Events

IPI Events

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IPI-ISES Capacity Building Seminar on "Balanced Use of Fertilizers for Quality Produce and Sustainable Agriculture in Pakistan", 20 August 2014, Faisalabad, Pakistan

Report and Recommendations by
Dr. Nisar Ahmad, NFDC Planning Commission, Islamabad, Pakistan and
Dr. Abdul Wakeel, ISES, University of Agriculture, Faisalabad, Pakistan; IPI Consultant Pakistan

A capacity building seminar on "Balanced use of Fertilizers for Quality Produce and Sustainable Agriculture" was jointly organized by the International Potash Institute (IPI) and Institute of Soil and Environmental Sciences (ISES), University of Agriculture, Faisalabad, Pakistan on 20 August 2014 at the Serena Hotel in Faisalabad.

The objectives of seminar were to: 1) build the capacity of agriculture extension workers both in the public and private sector to promote balanced fertilizer use for quality produce and sustainable crop yields; and 2) highlight the significance of potassium (K) fertilization and its promotion by developing joint collaborative programs and strategies involving the public and private sector.

The seminar was attended by about 105 delegates including researchers, extension workers, the fertilizer industry, academics and policymakers. The seminar was inaugurated by Professor Dr. Iqrar Ahmad Khan vice chancellor, University of Agriculture, Faisalabad. In his opening remarks, Khan commended the efforts of ISES and IPI in organizing the seminar. He said that imbalanced and inefficient use of fertilizers is severely impacting crop yields and hampering national food security. Khan advised all stakeholders to develop programs and strategies to address this issue and wished the seminar success.

Photos: IPI-ISES Capacity Building Seminar, 20 August 2014, Faisalabad, Pakistan. Photos by A. Wakeel.

Technical presentations revealed impressive growth in nitrogen (N) and phosphorus (P) use in the past 50 years. However, growth in potash use remained stagnant. One matter of concern was that both fertilizer use and crop yields appeared to have reached a plateau. Although micronutrients are already a component of crop fertilization, the importance of balanced use of nutrients, macro, secondary and micro is stressed. Site specific use of fertilizers using the latest modeling and geographic information system (GIS) technology was shown to be a promising tool that should be refined and promoted to farmers. Presentations also showed the benefits of integrated use of mineral and organic sources on improving nutrient use efficiency and crop yield. The use of potash and its positive impact both on quality and yield of sugarcane, cotton and fruits/vegetables was highlighted by a number of presentations from field investigations.

A lively panel discussion comprising experienced and distinguished representatives from extension, research, the fertilizer industry, and academia was held to critically analyze the imbalance in NPK fertilization in Pakistan and strategies to improve potash fertilization. While the use of chemical fertilizers (N and P) after the Green Revolution increased, the panel concluded that the use of potash remained depressed due to a number of factors, such as the high economic return from N and P compared to K, a strong belief that soils are naturally supplied with K, and limited availability of K fertilizers at the right time, right place and right price compared to other fertilizers.

Detailed discussions led to the following conclusions and recommendations:

1. Applying K fertilizers improves both yield and quality of sugarcane, cotton, horticultural and vegetable crops, and increases the shelf life of fruits and vegetables which promotes export of agricultural produce.
2. To promote K fertilizer use on sugarcane, the purchase of sugarcane needs to be based on the quality of the crop.
3. Crop ecological regions with clay mineralogical information should be delineated for the precise, crop responsive potash recommendations.
4. A consortium – comprising agriculture extension workers, researchers, universities and fertilizer marketing companies, including IPI – should be created to develop research and developmental programs for K use in Pakistan.
5. The Pakistan government should be provided with empirical evidence that clearly demonstrates how the use of potash will improve the productivity and quality of crops, to encourage them to subsidize K fertilizer.

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