Alternative Analytical Technology (AAT) for testing Soil nutrients

“Approaches to enhance the integrated knowledge system on soil nutrient analysis, site specific validation, demonstration and popularization of Alternative Analytical Technology (AAT) – Phase II” has been focusing on establishing region specific database, improving the accuracy level and popularizing AAT in villages, organizations and universities, after the successful completion of Phase-I. Soil samples collected from various regions were analyzed for physicochemical and biological properties, and the data base was updated from 12,500 to 21,164. The system performance was enhanced by predicting the soil nutrients based on a new set of extracted features with least error, and the software has been upgraded and modified based on fertilizer recommendations. The Mobile Alternative Analytical Technology (MAAT) visited 22 districts of Tamil Nadu and 15 farm groups in Pondicherry. Nearly 2800 soil sample were collected, analyzed on the spot and reports distributed along with fertilizer recommendations to the farmers within 24 hrs. This technology is also being adapted and developed as a portable kit called as Portable Alternative Analytical Technology (PAAT). Two workshops were organized, which also aimed at identifying suitable organizations for establishment of soil testing laboratories equipped with AAT for the benefit of millions of farmers in India.