A Brief Report on Value Added Course on
"SUPPLY CHAIN OPTIMIZATION IN AGRICULTURE"
Course No: AGV-04-2324
(27th February, 2024 to13th March, 2024)
Organized by Department of Agriculture,
Integral Institute of Agricultural Science and Technology (IIAST)
Integral University, Lucknow

Supply chain optimization plays a pivotal role in agriculture by enhancing efficiency, reducing costs, and ensuring sustainability across the entire Agricultural ecosystem. Through optimized supply chains, farmers can streamline the process from production to distribution, minimizing waste, improving resource allocation, and maximizing yields. This optimization enables better inventory management, timely delivery of inputs like seeds and fertilizers, and efficient transportation of harvested crops to markets. Additionally, by leveraging data analytics and technological advancements, supply chain optimization in Agriculture facilitates better forecasting of demand, mitigates risks associated with weather fluctuations and market volatility, and ultimately contributes to increased profitability for farmers while ensuring food security for communities worldwide.

In response to this growing interest and demand, the Department of Agriculture took proactive steps by organizing a comprehensive virtual value-added course on "Supply Chain Optimization in Agriculture." The course, conducted from 27th February, 2024 to13th March, 2024, spanned over 30 hours and was thoughtfully designed by expert instructors. The Agricultural Supply Chain Optimization course focuses on enhancing efficiency and sustainability within agricultural supply chains. The course covered optimization techniques aimed at improving production, distribution, and market access while ensuring environmental and social sustainability. The initiative reflects the commitment of IIAST to provide knowledge and skills that align with contemporary needs and opportunities in the field of supply chain. This course was specially designed for all the Undergraduate and Postgraduate students of all departments throughout the university. A total of 276 students were registered and more than 199 students were passed in the course based on quiz and attendance.This was a virtual mode course conducted and lectures were delivered daily between 6:30-8:30 PM including Quiz.

The Value-Added Course was conducted under the guidance of Prof. Saba Siddiqui, Head, Department of Agriculture, Integral University and was coordinated and facilitated by the following faculty members.

1. Dr. Srishti Thakur
2. Dr. Ruqaiya Bano

The Course modules were addressed by the following resource persons:

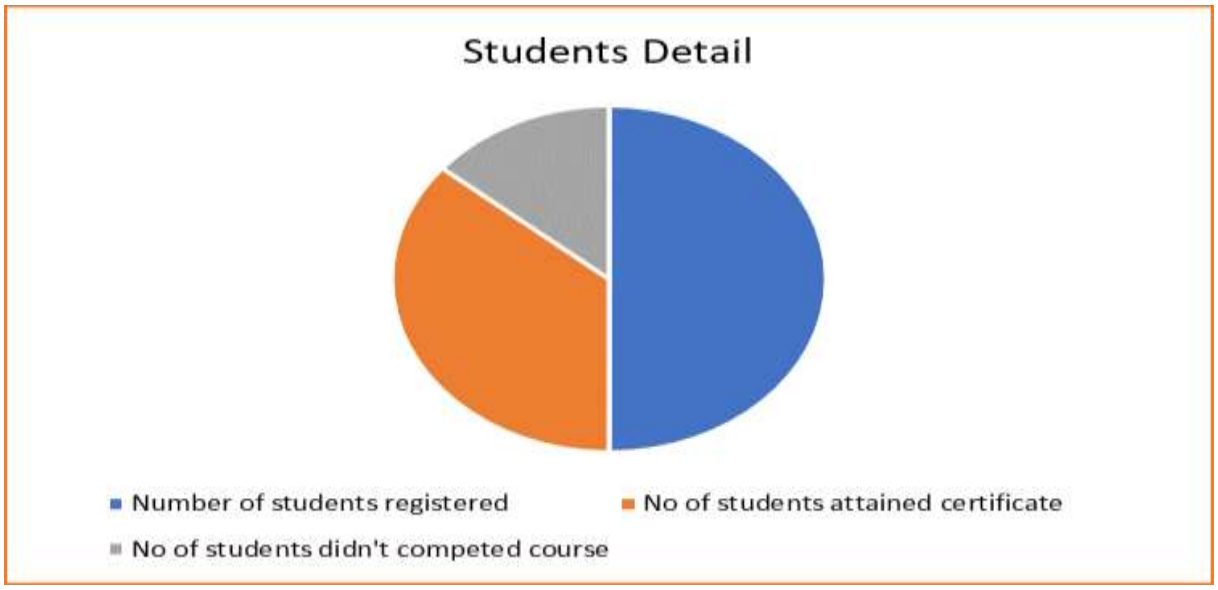
S.No.	Date		Course Instructor	Module	Outcome
	From	To			
1.	27/02/2024	01/03/2024	Dr. Srishti Thakur	Overview of agricultural supply chain components, Changing Business Environment, Challenges and opportunities in agricultural logistics, Dynamics of farm-to-market Operations **Quiz Test**	Students learned the basic knowledge of agricultural supply chain and its challenges and opportunities in agriculture.
2.	02/03/2024	04/03/2024	Dr. Ruqaiya Bano	Precision agriculture and data-driven farming techniques, Supply chain planning and management for agricultural products, Seasonal demand forecasting and inventory optimization **Quiz Test**	Students gained proficiency in utilizing cutting-edge technologies and data-driven approaches to optimize agricultural practices for enhanced productivity
3.	05/03/2024	07/03/2024	Dr. Srishti Thakur	Environmental impacts of agricultural practices, Implementing sustainable practices in farming and distribution. **Quiz Test**	Students learned analyzing the environmental impact and implementing strategies to minimize resource use and emissions while optimizing logistical

					efficiency.
4.	08/03/2024	10/03/2024	Dr. Ruqaiya Bano	IoT applications in smart farming and supply chain management, AI and machine learning for agricultural optimization, Blockchain for transparency and traceability in agricultural supply chains **Quiz Test**	Students understand how to design, implement, and manage sensor-based systems to optimize agricultural processes, improve resource utilization, and enhance crop yield and quality.
5.	11/03/2024	13/03/2024	Dr. Srishti Thakur and Dr. Ruqaiya Bano	Market integration strategies for agricultural products, Reducing food waste through optimized supply chains, Case studies on successful market access and waste reduction initiatives in agriculture **Quiz Test**	Learned to analyze, implement, and adapt market integration strategies to effectively navigate global markets and optimize business competitiveness.

All the participants who successfully completed the course were awarded e-certificates on the basis of their quiz test, feedback for every unit, attendance, general feedback, and moreover 50% qualifying criteria for the course. The VAC on Supply Chain Optimization in Agriculture provided a comprehensive learning platform, equipping attendees with a blend of theoretical understanding and hands-on proficiency, while highlighting the promising applications of IoT in the agricultural sector.

Number of students registered

Number of students registered	No of students attained certificate	Percentage engagement
276	199	72.62



CERTIFICATE

Of

Completion of Value Added Course on

SUPPLY CHAIN OPTIMIZATION IN AGRICULTURE

This is to certify that Mr./Ms.....
Enrolment No. .....has completed the 30 hours **Value Added Course** on **Supply Chain Optimization in Agriculture** offered by Integral Institute of Agricultural Science and Technology (IIAST), Integral University, Lucknow from 27th February 2024 to 13th March 2024.

Dr. Srishti Thakur
Course Co-Ordinator, IIAST
Integral University, Lucknow

Dr. Ruqaiya Bano
Course Co-Ordinator, IIAST
Integral University, Lucknow

Prof. Saba Siddiqui
Head, Department of Agriculture,
IIAST, Integral University, Lucknow