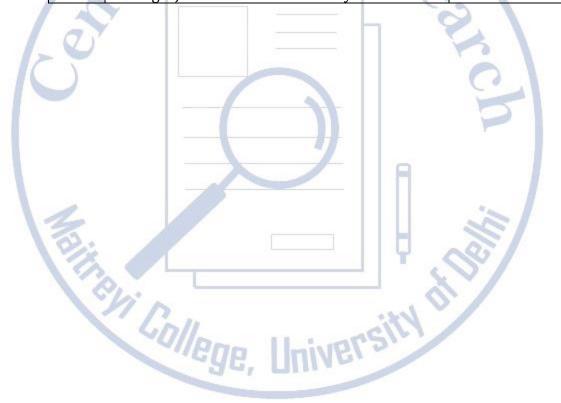
Report of Centre for Research 2020-21

S. No.	Name of Event	Page No.
1	Summer Internship Programme (SIP) 2020-21	2
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1. Summer Internship Programme 2020-21

The year 2021 began with a steep increase in COVID cases around the world, and the second wave shattered many dreams and hopes of a normalized life. We were once again left with the cycle of everything being online and the internet being our greatest ally. However, the intensive interest in learning and research did not decrease despite the outbreak and lockdowns. As part of the Summer Internship Program, SIP 2020-21, 30 research projects were carried out from April 25, 2021 to June 24, 2021 under the aegis of CFR and ACPG. A total of 38 faculty members and 89 students were involved in these projects. External experts from different Universities such Cotton University, Assam, IGNOU, Sharda University, University of Lucknow etc., evaluated all the project reports, as is our standard approach.

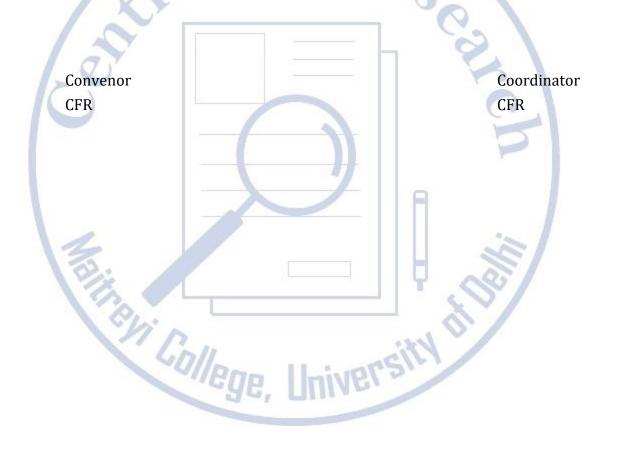
Projects carried out under SIP 2020-21

S. No	Code	Title of proposal	Department	Mentors	Mentees
1	SIP20- 21/01	An Insight into Application of Land Use Land Cover Analysis towards Sustainable Agriculture within Jhajjar district)	Botany	Dr. Pooja Baweja Ms. Priyadarshini Singh	Jyoti Singh, Neha, Mansi (Bot Hons 2nd yr); Isha Arya (Bot Hons 1st yr)
2	SIP20- 21/02	In-silico study of Pesticides for the binding of Calyx of Bovine β-Lactoglobulin	Chemistry	Dr Lata vodwal and Dr Durgesh Kumar	Tanishka Pal, Ritika Khanna (Ls 2nd yr); Kirti, Rishika Arya (LS 2nd yr)
3	SIP20- 21/03	Functionalized nano biopolymer for designing of sustainable crop protection formulations	Chemistry	Dr Gazala Ruhi, Dr Hema Bhandari and Dr Rajni Johar	Riya Nimbekar, Sakshi Maam, Sakshi Rajain, Leesha, Diksha, Rupa Adhikari (Chem Hons)
4	SIP20- 21/04	Optimizing The Consumption Of Products Of Petroleum Industry: An Approach Towards Agricultural Sustainability	Commerce	Dr Sonal Babbar	Vaishnavi Rastogi, Khushi, Bhawna Saini
5	SIP20- 21/05	Food Security, Sustainability and Markets: Understanding the Protest of Farmers against Laws	Commerce	Dr. Saroj Rani	Soumyata Katiyar and Shaivy Pulak (BA P 1st yr)
6	SIP20- 21/06	Exploring the sustainable future of Handlooms : A dive	Commerce	Ms. Kritika Khurana	Nandika Monga and Vani Shukla (B.com Honours, 2 nd year)

