

FAI Activities

Fertiliser Policy in India – Need for Reforms

The Fertiliser Association of India - Southern Region (FAI-SR) organized a workshop on **Fertilizer Policy in India – Need for Reforms** at FACT Ambalamedu House, Cochin, Kerala on 23rd January, 2024. It was inaugurated by Mr. Kishor Rungta, Chairman, FAI-SR and Chairman & Managing Director, The Fertilisers and Chemicals Travancore Limited (FACT) and Madras Fertilizers Limited (MFL). Sixty participants comprising of Officials from Fertilizer Industry, State Department of Agriculture and Scientists from Kerala Agricultural University & ICAR Institutes participated in the workshop. Mr. Manoj Mishra, Director (Marketing), FACT Limited; Ms. Sanju Susan Mathew, Principal Agricultural Officer, Kerala State Department of Agriculture; Ms. Tanie Thomas, Deputy Director, National Horticultural Mission; and Dr. R. Marimuthu, Senior Scientist and Head, Krishi Vigyan Kendra, Santhanpara, Idukki district also graced the inaugural session.

In his address, Mr. Kishore Rungta stated that fertilizers had played and will continue to play a crucial role in enhancing food grain production in the country. We are even exporting the food grains to other countries also. India does not have sufficient natural resources like natural gas, rock phosphate, etc. required for production of fertilizers. We are dependent on import of raw materials as well as finished products and the prices of such commodities have been increasing abnormally in the international market as the same is very turbulent. Hence, lot of efforts are required to develop indigenous products to supply vital nutrients. There is a need for exploration and identifying mineral resources available locally in the country.

He informed the participants that the NPK use ratio got distorted which is mainly due to skewed usage of urea because of its low price. The prices of other fertilizers such as DAP, NP/NPK complexes and MOP, etc. are 5 to 6 times higher than the price of urea which incentivise the farmers to use more urea at the cost of DAP, MOP and NP/NPK fertilizers. Therefore, there is a need to revisit the pricing policy to correct the NPK use ratio. He stressed on the need to educate the farmers to apply fertilizers on soil test based recommendations along with organic and bio-fertilizers. He felt that these practices will definitely improve the nutrient use efficiency; reduce losses to the environment; boost farm productivity; increase farmers' income; and sustain soil health for sustainable agriculture.



Mr. Kishor Rungta delivering the inaugural address. Others seen in the picture from left to right are Dr. Marimuthu, Mr. Murthy, Mr. Mishra, Ms. Susan Mathew, Ms. Thomas

Mr. Rungta apprised the participants that introduction of nano fertilizer products will reduce the use of bulk fertilizers. He also informed that Government of India introduced sulphur coated urea whose use efficiency is higher than that of conventional urea and it also provides sulphur which is deficient to the extent of 41% in the Indian soils. He mentioned that labour availability for farm operations is a big challenge in rural areas. He predicted that in the days to come, farm mechanisation and use of technologies such as drone will play a vital role in making farming easy and cost efficient.

He informed that the country is entirely import dependent on MOP. There have been R&D efforts to recover potash from the sea bittern and molasses. Potash derived from molasses is brought under NBS scheme to encourage its usage. There are certain issues with regard to indiscriminate use of fertilizers and its impact on environment which are to be addressed effectively through policy reforms. Government of India has already taken several initiatives to encourage production and use of alternative fertilizers which need to be commended. The policy reforms in the fertilizer sector can accelerate the innovations which can encourage introduction of new products with higher use efficiency and better crop yields and farmers' income. On the policy side for green ammonia, there is a need to provide the viability gap and incentive for its use. He appreciated the efforts of FAI in organising this workshop which will be immensely useful for the participants.

In his address, Mr. Anupam Mishra pointed out that FAI provides excellent platform for exchange of



A view of the participants with Mr. Kishor Rungta and faculties

knowledge by organising training programmes, seminars, workshops, etc. FAI also provides vital information about the overall view of the fertilizer sector and policy related aspects with latest updates. He said that training to the employees is an investment for any company. We should feel proud about working in fertilizer industry which is the backbone for ensuring food security to the nation on sustainable basis. We serve more than 13 crore farmers' families residing in more than 6.5 lakh villages through a network of around three lakh dealers.

