4th day "Press Note" of the 59th ICAR-IARI, New Delhi Convocation Week (Feb 7-12, 2021)

On the fourth day of the 59thICAR-IARI, New Delhi Convocation week (February 7-12,2021),in the series of professor's presentations on significant post-graduate students' research was made by Professors of the school of Social Sciences. Dr Seema Jaggi, Professor Agricultural Statistics convened this sessionin the august presence of Dr.A.K.Singh, Director, ICAR-IARI and Dr. Rashmi Aggarwal, Dean & Joint Director (Education) ICAR-IARI, New Delhi.

This session on the school of Social Sciences was chaired by Dr K. Vijayaragavan, Former Joint Director (Extension), ICAR-IARI, New Delhi.The school of Social Sciences presentation included the evaluation of paddy ecosystem services and disservices, and assessed if incentivizing farmers through eco-compensation or payments for ecosystem services could help in conserving fragile and important agroecosystems. The impact of mechanization of wheat production was found beneficial; while more profit couldbe reaped from wheat cultivation by making it more efficient if the farmers wereprovided with more incentives especially to the small and medium farmers.Social learning module could be effectively harnessed for natural resource management, linking farmers to market, farmer organization development, facilitation of joint farmer-researcher learning & promoting innovations, and development of entrepreneurial skills and attitude. Traditional folk media could have great potential which couldhelp the development functionaries to use them effectively for information dissemination among farmers. Agriculture price forecasting with structural break in time series data could help farmers for raising income as well as for avoiding market risk. The session ended with vote of thanks to the chair, members of jury, faculty and students.

On the same day, the presentation of significant achievements under different memorial award lectures were made by the recipients in the field of agricultural research, education and extension. On the eve of 59th convocation,

Three awards namely XXVIHooker Award (2018-19), XXVI Hari Krishna Shastri Memorial Award (2020) and VIII Rao Bahadur B. Vishwanath Award (2018-19)would be given for outstanding and remarkable work in the field of agriculture.

Dr. A.K. Singh, Director, ICAR-IARI welcomed the chairman of different lecture sessions as well as the dignitaries and audience. Dr. Rashmi Aggarwal, Dean & Joint Director (Education) started the session with the welcome address and highlighted the importance of Memorial Award Lectures. The major findings of the presented by the awardees are as below:

XXVIHooker Award (2018-19)lecture was delivered by Dr. S.K. Pradhan,Principal Scientist (Genetics & Plant Breeding), ICAR-National Rice Research Institute, Cuttack. The session was chaired by Dr. R.K. Singh, Former Director of Research, NDUAT, Kumarganj, Ayodhya. Dr S.K. Pradhan is the recipient of many awards and honours including ISGPB AB Joshi Memorial Award, 2017; DST Samanta Chandra Sekhara Award, 2015; GSHEG Indo-Nepal Asia Gold Star Award. He is Fellow of NAAS, New Delhi; Indian Society of Genetics and Plant Breeding, 2015; Editor-in-Chief, Oryza, 2016 and Vice President of the Indian Society of Genetics & Plant Breeding. He was involved in development and release of 45 rice varieties recommended for 16 states. Breeder seed indent of these 45 varieties through DAC is > 300 quintals showing estimated production of 19.2 lakh quintals certified seeds with tentative coverage of 63.36 lakh hectares generating additional net gain of >Rs.475 crores/annum with gross return of about Rs.11500 crores.He delivered talk on ricevarietal development and explained his work on improvement of rice variety of different traits. He first highlighted the importance and specialty trait of rice such as high disease resistance, good quality and high yielding. He covered the works on development of ricevariety for abiotic stress tolerance, upland, disease resistance along with good nutritional quality.He also talked about rice variety CR Dhaan having high per day productivity and water use. At the end of the session Dr.R.K. Singh put his valuable comments on development of climate smart rice varieties with multiple traits as it couldtolerate abiotic stresses besides disease resistance so its relevance would increase under the

scenario of climate change. He lauded the effort made by him with which the area of cultivation has been increased manifold.

XXVI Hari Krishna Shastri Memorial Award (2020)lecture was delivered by Dr. S.K. Jha, Professor, Division of Food Science & Post Harvest Technology, ICAR-IARI, New Delhi. The session was chaired by Dr. R.T. Patil, Former Director, ICAR-CIPHET, Ludhiana. Dr. Jha is a renowned scientist, who contributed significantly on development of machines like Grain roasting machine, Flaking machine, Animal Feed Block Formation machine, Feed Mixer, Feed Crusher, UMMB machine, Fruits and Vegetables grader. He has also developed processing technologies for making several food products including soy nut, bajra puff, breakfast cereal, green flakes, reconstituted rice etc. Some of these machines and products have been commercialized through signingof Memorandum of Understanding (MOU) with private firms.He has 4 Indian patent grants. He is the recipient of IARI Best Teacher award; He is Fellow of Institution of Engineers (India). He has been conferred with Team award by ISAE for development and promotion of animal feed block formation machine.During this award lecture, he talked about processing of food and value addition. He mentioned the food extrusion technology for value addition of food and sustainable income generation. He also highlighted the important quality animal feed enriching with nutrient and the feed block formation machine. His presentation dealt with his work on food processing, value addition and quality product formation and product development.

VIII Rao Bahadur B. Vishwanath Award (2018-19) lecture was delivered by Dr. G.P. Singh Director, ICAR-IIWBR, Karnal and the session was chaired by Prof. R.B. Singh, Chancellor, CAU, Imphal. Dr. GP Singh is an accomplished and dedicated agricultural researcher & manager having a rich experience on wheat-based system perspective spanning over three decades.

Dr. Singh is instrumental in the development of 51 wheat (5 biofortified varieties) and 03 barley varieties and 01 potato variety benefitting multitude farmers, consumers and industries. He is the main force behind the development and fast spreading of improved wheat technologies including DBW 187, and DBW 222, HD 2967, HD 3086, and DBW 173 as these are readily adopted by farmers as evident from top breeder seed indent and also a large number of licensing (723 licenses) through institute's business incubation model. Dr. Singh took painstaking efforts in successful mitigation of wheat blast threat in India through pre-emptive breeding and surveillance programme by initiating a strong coordination among ICAR, DARE, DAC&FW, SDA and WB government.Dr. Singh largely focused in intrinsic research on heat and drought tolerance for wheat improvement in India and developed many climate resilient wheat varieties. He is also the leader of the cutting edge technologies like Marker Assisted Recurrent Selection and Precision Phenotyping for heat and drought tolerance. He executed more than 10 externally funded projects apart from institute funded projects, majorly focusing on drought and heat tolerance of wheat. He has published more than 200 research articles of national and international repute with high impact factors, 14 books, 65 book chapters, 57 technical bulletins, 55 popular articles, 05 Policy/Strategy papers. His strenuous efforts on advancing the R&D led to several accolades at national and international level by being honoured with 15 awards. He is also a fellow of one academy and 03 registered scientific societies *i.e.* NAAS, ISGPB, SAWBAR, and SSDAT.