Cost reduction in paddy through soil testing-based fertilizer application: A case study of progressive farmer

Introduction: Mr. Dharmendra Pandey, village Chaukmaafi, Post: Badya chauk, block: bharohiya, district: Gorakhpur, a farmer who was selected for this demonstration. He was earlier involved with imbalanced fertilizer use and without soil testing. Zinc deficiency also found which causes khaira diseases in paddy and its appearance started on lower leaves as small brown/bronze color, later spots merged and leaves dry, grain number /ear and weight decreases, so ultimately the yield of paddy decreases, so ultimately the yield of paddy decreased.

Plan, Implement and Support: MGKVK Gorakhpur has encouraged the farmer for soil testing and aware by trainings. On the basis of that farmer was advised for balanced dose of chemical fertilizer and using integrated nutrient management practices with high yielding varieties paddy sambha sab-1. All agronomical management practices were done with as per recommended practice.

Output: Mr. Dharmendra pandey adopted the balanced dose of chemical fertilizer (N:P:K:Zn::120:60:40:25) kg/ha in paddy crop as per suggestion of KVK's scientist for his 1 acre land. His local yield was 20.50 qt with recommended technology. His yield increased by 17.39% with yield 3.04 qt. The economical gain in terms of per acre expenditure, gross income, net return and B:C ratio are recorded. Rs. 11640/-, Rs. 36896/-, Rs. 62384/- and 3.16 correspondingly.

Outcome: MGKVK Gorakhpur conducted 50 demonstrations in 9 villages during 2017-20 in an area of 5 ha at farmer's field with using zinc micronutrient and balanced dose of chemical fertilizer (N:P:K:Zn::120:60:40:25) kg/ha. This practice has been disseminated in many villages of the district. The outcome of this demonstration motivated the farming communities towards use of micronutrients, understand their benefits, prevention of khaira disease which is caused by the deficiency of zinc micronutrient. Mr. Sanjay Singh is very happy on improvement in their income, livelihood and set forth example for others.

Impact: Mr. Dharmendra pandey is very happy on improvement in their income, livelihood and set forth example for others and becoming one of the progressive and learned farmers for others with regards to popularization of balanced fertilization and nutrient management. This technology helps him for livelihood, empowerment and make him enthusiastic regards soil testing and balanced fertilizer use. He is one of the progressive farmer after a becoming a part of KVK activities and get their effectiveness for his own development.

