



Integral Institute of Agricultural Science & Technology (IIAST)

Integral University, Lucknow

Brief report on Refresher course on the theme ‘Technological Advancement in Current Agriculture’ organized by The Human Resource Development Centre along with Department of Agriculture, IIAST

The Human Resource Development Centre along with Department of Agriculture, Integral Institute of Agricultural Science and Technology (IIAST) conducted a Refresher Course in the session 2023-24, wherein various lectures were organized for the faculty members of Department of Agriculture, IIAST. The theme of the refresher course was ‘Technological Advancement in Current Agriculture’.

First session was conducted on 10th February, 2024, on “**Sustainable Agriculture and Global Perspective**” by Prof. K. N. Tiwari, Consultant, IFFCO, Lucknow. This lecture provided a comprehensive overview of the principles and practices essential for achieving sustainability in agriculture. Prof. Tiwari emphasized the urgent need for a shift towards sustainable agricultural practices to address the growing challenges of climate change, resource depletion, and food security. He discussed key strategies such as the adoption of organic farming, efficient water management, crop diversification, and the use of renewable energy sources. He highlighted that sustainable agriculture is not only about maintaining productivity but also about preserving the environment, ensuring the well-being of farming communities, and promoting economic viability. By integrating these practices, agriculture can contribute to the long-term resilience of both local and global food systems.

Furthermore, he provided a global perspective on sustainable agriculture, drawing attention to successful initiatives and policies from around the world that could serve as models for other regions. He discussed how different countries are tackling the challenges of sustainability through innovations in technology, policy frameworks, and international cooperation. The lecture also touched upon the importance of education and awareness in promoting sustainable agricultural practices, urging institutions to play a proactive role in disseminating knowledge and fostering a culture of sustainability among future generations. Prof. Tiwari concluded by stressing that achieving sustainable agriculture requires a collective effort from farmers,



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policymakers, researchers, and consumers, all working together to create a more equitable and sustainable future for agriculture globally.

Second session was conducted on 21st February, 2024, on **“Ensuring Academic quality and Integrity through accreditation in Agricultural Education”** by Dr. K. M. Manjaiah, Principal Scientist, Division of Soil Science and Agricultural Chemistry, IARI, New Delhi. He emphasized that accreditation serves as a quality assurance mechanism, ensuring that academic programs meet established standards of excellence. This process involves rigorous evaluation by accrediting bodies, which assess various aspects of an institution's academic offerings, including curriculum design, faculty qualifications, infrastructure, and student outcomes. By adhering to these standards, agricultural education institutions can maintain the credibility and relevance of their programs, ultimately enhancing the employability of graduates and contributing to the advancement of the agricultural industry.

Moreover, the lecture highlighted the importance of integrity in the accreditation process, stressing that it must be conducted transparently and free from conflicts of interest. Sir, noted that institutions must commit to continuous improvement, using accreditation not as a one-time achievement but as an ongoing process to identify areas for enhancement. This approach ensures that agricultural education programs remain aligned with the evolving needs of the industry and society at large. By fostering a culture of integrity and continuous quality improvement, accreditation helps safeguard the academic standards of agricultural education, ultimately benefiting students, educators, and the broader community.

Third session was conducted on 23rd March 2024 on **“Ground water depletion: a threat to resilience of our future”** by Dr. R. C. Srivastava, Ex-Vice Chancellor, Dr. Rajendra Prasad Central Agriculture University, Pusa, Bihar. He delivered a compelling message about the critical challenges posed by the over-extraction of groundwater. Dr. Srivastava discussed the alarming rates at which groundwater levels are depleting, driven by factors such as excessive agricultural use, industrial demands, and inadequate water management practices. He highlighted that groundwater is a vital resource, supporting not only agriculture but also drinking water supplies



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Integral University, Lucknow

and ecosystems. The depletion of this resource threatens the sustainability of food production, the stability of ecosystems, and the availability of clean water for future generations.

Dr. Srivastava emphasized that addressing groundwater depletion requires urgent and coordinated efforts at local, national, and global levels. He advocated for the adoption of sustainable water management practices, including the promotion of water-efficient agricultural techniques, the implementation of stricter regulations on groundwater extraction, and the enhancement of public awareness about the importance of water conservation. He also stressed the need for innovative solutions such as artificial recharge of aquifers and the development of alternative water sources. The lecture underscored that without immediate action, the depletion of groundwater resources will severely undermine the resilience of communities and ecosystems, posing a significant threat to the future of global sustainability.

Fourth session was conducted on 8th April, 2024, on **“Advancements in Agricultural research and academic excellence”** by Dr. Jabir Ali, Professor, Economics and Business Management, Indian Institute of Management, Lucknow. Dr. Ali offered an insightful overview of the latest innovations and their impact on agricultural education. He emphasized the importance of integrating cutting-edge research into academic curricula to ensure that students are equipped with the most current knowledge and skills. He discussed various advancements in agricultural research, highlighting how these innovations are revolutionizing the industry. By incorporating these advancements into academic programs, institutions can prepare students to address the complex challenges facing modern agriculture, from climate change to food security.

He also stressed the role of academic excellence in driving innovation and progress within the agricultural sector. He pointed out that fostering a culture of research and academic rigor within educational institutions is essential for producing graduates who are not only knowledgeable but also capable of contributing to the advancement of agricultural science. The lecture highlighted the need for collaboration between academic institutions, research organizations, and industry stakeholders to ensure that agricultural education remains relevant and impactful. Dr. Ali concluded by emphasizing that the continuous pursuit of academic excellence and research



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innovation is key to sustaining agricultural productivity and ensuring a resilient future for global food systems.

Fifth session was on 27th April, 2024, on **“Ethical considerations in agricultural writing”** by Prof. Shamim Akhtar Ansari, Scientist G and Director, Institute of Forest Productivity, Ranchi. Prof. Ansari provided an in-depth exploration of the moral responsibilities and ethical challenges faced by writers in the field of agriculture. He emphasized the critical role that agricultural writing plays in disseminating information, shaping public perceptions, and influencing policy decisions. He highlighted that writers must adhere to the highest standards of accuracy, transparency, and fairness to ensure that their work contributes positively to the agricultural community and society at large. The lecture stressed the importance of properly citing sources, avoiding plagiarism, and presenting data and research findings honestly, as these practices are essential to maintaining the integrity of agricultural literature.

Prof. Ansari also discussed the ethical implications of the content itself, particularly when addressing sensitive issues such as biotechnology, pesticide use, and genetically modified organisms (GMOs). He underscored the need for writers to be aware of the potential impact of their work on public opinion and policy, urging them to consider the broader social, environmental, and economic consequences of the topics they cover. The lecture concluded with a call for agricultural writers to engage in continuous self-reflection and to remain committed to ethical principles, as their work plays a pivotal role in shaping the future of agriculture and its relationship with society.

The course was well received by all faculty members where their queries were answered by coordinators. The Session was well coordinated by Faculty Members. The refresher course was observed under the guidance of Prof. Mohd Haris Siddiqui, Director, Integral Institute of Agricultural Science and Technology and Prof. Saba Siddiqui, Head, Department of Agriculture, IIAST, Integral University.



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Glimpses of the refresher course





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