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/Treasurer, ISA (avinash8wakhare@yahoo.com) in
advance or **can be registered on spot.**

Venue

The Brain storming will be held at ICAR-DOGR, Rajgurunagar, Pune – 410505, (Maharashtra). It is located about 40 km away from Pune Railway Station and 50 km from Pune Airport. Rajgurunagar, Pune is well connected by air, rail and bus. Conveyance will be arranged from Pune to Rajgurunagar on demand by the participants.

Accommodation

Accommodation will be arranged in Hotels in Pune/ Rajgurunagar on demand and payment basis.

General Information

Pune, known as the cultural capital of Maharashtra is the eighth largest metropolis in India. Besides having great historical past, it is home for more than 100 educational institutes, nine Universities and research Institutes of national importance. Pune has a growing industrial hinterland with many IT and automobile companies. It is located 560 m above mean sea level on western margin of Deccan plateau. During month of November, weather is pleasant with cool atmosphere at average temperature 22°C. It is well connected by air, rail and road from all major cities in India.

Advisory committee

Chief Patron

Dr. T. Mohapatra, DG, ICAR & Secretary, DARE,
New Delhi

Patron:

Dr. A.K. Singh, DDG (Horticulture), ICAR, New Delhi

Members:

Dr. K. Alagusundaram, DDG (Agril. Engineering), ICAR,
New Delhi

Shri Ashwani Kumar, Joint Secretary, M&T, DAC,
New Delhi

Dr. T. Janakiram, ADG (Horticulture), ICAR, New Delhi

Dr. W.S. Dhillon, ADG (Horticulture), ICAR, New Delhi

Dr. Dinesh Kumar, Director, ICAR-IIHR, Bangalore

Dr. B. Singh, Director, ICAR-IIVR, Varanasi

Dr. K. K. Singh, Director, ICAR-CIAE, Bhopal

Organizing Committee

Dr. K.E. Lawande

President, Indian Society of *Alliums* &
Ex-Vice Chancellor, DBSKKV, Dapoli &
Ex-Director, ICAR-DOGR, Rajgurunagar, Pune,
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Brainstorming on Challenges in Mechanization of Onion and Garlic Production in India

10th November, 2017

Organized by



Indian Society of *Alliums*

ICAR-Directorate of Onion and Garlic Research,
Rajgurunagar, Pune

National Horticultural Research Development &
Foundation, Nashik



Challenges in Mechanization of Production of Onion and Garlic

Onion and garlic are important spice crops cultivated in India since ancient times. India produces onion to the tune of 209.3 lakh tons over 13.2 lakh hectare area and garlic to the tune of 16.17 lakh tons from 2.81 lakh hectare area. India is second largest in production of both the commodities in the world after china. Cultivation of onion and garlic always found remunerative adding to the sustenance of agriculture, where ever irrigation is available. However, in the past it has been observed that due to fluctuation of prices, hasty policies, increased cost of production, the benefit cost ratio of onion and garlic production is going down, despite of adoption of all advanced production technologies. Both the crops are highly labour intensive. Preparation of nursery, transplanting, weeding, harvesting, grading, packing, storage and preparation for market, demand very high labour input. Out of the total cost of production, almost 50% is to be incurred on labour charges. Perhaps this is the highest proportion in these crops as compared to other commercial crops.

The crops like wheat, rice, soybean, potato, cotton, sugarcane, beetroot, etc. enjoy good benefits of mechanization. However, onion and garlic mechanization has remained a gray area. In China, U.S.A. and many European countries, onion and garlic cultivation is fully mechanized. Under Indian conditions, if mechanization is thought off with R&D and awareness, it will help reducing cost on labour tremendously.

With view to take a stock of situation and plan for mechanization, the Indian Society of *Alliums* in collaboration with ICAR-Directorate of Onion & Garlic Research, Rajgurunagar has organized brain storming session and live demonstration of same operations with existing gadgets on 10th November, 2017 at Rajgurunagar. This will provide a platform for agronomists, mechanical engineers, agri. entrepreneurs, farmers and development departments to discuss the scope and challenges in onion and garlic cultivation under Indian conditions. Fruitful thinking will help in developing strategy and plan for better mechanization.

Theme areas

Present status, challenges and way forward

- ♦ Mechanization for sowing and transplanting,
- ♦ Mechanization for intercultural operations.
- ♦ Mechanization in harvesting of onion and garlic bulbs as well as seed crop.
- ♦ Mechanization in post harvest operations including grading, transportation, storage and processing
- ♦ Promoting convergence among stakeholders including farmers, traders and manufacturers.

Invited papers

Papers on specific to pics will be obtained from experts exclusively through invitation only.

Field demonstrations

All the manufacturers will be given specified area for live demonstration well in advance in the field. For Example: To demonstrate the direct seeding machine, sowing should be done one month in advance by the firm/organization in their presence and can be monitored, subsequently. Based on the results, discussion will be made on the issues and their solutions in future.

Registration fee

All Participants	:	Rs. 1000
Farmers	:	Free

Registration fee includes kit, food, and field trip.

The registration fee can be sent through demand draft drawn in favour of **Indian Society of *Alliums*** payable at SBI, Rajgurunagar or online transfer to SBI, Branch Rajgurunagar, **Account No.11587554437, IFS Code: SBIN0000410** and should be intimated to Secretary