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INDIGENOUS KNOWLEDGE SYSTEM FOR SUSTAINABLE FUTURE

SPONSORED BY ICSSR

INTERNATIONAL CONFERENCE PROCEEDINGS

PART-1



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Dr Abhilasha Gautam

Editors

Dr Jyoti Tiwari

Dr Saidalavi Kundupuzhakkal

Mr Karthikeyan P

ARMY INSTITUTE OF EDUCATION

Plot M-1, P-5, Sector- Chi, Greater NOIDA

Affiliated to Guru Gobind Singh Indraprastha University, New Delhi

Awarded 'A' Grade by NAAC & JAC | NCTE Recognized

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Institute under the aegis of Army Welfare Education Society (AWES)

**Indigenous Knowledge System
for
Sustainable Future**

INTERNATIONAL CONFERENCE

SPONSORED BY ICSSR, NEW DELHI



ICSSR

Indian Council of Social Science Research

INDIGENOUS KNOWLEDGE SYSTEM FOR SUSTAINABLE FUTURE

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INTERNAL QUALITY ASSURANCE CELL (IQAC), AIE
organises

INTERNATIONAL CONFERENCE

SPONSORED BY ICSSR, NEW DELHI



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Indian Council of Social Science Research

On

‘Indigenous Knowledge System for Sustainable Future’

(21 Feb 2024)

Venue: Seminar Hall, AIE Campus (Hybrid Mode)

ABOUT THE INSTITUTE

Nestled in the heart of Greater Noida, the Army Institute of Education (AIE) stands tall as a beacon of academic excellence, nurturing the dreams of aspiring educators with a unique mission. Established in 2003 under the aegis of the Army Welfare Education Society (AWES), AIE proudly caters to the wards and dependents of our nation’s brave soldiers, instilling in them the values of service and dedication while equipping them with the tools to shape young minds.

Beyond its noble purpose, AIE boasts an impressive academic lineage. Affiliated to the esteemed Guru Gobind Singh Indraprastha University (GGSIPU) and recognized by the National Council for Teacher Education (NCTE) and the Rehabilitation Council of India (RCI), it offers a rigorous Bachelor of Education (B.Ed.) program, alongside a specialized B.Ed.

program in Learning Disability. This recognition signifies the institute's unwavering commitment to quality education, equipping its graduates with the knowledge and skills to excel in the dynamic field of education.

But AIE goes beyond mere academics. Recognizing the importance of holistic development, it fosters a vibrant learning environment that nurtures not just intellectual prowess, but also emotional intelligence, leadership skills, and social responsibility. Its state-of-the-art infrastructure, coupled with dedicated faculty, creates a platform for students to explore their potential and emerge as well-rounded educators.

Technology plays a pivotal role in AIE's pedagogy. The institute actively promotes the use of Information and Communication Technologies (ICT) in teaching and learning, preparing its graduates to effectively navigate the ever-evolving digital landscape. This forward-thinking approach ensures that AIE's graduates are not only adept in traditional teaching methods but also equipped to integrate technology seamlessly into their classrooms, fostering a more engaging and interactive learning experience for their students.

The success of AIE's graduates speaks volumes about its quality standards. With a commendable 100% placement record, its alumni are making a significant impact in schools across the country, shaping young minds and contributing to the nation's future. This remarkable achievement is a testament to the institute's commitment to providing not just theoretical knowledge, but also practical skills and exposure that prepare its graduates for the realities of the teaching profession.

AIE's commitment to its students extends beyond academics and career prospects. It fosters a strong mentor-mentee relationship, providing personalized guidance and support throughout their academic journey. This nurturing environment ensures that each student feels valued and empowered to reach their full potential.

ABOUT INDIAN COUNCIL OF SOCIAL SCIENCE RESEARCH (ICSSR)

Indian Council of Social Science Research (ICSSR) was established in the year of 1969 by the Government of India to promote research in social sciences in the country.

ICSSR provide grants for projects, fellowships, international collaboration, capacity building, survey, publications etc. to promote research in social sciences in India.

Documentation center of ICSSR - National Social Science Documentation Centre (NASSDOC) - provides library and information support services to researchers in social sciences.

