

**Krishi Vigyan Kendra, AAU, Dahod
&
SRC, NSS Unit, Polytechnic in Agricultural Engineering, AAU, Dahod
organized awareness programme on the theme
“Climate Resilient and Smart Agriculture”**



A growing global population and changing diets are driving up the demand for food. Production is struggling to keep up as crop yields level off in many parts of the world, ocean health declines, and natural resources—including soils, water, and biodiversity—are stretched dangerously thin. A 2020 report found that nearly 690 million people—or 8.9 percent of the global population—are hungry, up by nearly 60 million in five years. The food security challenge will only become more difficult, as the world will need to produce about 70 percent more food by 2050 to feed an estimated 9 billion people.

The challenge is intensified by agriculture’s extreme vulnerability to climate change. Climate change’s negative impacts are already being felt, in the form of increasing temperatures, weather variability, shifting agro ecosystem boundaries, invasive crops and pests, and more frequent extreme weather events. On farms, climate change is reducing crop yields, the nutritional quality of major cereals, and lowering livestock productivity. Substantial investments in adaptation will be required to maintain current yields and to achieve production and food quality increases to meet demand.

The problem also works in reverse. Agriculture is a major part of the climate problem. It currently generates 19–29% of total greenhouse gas (GHG) emissions. Without action, that percentage could rise substantially as other sectors reduce their emissions. Additionally, 1/3 of food produced globally is either lost or wasted. Addressing food loss and waste is critical to helping meet climate goals and reduce stress on the environment.

On the occasion of World Environment Day on 5th June, 2023 and in observance of the International Year of Millets 2023, the Department of Agriculture & Farmers Welfare Mission LiFE has finalized the theme of “Climate Resilient and Smart Agriculture” to make the occasion. The concept of LiFE i.e. Life style for Environmental was introduced by the Prime Minister, at the World Leaders Summit in Glasgow at the 2021 UNFCCC COP26 when gave a clarion call to rekindle a global pursuit to adopt sustainable lifestyle and practices. In this regard Krishi Vigyan Kendra, AAU, Dahod and SRC, NSS unit of Polytechnic in Agricultural Engineering, AAU, Dahod jointly organized awareness programme on the theme “Climate Resilient and Smart Agriculture” in the training hall of Krishi Vigyan Kendra on 22/05/2023. The Ministry of Agriculture & Farmers Welfare has decided to carry out week-long campaign between 22-28th May 2023 with the objective of disseminating climate resilient practices and raising awareness among the farming community. In the beginning Dr. G. K. Bhabhor, Scientist (Ext. Edu.) welcomed all the dignitaries Dr. B. K. Yaduvanshi, I/c Principal, PAE, AAU, Dahod, Mr. Sachin. S. Chinchorkar, Assistant Professor, Dr. F. G. Sayyad Assistant Professor, Mr. N. D. Makwana, Scientist (Agronomy), KVK, AAU, Dahod. Saraswati vandana was recited by dignitaries to seek the blessings of Goddess Saraswati. Dr. B. K. Yaduvanshi I/c Principal in his inauguration speech highlighted on addressed the gathering and motivated them to develop appropriate and cost effective farm machinery to facilitate collection, volume reduction, transportation and application of residues. Mr. N. D. Makwana in his speech highlighted on importance of millets for next generation. Millets are known for their climate-resilient features withholding adaptation to a wide range of ecological conditions, less irrigational requirements, better growth and productivity in low nutrient input conditions, less reliant on synthetic fertilizers, and minimum vulnerability to environmental stresses. Mr. Sachin S. Chinchorkar explained about climate change threatens people with increased flooding, extreme heat, increased food and water scarcity, more disease, and economic loss. Human migration and conflict can also be a result. The World Health Organization (WHO) calls climate change the greatest threat to global health in the 21st century. Societies and ecosystems will experience more severe risks without action to limit warming. Adapting to climate change through efforts like flood control measures or drought-resistant crops partially reduces climate change risks, although some limits to adaptation have already been reached.

Dr. Farid Sayyad, Assistant Professor focused on control of burning of crop residue to prevent environmental degradation and loss of soil nutrients and minerals by promoting management practices like incorporation in soil, mulching, baling or binding for use as domestic & industrial fuel. Crop residue can be used for various purposes like charcoal gasification, power generation, industrial raw material for production of bio-ethanol, packing material, composting and mushroom cultivation etc. Incorporation of crop residue into soils through adoption of

conservation agriculture practices to prevent soil erosion from wind & water and to augment the soil moisture. Miss Urmi Chawra, SRF (NICRA), also delivered a lecture on the topic “Impacts of climate change on different agroecosystems of India and mitigation measures”, where she highlighted the burning issue of emission of green house gases being the root cause of climate change. She also made students aware of weather extremes, their mitigation and adoption techniques alongwith climate smart agriculture practices running in the KVK adopted villages. Mr. Harsh Pandya SMS (DAMU), delivered lecture on topic, “Agromet advisory services in the direction of climate smart agriculture” in which he explained about importance of agromet advisory in agriculture, how to download weather alerting apps (Meghdoot and Damini) and its usefulness in daily routine agriculture activities.

A total of 58 students with staff members were participated in this awareness programme. Whole programme was framed and conducted by Mr. Sachin S. Chinchorkar, NSS Programme Officer and Dr. G. K. Bhabhor Scientist.

