

# DBS AGRI-SAMVAAD

A Quarterly Newsletter from Doon Business School Group, Dehradun

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### Seminar Highlights - "Harnessing Science and Technology for Hill Agriculture towards Wellness"

We are delighted to share the highlights of the recently held seminar on "Harnessing Science and Technology for Hill Agriculture towards Wellness," organized at Doon Business School on February 22, 2023. The seminar aimed to explore sustainable agricultural practices in hilly areas and their impact on the well-being of communities.

The event commenced with opening remarks on the importance of agricultural sustainability in hilly regions. Distinguished scientists of international fame,



Dr. Ravindra N Chibbar and Dr. Monica Baga from the Department of Plant Sciences, University of Saskatchewan, Canada, were warmly welcomed by Dr. I.J. Gulati, the Principal of DBS. Dr. Ravindra N Chibbar, a renowned authority on genomics and crop quality, delivered an enlightening talk on "Food Diversity for Environmentally Sustainable Agriculture and Improved Human Health". He shared insights into using molecular biology and genomics strategies to enhance grain quality, improve crop performance under adverse environmental conditions, and develop climate change resilient crops.

Dr. Monica Baga actively participated in the discussions, engaging with the students and faculty members. The session witnessed enthusiastic interactions, with students absorbing knowledge on food technology and genomics in agriculture. The experts addressed various topics, including vegan and non-veg diets, junk food, obesity, and traditional wisdom of Indian food habits.

The seminar provided a once-in-a-lifetime opportunity for the students and faculty of DBS to learn from world-level specialists in the field of genomics. The expert talks and the informative question and answer session enlightened the audience on cutting-edge research and strategies for tailoring climate-smart crops with improved grain quality. The event left a lasting impact on the participants, fostering a deeper understanding of the significance of genomics and technological advancements in agriculture.

DBS extend our gratitude to the scientists and everyone involved in making this seminar a resounding success. The event served as a platform for knowledge exchange, encouraging students and faculty to explore innovative approaches in the field of agriculture. Stay tuned for more engaging events and initiatives as we continue to strive for excellence and promote sustainable practices in education and research.



## **Academia- Industry Connect**

### **A Video case on Cooperative Initiative of Uttarakhand 'BAKRAW'**

One video was produced by Faculty of DBS Dehradun on The 'BAKRAW' which is a cooperative initiative of Uttarakhand Government under a funded project of NCDC, aimed at enhancing the livelihood of farmers in the hilly areas of Uttarakhand through goat and sheep rearing. The video is prepared with the objective to disseminate the good practices of the cooperative industry for other stakeholders for find better prospects under the cooperative development. I hope the video will be fruitful fo r several policy holders and educators to use it for capacity building programmes for spreading of cooperative flair among the rural folks for better and sustainable livelihood options. The video is well acknowledged by premier institution of cooperative management under the Ministry of Cooperation and provided a space in their webpage. The video link is attached as under-  
<https://www.youtube.com/watchv=w0udXVtjYUU>



### **Upgradation of Knowledge by Faculty of DBS Dehradun**

DBS faculty is engaged in self upgradation of Knowledge, Attitude, Skillsets and Habits. Few papers of faculty are selected and published in reputed peer reviewed journals. One article on “Indian Agriculture Sector and Blockchain Technology: A Systematic Review Envisaging Business Opportunities” is published by Empirical Economics Letters indexed in EconLit. The paper talks about blockchain in the agriculture sector and highlight the issues and emerging domains.

## Entrepreneurial opportunities in the Microgreen for Healthy lifestyle

Dr I J Gulati  
Principal  
DBS Dehradun

Microgreens present a significant opportunity for entrepreneurship in India, particularly considering the increasing demand for healthy and organic food products. Microgreens are young vegetable greens harvested within 14 days of seed germination and are known to be highly nutritious, often containing higher nutrient levels than fully grown vegetables. The market for organic food in India is projected to experience a compound growth rate of 20-25% in the coming years, driven by the growing health-consciousness of the population.

Starting a microgreen business in India can be a lucrative venture with relatively low investment and space requirements. The business can be initiated in a small area as little as 6 sq ft, making it suitable even for individuals with limited space. One successful example is that of Ajay Gopinath from Kerala, who grows microgreens in an 80 sq ft room in his house and earns around Rs 2 to 3 lakh per month.

To start a microgreen business, market research is crucial to understand the local demand and potential customers. Microgreens can be grown using vertical farming techniques, utilizing metal shelves, lights, and flat trays. The vertical farming approach maximizes space utilization by growing plants vertically, which is especially beneficial in small areas. Adequate lighting and temperature control are essential factors to consider for successful microgreen cultivation. The choice of seeds is also important, as only non-GMO, non-hybrid, non-treated, and open-pollinated seeds are suitable for microgreen production.

When starting a microgreen business, it is beneficial to extensively study the local market, implement effective marketing strategies, evaluate health risks, and consider packaging to maintain product quality. Potential clients for microgreens include 5-star hotels, cafes, supermarkets, and urban upper-middle-class households. The business can be approached through both B2B and B2C models, supplying microgreens to commercial establishments and directly selling to consumers. Innovative product formats, such as salad mixes or paratha mixes incorporating microgreens, can enhance market acceptance.



In summary, establishing a microgreen business in India presents a promising entrepreneurial opportunity due to the increasing demand for organic and nutritious food. With proper market research, suitable cultivation techniques, and effective marketing strategies, individuals can capitalize on the growing interest in microgreens and build a successful and profitable venture.