There are challenges in all the divisions of the fertilizer industry and every employee has to make their best efforts in finding ways and means to overcome the challenges. While attending such training programmes, the participants will get sensitized about the various issues confronting the fertilizer industry. Based on this background, one can realise what is their role in reforms and how to cope up with the situation that will be arising out of the reforms in this sector.

Mr. Y.V.N. Murthy, Regional Head, FAI-SR, Chennai, explained the objectives of the workshop. He briefed about the fertilizer policy being notified by the Government of India from time to time starting from late 1970s; investment in the sector; production trend; energy efficiency; capacity utilization; availability of indigenous gas & import dependency; trend in use of fertilizers and imbalance in use; decline in crop response to fertilizer application; import dependency

and volatility of international market to procure fertilizers and raw materials; need for reforms, etc.

Earlier, Mr. Jitendra Kumar, General Manager (Marketing), FACT Limited, Cochin, welcomed the dignitaries and the participants to the workshop.

The topics covered during the one day workshop included i) Fertilizer Control Order – Provisions and Latest Amendments by Mr. Shyam Babu, Director, Central Fertiliser Quality Control and Training Institute, Faridabad; ii) New Generation Specialty Fertilizers for Improving Fertilizer Use Efficiency and Climate Smart Agriculture by Dr. Vignesh Janakiraman, Director, Timac Agro India Limited, Chennai; iii) Nano Technology Products and their Use in Agriculture by Mr. A. Manikandan, State Marketing Manager and Mr. P.K. Abhin, Deputy Manager, IFFCO, Cochin; iv) Awareness on Energy Price Risk Management by Mr. Kevin Benny, Senior Manager, Product Management Team, Multi Commodity Exchange, Mumbai; v) Fertilizer Scenario and Policy in India and Need for Reforms by Mr. Y.V.N. Murthy; and vi) ICAR – Krishi Vigyan Kendras and Research Institutes Initiatives in Promoting Integrated Nutrient Management by Dr. R. Marimuthu, Senior Scientist and Head, KVK, Santhanpara, District Idukki..

Mr. Y.V.N. Murthy thanked the management of FACT for providing facilities in organising the workshop at Ambalamedu House. He also thanked all the member companies for their support in proper implementation of the workshop.

National Seminar on Specialty Plant Nutrition

The Fertiliser Association of India-Western Region (FAI-WR) organized a National Seminar on **Specialty Plant Nutrition** on 24th January, 2024 at Pune, Maharashtra. It was attended by 113 participants from various organizations; apart from the senior officials of the FAI, State Department of Agriculture and Specialty Plant Nutrition Industry. Mr. Vikas Patil, Director of Agriculture (Inputs & Quality

Control), Government of Maharashtra was the Chief Guest at the inaugural session. Mr Ajay Kulkarni, Deputy Director of Agriculture (Fertilizer), Government of Maharashtra was the Guest of Honour. Dr. Naresh Prasad, Director (Marketing), FAI, New Delhi, presided over the inaugural session.

Dr. Naresh Prasad, in his address, informed that



Mr. Vikas Patil delivering his inaugural address. Others seen in the from left to right are Mr. S.P. Shete, Dr. Naresh Prasad and Mr. Ajay Kulkarni.

specialty fertilizers include an array of products ranging from low-end stabilized nitrogen fertilizer products for broad area cropping systems, to high value premier products ranging from water soluble fertilizers (WSFs) for foliar fertilization and drip-fertigation to controlled release fertilizer products for turf and ornamental plants. He pointed out that, in India, the specialty fertilizers are categorized broadly as WSFs, *neem* coated urea, fortified fertilizers, customized fertilizers, micronutrient fertilizers, and liquid fertilizers,. In addition to nano fertilizers, bio-stimulants and organic fertilizers, have also occupied significant space in the Indian specialty plant nutrition market.

