

## **National Seminar on “Technological Innovations in Oilseed Crops for Enhancing Productivity, Profitability and Nutritional Security”**

Indian Society of Oilseeds Research (ISOR) in association with Indian Council of Agricultural Research (ICAR) is organising two days National Seminar on “Technological Innovations in Oilseed Crops for Enhancing Productivity, Profitability and Nutritional Security” from 7-8 February, 2020 at PJTSAU, Auditorium, Rajendranagar, Hyderabad.



In the inaugural session, Dr A. Vishnuvardhan Reddy, Director, ICAR-IIOR, Hyderabad provided the status and background of vegetable oils in the country and mentioned the import dependence of >60% (15 million t; Rs.69000 crores) for vegetable oil dominated by Palm oil. The significant achievement of increase in oilseeds production by 5.5 times to reach to 32 million tonnes from 6 million tonnes in sixties was commendable given the background of majority (>70%) rainfed ecosystem, small farm holdings and unfavourable market environment. The current high demand is due to the high *per capita* consumption (18kg/head/year) far exceeding increased oilseeds production. He emphasised the need of this seminar to address these issues of challenges of improving the production and profitability of oilseeds and vegetable oils including secondary sources and policy issues to make the country self-sufficient.



Dr V. Praveen Rao, Vice-Chancellor, PJTSAU, Rajendranagar, Hyderabad stressed the need for clear policy framework for adopting precision agriculture practices and gadgets such as sensors and use of Drones for spraying and data acquisition. He highlighted the shift to cold pressed oils that besides healthy was also opined to reduce cooking oil for food preparation. He highlighted the experience of Telangana State in identifying efficient crop ecological zones as crop colonies for focussed development and stressed the need for valuing ecosystem services of oilseeds cultivation beyond yield and profits.

Dr Mangala Rai, Former Secretary, DARE & DG, ICAR, reiterated the progressive increase of oilseeds production, the reasons for oil import due to dynamic policy decisions affecting domestic oilseeds production and import requirement and tariffs. He emphasised the importance of value addition in oilseeds and promoting valuable by-products (cake, meal, fibre etc.,) as main products in crops like soybean, linseed, etc. He exhorted to provide more emphasis to achieving higher resource use efficiency of water (WUE, water productivity etc.,) soil health especially soil micro-organisms, for a sustainable oilseeds production system. The need to embrace cutting edge technologies and tailoring genotypes to varied growing situations and stresses that support quantum increase in production.



Dr Trilochan Mohapatra, Secretary DARE & Director General, ICAR, New Delhi indicated that this national seminar platform will discuss threadbare, the issues on all aspects of oilseeds to reduce the import of oil. The immediate responsibility of all citizens on reduced oil consumption and efforts to create awareness on healthy consumption to the extent of 6 kg/head/year (as per ICMR, DG, Dr Balram Bhargava), on long term can straight away reduce the import bill. This apart, deliberations on solving impending issues through research and development (higher use of genomic resources and systematic incorporation in varietal development, effective pest and disease management, etc.) of technologies and gaps in crop management across crops and states for achieving higher vegetable oil production and export needs to be addressed in this seminar. Research is already initiated on Drone technology in ICAR that will take few years to come as recommendation. The support of Govt of India in establishing 36 seed hubs for meeting the quality seed supply is significant step towards achieving higher oilseeds production. There is a need to make further value addition in castor to increase export of castor products, reducing gap from lab to land and value chain from seed to Industry. Genome editing, speed breeding, marker associated breeding, etc. to be employed to break the intrinsic yield barriers of the energy rich oilseed crops.



Dr Panjab Singh, former Secretary, DARE & DG, ICAR opined that enabling policy is essential for meeting the demand. As the demand for vegetable oil is expected to continue at higher rate, moderating consumption, technology lead increasing production will provide surplus for export in long term. Efficient crop management and policy support would ensure higher profitability of oilseeds cultivation. Ensuring quality seed availability especially of soybean and groundnut is priority. Promotion of oil palm in eastern India would bring higher production. Oilseed crops help in diversification of cropping systems without disturbing existing main crops to fit as efficient preceding or succeeding or intercrop. Policy decision to keep a ceiling on growing of cereals like Rice/wheat after certain period and growing of oilseeds need to be emphasized and supported including value addition for increasing much

needed oilseed production. Agronomic manipulations including conservation agricultural practices, precision farming, value addition, efficient water use, MSP, etc. were the needed focus. He hoped the deliberations will be consolidated and made as action points for implementation with relevant stake holders.

The session ended with vote of thanks by Dr M. Sujatha, General Secretary, ISOR and Principal Scientist, ICAR-IIOR, Hyderabad.