ICSSR has developed ICSSR Data Service to serve as a national data service for promoting powerful research environment through sharing and reuse of data among social science community in India.

RELEVANCE OF THE THEME

Indigenous knowledge system consists of knowledge, beliefs, traditions and practices developed by local communities. Indigenous Knowledge also referred to a body of observations, oral and written knowledge, innovations, practices, and beliefs that promote sustainability and the responsible stewardship of cultural and natural resources through relationships between humans and their landscapes. Indigenous Knowledge cannot be separated from the people inextricably connected to that knowledge. It applies to phenomena across biological, physical, social, cultural, and spiritual systems. Indigenous Peoples have developed their knowledge systems over millennia, and continue to do so based on evidence acquired through direct contact with the environment, long-term experiences, extensive observations, lessons, and skills. Lakhs of manuscripts, shastras, oral traditions, folk songs, stories, art forms, handicrafts, skills covering all domains of life is reflected through this knowledge.

Currently world is facing challenges like wars and military conflicts, climate change, human rights violation, poverty, global health issues and many more. There is a universal need for a knowledge system of values and thoughts that has the possibility of creating world a better place. Indigenous knowledge system has power to create sustainable future. Bringing Indian Indigenous Knowledge Systems in the centre stage of education, NEP 2020 clearly mentioned on its page 5 that “The rich heritage of ancient and eternal Indian knowledge and thought has been a guiding light for this Policy” The NEP2020 recommends that knowledge from ancient India, the indigenous ways of learning, the knowledge traditions, would be covered in all disciplines at both school and higher education levels, Thus, education needs to incorporate the domain of indigenous knowledge.

This International Conference is an initiative to provide a platform to educationists, policy makers, research scholars, teacher educators, educational administrators & school teachers to deliberate upon the need of Indigenous knowledge system for sustainable future and to make our nation a knowledge super power as rightly expected in the vision of NEP2020.

OBJECTIVES

The International Conference is an educational endeavour:

- To build a comprehensive perspective about the need, relevance and essence of Indigenous Knowledge system.
- To address the challenges in applying Indigenous knowledge system in education.
- To create a platform for sharing knowledge and dialogue on the need of Indigenous knowledge system for sustainable future.
- To consider and deliberate on the inflection of the Indigenous knowledge system as proposed in NEP 2020.
- To delineate on Indigenous knowledge system to achieve sustainable development goals.
- To discuss the recent trends and current innovations in the field of education.

LEARNING OUTCOMES

After attending the Conference, the participants will be able to-

- Develop a thorough perspective on the necessity, relevance, and core aspects of Indigenous Knowledge System (IKS).
- Analyse the significance of integrating IKS into various domains, including education.
- Identify and address the challenges associated with the application of Indigenous Knowledge System in educational settings.
- Propose effective solutions to overcome obstacles and promote the integration of IKS in education.
- Evaluate the implications of the National Education Policy (NEP) 2020 on the infusion of Indigenous Knowledge System in educational practices.
- Engage in thoughtful deliberations to understand how NEP 2020 aligns with or challenges the principles of IKS.
- Delineate strategies to leverage Indigenous Knowledge System for achieving Sustainable Development Goals (SDGs).
- Formulate connections between IKS principles and specific SDGs, demonstrating an understanding of their interdependence.
- Investigate recent trends and innovations in the field of education, with a specific focus on the integration of Indigenous Knowledge System.
- Discuss the potential impact of emerging trends on educational practices and the role of IKS in fostering innovation.

