

Report: Capacity building national workshop for teachers on communication and dissemination of Indian Knowledge System (IKS)

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CSIR-National Institute of Science Communication and Policy Research (NIScPR) organised a Capacity Building National Workshop for Teachers on “Communication and Dissemination of Indian Knowledge Systems” under the national initiative SVASTIK (Scientifically Validated Societal Traditional Knowledge) to communicate scientifically validated traditional knowledge to society, jointly with the Indian National Young Academy of Science (INYAS) under its flagship programme RuSETUp (Rural Science Education Training Utility Programme) and Maharshi Dayanand University (MDU), Rohtak on 16th October 2025 at MDU, Rohtak. More than 100 participants from 75 different institutions registered and actively participated in the workshop. The programme started with the welcome address by Dr Surender Yadav, MDU followed by the introductory remarks by Dr Geetha Vani Rayasam, Director, CSIR-NIScPR who joined online. She introduced SVASTIK and appreciated the collaborative efforts of CSIR-NIScPR, INYAS, and MDU in taking IKS dissemination to regional institutions and teachers. Dr Anil P Joshi (Padma Bhushan), the chief guest and founder of the Himalayan Environmental Studies and Conservation Organization (HESCO) in Dehradun, delivered a motivational keynote speech. In his discussion of the complex relationships between the economy, ecology, and environment, Dr Joshi, who is popularly referred to as the "Mountain Man of India", emphasised that traditional Indian knowledge has always been based on sustainability and self-reliance. He reminded the educators that farmers and artists are some of the first scientists whose empirical knowledge still informs sustainable practices, and he encourage them to promote scientific learning within the context of India's indigenous traditional knowledge. The presidential address was delivered by Prof Rajbir Singh, Hon'ble Vice Chancellor, MDU, who commended the joint efforts of CSIR-NIScPR, INYAS, and MDU in promoting interdisciplinary initiatives on the Indian Knowledge System (IKS).



The first technical session on “India’s Science and Technology Heritage -From Protection to Perpetuation” of the workshop focused on India’s rich and diverse scientific heritage and its continuity in the present era. Prof Ranjana Aggarwal, Outstanding Scientist, CSIR, began her talk, titled “Indian Science: Tradition, Innovation, and Relevance”, addressing the relationship between modern innovation systems and India's traditional scientific knowledge. Prof Aggarwal emphasised that a holistic perspective that integrates the natural, social, and spiritual

sciences forms the foundation of India's scientific heritage. She concluded by calling for the revival of Indian science that combines traditional knowledge with modern innovation and encouraged teachers to cultivate curiosity, logic, and cultural pride. Thereafter, Dr Ashwani Tiwari, Associate Professor, School of Environmental Sciences, JNU, delivered an engaging lecture on the importance of traditional rainwater harvesting systems in addressing India's growing water scarcity. To encourage local conservation efforts, he advised educators to incorporate traditional water knowledge into environmental education. Dr Charu Lata Principal Scientist and Coordinator SVASTIK, CSIR-NIScPR delivered an insightful talk on India's traditional food wisdom. Dr Lata outlined the systematic process followed under the SVASTIK initiative from identifying and validating traditional knowledge to communicating them to the public through digital and social media platforms. She additionally invited the participants to serve as "Brand Ambassadors of SVASTIK" by providing local examples of traditional knowledge from their areas and added that educators and researchers who can link conventional knowledge with verified scientific data are the first to effectively communicate science.



The second session started with an interactive Hands-on Training on Traditional Knowledge Communication, conducted by Dr Paramananda Barman, Senior Scientist and the SVASTIK Team from CSIR-NIScPR. Dr. Barman began by explaining the fundamentals of science communication, emphasizing that it serves as a bridge between complex scientific research and the general public. During the session, participants received hands-on training in designing communication materials, learning how to create visually appealing infographics, posters, and short videos on traditional practices such as yoga, meditation, and traditional food systems. At the end of the session, Dr. Raj Mukhopadhyay, Scientist, ICAR-Central Soil Salinity Research Institute, Karnal delivered an informative talk on indigenous soil management practices and their role in enhancing soil fertility, microbial activity, and nutrient cycling. He stressed that traditional farming wisdom, rooted in observation and adaptation to local ecosystems, offers valuable insights for modern sustainable agriculture.

The workshop concluded with an interactive Feedback and Vote of Thanks session, where participants from schools and colleges expressed gratitude for the enriching experience. They appreciated the hands-on training on traditional knowledge communication, which enhanced their ability to integrate scientific and indigenous concepts into teaching and outreach. In the concluding remarks, Dr Sandhiya Lakshmanan, Senior Scientist, CSIR-NIScPR, thanked all dignitaries, speakers, and participants for their active engagement.