SAGE Report 2023

Junior Ar

## The Sustainability Ambassadors Global Exchange Program 2023

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Executive Summary
The SAGE Senior Ambassadors
The SAGE Junior Ambassadors
the echo network Summit
48
Students
88
Instructors
120

Summit Participants

## **Executive Summary**

From June - October, 2023, 22 Masters and PhD students and 26 undergraduates embarked on a 20-week journey to learn how to engage science and technology with society known as the Sustainability Ambassadors Global Exchange (SAGE) Program. The SAGE Senior Ambassadors program is a short-term exchange program (STEP) for Indian and Nordic Masters or PhD students from social, natural, physical, and engineering sciences, including an immersive and interactive program to understand cross-sectoral and interdisciplinary research surrounding current on-ground issues facing India. The SAGE Junior Ambassadors program is an interactive training experience of 2-4 hours per week plus a community outreach activity hosted by the echo network, Medha <u>Foundation</u> and <u>Vigyan Shaala</u>. These two programs joined together with over 120 of our network members in total on August 10-12 at the first echo network summit. Here, the Senior Ambassadors shared their 6-week research projects with all participants, and both stages of Ambassadors worked with our network members to develop three-year project concepts for our upcoming SAGE Fellows program in 2024.

## The SAGE Senior

## Ambassadors

"I learned a lot about recent advancements and ongoing research in the sustainability industry, specifically about the areas that need more research"

-Bhawna Chauhan, IIT Ropar



"One key realization that emerged from the discussions is the interconnectedness of various areas – this is especially true when it comes to ecosystem valuation, but it extends to all. It became evident that these domains are not mutually exclusive but rather complement each other in achieving sustainable outcomes"

#### -Dorotea Rossi, Norwegian School of Economics





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22 Indian and international postgraduates (i.e. currently in or have completed Masters or PhD) participated in this multi-week summer STEP program. This program is an integral part of the echo network's multi-stakeholder <u>Communities of Practice</u>. In June, 2023 through online interactive discussions, students first learned about key topics and approaches from our network experts working on the ground with topics such as circular bioeconomy, food security and nutrition, food systems, climate action, ecosystem services and preservation, water and sanitation (WASH), OneHealth, ecosystems-based adaptation, and regenerative agriculture, relating to echo network problem statements. In June and July, 2023, Senior Ambassadors performed remote collaborative pilot projects and shared information and expertise among the international consortia mentors and network members (see team below)

In early August, 2023, a 2-week STEP training and networking experience was held in Bengaluru, India. In the process, students were exposed to real-world problems by engaging with the consortia members, key stakeholders, and communities through highly interactive and engaging lectures, field visits, and other activities. The students presented a mid-program analysis of their understanding and ideas to their mentors and our Implementation Partners. At the end of the STEP training, a Network Summit was held with students and consortium members to present pilot project outcomes. As a final presentation at the Network Summit in Bengaluru, the students pitched their ideas/experiences to develop future plans towards our larger outcomes with SAGE Fellows. During the Network Summit, the consortia members and students worked together with project results to develop ideas/strategies/questions on the 4 focus areas. The participants were provided the opportunity to establish collaborations to tackle the outlined projects through long-term collaborations.

As an extension of the program, the Senior Ambassadors also served as peer mentors to the Junior Ambassadors. In the week before the Summit, the two groups met together and each Junior Ambassador was peer-taught by a Senior Ambassador in his or her area of research. This information was used to codevelop evidence-based talking points that the Junior Ambassadors will learn to take into their communities (see JA summary below).

#### See the syllabus <u>HERE</u>

"It was interesting to learn how professionals from different technical backgrounds can work together for the same purpose. I believe a main focus was to consider behavioural changes in the whole chain (from production to end life) of a product to see how individual or community actions can actually make a difference"

-Claudia Anselmi, Technical University of Denmark

#### Meet the team



#### Ambassadors



#### Advisors



#### Mentors



Human Library

**Field Trips** 



#### $\bullet \bullet \bullet \bullet \bullet \bullet \bullet$

"From the field trip to the Bangalore Creative Circus, I was able to appreciate context mapping and stakeholder mapping as effective methods of understanding a problem. I also learned a lot about heat waves, a concept I did not know much about, and understand the causes and implications of it. I feel the BCC is a living example of how we can incorporate sustainability into our daily lives. I hope to spread the examples I witnessed there in my life and use their implementation of sustainability ideas as solutions to many of our problems. "

-Aswathy Ram, Azim Premji University





"The field trip to BR Hills was truly an unforgettable experience that left a profound impact on me. Throughout the trip, I learned some really important things that have shaped my perspective. One of the most crucial insights I gained was the need to acknowledge tribal communities as invaluable contributors to scientific research. They have a lot of traditional knowledge to offer, and it's important to include them in studies and share the results with them. Additionally, I also realized the essential connection between tribal involvement and effective forest conservation. The concept of cosettlement emerged as a groundbreaking approach, highlighting the symbiotic relationship between tribal communities and the preservation of our forests. "

