

# ROLE OF K IN BALANCED FERTILISATION

**T**here is growing interest in the concept of balanced fertilisation to increase food production, with the role of K taking center stage in this discussion. How many of you have been involved in field research and demonstration trials that clearly show the benefits of K? I would dare to say that in South Asia the number is large, and research conducted by IPNI over the last 2 decades certainly supports the use of K in most effective fertiliser management programmes. This issue of BCSA covers a series of issues related to K and balanced fertilisation from IPNI research activities in South Asia.



**It is so evident that South Asia is going to have to work hard to restore the impact of whole crop removal over millennia of production.** As someone who has visited and crossed South Asia over the last 8 years it has always amazed me how productive many of the soils are given the past management practices. Total crop removal, that is grain and all above ground biomass, has been part of the South Asian farming system. However, the impact on declining soil quality, fertility and productivity are becoming very obvious.

**Field research conducted in farmers' fields clearly shows the impact of bringing balance to the traditional use of N and P.** Recent field research by IPNI across the Indo-Gangetic Plains, as well as Eastern and Southern India has resulted in a clearer picture of how severe this nutrient imbalance is. While the impact of added macro, secondary and micronutrients varies considerably from state to state, and regions within states, the results are undeniable. Large yield responses can be achieved with the addition of K, while in many cases the rates of N and P remain unchanged, or even decrease.

**Positive crop responses to K addition in field research is encouraging, and provides some link to ensuring future food security in the region.** While the use of K in India is limited by awareness, cost and availability, farmers currently optimising their crop production with balanced fertilisation are convinced. Future increases in both crop production and profit for farmers will only be achieved when access to all required nutrients is ensured. Let's not forget, it is supporting farmers with the basic technology that is critical to keeping all of us fed.

**It is time to take a second look at how effective we have been in educating farmers and their advisors on balanced fertilisation.** It would be easy to present the overwhelming accumulated evidence on the impact of balanced fertilisation in addressing the 'yield stagnation' so often cited in India. However, history indicates that this has had limited impact on both understanding and impact at the farm level in the country. Let us take the time to reconsider how we both deliver basic information in our development and extension efforts to ensure we prevent further neglect in building awareness on the farm.

**Numbers alone cannot define food security and a better livelihood.** It entails the aspirations of millions of families to have adequate nutritious food on their plates, sending their children to school and having modern amenities at home. In South Asian countries, where nearly 60% of the population is dependent one way or other on agriculture, balanced fertilisation will always play a critical role in meeting these aspirations.

**BETTER  
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