MANAGEMENT COMMITTEE

PATRON	: LT GEN BHAVNISH KUMAR, VSM GOC, Delhi Area & Patron AIE
CHAIRMAN	MAJ GEN SUMIT MEHTA, VSM COS, Delhi Area & Chairman AIE
CONFERENCE CHAIR	: DR ABHILASHA GAUTAM Principal, AIE
CONFERENCE CONVENER	: DR JYOTI TIWARI Assistant Professor AIE
CONFERENCE CO-CONVENERS:	DR SAIDALAVI KUNDUPUZHAKKAL Assistant Professor AIE MR KARTHIKEYAN P Assistant Professor, AIE

ORGANIZING COMMITTEE

- ❖ **COL ABHAY RAJVANSHI (RETD)**, Registrar & HoA, AIE
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- ❖ **MS SHWETA DAS** (Asst Prof, AIE)

TECHNICAL SUPPORT

- ❖ **MR CHINTAN KAPOOR** (Asst Prof, AIE)
- ❖ **MR MANOJ KUMAR** (Computer Lab Attd, AIE)

SUB THEMES

1. *Contribution of Indian Knowledge System (IKS) towards Indigenous Knowledge*
2. *Relevance of Indigenous Knowledge in current scenario*
3. *Preservation of Indigenous Knowledge*
4. *Indigenous Knowledge for World Peace and Harmony*

5. *Role of Indigenous Knowledge for quality Education*
6. *Indigenous Technology and Innovation*
7. *Indigenous Knowledge and Environmental sustainability*
8. *Role of Indigenous Leaders in Youth Empowerment*
9. *Indigenous Cultural Heritage*
10. *Indigenous Knowledge and NEP 2020*
11. *Indigenous Knowledge and Sustainable Development Goals*
12. *Any other theme related to the theme of the International conference*

IMPORTANT TIMELINES

Abstract Submission	:	Sunday, 28 Jan 2024
Full Paper Submission	:	Monday, 05 Feb 2024
Conference Date	:	Wednesday, 21 Feb 2024

ABSTRACT AND FULL PAPER SUBMISSION

Abstracts and full papers are invited on the identified sub themes of the conference (abstract should not exceed 300 words and full paper should not exceed 3500-4000 words) in MS Word font 12 (Times New Roman for English and Kruti Dev for Hindi) 1.5 spacing and should be sent to the Seminar Convener/ Co-Conveners through email at conference.aieindia@gmail.com

CONFERENCE PROCEEDINGS

The papers presented in the Conference shall be selected based on plagiarism check and peer review process by expert committee after which the authors are required to incorporate the suggestions before final publication in the form of a book with ISBN No. **Proceedings part 1 will be released on the day of the Conference, Proceedings part 2 will be released after the conference.**

Category of Delegate	Registration Fee
Faculty (Paper Presenters)	₹1000*
Research Scholar/Students (Paper Presenters)	₹ 800*
Teachers (Paper Presenters)	₹ 800*
Participants	₹ 500
<i>Separate registration fee is applicable for co-authors as per their category*</i>	

REGISTRATION LINK: <https://forms.gle/yzrRYUZuWnep2ySZ9>

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For further details, please contact:

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(Asst Prof., AIE) **Co-Convener**

Mob. No.- 9894529472

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RIYA PANWAR, B.Ed. Batch 2022-24

ASHISH YADAV, B.Ed. Batch 2022-24

AAKASH KUMAR, B.Ed Batch 2023-25

NOTE

1. *Registration Fee includes publication charges also.*
2. *Proceedings part 1 will be released on the day of the Conference. Thus all the presenters are requested to follow the paper submission guidelines.*
3. *Conference will be held in hybrid mode. Only outside Delhi/NCR presenters and foreign presenters are requested to join in the online mode.*
4. *Kindly send full papers along with the Plagiarism Report with the similarity index of 10% or below.*
5. *Co- authors need to register separately to get certificate and copy of conference proceedings.*



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‘INDIGENOUS KNOWLEDGE SYSTEM FOR SUSTAINABLE FUTURE’

(21 Feb 2024)