-Arun Sai Kumar, ICRISAT Hyderabad



#### $\bullet \bullet \bullet \bullet \bullet \bullet \bullet \bullet$

"During the field trip to Saahas Zero Waste Recycling, their work served as a remarkable inspiration for recycling practices and sustainable products. Witnessing their commitment to the environment and resource management left a lasting impression on me. The sad reality is that as a global community, we humans generate an alarming amount of waste every day. Our consumption patterns, fast-paced lifestyles, and inefficient waste management systems have led to an extreme waste crisis. This experience has motivated me to explore and promote recycling practices in my research and future career endeavors. I aim to incorporate similar sustainable approaches into my work to contribute to a more circular and environmentally conscious society."

-Praful Panicker, University of Calicut

## The SAGE Junior Ambassadors

"I learnt from so many experienced people, made new connections, and enjoyed the whole summit as well. It has been a wonderful experience"

-Rishabh Mishra, Banda University of Agriculture and Technology



"The experience was truly amazing, filled with valuable learning and a sense of contribution to the community. During this program, I had the privilege of interacting with senior ambassadors, top scientists in India, esteemed professors, and field specialists. This experience has not only enriched my knowledge but also ignited my passion for contributing to sustainability efforts. I look forward to applying the insights gained during this program to make a positive impact on the community and society at large. I'm super excited for upcoming offline classes."



- Garima Upadhyay, Fergusson College, Pune



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26 Indian undergraduates from four States participated in this multi-week program. Using a five-step process, this program was designed to leverage the power of trust through our science-based network to empower local "Sustainability Ambassadors" across India. These student ambassadors learned about, and then raised awareness on sustainability issues in their home communities on the topics of onehealth, regenerative agriculture, ecosystems valuation, and circular economy. At the end of the community activities, local community members will share current concerns they experience regarding these topics, and the ambassadors will respond to those community needs with targeted evidence-based actions provided by scientific experts, companies, and organizations.

The ongoing program consists of a 4-week course + 6-week independent project with communities to plan community action. `Equal numbers of students were selected from Medha Foundation and VigyanShaala programs, and both programs assisted with course logistics and student selection. Each Junior Ambassador has been mentored by a Senior Ambassador who helped the Junior to understand the Senior's research. In early August, the mentor teams identified 5 talking points on the issues examined by the Senior Ambassadors relevant to each Junior Ambassador's community. A 3-week course was then held to train the Junior Ambassadors in listening to communities, employing inclusive and equitable communication techniques, engaging in storytelling and multilingual media, and creating a communications plan. The course was hosted online by VigyanShaala platform. The echo network facilitated course

development with expert instructors (see <u>Advisory Team</u>). In September 2023, after developing a communication plan in collaboration with the expert instructors, students will disseminate the knowledge gained in their 26 home communities across Uttar Pradesh, Uttrakhand, Maharashtra, and Telangana. Students are tasked to convey their talking points effectively and also take back specific community needs identified by community members. Respective consortia members such as those developed in the Network Summit will then connect with these communities to address their needs. Progress will be monitored by the echo network and the Junior Ambassadors.

#### See the syllabus <u>HERE</u>

"The SAGE program not only offered a platform for knowledge-sharing but also acted as a conduit to establish connections with prominent entities from India and around the world. The networking opportunities created during the program have the potential to open doors to collaborative projects and initiatives that further the cause of sustainable development. This experience has left us inspired to contribute meaningfully to the ongoing efforts towards sustainable development, both within India and on a global scale."

- Pradeep Bhatt, Soban Singh Jeena University (SSJU)

Meet the team



#### Ambassadors



#### Advisors



Mentors

## the echo network Summit

95%

of attendees were satisfied with the event

84%

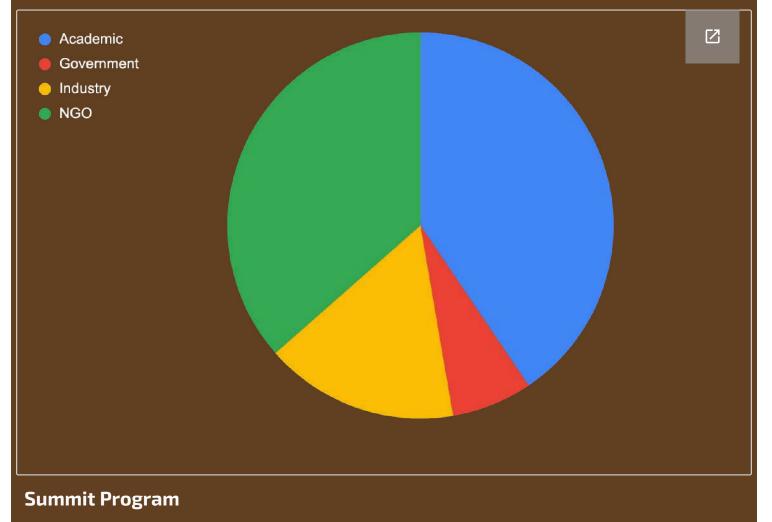
of attendees found the program relevant for their careers/work

