zones of interest (Figure 2) including Zone I: 26°8' 13" E & 27°25' 43" E latitude and 92°23' 82" N and 92°59'43" N longitude showing no constraint of Zn, Mg, P, and N and having very high average productivity of 84 kg/tree (areas identified as Navgaon, and Rangpara of Assam state); Zone II: 26°31'35"-27°2'35" E latitude and 88°3'49"-88° 23' 56" N longitude; 26°35′56"-27° 27′3" E latitude and 93° 23′ 5"-93° 58′ 26" N longitude showing no constraint of Zn, P, and N and having an good productivity of 54 kg/tree (areas identified as Golpara of Assam state and Mirik, and Lisa Hills of West Bengal state); and Zone III: 26°4' 55"-27°47'43" E latitude and 91°32'8"-93°0' 47" N longitude showing no constraint of Zn and P and having low productivity of 30 kg/tree (areas identified as Shergaon, Dirang, and Tangla & Mangaladai (Assam).

In summary, the integrated use of two diverse softwarebased DSS helped in identifying potential sites for the purposes of land use planning and monitoring trends in productivity and orchard fertility. Future evaluation of these productivity zones/ sites with respect to maximising productivity and improving sustainability will help to improve the efficacy of this delineation process. **ECA**

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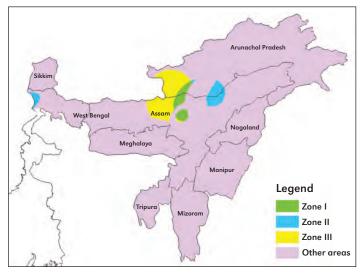


Figure 2. Three selected zones of mandarin orchard production in northeast India differentiated by selected leaf nutrient and yield survey data.



Software-aided decision support systems are adaptable to mandarin orchard management in Northeast India.

International Certified Crop Adviser Program Now in India

The International Certified Crop Adviser (ICCA) program of the American Society of Agronomy (ASA) was launched in India during 2010. This proactive certification program was established in 1991 in the United States of America (USA) and later extended to Canada. India is the first country outside North America to provide the ICCA program, along with "continuing education" as a major, significant, and attractive feature for renewing the certification. The India ICCA program is one of the objectives of the Cereal System Initiative for South Asia (CSISA). The program is being adapted in India through collaboration of ASA with the International Rice Research Institute (IRRI) and Indian Society of Agribusiness Professionals (ISAP).



The India ICCA certificate will be issued by ASA and will be recognized in the USA, Canada, and India. The program is open for all agri-professionals and agri-graduates who are engaged in farm advisory activity, whether in private or public sectors. The certification program includes af a comprehensive exam based on the Performance Objective document (syllabus) covering four major competency areas: Nutrient Management, Soil and Water Management, Integrated Pest Management, and Crop Management.

The main objective of this program is to educate the frontline agriculturists employed by private companies, non-government organizations (NGOs), and public sectors to guide farmers on the latest technologies. With this objective, the India ICCA program aims at improvement in the quality of farm advisory across all sectors of agriculture. The exam will be offered twice every year, in June and December. The basic requirement for the certification is either a degree in Agriculture, B.Sc. (Agri.) with a minimum of 2 years of crop advising experience or a higher secondary (10 +2) with a minimum of 4 years of active crop advising experience.

Detailed information for prospective candidates regarding the India ICCA exam is available at the website: www.certifiedcropadviser.org/india. Candidates may also contact the Manager, India Certified Crop Adviser Program, through e-mail at k.yadav@cgiar.org or phone at + 91 – 9654456005. Or contact the Indian Society of Agribusiness Professionals by phone at +91-11-43154100 or e-mail at indiacca@isapindia.org. **DEM**