According to Dr. Prasad, the market size of Global specialty fertilizers was valued at USD 24.2 billion in 2022. The market may grow at a compound annual growth rate of 6.6% from 2022 to 2032 and expected to reach USD 45.9 billion by 2032. The growth in Asia Pacific is expected to be at more pace during this period. In India, specialty fertilizers market is accessed to be of worth Rs.30,000 crore. He mentioned that considering the challenges and opportunities, the Seminar has been specifically designed to have in depth discussions for healthy growth of this important sector; be it manufacturers, importers / exporters, distributors or policy makers. He appreciated the response and hoed that the participants will gain valuable insight of the entire value chain of specialty fertilizers and will be well equipped to face the challenges.

In his address, Mr. Vikas Patil thanked FAI for taking up the initiative to have much-needed discussions on specialty plant nutrition industry. He informed that Maharashtra is one of the most progressive states in agriculture with diversified cropping pattern. He underlined that Maharashtra state is pioneer in the field of specialty fertilizer use, with various types of products being used by the farmers of the state. He

further mentioned that specialty fertilizers are costly compared to conventional fertilizers, however, considering the use efficiencies of such fertilizers, they are economical and beneficial for the farmers.

Mr. Patil stated that there are large numbers of agri-input manufacturers / suppliers operating in Maharashtra and they are continuously developing / introducing new products in the market, claiming to increase the crop yields; however, such claims should be authenticated by field trial data. He further mentioned that the Government of Maharashtra is committed to support the specialty plant nutrition industry provided right type of products and services are delivered to the farmers. He appreciated the course content of the Seminar and hoped that it will give much needed impetus to the specialty plant nutrition industry. He wished the programme a success.

Earlier, Mr. S.P Shete, Regional Executive, FAI-WR, Mumbai, welcomed the guests, faculties and the participants.

Presentations in the technical sessions comprised of An Overview of Specialty Fertilizers with Recent Amendments in FCO by Dr. Naresh Prasad; Water Soluble and Liquid Fertilisers – Market Scenario by Mr. Anant Kulkarni, President & CEO, ICL Growing Solutions Limited, Gurugram; Customization in Water Soluble Fertilizer Formulations for Crop and Stage Specific Foliar & Fertigation Solutions by Dr. Shubhendu Bhadraray, Consultant, Rallis India Limited, Kolkata; Micronutrients for Food and Nutrition Security by Dr. Soumitra Das, Director, South Asia (ZNI), International Zinc Association, New Delhi; Micronutrient Fortified Fertilizers – Prospects and Challenges by Mr. Anand Gole, Senior General Manager (R&D), Coromandel International Limited, Mumbai; Innovative Micronutrient Fertilizers and Application Technologies by Dr. Rajiv Rathod, Vice President & Global Head, Sulphur Mills Limited, Mumbai; Value Added Fertilizers to Increase Nutrient Use Efficiency by Mr. Sharokh Nikorawala, Managing Director, Universal Specialty Chemicals Limited, Mumbai; Nano Fertilizers - Challenges and Opportunities by Dr. M.S. Powar, Senior Agronomist, IFFCO, Pune; Bio-stimulants – Opportunities and Challenges by Dr. K. Sammi Reddy, Director, ICAR-National Institute of Abiotic Stress Management, Baramati; Strategies for Promotion of Organic Fertilizers by Dr. Harihar Kausadikar, Director, Maharashtra Council Agriculture Research & Education, Pune; and Energy Price Risk Management by Mr. Rahul Chahal, Manager (PMT Energy), Multi Commodity Exchange Limited,, Mumbai.

The Seminar ended with a formal vote of thanks by Mr. Shete.

Fertilizer Orientation Programme

The Fertiliser Association of India - Southern Region (FAI-SR) in collaboration with College of Agriculture, Kerala Agricultural University, Vellanikkara organised Fertilizer Orientation Programme for the students on 24th January 2024. It was inaugurated by Dr. Mani Chellappan, Associate Dean of the College. One hundred twenty nine students participated in the programme.

