SDAU Mulls over Water Issues in North Gujarat with Experts from Columbia University

An Introductory Meeting of Scientists of SDAU and CIPT, Columbia University was convened under the chairmanship of Prof (Dr) Ashok A Patel, the Hon Vice chancellor of SDAU on 08 September 2015. The purpose of the meeting was to discuss the water related issues of North Gujarat and how can they be mitigated by coordinated technological interventions of the two universities. Dr B S Parmar introduced the concerns for dissipating aquifer and over dependence of agriculture on underground water in North Gujarat. He informed that MIS has been adopted over 2.06 lakh ha in Gujarat with highest adoption in potato, cotton and groundnut. Dr R N Singh presented scintillating methods for in situ water harvesting and well recharging along with technological interventions for increasing the water use efficiency. Giving details of endeavors of CIPT, Dr Kamal Vatta narrated that the prime focus is on increasing beneficiary base by promoting innovations so as to increase visibility. Water-energy-agriculture-livelihood sustainability (WEALS) nexus, water use efficiency, capacity building, incentive for water use efficiency, etc are the major fields. He informed that use of simple intervention like tensiometer in Punjab resulted in 25 % saving of water in paddy. He also delved in innovative weather station; use of drone with remote sensing for data collection, mobile based DSS, SAFAL (Sustainable Agriculture Farming and Livelihood) for increasing quality seed, water management and simulating the data for decisions like irrigation, fertilizers etc. He explained climate models for monsoon prediction and its consequent use in predicting yield and inputs requirements eg if the season is late, we can save wastages of resources by avoiding early sowing. He specially highlighted the involvement of students as young leaders under a mentor in different villages for understanding the field problems entailing huge knowledge and awareness gap and exercises for their solutions. The salient takeaways of the meeting were:

i. Precision technologies involving weather stations, sensors, weather stations and drones.
ii. DSS information for web site, web portals and mobile application for different crops.
iii. WEALS nexus, in situ and ex situ conservation, well recharging, RCTc, etc
iv. Agents of change by forming small groups of students and arranging their monthly visit to different blocks for analyses of problems and their solutions.
v. Status papers for all 56 blocks under the jurisdiction of SDAU with involvement of PG students.
vi. Development of PG diploma entailing 4 weeks exposures and 20 weeks collaborative trainings on different areas involving multitasked holders. The selected group of students may interact with scientists of CIPT/US for instilling and building confidence in advisory services.
vii. Capacity building Workshop on different fields with expert lectures and hand-on trainings.