

## International Conference on Millets: A Sustainable Approach Towards, Health, Nutrition and Environment Sponsored by ICSSR Supported by Directorate of Millet Board, Govt. of India, New Delhi

(25<sup>th</sup> and 26<sup>th</sup> September 2023)

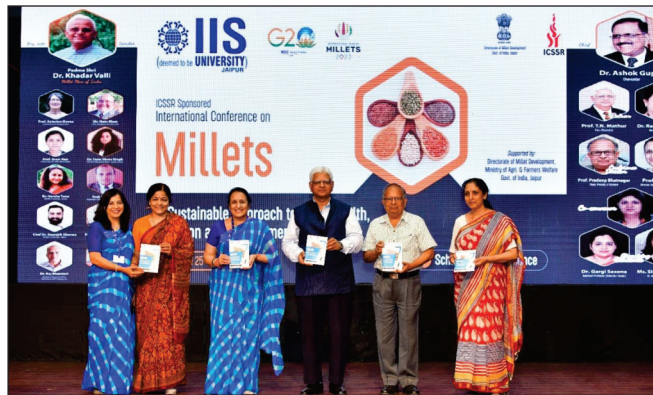


The School of Home Science, IIS (deemed to be University), Jaipur organized a two-day International Conference on 25<sup>th</sup> and 26<sup>th</sup> September 2023, on 'Millets: A Sustainable Approach Towards, Health, Nutrition and Environment' sponsored by ICSSR, Supported by Directorate of Millet Board, Govt. of India, New Delhi.

The aim of the conference was to provide an interdisciplinary platform for researchers and entrepreneurs to exchange their experiences and vision on sustainability of millets as a crucial link to improve health, nutrition, and environment. The conference also aimed to identify challenges and thereby provide solutions for making millets accessible to the masses to ensure nutritional as well as food security. Another objective of the conference was to understand the business and economic environment to look for entrepreneurial opportunities in cultivation, processing, and marketing millets at national and global level.

### Inaugural Session

The conference commenced on 25<sup>th</sup> September, 2023 at 10:30 am with the Inaugural Session, seeking the blessings of the Almighty in the form of Saraswati Vandana. This was followed by lighting of the lamp by the dignitaries on the dais – Keynote speaker Dr. Khadar Valli Padma Shri Awardee, Millet Man of India from Mysuru, Prof. T.N. Mathur, Vice Chancellor, IIS



(deemed to be University), Prof. Raakhi Gupta, Rector and Registrar, IIS (deemed to be University), Prof. Pradeep Bhatnagar, Dean, Faculty of Science and Conference Director, Prof. Ila Joshi, Director, School of Home Science and Conference Convenor, Dr. Nalini Totuka, HOD and Co-convenor .

This ceremony was followed by the welcome address by the conference Patron Prof. T.N. Mathur, Vice-chancellor IIS (deemed to be University), Jaipur. He extended a warm welcome to the resource persons and delegates who came from different parts of the country. Prof. Pradeep Bhatnagar, Conference Director, then acquainted the delegates with the aims and objectives of the conference. This was followed by the release of the book of abstracts by the keynote speaker Dr. Khadar Valli and other dignitaries on the dais.

In his inaugural remark, the keynote speaker spoke about the importance of millets and how these tiny grains have been marginalized when the green revolution set in. Dr. Valli also talked about the resilient nature of millets and how these grains can sustain harsh climatic conditions with minimal requirements of water.

The inaugural session ended with a formal vote of thanks by the Prof. Raakhi Gupta, Rector and Registrar, IIS (deemed to be University),.

The inaugural session was followed by the Plenary Session on the theme-Mainstreaming millets for a sustainable tomorrow: A roadmap. This session was moderated by Prof. Eram Rao, Department of Food Technology, Bhaskaracharya College of Applied Sciences, University of Delhi, New Delhi and the panelists were Dr. Khadar Valli, Dr. Raj Bhandari, member National Technical Board on Nutrition and Health, NITI Aayog, Govt. of India and Dr. Satyen Yadav, Founder Director, India Millet Initiative, Noida. All the panelists gave their input on how to create a sustainable ecosystem and the important role that millets play in conserving the environment. The panelists also highlighted the difference in carbon dioxide emissions in the cultivation of millets and cereals. The panel discussion was followed by tea and group photographs.

### **Keynote Session**

Dr. Khadar Valli delivered the keynote address on the Millets- Beyond Health and Environment. In his address. Dr. Valli spoke about diabetes reversal by modifying diets. He emphasised upon the presence of fibre and phytochemicals in millet-based diets and their beneficial effects upon gut, hormones, muscles and longevity.

### **Technical Session I**

After the keynote address, the conference proceeded to technical session I, Nutri-cereals for nutritional security. This session was chaired by Prof. Vanisha Nambiar, The Maharaja Sayajirao University of Baroda, Vadodara. The invited speakers of this session were Prof. Eram Rao, Department of Food Technology, Bhaskaracharya College of Applied Sciences, University of Delhi, New Delhi and Dr. Varsha Tanu, Associate Professor, IIHMR University, Jaipur.