		into its raw materials market, exports, growth and prospects			
7	SIP20- 21/07		Economics	MS. NIDHI CHAND	SEJAL SURI, AKANKSHA YADAV (Eco Hons 1st yr)
8	SIP20- 21/08	Organic Farming and Sustainable Development	Economics	N. Shradha Varma	Sagarika Rastogi and Prerna Agarwal (Eco Hons 1st yr)
9	SIP20- 21/09	Indigenous knowledge, new age modernism to achieve sustainable agriculture and its impact on farmers	Economics	N. Shradha Varma	Diya Nagpal and Risha Sinha(1st year- B.A Hons Economics)
10	SIP20- 21/10	Implementation Gaps in Sustainable Agriculture: An Analysis of the Indian States Uttar Pradesh and Bihar)	Economics	N. Shradha Varma	Nandini and Jigisha Sharma (Eco Hons 1st yr)
11	SIP20- 21/11	Rebound agriculture - Traditional techniques for contemporary needs	Economics	N. Shradha Varma	Geet Nakra and Yashita Srivastava; Eco Hons 1st yr
12	SIP20- 21/12	ECONOMIC CHALLENGES IN WIDE-SCALE ADOPTION OF SUSTAINABLE AGRICULTURAL PRACTICES IN INDIA	Economics	Ms Devangana Jha;	Vaanya Bhalla and Nandini Singhal (Eco Hons 1st yr)
13	SIP20- 21/13	Socio - Economic Issues of Sustainable Agriculture in India	Economics + Sociology (Interdisciplinar y)	Dr. Priti Mendiratta Arora and Dr. Aruna Grover	Vanshika Gulia and Laxmi Kumari Mahato (BA Prog); Pooja and Ritika Choudhary BA (H) Sociology 1st year
14		The Impact of APMC Amendment Act on Agribusiness and Farmers' Welfare)	Economics	preeti mendiratta	Eshna Jain and Priyal Nanda
15	SIP20- 21/15	Recognition of the Role of Agriculture in Assamese Society: A Study of Culture, Folklore and Cinema	English	Dr Richa Chilana	Debangi Kashyap, Pratikshya Parashar (Eng Hons 2nd yr)
16	SIP20- 21/16	Women in Premchand's Rural Settings: Negotiating Tradition and Modernity	English	Dr Richa Chilana	Riya Arora and Anjali Sharma (Eng Hons 2nd yr)
17	SIP20- 21/17	Sustainable Production of Rice in West Bengal: A Mathematical Model of Rice Growth)	Maths	Dr. Neetu Arneja , Mr. Saurav Kumar	Anmoldeep, Sunidhi Chadha, Saloni, Sunanda (Maths 1st & 2nd yer)

18	SIP20- 21/18	Synthesis And Testing Of Structured Water For Sustained Agriculture	Physics	Dr. Parul Yadav, Dr Shalini Lumb Talwar	Ms. Gunjan, Ms. Bhawna, Ms. Neha (Phy Hons 2nd year); Ms. Rishika Mittal (Phy Hons 1st yr)
19	SIP20- 21/19	Design of Hydroponics system using Arduino to monitor physical parameters required for plants growth	Physics	Dr. Parul Yadav Dr. Mansi Dhingra,	Vishakha (Phy Hons 3rd yr); Sneha 2, Ms. Vaishali 2, Ms. Pranshi (Phy Hons 2nd yr)
20	SIP20- 21/20	Aquaponics- A Method Towards Sustainable Agriculture	Physics	Dr. Prajwalit Shikha	Simrat Kaur (1652): B.Sc.(H) Physics- I Year (Sem-II); Khushi Poonia and Anchal Pandey (Phy 2nd yr)
21	100	Vedic Farming: A Boon to Indian Agriculture	Sanskrit	Dr Rekha Kumari;	Niharika Khurana; BA Hons Sanskrit 2nd yr
22	SIP20- 21/22	Interrogating the idea of 'sustainable culture' and its impact in India	Sociology	Dr Rashi Bhargava;	Amrata Yadav and Muskan Shrestha; BA prog 2nd yr
23	SIP20- 21/23	Sustainable agriculture and irrigation methodsa case study of Kangra district, Himachal Pradesh, India.	Sociology	Mr Pawan Harsana	Sanyukti Dewan and Sneh Thappa
24	SIP20- 21/24	Minimum Support Price Conundrum and Sustainable Farming: a study of the impact of socio-economic factors on sustainable agriculture	Sociology	Mr Pawan Harsana	Vanshika and Sanjana (Socio Hons 1st yr)
25	SIP20- 21/25	Review Based Analysis of Modern Farming in Sustainable Agriculture)	Zoology	Dr Luni and Dr Tejendra Kumar	Megha Lakhera, priya (LS 3rd yr); Versha Aggarwal (zoo hons 1st yr); Prashansa (LS 1st yr)
26		Ladybird beetles as biocontrol agents: their contribution in sustainable agriculture sustainable agriculture	Zoology	Dr Meena Yadav	Anshu Rana and Garima; Zoology Hons 2nd yr
27	SIP20- 21/27	To monitor the growth of plants using bio-organic approach for Sustainable agriculture	Interdisciplinary (Chemistry & Botany)	Dr. Kiran Soni , Dr. Gita Batra Narula, Dr. Alka B Vadakan, Dr. Shweta Sharma, Ghai, Prachi (Che Hons 1st & 2nd yn	
28	SIP20- 21/28	IoT-based smart farming for sustainable agriculture in India		Ms. Geetan Manchanda and Dr. Shikha Badhani Aadi Lochab and Bhumika Papnai (B (H) Maths IV Sem)	

