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Asian Institute of Diplomacy and International Affairs

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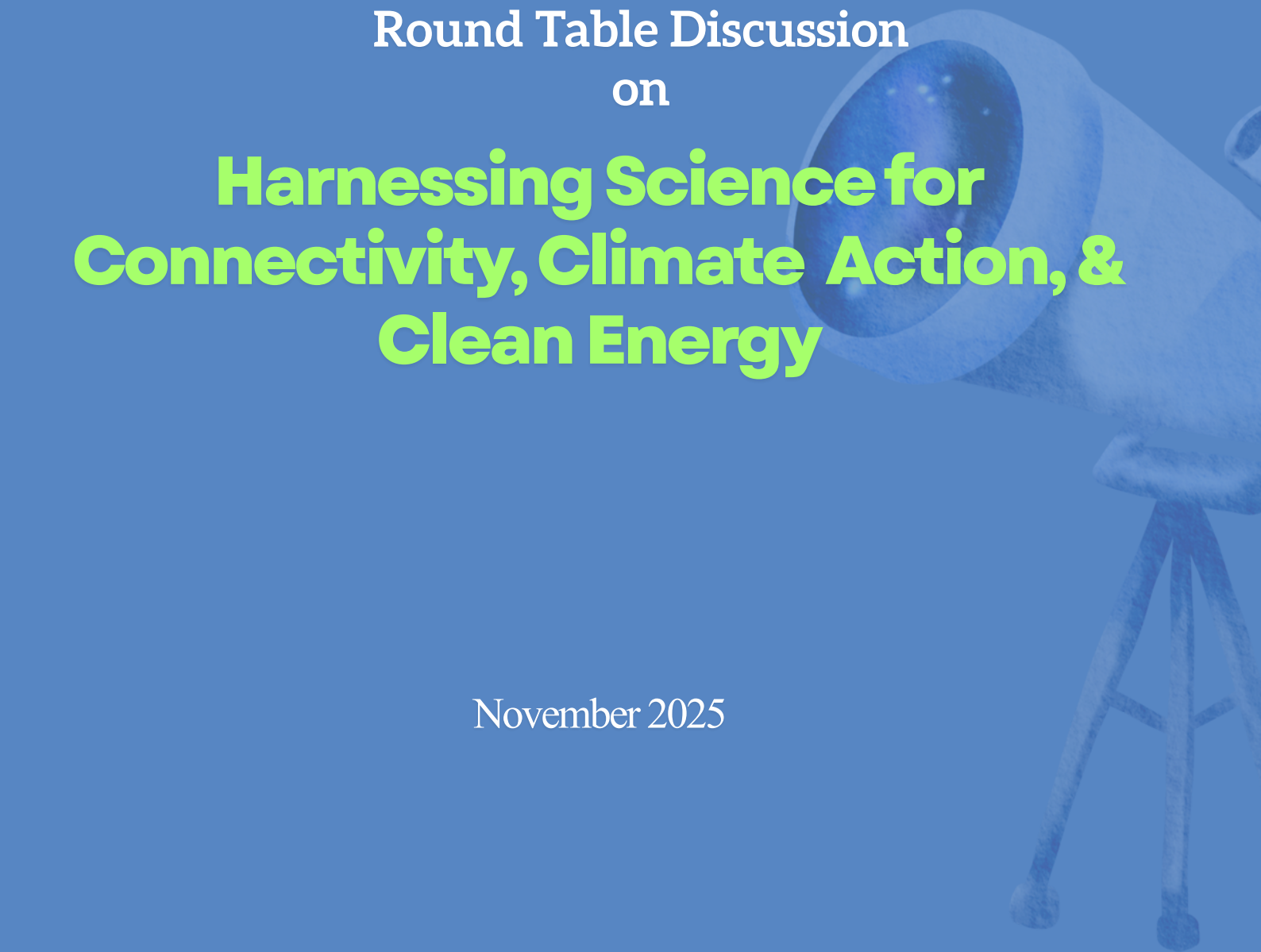
Trust, transformation, and tomorrow: The science we need for 2050

World Science Day 2025

Round Table Discussion

on

Harnessing Science for Connectivity, Climate Action, & Clean Energy



November 2025

Introduction

The Asian Institute of Diplomacy and International Affairs (AIDIA) organized a Roundtable Discussion on Thursday, 13 November 2025, in Kathmandu, to commemorate World Science Day for Peace and Development 2025 entitled **Harnessing Science for Connectivity, Climate Action, & Clean Energy**. Established by UNESCO in 2001, the day highlights the vital role of science in advancing peace, sustainable development, and public welfare.

Aligned with the global theme "Trust, transformation, and tomorrow: The science we need for 2050," the event underscored the transformative role of science in enhancing connectivity, advancing climate action, and accelerating clean energy transitions.

This program is part of AIDIA's annual initiative to observe World Science Day, an effort that began in 2024. This year's commemoration carried particular significance as Nepal navigates a rapidly evolving development landscape shaped by technological advances, climate pressures, and shifting geopolitical dynamics. The event has been the platform for stakeholders to collectively reflect on how scientific progress can be mobilized to address national and regional challenges. It emphasized that science is not merely an academic pursuit but a practical tool for strengthening resilience, improving livelihoods, and fostering inclusive growth.

Participants

The event brought together a diverse and multidisciplinary group of participants, reflecting the crucial relevance of science in the themes discussed. Attendees included former minister and senior government officials who provided policy-level perspectives, alongside leading experts in climate adaptation, disaster risk reduction, clean energy, and connectivity.