PROGRAMME SCHEDULE-TENTATIVE

TIME	EVENTS
0900-1000 hrs	Registration
1000-1215 hrs	INAUGURAL SESSION
1000-1010hrs	Invocation & Lamp Lighting
1010-1020hrs	Felicitation of Guests
1020-1025 hrs	Release of Conference Proceedings
1025-1035hrs	Welcome Address by Dr Abhilasha Gautam, Principal AIE
1035-1045 hrs	Opening Address by Lt Gen Bhavnish Kumar, VSM, GOC Delhi Area & Patron AIE
1045-1100 hrs	Keynote Address by Prof Dr Radhe Shyam Sharma, OSD, Delhi School of Climate Change & Sustainability, University of Delhi, Delhi
1100–1120 hrs	Keynote Address by Dr Vinnaras Nithyanatham, Dean and Associate Professor, Department of Education, DMI St. John The Baptist University Mangochi, Malawi South East Africa (Online)
1120-1140 hrs	Address by the Guest of Honor Ms Kesang Yangzom Sherpa, IRS, Member Secretary, NCTE
1140-1200 hrs	Address by the Chief Guest
1200-1205 hrs	Vote of Thanks by Col Abhay Rajvanshi, Registrar & HoA, AIE

1205–1210hrs	National Song
1210–1215hrs	Group Photograph
1215-1300 hrs	Lunch Break
1300–1500hrs	TECHNICAL SESSIONS III & IV (OFFLINE)
1300-1500 hrs	Technical Session III – Resource Person & Chair: Prof Dr Rainu Gupta , Dean School of Education, Sanskriti University, Mathura Technical Session IV- Resource Person: Dr Niradhar Dey , Associate Professor School Education IGNOU, New Delhi
1430–1445hrs	Welcome Tea for Valedictory Session Guests
1500-1700hrs	VALEDICTORY SESSION
1500-1505 hrs	Felicitation of Guests
1505-1510 hrs	Welcome Address by Dr Abhilasha Gautam, Principal, Army Institute of Education, Greater NOIDA
1510-1520 hrs	Opening Address by Maj Gen Sumit Mehta, VSM, COS Delhi area and Chairman, AIE
1520-1530 hrs	Keynote Address by Beatriz Lucia Salvador Bizotto, Professor, Unifacvest University Center, Brazil
1530-1550 hrs	Valedictory Address by Prof Dr Rainu Gupta, Dean School of Education, Sanskriti University, Mathura
1550-1610 hrs	Address by Eminent Speaker Maj Gen A K Chaturvedi, AVSM, VSM
1610-1615 hrs	Report of the National Seminar by Mr Karthikeyan.P, Conference Co-convener, Assistant Professor, AIE
1615-1625hrs	Vote of Thanks by Dr Jyoti Tiwari, Conference Convener Assistant Professor, AIE
1625-1640 hrs	Certificate Distribution
1640-1645 hrs	National Anthem
1645-1700 hrs	Group Photograph
1100 hrs Onwards	TECHNICAL SESSIONS I & II (ONLINE)
	Technical Session I- Resource Person & Chair: Dr Sivachandiran Sivaraju , Deputy Dean of Studies in International Training Institute, Lae Campus, Papua New Guinea Technical Session II – Keynote Address: Prof Joy Sen , Professor, Architectural and Regional Planning, Indian Institute of Technology(IIT), Kharagpur Resource Person & Chair: Prof Dr Rita Arora , Former Professor & Dean at University of Rajasthan, Jaipur, Director School of Education at Jaipur National University

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‘INDIGENOUS KNOWLEDGE SYSTEM FOR SUSTAINABLE FUTURE’



(21 Feb 2024)

PROGRAMME SCHEDULE TECHNICAL SESSION 1 (ONLINE)

Venue- Computer Lab

In-charge- Mr Karthikeyan P, Asst Prof, AIE & Ms Saswati Mahapatra, Asst Prof, AIE

TIME	EVENTS
1100-1105 hrs	Invocation & Lamp Lighting
1105-1110 hrs	Welcome Address by Session In-charge
1110-1400 hrs	Paper Presentations
1400-1430 hrs	KeynoteAddress&SessionChairRemarksbyDrSivachandiran Sivaraju, Deputy Dean of Studies in International Training Institute, Lae Campus, Papua New Guinea
1430-1435 hrs	Vote of Thanks

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(21 Feb 2024)

PROGRAMME SCHEDULE TECHNICAL SESSION 2 (ONLINE)

Venue- Staffroom Spl. Ed.