29	SIP20-	"Polymeric 'Smart Nuribots'	Interdisciplinary	Dr. Swarndeep Kaur	Shweta Tiwari,
	21/29	for Sustainable Aquaponics	(Chemistry**+	Sethi; Dr Kiran soni and	Swarnali Panda, Charu
		Agriculture"	Botany)	Dr Geeta Batra Narula,	Gupta, Shivangi Saini
				Dr Pooja Baweja	(chem hons 3rd yr);
					Divya Bisht (chem 1st
					yr); Padmaakshi
					Chakravartty, Rupika
					Gaba,
	SIP20-	An Integrative Approach	Interdisciplinary	Dr Veena Ghuriani & Dr	Pragya Deolal (BA P
	21/30	towards Recommending	(Comp sci +	Jyotsna Talreja Wassan	3rd yr); Vidushi
		Farming Solutions for	Economics)		Sharma, Dimpy Dalal,
		Sustainable Agriculture			Aditi Goyal, (BA Eco
30	- 12	LOP			2nd yr);
	Total	30	1	38	89

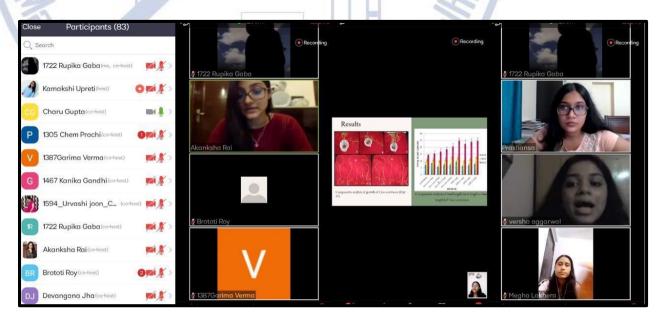


2. Avlokan 2021

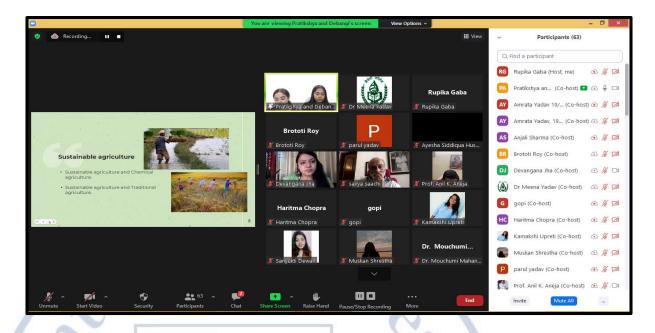
Based on the review, selected projects were presented before external jury members in the SIP presentation series, this year onwards known as "Avlokan". On October 5, in Avlokan Session I, project numbers SIP20-21/01, SIP20-21/02, SIP20-21/18, SIP20-21/25, SIP20-21/26, SIP20-21/27 and SIP20-21/29 were presented in front of Jury members: Dr. Suman Govil, Ex-Sr Advisor, DBT, Ministry of Science & Technology, Government of India and Prof. Vaishali Singh, Guru Govind Singh Indraprastha University, Delhi. There were a total of 420 participants.

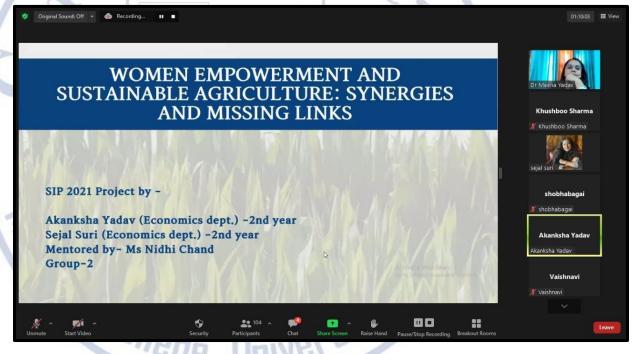
On October 21, in Avlokan Session II, project numbers SIP20-21/04, SIP20-21/07, SIP20-21/09, SIP20-21/11, SIP20-21/12, SIP20-21/13, SIP20-21/14, SIP20-21/17, SIP20-21/28 and SIP20-21/30 were presented before Jury members: Prof. Shobha Bagai, Cluster Innovation Centre, Delhi University and Prof. Paramjit, Delhi School of Economics. There were 104 participants. On October 26, in Avlokan Session III, project numbers SIP20-21/15, SIP20-21/16, SIP20-21/22, SIP20-21/23 and SIP20-21/24 were presented in front of Jury members Prof. Savyasaachi, School of Social Sciences, JMI, Delhi and Prof. Anil Aneja, Department of English, Delhi University. There were 63 participants. The projects were presented in online mode and the projects titled 'To monitor the growth of plants using bio-organic approach for Sustainable agriculture', 'An Integrative Approach towards Recommending Farming Solutions for Sustainable Agriculture' and 'Interrogating the idea of 'sustainable culture' and its impact in India' were judged the best projects for the respective days.