Experts shared diverse perspectives, offering meaningful insights on cooperation, public engagement, and practical implementation, highlighting the crucial role of science in shaping informed decisions and driving sustainable progress. The interaction also saw active participation from academics and students, whose involvement underscored the importance of nurturing scientific understanding and leadership among the next generation.

Opening Remarks

Ganesh Shah, Former Minister for Environment, Science, and Technology and Advisor at AIDIA, delivered the opening remarks, setting a constructive and forward-looking tone for the event. He emphasized the urgent need for Nepal to integrate scientific research and technological innovation into national policy frameworks to address the growing challenges of climate change, environmental degradation, and sustainable development.

Shah highlighted the increasing complexity of global and national issues, stressing that science-informed decision-making is essential for ensuring long-term resilience and prosperity. He also underscored the importance of investing in inclusive science communication, fostering public awareness, and strengthening collaboration among government, experts, and communities. Through his remarks, Shah reaffirmed the role of science as a foundational pillar for Nepal's sustainable and peaceful future.

Technical Sessions

The roundtable featured three expert presentations addressing the thematic pillars of the program.

Connectivity

Laxman Bahadur Basnet, Distinguished Fellow at AIDIA, highlighted the multi-dimensional nature of connectivity, encompassing physical, digital, economic, human, and policy aspects. He emphasized Nepal's strategic position between India and China and its potential to transform from a landlocked to a land-linked nation. Basnet underscored the importance of enhancing transportation systems, improving digital infrastructure, strengthening regional energy cooperation, and modernizing trade mechanisms. He also noted Nepal's active involvement in regional cooperation frameworks such as SAARC, BIMSTEC, BBIN, and SASEC, while stressing that long-term planning and institutional reforms are essential for effective regional integration.

Climate Loss and Damage

Ujjwal Upadhyay, a prominent expert in Climate Adaptation and Disaster Risk Reduction, provided an extensive analysis of Nepal's climate vulnerabilities. He explained how rising temperatures, shifting monsoon cycles, and increasing extreme weather events are adversely affecting communities, agriculture, infrastructure, and ecosystems. Upadhyay highlighted Nepal's carbon emission and sequestration trends, the financial implications of climate change, and the national NDC implementation timeline. He emphasized the value of combining indigenous knowledge with scientific tools such as satellite imagery, climate modeling, and data analytics to enhance forecasting and preparedness. Despite advancements in early warning systems, he pointed out persistent gaps in dissemination, anticipatory action planning, and implementing climate-resilient development measures.

Energy Transition

Kuber Chalise, Research Director at AIDIA, discussed Nepal's evolving clean energy transition, noting the rapid expansion of hydropower production and the growing adoption of electric vehicles across the country. He stressed the urgency of reducing dependence on fossil fuels and promoting renewable energy integration to support Nepal's long-term sustainability goals. Chalise outlined the challenges facing the energy sector, including infrastructure gaps, financial constraints, and policy implementation delays. He emphasized that science-driven policymaking, technological innovation, and coordinated institutional efforts are essential to accelerating Nepal's transition toward a low-carbon, energy-secure future.

Open Discussion

The open-floor discussion that followed the presentations encouraged active engagement among participants from diverse professional backgrounds, including academia, civil society, policy institutions, and the media. Contributors emphasized the need for stronger interdisciplinary collaboration and multi-stakeholder partnerships to address Nepal's interconnected priorities related to connectivity, climate resilience, and clean energy. Several participants highlighted the existing gap between scientific research and its effective translation into public policy and implementation, stressing that scientific insights often fail to reach communities where they are most needed. Additional concerns were raised regarding the barriers that impede the integration of scientific recommendations into national development frameworks, underscoring the importance of strengthening data-driven planning, promoting technology adoption, and enhancing community-based climate adaptation measures. During the discussion, Anup Upadhyay, Chair of Nepal Ujjwalo Party and Chair of Nepalese Association of PPP Professionals and Practitioners (NAPPP), pointed out gaps within current government policies and the systemic obstacles that hinder their execution. He stressed the necessity of administrative reforms to ensure that science-informed solutions can be effectively operationalized at all levels.

Key Outcomes & Insights

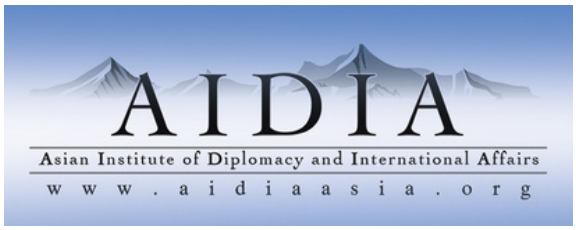
The roundtable yielded several essential insights that reaffirmed the central role of science in guiding Nepal's sustainable development efforts. Participants expressed a shared commitment to advancing science that is accessible, inclusive, and actionable, emphasizing its importance in fostering long-term resilience and growth. There was strong recognition of the need for Nepal to adopt forward-looking policies that encourage innovation, support technology transfer, and strengthen regional cooperation. The discussions highlighted the value of improving science communication to enhance public understanding and participation, ensuring that scientific knowledge contributes meaningfully to societal progress. These outcomes aligned closely with the global theme trust, transformation, and tomorrow underscoring its relevance to Nepal's development trajectory and future aspirations.

Closing Session

The event concluded with remarks reinforcing the importance of continued collaboration, research, and policy engagement. As a gesture of appreciation, Sajina Rai, Program Director at AIDIA, presented tokens of love to the distinguished speakers.

Conclusion

The roundtable successfully commemorated World Science Day 2025 by fostering dialogue, promoting awareness, and highlighting the indispensable role of science in shaping Nepal's future. AIDIA reaffirms its commitment to advocate for advancement of evidence-based policymaking, regional cooperation, and inclusive scientific transformation.



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