In-charge- Dr Saidalavi K, Asst Prof, AIE & Ms Devika Naithani, Asst. Prof, AIE

TIME	EVENTS
1100-1105 hrs	Invocation & Lamp Lighting
1105-1110 hrs	Welcome Address by Session In-charge
1110-1140 hrs	Keynote address Prof Joy Sen, Professor, Architectural and Regional Planning, Indian Institute of Technology(IIT), Kharagpur
1140-1420 hrs	Paper Presentations
1420-1440 hrs	Concluding Remarks by Technical Session Chair Prof (Dr) Rita Arora, Former Professor & Dean at University of Rajasthan, Jaipur, Director School of Education at Jaipur National University
1440-1445 hrs	Vote of Thanks

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‘INDIGENOUS KNOWLEDGE SYSTEM FOR SUSTAINABLE FUTURE’



(21 Feb 2024)

PROGRAMME SCHEDULE TECHNICAL SESSION 3 (OFFLINE)

Venue- Seminar Hall

In-charge- Dr Azkia Khan, Asst Prof, AIE

TIME	EVENTS
1300-1310 hrs	Invocation
1310-1315 hrs	Welcome Address by Session In-charge
1315-1415 hrs	Paper Presentations
1415-1430 hrs	Concluding Remarks by the Resource Person & Chair of the Technical Session Prof(Dr) Rainu Gupta, Dean School of Education, Sanskriti University, Mathura
1430-1435 hrs	Vote of Thanks

	<h2 style="margin: 0;">ARMY INSTITUTE OF EDUCATION</h2> <p style="margin: 0; font-size: small;"> Affiliated to Guru Gobind Singh Indraprastha University, New Delhi Awarded 'A' Grade by NAAC & JAC NCTE Recognized Approved by RCI ISO Certified Institute 'Institute under the aegis of Army Welfare Education Society (AWES)' Plot M-1, P-5, Sector- Chi, Gr. NOIDA Ph. : 0120-2343741/ 42 e-Mail: aie@awesindia.edu.in www.aie.ac.in </p>	
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‘INDIGENOUS KNOWLEDGE SYSTEM FOR SUSTAINABLE FUTURE’

(21 Feb 2024)

PROGRAMME SCHEDULE TECHNICAL SESSION 4 (OFFLINE)

Venue- Conference Hall

In-Charge- Ms Komal Choudhary, Asst Prof, AIE

TIME	EVENTS
1300-1310 hrs	Invocation
1310-1315 hrs	Welcome Address by Session In-charge
1315-1415 hrs	Paper Presentations
1415-1430 hrs	Concluding Remarks by the Resource Person & Chair of the Technical Session Dr Niradhar Dey, Associate Professor, IGNOU, New Delhi
1430-1435 hrs	Vote of Thanks

Prologue

In the intricate interplay of tradition and advancement, the heartbeat of humanity echoes through the ages, carrying the profound wisdom of indigenous knowledge systems. As we embark on this intellectual journey through the conference proceedings, we find ourselves immersed in a tapestry woven with the threads of cultural richness, environmental stewardship, and the promise of a sustainable future. I welcome you all to the prologue of the conference proceedings on the theme “Indigenous Knowledge System for Sustainable Future.” Here, we embark on a voyage that transcends disciplinary boundaries, inviting you to traverse the landscapes of ancient traditions, contemporary challenges, and the synergies that emerge when the two converge.

The pages that follow encapsulate the collective efforts of scholars, researchers, practitioners, and visionaries who have dedicated their work to understanding, preserving, and celebrating indigenous knowledge. These proceedings serve as both a chronicle of the diverse indigenous wisdom that graces our world and a roadmap for navigating the complexities of our shared global challenges. In the embrace of these proceedings, anticipate encountering narratives that weave through the intricate relationship between indigenous communities and their environments. From sustainable agricultural practices rooted in ancestral insights to the preservation of languages that carry the essence of cultural identity, each contribution resonates with the heartbeat of sustainable coexistence.

As you delve into the rich array of papers, presentations, and discussions, envision a collective effort to bridge the gap between the ancient and the modern, the traditional and the innovative. Our authors explore the intersections of indigenous knowledge with contemporary issues such as climate change, biodiversity conservation, sustainable development and IKS offering a nuanced perspective on the path towards a harmonious and equitable future. In the spirit of fostering dialogue, understanding, and collaboration, we invite you to engage deeply with the insights shared within these pages. Let this prologue be your guide as you navigate the myriad voices, perspectives, and solutions that emerge from the crossroads of indigenous knowledge and a sustainable tomorrow.