Source: <https://seepositive.in/article/4395/know-how-a-kerala-man-grows-microgreens-in-his-room-and-earns-3-lakh-per-month/#:~:text=Ajay%20currently%20grows%20about%2015,microgreens%20from%20the%20green%20gram.>

## Why 2023 is the year of millets?

*Dr Richa Bharti*  
*Assistant Professor*  
*(Plant Breeding and Genetics)*

Following a proposal by India, which aspires to establish itself as a major producer of millets, the United Nations has designated 2023 as the International Year of the Millet. For ages, millets have been a staple of our diet. Millets have a wealth of health advantages, but they are also beneficial for the environment because they require less water and other resources. The Government of India requested that the United Nations proclaim 2023 the International Source: Webpage of HGMPL Year of Millets with the intention of raising awareness and increasing millets' production and consumption.

- Millets, a resilient dryland crop prevalent in Asia and Africa, are becoming more well liked due to their health benefits. 2023 has been designated by the UN as the International Year of Millets.
- Events like this raise awareness of lesser known subjects, in this case crops. They also support trade and the international flow of ideas, research, and development.
- Quinoa gained popularity and is now cultivated all over the world as a result of 2013, which was designated as the International Year of Quinoa. Researchers claim that despite creating a boom-and bust cycle, the initial increase in popularity helped farmers. There are worries that millets could experience the same thing.

Millets are referred to as "shri anna" or the "best of all grains", according to India's

Finance Minister Nirmala Sitharaman, who did so in February 2023 when she made the Union Budget announcement. Her repositioning of millets, which were previously listed as a neglected and underutilised crop species and were frequently disparaged as "the poor man's grain," was accompanied by a government funding pledge for the Hyderabad-based Indian Institute of Millet Research (IIMR), which was founded in 1958. Sitharaman stated that IIMR will evolve into a centre of excellence and a global powerhouse for millet research and development, while the precise amount of money is unclear. This celebration of millets year is also to spread awareness about millets consumption and its benefits to the people all over the world and especially to the youth and children. The UN's designation of 2023 as the International Year of Millets is related to this and other initiatives aimed at promoting millets.

So how can a crop that has been neglected and has all but disappeared from our plates make a comeback?



SOURCE -  
<https://st.adda247.com/https://wpassets.adda247.com/wp-content/uploads/multisite/sites/5/2023/01/02102231/QT-Millets.jpg>

## The Potential of Drones in Revolutionizing Agriculture Practices

*Dr Satish Chandra Pant,  
Assistant Professor  
(Agribusiness Management)*

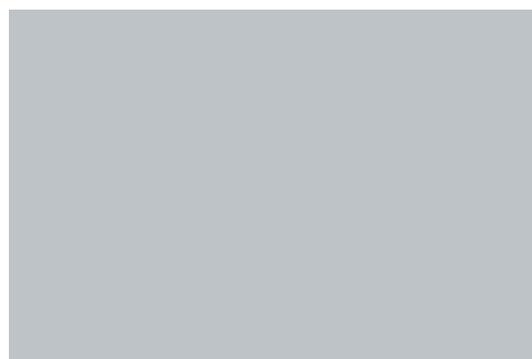
The emerging use of drones, also known as unmanned aerial vehicles (UAVs), in agriculture in India has the potential to revolutionize farming practices and contribute to sustainable agricultural management. These drones are increasingly being utilized in the farm sector to streamline operations, improve resource management, and enhance productivity amid fierce global pressure of sustainable development.

One of the key applications of drones in agriculture is crop monitoring. By capturing high-resolution aerial images and utilizing advanced remote sensing sensors, drones can provide valuable data on crop health, growth patterns, and potential issues such as nutrient deficiencies or pest infestations. This information enables farmers to make informed, timely and targeted interventions, such as adjusting fertilizer prescriptions or applying pesticides as and when needed. By effective utilization of such practices, farmers can improve crop yields, reduce input costs, and minimize environmental impact. Additionally, drones play a crucial role in precision agriculture. They enable farmers to gather accurate and up-to-date spatial data about their fields, including soil variability, topography, and drainage patterns.

Furthermore, drones facilitate the monitoring and management of large agricultural areas. They can cover vast

expanses of farmland quickly and efficiently, providing a comprehensive view of the entire field. This is particularly beneficial in countries like India, where agricultural lands can be extensive. Drones equipped with thermal cameras and multispectral sensors can assess crop stress levels, detect diseases, and identify areas requiring immediate attention. This data allows farmers to make data-driven decisions and allocate resources effectively, leading to improved crop health and reduced losses.

The use of drones in agriculture not only enhances productivity and efficiency but also contributes to sustainable land management. By adopting precision agriculture practices facilitated by drones, farmers can optimize the use of fertilizers, water, and other inputs, reducing their environmental impact. This approach helps minimize nutrient runoff and soil erosion, conserves resources, and supports long-term agricultural sustainability. In conclusion, the emerging use of drones in agriculture in India holds immense potential for transforming farming practices. By leveraging drone technology, farmers can enhance crop monitoring, implement precision agriculture techniques, and contribute to sustainable land management.



Source- <https://fly.hupthye.com/wp-content/uploads/2021/05/agriculture-technology-agtech-south.png>

## Feedback received from previous Issues:

The newsletter Agri-SAMVAAD is a comprehensive and insightful resource for reader. I found the content valuable and would be interested in receiving future newsletters to stay updated on the latest developments in the agribusiness sector.

-Dr Sathyendra Kumar AD, Manager, NAARM-ABI, Hyderabad

## Suggestions and Feedback:

We would be happy to hear suggestions and feedback (if any) on this issue. Feel free to contact at [dr.ijgulati@doonbusinessschool.com](mailto:dr.ijgulati@doonbusinessschool.com) or [satishpant@doonbusinessschool.com](mailto:satishpant@doonbusinessschool.com) for any academic and placement activities in the future.

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