## Workshop on Tractor Mechanics and Principles of Efficient Tractor Operation (10-11-21)

MNS University has arranged a two-day workshop/training for faculty and students titled: i). "Tractor Mechanics and Principles of Efficient Tractor Operation" ii). "Environmental impact of diesel exhaust, its remedies, and EPA standards." Engr. Mansoor Rizvi, Country Manager of CNH Industrial was the guest speaker/trainer. Engr. Mansoor Rizvi is also serving as President, Pakistan Society of Agricultural Engineers. In the first quarter of the morning session, Pakistan Society of Agricultural Engineers (PSAE) conducted a brief meeting with the stake holders including faculty members, progressive farmers and the Industrial representatives. President, PSAE interacted with senior student ad received their feedback. Engr. Rizvi described the role of society in dissemination of information and knowledge pertaining various area related to the Agricultural Engineering profession. The president (PSAE) said that Agricultural Engineering is multi-disciplinary profession and it is addressing various challenges in mechanized farming systems. Now Agricultural engineering profession has started to address difficulties faced by the Agro-based industry. Being comparatively new profession the earned skills have not been utilized fully. This is not a matter of concern for these individual but a colossal national loss because this branch of engineering deals with all the major areas involved in the development and establishment of our country from water, environment, Agro-industry and Farm Mechanization. He has reiterated the need to lobby Government to make Agricultural Engineering understand the importance of this trade. Engr. Abdul Aleem, Director Agricultural Mechanization Research Institute (AMRI) and Vice President of the PSAE stressed upon the participants to join PSAE platform by becoming its member to strengthen the society in the pursuit of their goals which are mainly advocating the role of Agricultural engineering and providing concrete technical and commercial support to the institutions engaged in the manufacturing of farm machinery.

Prof. Dr Asif Ali, Vice Chancellor inaugurated the session and has displayed his great pleasure to support the activities of PSAE in the promotion and enhancement of Agricultural engineering profession. He has laid great emphasis in developing the communication channels between industry, farmer and students and streamline it by establishing a formal Industry- academia linkage. He recommended the similar training programs for the tractor operators, farm managers and the all disciplines of Agriculture.

Engr. Dr. Alamgir A. Khan, the Subject Expert, Agricultural Engineering, MNS University of Agriculture and an exponent of PSAE said that Agro-based industry and farm machines are lagging in automation, on the other hand farmers are facing serious challenges due to upcoming shortage of labor particularly the skilled labor. He said that academic institutions should focus on capacity building of their existing faculty with special emphasis of automation. Trained faculty can further educate the future technologists/engineers. In his opinion PSAE can play a vital role in connecting the national and international stakeholders. Dr. Alamgir made strong

recommendations for the establishment of two centers: i) "Agro-Industrial Center of excellence at MNSUAM" to support local agro-based industry for specialized tasks and ii). "establishment of region-wise agro-Industrial Parks (AIP)" with the aim to serve as one window platform to farming community. AIP would also help produce high standard farm machines in the country and resultantly increase national export.

Engr. Dr. Sarfraz Hashim, the head of department, Agricultural Engineering, MNS University of Agriculture, Multan said that the training program is very useful for faculty members and students to get awareness about field issues and the optimum operations of the tractor. The carbon emission test (CET) appeared to be crucial for diesel operating vehicles. Launching of emission testing system with special prominence on the testing of the CET is very important to control the environment pollution.

