

DAYALBAGH EDUCATIONAL INSTITUTE (Deemed to be University)
AGRICULTURAL ENGINEERING
ACADEMIC SESSION 2024-25
AGRITECH SEMINAR - REPORT

The Department of Agricultural Engineering organized a one day Agritech Seminar on 19th March 2025, at the Fablab, SOE starting at 9:00 a.m. The event featured an insightful talk by Dr. Lord Ajay Sharma, a distinguished alumnus of DEI and an esteemed industry executive. Dr. Sharma, the founder of ASR Ventures (Invest in Impact Innovations) and a Professor of Management at UIBS, Amsterdam brought a wealth of knowledge and experience to the seminar. Dr. Sharma engaged in a lively and energetic conversations with the students and faculty of Agricultural Engineering centering on the theme ***“Smart Agriculture for India: from Poverty to Prosperity for Small and Marginal Farmers”***.



The session began with an interactive dialogue about the population share of smallholder farmers in India and the world followed by identifying the challenges and scope for growth and economic development in the small scale farming sector. He highlighted how limited accessibility to quality inputs, credit facilities, public resources and technology results in reduced productivity and reduced income safety to these farmers. Dr. Sharma underscored the importance of increasing the income of small-scale farmers to achieve GOI goal of doubling farmer income by 2024. The potential of self-governance among farmers through farmer producer organizations (FPOs) in meeting the challenges and need of community networking in India have been given thrust in the talk. The discussion also examined the massive pain points of agro food value chain in the country, such as poor traceability issues and high cost

operations. He shared the success stories, including the use of drone technology in capital saving and productivity enhancement at the TATA coffee plantations as well as innovative startups like Dimitra, that leverage AI in Farming.

The speaker significantly emphasized the transformative potential of the amalgamation of multiple technologies-IoT, Sensor technologies, Robotisc, Satellite imaging, Big Data, and Block chain- for small farms towards smart farms. He advocated for simplified user interfaces and feasibility for value added actions and information to every section of famers. The seminar also explored innovation scales at the agritech startup ecosystem including carbon credit markets aimed at decarbonising farming. In conclusion Dr. Sharma outlined key pillars for transforming small-scale farming from poverty to prosperity-Consolidation of technologies into simplified platforms, Smart mobile connectivity, Financial inclusion and Improved access to knowledge, technology and sustainable practices. Dr. Ajay Sharma encouraged students to approach agricultural problems with the right mind-set, acknowledging that adoption of new solutions requires time and effort. The talk provided students insights to identify key areas with lot scope of engineering interventions and innovation for transforming subsistence farming into profitable, economically viable businesses. Dr. Ajay Sharma wind up the session by challenging the students to form the right problem statements to tackle them.



Later he visited the Soil and Water Lab and Farm Machinery lab of Agricultural Engineering. He also explored the technology demonstrations at the Agricultural Farm, FOE. Following the visit, there was an interactive session with the faculty members of Agricultural Engineering and Department of Agriculture, DEI, during which he was delighted to sample variety of processed products made from Desi Gulab (Indian roses) cultivated at the

Agricultural Farm, FOE by students, adding a unique and flavourful touch to the exchange. To the quest of starting an entrepreneur culture and startup system within the campus for the budding agricultural engineers of DEI, he recommended introducing starting a course on startup ecosystem, to be integrated throughout the four year curriculum. This initiative would inculcate a robust support structure comprising volunteer mentors from diverse disciplines such as accounting, law, Psychology and more. It facilitates as a guiding mechanism to the students to frame their dreams from 1st year till formation of a startup by 4th year, ultimately transforming the campus into hub of innovation. He also encouraged to secure patents and to develop them into viable business models. He also suggested to renaming the academic discipline of “agriculture” as “digital agriculture” to better reflect the integration of digital technologies with traditional practices.

