

Introduction

Despite the country's increasing usage of fertilizers, India's agricultural productivity is stagnating, and the quality of its soil is declining. Therefore, efforts should focus on maintaining an agricultural ecosystem where fertilizers are used in a balanced manner and where farmers have a sufficient understanding of how to use micronutrients. The quality of the fertilizers given to the farmers, however, is the most important concern because they have a significant impact on productivity.

The Indian government has undertaken a number of measures to expand the use of fertilizers after realizing their significance in boosting output. The Retention Price Cum Subsidy Scheme (RPS), introduced in 1977 to provide fertilizers to farmers at minimum prices without harming the interests of manufacturers, and the delicensing of the fertilizer industry in 1991, which allowed manufacturers to set up fertilizer plants without obtaining permission from the government after obtaining the

environmental permits, were two of the major initiatives. These efforts led to an increase in the consumption of fertilizers from 0.7 lakh MT in 1950-51 to 249.09 lakh MT in the year 2008-09.

QUALITY OF FERTILIZERS-

The quality of the fertilizer delivered to farmers is the most important concern, thus the quality control system that ensures a supply of high-quality fertilizers must be functional and effective. It is obvious that productivity suffers when low-quality fertilizers are used. However, the problem of fake fertilizers is pervasive despite India having a sophisticated system in place for quality control. According to the Central Fertilizer Quality Control Testing Institute (CFQCTI), Faridabad, about 70% of quality control issues are caused by adulteration or misbranding, 20% by the deliberate production of low-quality fertilizers, and 10% by variations in the contents of the bags and the black marketing of the fertilizer.



NATURE SCIENCE ISSN NO: 3048-8117 25

IMPACTS OF USING LOW QUALITY FERTILIZERS-

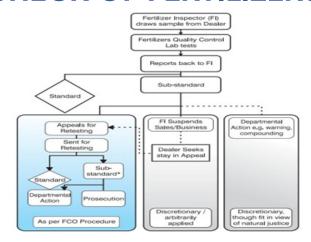
The use of poor-quality fertilizers reduces the effectiveness of the agricultural system. First of all, because poor fertilizers do not supply the necessary nutrients, the soil is not properly nourished, which causes farmers to lose faith in both the system and new technologies. Second, in some circumstances, the additions may degrade the soil's quality and the product. By engaging in such actions, farmers' livelihoods and the nation's food security are seriously threatened by adulteration and the use of inferior fertilizers. One example of the situation at hand is the stagnant production of food grains in recent years.



PROVISIONS OF THE FCO IN THE QUALITY CONTROL MECHANISM OF FERTILIZERS IN INDIA-

- ▶ All fertilizer manufacturers, importers, and dealers must be registered.
- **Establishment of enforcement organizations.**
- Establishing quality control labs to examine fertilizer samples obtained from sellers.
- ▶ Prohibition on the production, importation, and sale of fertilizers that are fake, or adulterated.

SAMPLING AND TESTING FOR QUALITY CHECK OF FERTILIZERS



NATURE SCIENCE ISSN NO: 3048-8117 26

Conclusion

In India, where 70% of the population works in agriculture, the quality of fertilizer is extremely important because millions of Indians depend on it for their livelihood as well as for economic prosperity. The intricate quality control system in place in India ensures the identification of fertilizer producers and sellers, specifies the types of fertilizers that may be manufactured and

sold, and makes arrangements for routine and unexpected fertilize testing in markets in specially licensed laboratories. However, concerns regarding the quality of fertilizers being sold on the market have been voiced by the government and other stakeholders, highlighting the necessity of periodically updating the quality mechanism.



ISSN NO: 3048-8117 **27**