In his address Dr. Mani Chellappan stated that we are now not only self-sufficient in food grain production but also, in fact we are exporting to other countries. The scientists, extension personnel, farmers and policy makers need to be complimented for achieving such marvelous increase in production of food grain. The efforts of the agri-input industry in making the vital inputs like fertilizers, seeds and pesticides available to the farmers at right time for increasing production of food grain have also been commendable. After reaching the stage of self-sufficiency in food grain production, it is prudent to look at the factors which are affecting the soil health and finding the solutions for sustainable agriculture.

He mentioned that low nutrient use efficiency of applied fertilizers is a major concern for the policy makers and a challenge for the scientists working on nutrient management. Utilization of fertilizer nitrogen (N) by crops in India seldom exceeds 35% under lowland and 50% under upland conditions. Use efficiency of other nutrients is 15-25% of phosphorus, 50-60% of potassium, 8-12% of sulphur and 2-5% of most of the micronutrients under the best managed conditions. Fertilizer-N not consumed by the crops leaks to the environment through processes like ammonia volatilization, nitrate leaching, surface run off and N₂O emissions. The other nutrients after addition remain essentially in the soil and get fixed in different reaction products making them inaccessible for absorption by the growing crops. Ways and means to be in place to improve fertilizer use efficiency. Towards this, research institutes and fertilizer industry world over have been working relentlessly on the development of innovative fertilizer products, technologies, and practices. He thanked FAI for organising this programme for the benefit of the students of this college which is located in a remote place. He requested all the students to be very attentive in the class and gain the best knowledge from the learned faculties.

Specialty Fertilizers for Sustainable Agriculture

The Fertiliser Association of India - Southern Region (FAI-SR) with ICAR – Krishi Vigyan Kendra (KVK), Venkatagiri organised a training programme on **Specialty Fertilizers for Sustainable Agriculture** at



Dr. Mani Chellappan delivering the inaugural address

Mr. Y.V.N. Murthy, Regional Head, FAI-SR, Chennai explained about the objectives of the programme. He informed that through this programme, students will be enlightened about the production process, distribution system, marketing net-work and legal aspects of fertilizer sales. They will also know about agro-services provided by the fertilizer industry to the farmers through various promotional and publicity activities also about the entrepreneurial and employability opportunities in the fertilizer sector.

Earlier, Dr. Beena V.I, Professor and Head, Department of Soil Science and Agricultural Chemistry, welcomed the dignitaries, faculties and other senior officials of the fertilizer companies to the programme and briefed the students about the contents of the programme.

The topics covered during the programme included i) Manufacturing Process, Scenario, Logistics Operations and Imports of Fertilizers by Mr. Y.V.N. Murthy; ii) Financial Facets of Fertilizer Marketing and Legal Aspects of Fertilizer Sales under FCO by Mr. Sivachandran Balasubramanian, Zonal Manager, FACT, Palakkad; iii) Specialty Fertilizers by Mr. Jamsheer N, Senior Marketing Officer, SPIC and Greenstar Fertilizers Limited, Wayanad; iv) Dealer Network Development and Promotional Programmes by Mr. D. Srinivasan, Regional Manager, Madras Fertilizers Limited, Cochin; and v) Importance of Nano Technology Products in Agriculture and Cooperative Network in India by Mr. P.K. Abhin and Ms. S.K. Harsha, Assistant Managers, IFFCO, Cochin. The programme ended with formal vote of thanks by Dr. Mayadevi M.R. Assistant Professor, Department of Soil Science and Agricultural Chemistry of the college.

Venkatagiri in Tirupati district of Andhra Pradesh on 21st December 2023. It was inaugurated by Dr. B. Govindarajulu, Principal Scientist and Head, KVK. Fifty Five participants comprising of front line

extension personnel and progressive fertilizer dealers attended the programme.

In his address, Dr. Govindarajulu stated that integrated nutrient management is the key to sustain soil health. The organic carbon content of the soil is going down alarmingly due to non-usage of organic manures by the farmers. There is imbalance in use of fertilizers due to more application of N through urea at the cost of P and K fertilizers. The need is to enhance use of organic fertilizers and apply fertilizers as per soil test- based recommendations in balanced proportion to sustain soil health. Towards this, education of the farmers needs to be given more impetus by all concerned. He informed that frontline extension personnel and fertilizer dealers had played and will continue to play decisive role in transmitting the technical knowledge to the farmers. He requested the trainees to disseminate the knowledge gained from this programme among the farmers.