Glimpse of Avlokan 2021



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3. Annual Research Programme 2020-21

A new venture, Annual Research Programme (ARP), was initiated from January, 2020 by the Centre for Research and ACPG keeping in mind the enthusiasm and zeal shown by faculty and students alike for pursuing research activities throughout the year. In its very first year, 5 projects were completed including nine faculty members and 25 students.

Research Projects completed under ARP 2020-21

S.No.	Department/	Title of the Projects	Mentors	Mentees
	S		10	
1	Botany and	Literature survey for	Dr Haritma	Nisha Poddar, Sakshi
4	Chemistry	the comparative	Chopra,	suman, Nikita Goel,
0	7	analysis of pollution	Dr. Pooja	Ritika (Botany Honsn
		scavenging potential	Baweja	3 rd yr); Aparna Rai (BSc
	1	of the perennials	Dr. Ankita	Life Science, 3 rd yr) and
		growing in Maitreyi	Sehrawat	Jyoti Singh (Botany
		college campus	¥	Hons. 2 nd yr)
2	Chemistry and	Evaluation of Soil	Dr. Ramesh	Shreya Mandal, Kalpana
	Zoology	Fertility in Different	Kumari	(Chemistry
		Parts of Delhi-NCR	Dr Meena	Hons. 2 nd yr); Anshu
1		Region: Role of Ant	Yadav	and Riya (Zoology Hons
33.		nests in Soil Fertility	H 🚿	2 nd yr)
3	Chemistry and	A cross-sectional	Dr Haritma	Isha, Rishika Malhotra,
1.	Zoology	survey to assess the	Chopra,	Diksha, Kirti,
	M'D	role of complementary	Dr Jyoti	Purnima Sharma,
	6011	and alternative	Singh,	Twinkle Soni (Zoology
	OILE	medicines used for	Dr Brototi	Hons.); Akanksha
		management of	Roy	Upadhyay, Neha (BSc
		diabetes		(P) Life Science)
4	Chemistry and	Pure water pure life-	Dr Haritma	Anamika Sharma,
	Zoology	development of safe	Chopra	Rishika Maji, Annu
		and economic water	Dr Renu	Kumari, Drushti Sable
		purification method	Gupta	and Preena
			Dr Archana	(Zoology Hons. 3 rd yr)
			Aggrawal	

5	Zoology	Carbonated Soft Drink	Dr Meena	Ritika Kalra and
		Consumption among	Yadav	Lavanya Ranjan
		Adolescents and		(Zoology Hons 3 rd yr)
		Young Adults in Delhi:		
		Is there a need to		
		change the habits of		
		intake?		
	Total	5	9	25



4. Student Apprenticeship Programme 2021

Under Student Apprenticeship Programme (SAP) 2021, four students were trained for various skills such as event management, data management, soft skills, social media handling etc.



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5. Training workshop 2021

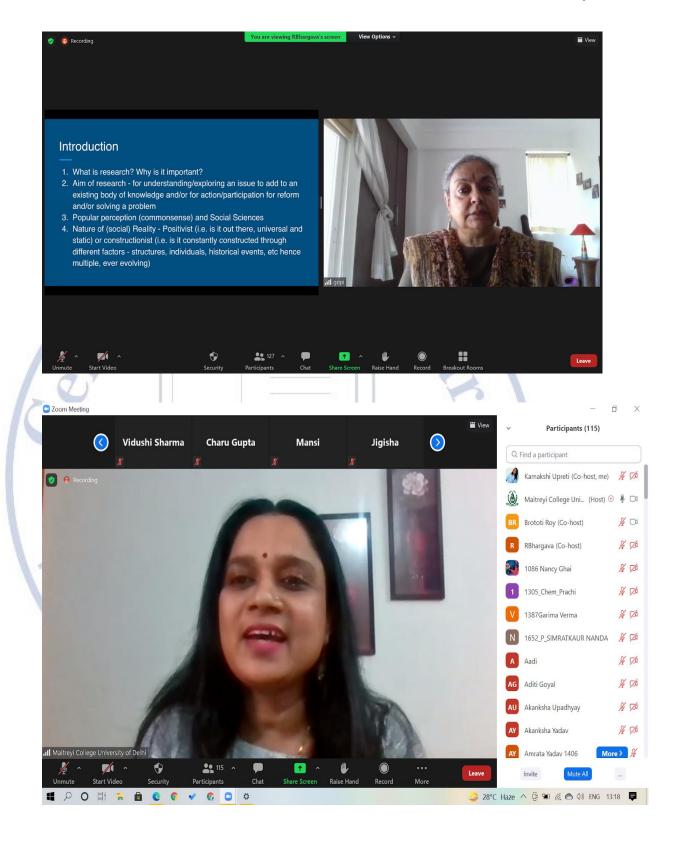
A one-day Training Workshop for SIP 2020-21 was organized on May 20, 2021 by Centre for Research and ACPG, Maitreyi College. The workshop was attended by 112 participants including 89 students as well as 23 faculty members from the different Departments of Maitreyi College. The workshop was organized to familiarize the participants with the basics of research methodology and technical report writing. Dr. Haritma Chopra, officiating Principal and coordinator of Centre for Research (CFR) Maitreyi College, very lucidly portrayed the various activities and the achievements of CFR since its inception in 2017. She also elaborated on the importance of a research-based education system. This was followed by a presentation of Dr. Gopi. D. Tripathy on the relevance of theme-based research and interdisciplinarity. Dr. Brototi Roy educated the participants about the basics of Research Methodology and implication of good samples and ethical concepts to be considered in survey-based research and interviews in research work. Dr. Rashi Bhargava and Dr. Devangana Jha explained in detail about quantitative and qualitative data. Dr. Meena Yadav illustrated the nuances of technical report writing.

