

## INDIAN SOCIETY OF AGROPHYSICS

Proceedings of the 5<sup>th</sup> Prof. B. P. Ghildyal Memorial Lecture

held on 29th April, 2017, at CESCRA Auditorium, IARI, New Delhi

The 5th Prof. B.P. Ghildyal Memorial Lecture was delivered 29th April, 2017 by Dr. Alok K. Sikka, IWMI representative-India and former Deputy Director General (Natural Resources Management), ICAR, New Delhi. The programme was organized by the Indian Society of Agrophysics and hosted by the Division of Agricultural Physics, IARI.

At the outset of the programme, Dr. Debashish Chakraborty, Secretary, Indian Society of Agrophysics (ISAP) welcomed the gathering. Dignitaries lighted the lamp and paid homage to the great soul of Prof. B.P. Ghildyal. Dr. Pramila Krishnan formally welcomed Dr. A. K. Sikka, the hon'ble speaker and Dr. J.S. Sandhu, the hon'ble Director of IARI with flower bouquet. The esteemed family members of Prof. B.P. Ghildyal were also welcomed with the bouquet of flowers in the occasion.

Dr S.S. Ray, the Vice-President of ISAP, briefly greeted the dignitaries on and off the dais, and the general gathering. He briefed on the history of this coveted lecture. He mentioned about Prof. B.P. Ghildyal's contribution for the society and the scientific community at large, especially the message to reach to the young scholars, researchers and students of IARI. He also named the speakers who have delivered this lecture in the past. He welcomed and briefly introduced about the Chairperson, Dr. J.S. Sandu, Director IARI and DDG (Crop Science), ICAR.

Dr. J.S. Sandhu in his brief address expressed his due respect to Prof. Ghildyal, his happiness to receive the family members of Prof. Ghildyal., and feeling honoured to be a part of this auspicious programme. Dr. Sandhu introduced the Speaker, Dr. Alok K. Sikka.

Dr. Alok K. Sikka, delivered the lecture on the topic "Climate Change Implications on Water: Adaptation Challenges and Opportunities", only after paying his tribute to Prof. Ghildyal, a teacher per excellence and a beautiful soul. Dr. Sikka felt that he was indeed considering himself fortunate to deliver this lecture as it was in the name of Prof. Ghildyal and moreover, in the past the lecture was delivered by illustrious scientists like Prof. M.S. Swaminathan, Dr. J.S.P. yadav, Dr. Punjab Singh and Dr. L.S. Rathore. Incidentally, Dr Sikka did his Bachelor's degree, (B.Sc. in Ag. Eng) from the Allahabad University where Prof. Ghildyal was a professor of the University. Dr. Sikka received his Master's degree, (M.Tech, in Ag. Engg.) with specialization in Soil & Water Conservation Engg. from the Indian Institute of Technology, Kharagpur in 1978 and Ph. D. (Civil & Env. Eng. Specialization in Hydrology & Water Resources) from Utah State University, Logan, Utah, USA in 1993, which was also alma mater of Prof. B.P. Ghildyal.

Dr Sikka in his lecture addressed the issue of water in the changing climatic scenario. He started with the water consumption of different sectors including agriculture and then went on to explain the future scenario of rainfall and temperature for south Asia (2030, 2050 & 2080). He clearly indicated that the extreme weather events are going to increase in the future and the return periods of extreme events are going to be reduced. With the forecasting that water availability for agriculture sector in future is going to reduce, he has clearly pointed out the

challenges and came out with a few possible solutions i.e. adaptation & even some mitigation actions. He has emphasized on shifting the research priorities from productivity to resilience to ultimately sustainability under the changing climatic scenario.

The programme ended with a closing remarks by Dr. Mrs. P. Krishnana, Head. Division of Agricultural Physics, and the vote of thanks by Dr. Chakraborty, the Secretary of the Society.