



We are committed to help ensure sufficient, nutritious and environment friendly food production in the country.

With our dedication to excellence and continuous improvement in our processes and system, we strive to meet rather exceed the expectations of end-users. We shall accomplish this through human resource development and the use of nuclear and other contemporary advanced research techniques that are

Nuclear Institute for Food & Agriculture

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NUCLEAR INSTITUTE FOR FOOD & AGRICULTURE





Vision

To be a center of excellence for an efficient and competitive sustainable agriculture ensuring food security contributing to the economic development of Pakistan

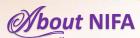
Mission

To create, innovate, transfer and apply agricultural competencies to facilitate the farming community with increased productivity and stabilized incomes

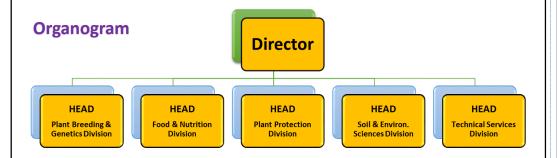
Mandate

To enhance crop
production, protection, soil
fertility, water / nutrient
management and value
addition of food resources
employing nuclear and
other contemporary
techniques

NIFA, an R&D institute of Pakistan Atomic Energy Commission (PAEC) established in 1982. Its overall objective is to achieve food security and safety by maximizing crop yield through development of new varieties, optimization of inputs, crop protection as well preservation of food and value addition of valuable agricultural and horticultural produce through the use of nuclear and other contemporary advanced techniques by the highly qualified manpower using well equipped laboratories



NIFA is playing a key role in providing sufficient, safe and nutritious food for healthy life of the population of Khyber Pakhtunkhwa. The research divisions of the institute are mandated for undertaking the need based research with provision of effective services to different stake holders through application of innovative agriculture technologies.



Strategic Direction for Basic and Applied Research

Development of Crop Varieties

Breeding Wheat, Oil seed Brassica, Chickpea and Mungbean Crops best suited to existing environmental conditions coupled with surveillance for prevailing diseases

Insect Pests and Disease Management

Termite and Fruit fly management, Mosquitoes and Dengue control, Biological control of maize and sugarcane stem borers

Preservation of Food and Nutrients

Mushroom cultivation and popularization as a cottage industry, Iron Fortification, Radiation Decontamination of Poultry Feed, Astringency removal from persimmon fruits, MRE for immuno-compromised patients, microbial analytical assay for drinking water and Rapid Test Kits for iodized salt

Water and Nutrients Management

Integrated nutrients management of horticultural crops, Tunnel technology for off session vegetables, Biogeysers and organic fertilizers for small farmers

SIGNIFICANT Achievements

- Developed and released 20 crop varieties of Wheat, Oilseed Brassica, Chickpea and Mungbean
- Successful risk reduced management of mosquitoes, fruit flies, termites, pod borers of vegetables and crops to keep insect pests population under economic injury level through NIFA developed Traps, Trichocards, Termaps, Dengue Guards and Ratnils
- Efficient plant nutrient and water management strategies through nuclear techniques for soil health and crop nutrients management with 20-30% higher net return
- Developed composting and bio-geyser technology with efficient utilization by farmers
- Developed effective and economical tunnel farming technology for offseason vegetables
- Minimized post-harvest losses of horticultural commodities to overcome the trade barriers.
- Developed Meal Ready to Eat (MRE) technology for Pak Army and Disaster management
- Popularized Mushroom cultivation as a cottage industry among the farming communities
- RTKs development for Iron, Iodine and Vitamin A to minimize anemia and goiter problems
- Developed green Growth Technology to replace the use of hazardous pesticides and fertilizers
- **O** Persimmon astringency removal for proficient export
- Effective utilization of radiation for value addition of food commodities and gemstone