Editorial

SUSTAINABLE AGRICULTURAL MODELS TO FEED THE FUTURE

An agricultural model is considered as sustainable if it is compatible with environment and society along with withstanding the impacts of climate change effects. A number of agricultural models are already validated for their sustainability under different farm conditions. Unfortunately, there is no one-size-fit-all model as there are wide variations in the availability of land, water and other resources between farmlands. Hence, categorization of these models as excellent or poor performers is difficult. Still, base of all these sustainable agricultural models are the same set of agricultural practices like minimum soil disturbance, soil covering to prevent erosion, intercropping and crop rotation, biodiversity enhancement practices, recycling of farm waste to manures, optimum use of external inputs like fertilizers and plant protection chemicals etc. in different proportions.

In many situations after adoption some of these sustainable agricultural models need to be evaluated for their limitations and customized again based on the strengths and weaknesses of particular farmland. Since, choice of agricultural models for farmlands is vested in the hands of cultivators it is important to make their knowledge on available technologies as stronger as possible through different transfer of technology activities. For instance, even many innovative farmers have partial knowledge about successful agricultural technologies available near to them due to the ineffectiveness in transferring the knowledge. In fact, the future food security depends on sustainable agricultural models with Intermediate External Input (IEI) than the highly profitable High External Input (HEI) system or the less profitable Low External Input (LEI) system.

This issue of Harit Dhara covers articles on a few familiar IEI systems like conservation agriculture, soil test based fertilizer use, and recycling of farm waste through decomposition technology in farmers' fields. Articles on key soil management issues like sodic soil management, soil health cards, impact of climate change on agriculture, impact of pesticides on nutrient uptake and impact of recent floods on sugarcane production in western Maharashtra are also included.

We lost our beloved colleague Dr. S. Ramana, Principal Scientists and Associate Editor, Harit Dhara on April 18, 2021. His yeoman services for the E-Magazine would always be remembered. We pray the almighty for his soul rest in peace.

Sanjay Srivastava
Editor In Chief