In his address, Mr. K. Satish Kumar, Project Director, Andhra Pradesh Micro Irrigation Project, Tirupati district pointed out that diversion of water to other sectors will aggravate the problem of water availability for agriculture purposes. Climate change has also been an issue for water scarcity concerns. The impact of climate change is much more evident in Indian agriculture, where around 85% farmers are small and marginal and 60% agriculture is dependent upon the vagaries of monsoon. The role of micro-irrigation, therefore, assumes significant importance in this back drop.

He stated that traditional irrigation practices adopted since the introduction of Green Revolution in late 1960s has also been a cause of apprehension. In tube well irrigated area, water table has been deepening and hydrological drought is being witnessed in certain areas. In canal irrigated area, problems of water logging, salinity and alkalinity are imminent. The result is rise in cost of cultivation of a crop for a farmer. Sensing the significance and probable benefits of the process to double the farmers' income along with agricultural sustainability and environmental quality, the Union Government launched a comprehensive flagship programme called *Pradhan Mantri Krishi Sinchai Yojana* or "more crop per drop".

He emphasized that adoption of micro-irrigation system along with water soluble fertilizers by the farmers is prerequisite to increase water as well fertilizer use efficiency, crop yields and farm income for sustainable agriculture. By applying water directly to the root zone, the practice reduces loss of water through conveyance, run-off, deep percolation and evaporation. These losses are unavoidable in traditional irrigation practices. Micro-irrigation, through its water-saving approach, has paved the way for higher water use efficiency of around 75-95%.

In his address, Mr. V.G. Nagarjuna, Assistant Director of Agriculture, State Department of Agriculture,



Dr. Govindarajulu delivering the inaugural session. Others seen in the picture from left to right are Mr. Reddy, Mr. Murthy, Mr. Kumar and Mr. Nagarjuna

Government of Andhra Pradesh, Venkatagiri, stated that use efficiency of the bulk fertilizers applied to the soil is very low. In context of availability of urea at a very low price compared to other fertilizers, farmers opt to use urea indiscriminately. He urged the participants to understand the adverse effects of excess usage of urea on soil health; increase in incidences of pests and diseases; negative impact on uptake of other nutrients by the plants, environmental and ground water pollution, etc. He requested the trainees to advise the farmers to use fertilizers (both organic and inorganic) on soil test-based recommendations.

Mr. M. Ananda Reddy, Horticultural Officer, State Department of Horticulture, Government of Andhra Pradesh, informed that the farmers of this area grow variety of crops including vegetables and other horticultural crops. He explained about the various schemes introduced by the government to enhance the quality and productivity of the crops.

Earlier in his welcome address, Mr. Y.V.N. Murthy, Regional Head, FAI-SR, Chennai, briefed about the objective and topics to be covered by learned faculties. He also gave an overview of growing need of use of speciality fertilizers in the country.

The topics covered during the programme included i) Use of Fertilizers on Soil Test Based Recommendations by Dr. Govindarajulu; ii) Enhancing Crop Productivity with Quality Produce through Use of Specialty Fertilizers by Mr. Gangadhar, Regional Manager, Greenstar Fertilizers Limited, Tirupati; iii) Bio-fertilizers for Sustainable Agriculture by Mr. K. Subrahmanyam, Field officer, KRIBHCO, Guntur; iv) Nano Technology Products and their Importance in Agriculture by Mr. V.R. Laxmi Narayan, Field officer, IFFCO, Nellore; v) Specialty Fertilizers from Coromandel International Limited by Mr. Tony Shashikant, Agronomist, Coromandel International Limited, Nellore; vi) Importance of Micro-irrigation in Enhancing Water and Fertilizer Use Efficiency by Mr. K. Satish Kumar. The programme ended with formal vote of thanks by Dr. N. Rajeevana, Subject Matter Specialist (Soil Science), KVK, Venkatagiri. ■