#### 90+

#### Organizations were represented



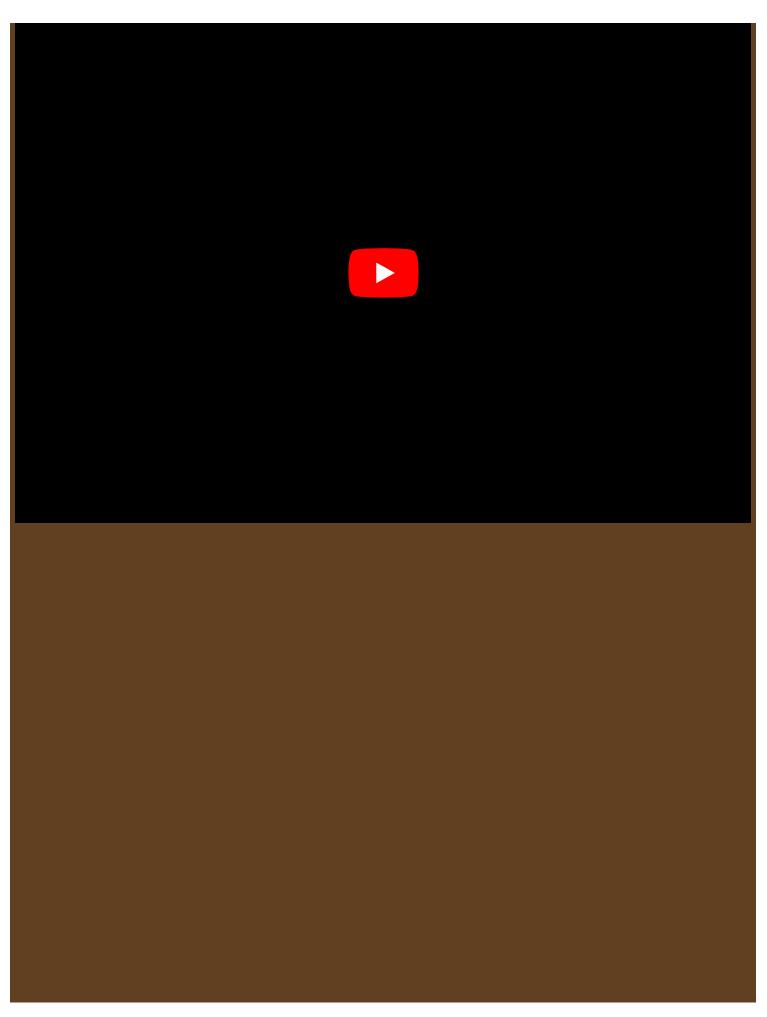
#### Attendee Breakup

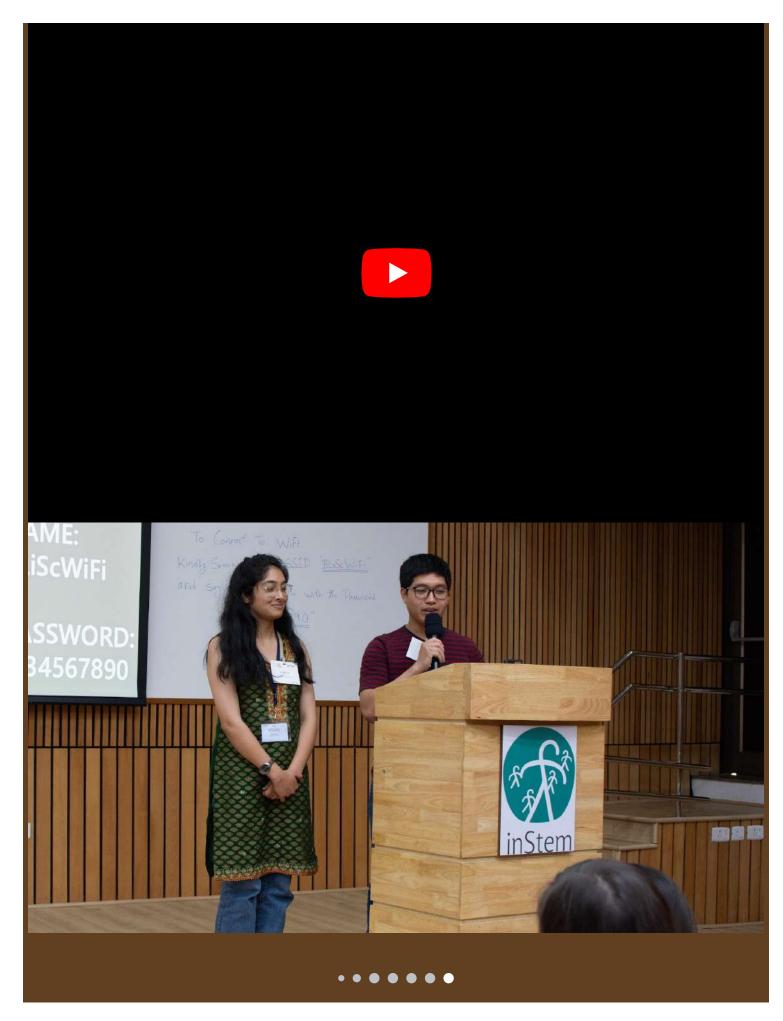


## The ectoric network Summit

Tata Institute for Genetics and Society August 10-12, 2023 Bengaluru, Karnataka, India

NetworkSummit2023.pdf





The echo network summit, held from August 10-12, 2023, was a series of interactions to develop long-term collaborations regarding India's sustainable development. It was also an important opportunity to engage with national and international network members within our four focus areas: OneHealth, Regenerative Agriculture, Ecosystem Valuation & Circular Bioeconomy. Attendees had the opportunity to meet both levels of the Sustainability Ambassadors Global Exchange (SAGE) Program, among whom were students from five Danish universities and students from universities in India and around the world.

The summit hosted individuals from at least 70 different organizations: 42% academic, 38% NGOs, 16% industry and 7% government. The attendees also participated in 11 separate Theory of Change discussions to identify projects for upcoming PhD Fellowships based on previous discussions and student projects. The participants listened to each other's points of view, discovered new ideas, and found new voices to drive several new collaborations.

#### Key takeaways:

- key opportunities for tackling issues in our focus areas.
- top project ideas that the echo network can jointly take forward in our Communities of Practice.
- participating consortia members for the echo network's SAGE PhD Fellows
  Program to be initiated in 2024.
- discussions on how a collaborative approach towards science and technology can lead to community-based solutions.