May the proceedings not only inform but also inspire, sparking conversations, collaborations, and actions that ripple through academia, policy, and community engagement. Together, let us embark on a collective journey toward a future where the wisdom of indigenous knowledge stands as a beacon, guiding us to a sustainable, harmonious, and resilient world.

With gratitude for your presence on this transformative journey,

Dr. Jyoti Tiwari
Convener
International Conference



ले. जनरल भवनीश कुमार, वी एस एम

जनरल आफिसर कमांडिंग

Lt Gen Bhavnish Kumar, VSM

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C/o 56 APO

MESSAGE FROM THE PATRON

1. As we step forward to the era of Advancement, it is with great reverence that we come together to honour the profound wisdom deeply embedded within our indigenous cultures, wisdom that has sustained communities and ecosystems for generations.
2. Army Institute of Education, in its effort to promote invaluable contributions of indigenous people, who possess a deep understanding of their environments and the interconnectedness of all living beings, has embarked on this journey together, with Indian Council of Social Studies in order to amplify indigenous voices, integrating their wisdom into our policies, practices, and innovations. By embracing indigenous knowledge systems, we not only safeguard our Nation for future generations but also foster cultural diversity, social justice, and environmental harmony.
3. I, commend the organizing team for this multifaceted gathering and hope that this conference serves as a catalyst for collaboration, learning, and collective action towards a more just, equitable, and sustainable world.

“Jai Hind”

Station : Delhi Cantt-10

Date : 14 Feb 2024



(Bhavnish Kumar)

Lt Gen

General Officer Commanding



मेजर जनरल सुमित मेहता, वीएसएम
चीफ ऑफ स्टाफ

Maj Gen Sumit Mehta, VSM

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MESSAGE OF COS, HQ DELHI AREA AND
THE CHAIRMAN, AIE

As we commemorate the foundation day of our esteemed institution, the Army Institute of Education, it is with immense pride and confidence that I extend my heartfelt greetings to all of you participating in the ICSSR-sponsored International Conference on "**Indigenous Knowledge System for Sustainable Future.**"

The choice of theme for this conference is timely as also pivotal in shaping the discourse surrounding sustainable development, education, and the preservation of indigenous wisdom. Indigenous knowledge deeply rooted in cultural practices and traditions, has proven to be a reservoir of wisdom that holds valuable solutions to contemporary global challenges.

The conference proceedings, comprising the invaluable research papers and articles contributed by each one of you, will undoubtedly serve as a cornerstone in the foundation of knowledge and bridge the gap between tradition and progress. I commend the dedication and effort that the organizing team has invested in curating a platform that brings together scholars, researchers, and practitioners to exchange insights, share experiences, and contribute to the discourse on Indigenous Knowledge System for sustainable development.

I am confident that this event will serve as a catalyst for meaningful discussions and collaborations, paving the way for innovative solutions that draw from the wealth of indigenous knowledge. May the conference be a resounding success, fostering a spirit of inquiry, dialogue, and collective action.

JAI HIND!

Prof. (Dr.) Mahesh Verma

MDS, MBA, PhD, FDSRCS (Eng),
FDSRCS (Edin) FDS RCPSCG (Glas)

Vice Chancellor

**Padma Shri Awardee
Dr. B. C. Roy Awardee**



GURU GOBIND SINGH
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MESSAGE

गुरु गोविंद सिंह इंद्रप्रस्थ विश्वविद्यालय
सेक्टर - १६ सी, द्वारका, नई दिल्ली - ११००७८

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GGSIPU/VCO/2024
5th February, 2024

The significant improvement in development indicators such as health status, education, reduction in poverty, technology, etc, comes along with the increased pressure on natural resources. The question of sustainability haunts the world, more so the developing countries who are subject to the rampant exploitation of their rich natural resources.

There is therefore a universal need for a knowledge system of values and thoughts that has the possibility of creating a better world.