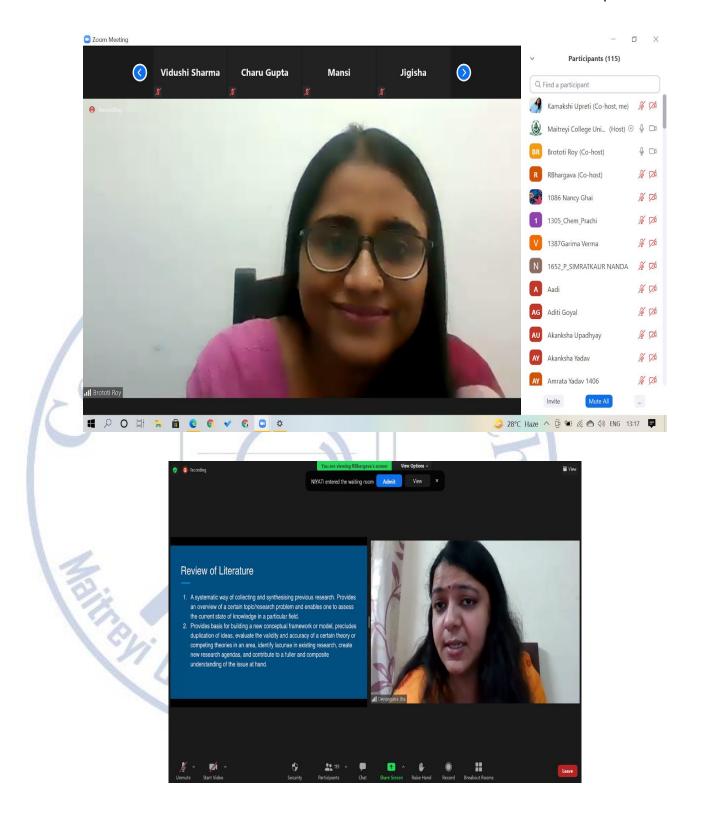
This was followed by a very interactive question and answer session. The participants expressed their gratitude to the organizing committee from CFR and ACPG for conducting the workshop which they felt was very relevant and useful for them. They also requested CFR for organizing similar workshops in future.

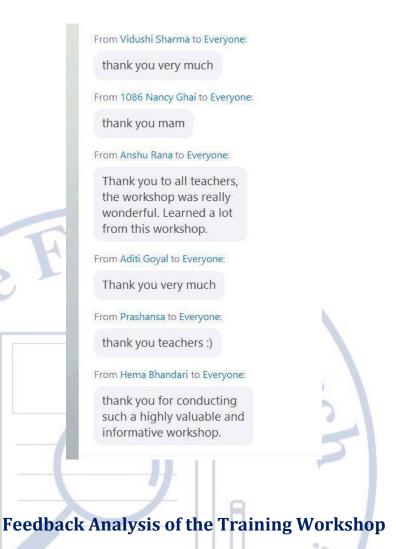
Glimpses of Training Workshop

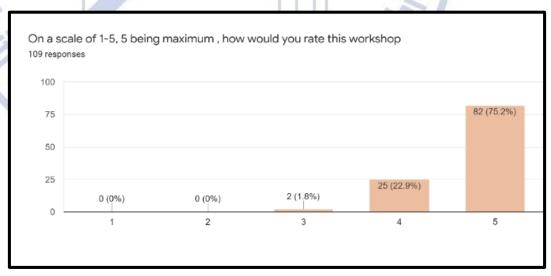
Participants (119) Pragya Deolal **(2)** Ritika Kalra Khushi Waiting Room (2) Wessage Admit all Drushti Sable In the Meeting (119) Maitreyi College Uni... (Host) 💿 🔏 🖂 BR Brototi Roy (Co-host) \$ D1 **å** □1 1086 Nancy Ghai % Th 1305 Chem Prachi % TX V 1387Garima Verma N 1652_P_SIMRATKAUR NANDA 26°C Light rain ^ 👵 💌 🖟 🔿 🕪 ENG 11:11 📮