#### **Working Group Topics**

- 1. Flood and water-related mitigation and preparation strategies for a denguefree ward
- 2. Technology-based surveillance and prediction systems for communicable diseases
- 3. Sustainable solid waste management for a dengue-free ward
- 4. Digital tools for shifting from conventional to ecosystems-based regenerative agriculture
- 5. Linking nutrition with food production for localized and sustainable food systems and security
- 6. Developing an institutional ecosystem for localized agrifood systems
- 7. Ecosystem stewardship for resilient agricultural communities
- 8. Framework for valuation of ecosystem services for policymakers
- 9. Sustainable business strategies for converting crop biomass for agricultural side streams
- 10. Closing nutrient loops for sustainable plastic packaging
- 1. Water circularity across the value chain for the textile industry

#### **Next Steps**

- 1. Working group participants are currently adding their comments to the group notes, and then these notes will be compiled into a report to send to all participants.
- 2. Our implementation partners will review the project ideas emerging from the report and fine tune them to fit project goals and the upcoming SAGE Fellows Ph.D. program.
- 3. Finally, we will request participants and other relevant network members to participate in an online discussion to refine the project outcomes in our virtual Expert Dialogues.



#### **Network Hosts**



### Danish Academy of Technical Sciences

# SOCIAL alpha/

**Summit Host** 



#### **Implementation Partners**







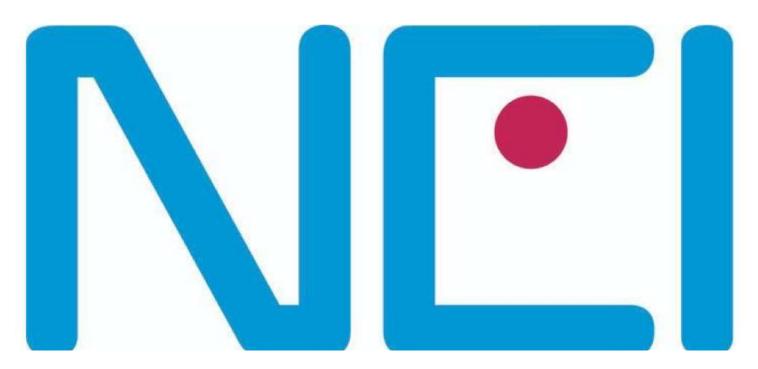




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**SAGE Ambassadors Program** 



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