

Agri-voltaic system inaugurated at CAZRI, Jodhpur by Secretary DARE and DG ICAR

Dr. Trilochan Mohapatra, Secretary, DARE and DG, ICAR inaugurated a 105 kW Agri-voltaic system (AVS) at the ICAR-Central Arid Zone Research Institute, Jodhpur on 12 August, 2017. Given increased energy and food requirements in future, Dr. Mohapatra emphasized that AVS comprising of installing solar panels and undertaking farming at one time on the same land serves two major purposes of electricity generation and crop cultivation. The uniqueness of AVS system that he inaugurated at CAZRI is that it had provision of harvesting rainwater falling on solar panels that can be reused for supplemental irrigation during the period of water shortages. AVSs have a special relevance in arid areas of north-western region as these regions receive higher radiations ($6.11 \text{ kWh m}^{-2} \text{ day}^{-1}$) as compared to the rest of the country ($5.6 \text{ kWh m}^{-2} \text{ day}^{-1}$). The income from selling of PV-generated electricity from around one acre area would be about Rs. 7,60,000/- per year in addition to income from farming.



Dr. J.S. Samra, Chairman of Research Advisory Committee of institute was also present on this occasion. He emphasized that there is need to understand change in micro-climate created by growing of crops between spaces of panels.

Dr. Bhaskar ADG (AAF & CC) highlighted the importance of soil conservation in AVS with perennial components in order to reduce soil loss from fields and further mentioned that land productivity can be increased by introducing AVS in wastelands and agricultural lands of arid areas.

Earlier Dr. OP Yadav, Director of the institute briefed about the objective of AVS and highlighted that the region provides 300 cloud-free days in a year and thus have a huge potential to harness solar energy. The interspace areas in AVS, installed with three experimental designs in separate blocks at CAZRI, provide scope of cultivation of crops in around half of area.

Dr. B Singh, Vice-Chancellor, Agriculture University; Dr. SK Singh, Director, ATARI; Dr. S Rao, Director of the Regional Space Research Centre; and Dr. C Tara Satyavathi, Project Coordinator and staff of institute were also present on this occasion.