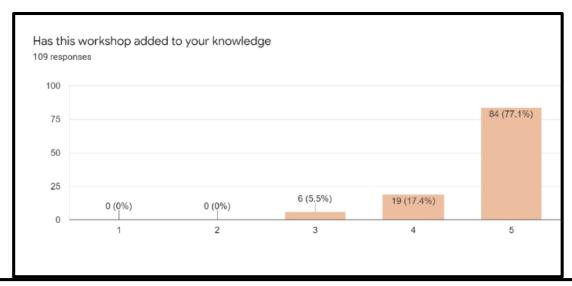
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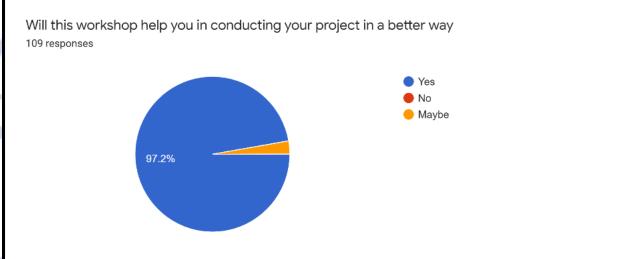


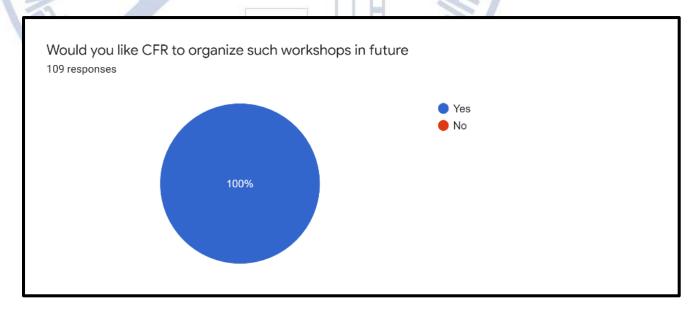












6. Equinox 2021: The Annual International Conference

Theme: Sustainable Agriculture: Negotiating Tradition and Modernity
August 12-14, 2021

Centre for Research, Maitreyi College, University of Delhi organized **Equinox 2021**, the Annual International Conference, virtually, under the aegis of *Vantage: Journal of Thematic Analysis* on the theme, "Sustainable Agriculture: Negotiating Tradition and Modernity" from **August 12-14**, **2021**. Prof. Haritma Chopra was the coordinator of the conference and Dr. Gopi Devdutt Tripathy, Department of Sociology, Dr. Brototi Roy, and Dr. Meena Yadav, Department of Zoology, Maitreyi College were the convenors.

With agriculture providing employment to seventy percent of India's population and the global focus on Sustainable Development Goals (SDGs) such as reducing poverty and inequality, restoring the ecological balance, and harmony between nature and mankind, a strong agricultural sector is very crucial to meet the SDGs. The conference addressed some of the major concerns in this area which are especially relevant for India as we celebrate the **75th year of our Independence**. It engaged with the relationship between traditional and modern agricultural practices with a focus on sustainable agriculture that entails socially acceptable, economically viable and ecologically sensitive practices.

The conference included talks by eminent speakers such as Prof. S.P.S Beniwal (Chairman, Agri History Foundation), Dr Chandish Ballal (Former Director ICAR-NBAIR), Dr. Shaikh Tanveer Hossain (Ambassador, IFOAM Organic International and ALGOA, Tokyo, Japan),

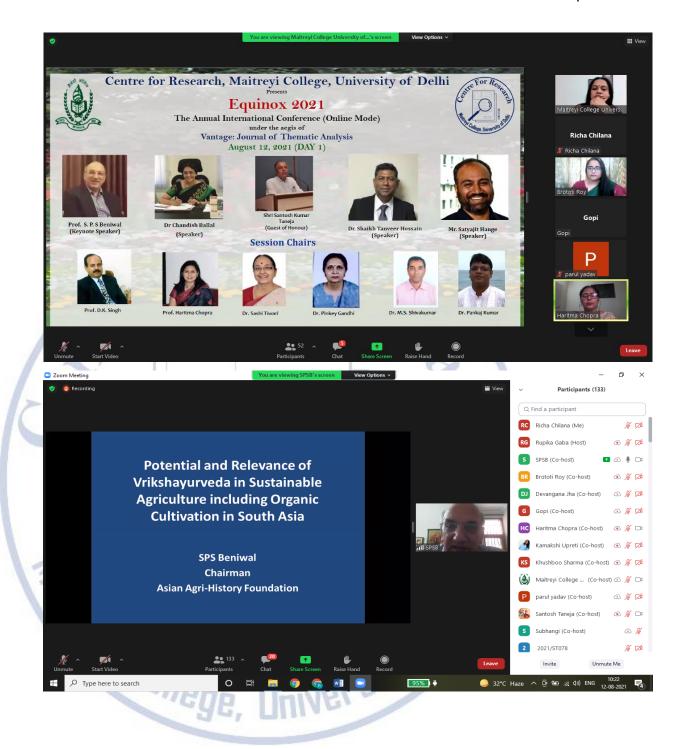
Dr Debojyoti Das (Lecturer and Global Research Associate, School of Global Studies, University of Sussex, UK), Prof. Savyasaachi (Department of Sociology, Jamia Millia Islamia), Prof. A.R Vasavi (Independent Scholar and Secretary, Punarchith Collective, Karnataka), Prof. G.K Garg (G.B Pant University of Agriculture and Technology, Pantnagar) and Dr. Nitu Goswami (University of British Columbia, Canada). In addition to theoretical engagements, there were fascinating perspectives from the field such as that of Mr. Satyajit Hange (Co-Founding Farmers, Two Brothers Organic Farm) who will talk about his interesting journey from being a banker to

