy performance, Mr. Harinder Khanna (President, Indian Fodder Association) suggested a nutritionist to access nutritional value of fodder, which was also reiterated by Mr. Siddharth Mundeja (General Secretary, Fodder Manufacturer Association) who shared that there is 22% fodder deficiency i.e., potential market for nutritional fodder in India.

Individual presentations by Mr. Deepak Gupta (Deputy Manager, National Commodity & Derivatives Exchange Limited), Mr. Malwinder Malhi (Program Lead-North Region, Syngenta India), Dr. Sudesh Kumar (Scientist 'F', CIAB-NABI) and Mr. Taranjeet Bhamra (CEO, AgNext Technologies) added immense value to the program.