The indigenous communities all over the world have inherently developed knowledge systems that help them to make judicious utilization of the available resources. This enables enhanced sustainability of the environment, the environment from which they derive their basic necessities. The indigenous knowledge system has the power to create a sustainable future. There is so much to learn, to imbibe from the indigenous people and their knowledge systems.

In this context, I am very happy that an ICSSR sponsored international conference on 'Indigenous Knowledge System for Sustainable Future' is being organised by our affiliate institute, Army Institute of Education (AIE). AIE, renowned for its dedication to quality teacher education, serves as a beacon of excellence within the GGSIPU family.

This conference, held on the occasion of AIE's foundation day, marks a significant milestone in our collective pursuit of knowledge and its application for a better tomorrow. The theme of the conference resonates deeply with the pressing challenges of our times. It is crucial to turn to the wisdom and practices embedded within the indigenous communities. These time-tested knowledge systems offer invaluable insights into living in harmony with nature, building resilient societies, and ensuring a just and equitable future for all.

The conference has provided a very meaningful platform to educationists, policy makers, research scholars, teacher educators, educational administrators & school teachers to deliberate upon the need and merits of the Indigenous Knowledge system. I am confident that the conference would have also helped in developing meaningful collaborations between all the educators, practitioner's, researchers and communities committed to a better and more equitable world.

The papers and articles presented in this volume represent a treasure trove of knowledge and perspectives from scholars and experts across diverse disciplines. I am confident that the insights shared here will spark meaningful dialogue, inspire innovative solutions, and pave the way for a more sustainable future.

I appreciate that AIE has taken the initiative of holding an international conference on such a relevant subject. I commend the organizers and participants of this conference for their dedication and commitment to this important and relevant dialogue.

May the deliberations of this conference inspire us to embrace the wisdom of the past and build a brighter future for generations to come. My best wishes to AIE for more such successful educational endeavors in the future!

Prof. (Dr.) Mahesh Verma



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MESSAGE

Greetings!

Indigenous knowledge, deeply rooted in traditional practices and wisdom, offers valuable perspectives on sustainable living, environmental conservation and community resilience. As we are observing complex global challenges, the wisdom embedded in indigenous knowledge systems are becoming relevant and increasing on daily basis. The International conference organized by Army Institute of Education aims to explore, celebrate, and amplify these indigenous perspectives, fostering collaboration and mutual learning.

I am delighted to extend warm and heartfelt congratulations to AIE team for organizing an International Conference with a focus on the theme "Indigenous Knowledge System for Sustainable Future". This conference will serve as a platform for scholars, researchers, and practitioners to engage in meaningful discussions and exchange insights on the crucial role of indigenous knowledge in shaping a sustainable future.

I hope that this event will be a catalyst for innovative ideas. By acknowledging the importance of Indigenous knowledge systems, I extend my sincere gratitude to all participants, presenters and sponsors for their invaluable contributions to this endeavor.



DMI-ST. JOHN THE BAPTIST UNIVERSITY

(Run by Fathers of MMI, Sisters of DMI and Collaborators)

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On behalf of ICSSR sponsored International Conference on 'IKSSF' organizing committee, I am delighted to welcome all the experts and academics from around the world to Greater Noida in India for the International Conference on 'Indigenous Knowledge System for Sustainable Future' that will take place on 21st February, 2024 by Internal Quality Assurance Cell (IQAC), AIE.

While much inspiration and evolution are going on the day that's too during this sustainable era the topic is the need of the day. It will be a great pleasure to join with the doctors, Teaching professionals, and research scholars from around the globe. As the global level understanding and facts that say Indigenous knowledge refers to understandings, skills, and philosophies developed by local communities with long histories and experiences of interaction with their natural surroundings, the conference could be an effective one in delivering the most authentic and supportive care to our mother Nation.

As an academician, I want to welcome you to the wonderful, dynamic, and international conference. A sincere thanks to you the organizing committee for selecting the topic in this critical era of the indigenous world.