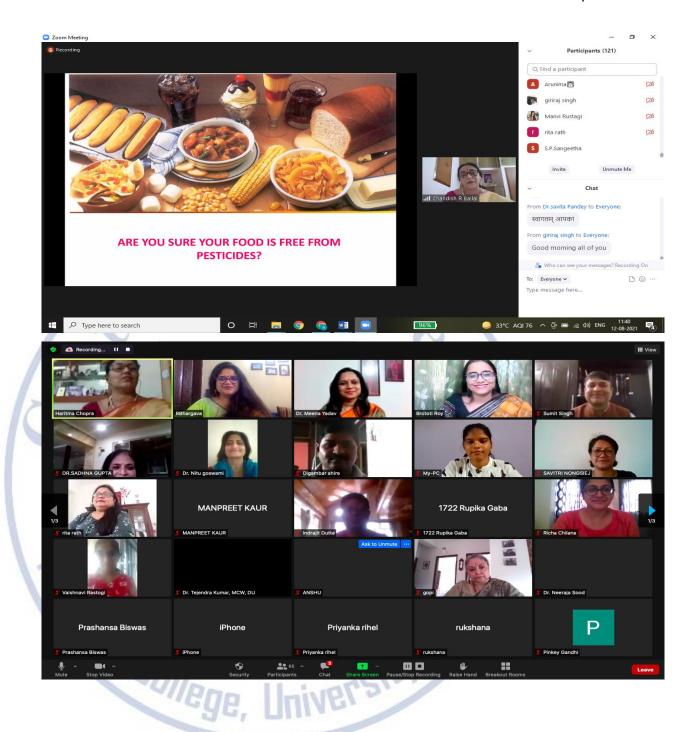
an organic farmer with customers from all across the globe. Faculty members and student participants from all across the globe presented papers on several pertinent themes such as organic agricultural practices, social issues related to sustainable agriculture, innovative technologies in agriculture etc.

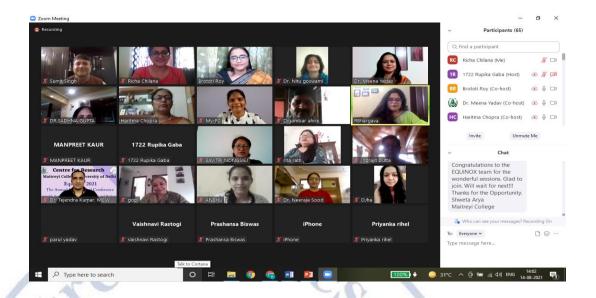
The Chief Guest of the Valedictory session, Prof Askok Kumar Prasad, Dean of Faculty of Sciences praised the excellent conceptualization and execution of the International Conference.

185 registered participants attended the conference along with many students and Faculty members of Maitreyi College.