Prof. Eram Rao, delivered a talk on “Transforming food systems for planetary healthy diets for all.” She started by explaining how millets play a crucial role in transforming health, nutrition, agri-food systems, and climate change across the globe as they are nutrient rich, carbon neutral and resource-efficient. Prof. Eram also emphasized that millet cultivation may also help promote a shift towards sustainable agriculture, diversifying crop rotations and avoiding the promotion of mono-cropping systems. Simultaneously, poster presentations were put up by young scientists. The posters were judged Dr. P. N. Kalla, Dean, Agriculture,

Jagannath University, Jaipur and Dr. Charu Sharma Associate Professor, Department of Microbiology and Biotechnology, IIS (deemed to be University), Jaipur. A total of 150 registrations were made for the conference, out of which total 69 delegates from different universities showcased their research ideas in the form of posters. A stall was put up by Directorate of Millet Board, Govt. of India, New Delhi exhibiting the major and minor millets and IEC material related to these mighty grains.

Lunch was served to all the delegates and dignitaries in the mess. All the delegates were appreciative of millet-based desert in the menu.

Resuming the technical session-I, Dr. Varsha Tanu gave a talk on “Millets-Key to nutrition security through community engagement and women empowerment” wherein she highlighted the pivotal role of millets in promoting nutritional security, gender equality and sustainability in remote hilly forested tribal areas. Dr. Varsha Tanu also showed a beautiful documentary highlighting her work in hilly tribal areas of Udaipur.

### **Technical Session II**

Technical session II was chaired by Prof. Mukta Agarwal, Former Principal Maharani College, and Head department of Home Science, UOR. Jaipur. In this session, two invited speakers Dr. Tanu Shree Singh and Chef Dr. Saurabh Sharma delivered their talks. The broad theme of this session was Entrepreneurial opportunities in millet industry.

Dr. Tanu Shree Singh spoke on “Bazic’s success journey: Crafting a healthier future with Millets.” In her talk, she discussed her start-up Bazic Foods. It is a government-awarded and funded millet startup and has embarked on a remarkable journey dedicated to revolutionizing the way we enjoy comfort foods. With an unwavering commitment to crafting 100% modern millet products, Bazic has emerged as a trailblazer in the culinary world.

Dr. Saurabh Sharma gave his insights on Promoting Millets through Rajasthan’s Culinary Heritage. He gave valuable inputs on reviving millet glory through conducting cooking workshops, food festivals, collaboration with restaurants and rediscovering traditional millet-based recipes, and promoting culinary tourism.

### **Technical Session III**

On the second day, the conference commenced at 9:00 a.m. with technical session III- Millets for sustainable agriculture and environment. International speakers of great repute joined the conference online. The session was chaired by Dr. Satyen Yadav, Founder Director, India Millet initiative. Prof. Katrien Devos, University of Georgia, USA delivered her talk on the power of genomic resources to enhance the nutritional and sustainability qualities of finger millet. Dr. Devos presented her work on identifying host resistance to infection by the fungus which causes blast disease and assist with the development of finger millet cultivars with improved nutritional and sustainability qualities.

Another speaker in this session was Mr. Nate Blum, expressed his opinions on -The role of sorghum and millets in redefining global food and agricultural paradigms. Mr Blum discussed about environmentally sustainable attributes of sorghum and millets as they pertain to water, wildlife, and soil health, as well as being an optimal tool for carbon sequestration.

#### Technical Session IV

Technical Session IV was tailored around- "Processing and post-harvest technology of millets" and was chaired by Prof. Ritu Mathur, MDS University, Ajmer and the invited speakers were Prof. Vanisha Nambiar, The Maharaja Sayajirao University of Baroda, Vadodara, and Prof. P. N. Kalla, Dean, Agriculture, Jagannath University, Chaksu.

The first invited lecture in this session delivered by Dr. Nambiar beautifully summarized her research on Understanding glycemic index, glycemic load, and retention of iron and zinc following minimal processing of millets. Techniques of soaking, malting, germination, decortication, blanching, and milling lead to a reduction of tannates and phytates and enhance the bioavailability of iron and zinc in traditional recipes from Rajasthan, Gujrat, and Maharashtra.

Dr. Nambiar's talk was followed by oral presentations by Young Scientists from different cities of the country. Dr.

Kanika Varma, Professor, Department of Home Science, University of Rajasthan, Jaipur chaired the session. There were 9 oral presentations in this session. The judges for the same were Dr. Payal Chaturvedi, Associate Professor, Department of Microbiology and Biotechnology, IIS (deemed to be University) and Prof. Yamini Chaturvedi, Professor, Commissionerate College Education, Shiksha Sankul, Jaipur.

The second speaker of the technical session IV, Prof. P.N. Kalla presented his talk on International year of millet 2023- A comprehensive guide to processing, health benefits and versatile uses of millets. He also mentioned the initiatives taken by the Indian Government and ICAR for promoting Millets and the primary and secondary post-harvest processing operations.

After breaking for lunch, the remaining oral presentations were taken up. In total, 15 oral presentations were delivered through the conference.

#### Valedictory Session

The conference concluded with a valedictory session, where awards were conferred to researchers in the category of oral and poster presentations.

The conference report was presented by Ms. Simran Singh (Sr. Assistant Professor and Organizing secretary of the conference. Impressions of the conference were shared by two participants. The concluding remarks were given by Prof. T.N. Mathur, the vice chancellor of the university. Lastly formal vote of thanks was given by Dr. Nalini Totuka, Head, Dept. of Home Science, IIS (deemed to be University), Jaipur.

The school of Home Science also launched a booklet- Millets- A Powerhouse of Nutrition. The book summarized the health benefits of millets and included a few selected recipes prepared using millets. The conference report was presented by Ms. Simran Singh (Sr. Assistant Professor and Organizing secretary of the conference.

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