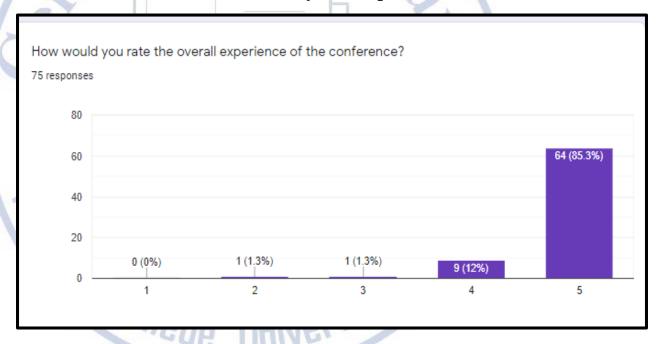


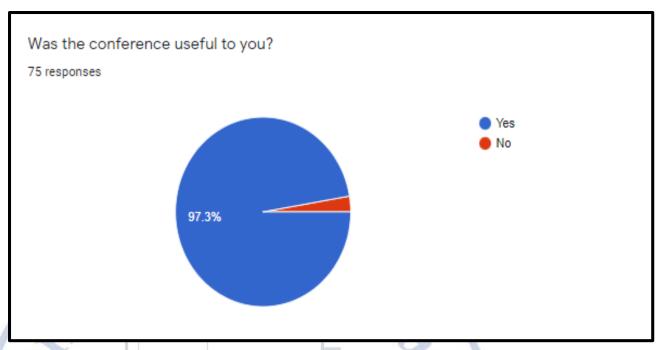


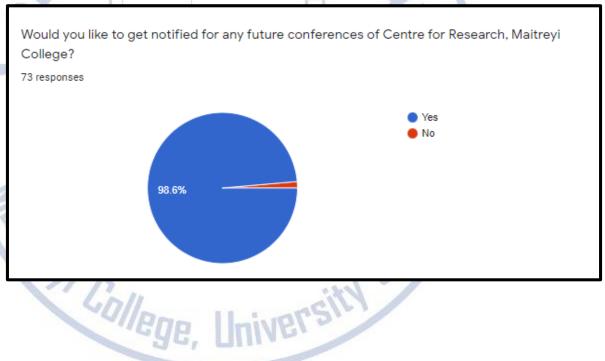


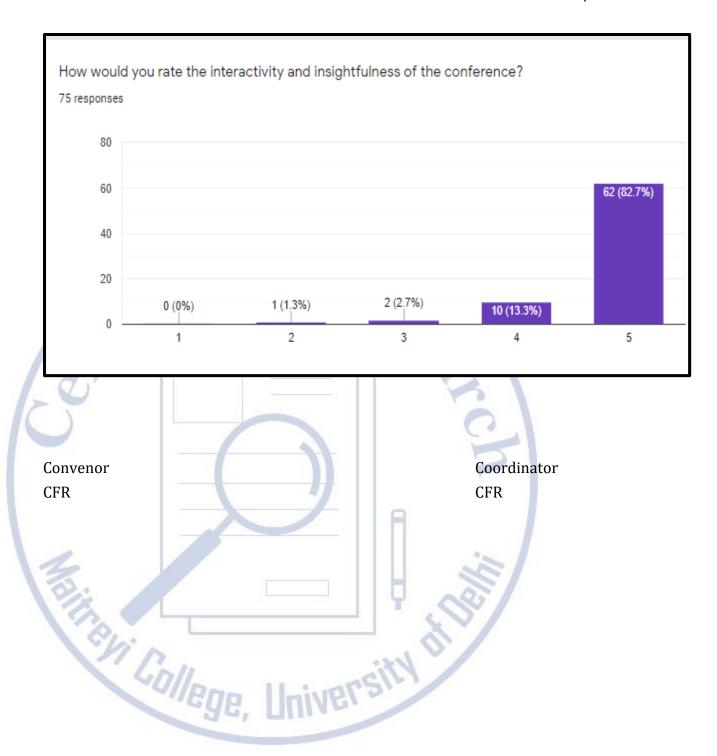


Feedback Analysis of Equinox 2021



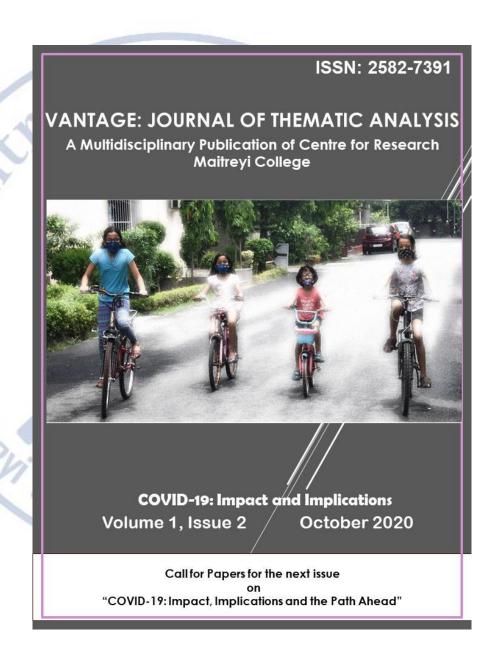






7. Vantage: Journal of Thematic Analysis

The October, 2020 issue on the theme 'COVID-19: Impact and Implications' and April, 2021 issue on the theme 'COVID-19: Impact, Implications and Path Ahead' were published. ISSN for the journal was obtained (ISSN: 2582-7391). Digital Object Identifier (DOI) from CrossRef was also obtained for the articles published in Vantage.



ISSN: 2582-7391

VANTAGE: JOURNAL OF THEMATIC ANALYSIS

A Multidisciplinary Publication of Centre for Research
Maitreyi College



COVID-19: IMPACT, IMPLICATIONS AND THE PATH AHEAD

Volume 2, Issue 1 | April 2021

Convenor Coordinator CFR CFR