Prof. (Dr.) Vinnaras Nithyanantham



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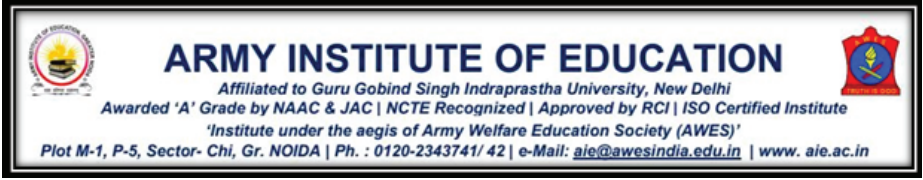
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The International Conference on "Indigenous Knowledge System for Sustainable Future" fosters cross-silo collaboration to create multifarious opportunities for vibrant researchers, enthusiastic students, and participants who thirst for learning about indigenous knowledge and its impact on a sustainable future. Our country is affluent with eternal instinctive knowledge and etiquette. This conference will allow educationists, policymakers, and administrators to implement and execute the holy grail effectively for the nation's sustainable development. In the contemporary era, there will be a need for the collaboration of artificial intelligence technology with indigenous knowledge in the Indian education system. This platform must draw determined participants who aspire to pursue their research in the Indigenous Knowledge System with the hybrid technology.

For the researchers, "The road to success must be filled with obstacles. Others give up and turn around, but you push your way through." Furthermore, I want to thank the Army Institute of Education's management for prioritizing this topic, and I trust this conference will yield more research work. I trust the diligent efforts made by the organizing committees will be the grand success of this conference, and my best wishes to all participants to make this conference one of the most successful events.

Dr.Sivachandiran Sivaraju



Col. Abhay Rajvanshi (Retd)
Registrar & HOA
Army Institute of Education, Greatr NOIDA

It is with great pleasure and enthusiasm that I extend my warmest greetings to all contributors and attendees of the international conference on “Indigenous Knowledge System for Sustainable Future” held at Army Institute of Education sponsored by ICSSR.

I am sure insightful discussions, presentations, and exchanges of ideas surrounding the crucial theme of leveraging indigenous knowledge systems will pave the way for a sustainable future. It is inspiring to see educators, researchers, and practitioners from diverse backgrounds coming together to explore the intersection of traditional wisdom and contemporary challenges.

As the registrar of this institute, I am honoured to introduce the publication of proceedings from this significant event. These research papers encapsulate the wealth of knowledge shared and generated during the conference, serving as a valuable resource for academics, policymakers, and practitioners committed to advancing sustainable development through the lens of indigenous wisdom.

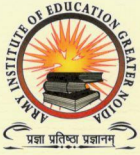
I would like to express my deepest gratitude to all authors for their invaluable contributions, as well as to the organizing committee, reviewers, and support staff for their dedication in ensuring the success of this conference and the subsequent publication of proceedings.

May this compilation of research papers serve as a catalyst for ongoing dialogue, collaboration, and action towards harnessing indigenous knowledge systems for a more equitable, resilient, and sustainable future for all.

Warm regards,

A handwritten signature in blue ink, appearing to read "Abhay Rajvanshi", is written over a horizontal line.

(Col Abhay Rajvanshi)



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Message from the Principal, AIE

1. It is with immense pride and joy that I present the proceedings of the International Conference on 'Indigenous Knowledge System for Sustainable Future,' hosted by the Army Institute of Education on 21 Feb 2023.
2. First and foremost, I am deeply grateful to the Honourable Management of our college, Lt Gen Bhavnish Kumar, VSM (GOC, Delhi Area & Patron AIE), Maj Gen Sumit Mehta (COS, Delhi Area & Chairman AIE), Maj Gen P R Murali (VSM) Retd. (MD,AWES) for consistently fostering a culture of intellectual exploration and encouraging us to delve into unconventional solutions. Special thanks to ICSSR for sponsoring this important event. Their support has been instrumental in bringing together diverse minds and facilitating impactful dialogue.
3. I would also like to express my heartfelt gratitude to our esteemed Vice Chancellor of GGSIPU, Prof. (Dr.) Mahesh Verma, for being a constant source of guidance and mentorship. Your commitment to academic excellence inspires us all. To the Member Secretary of NCTE, Ms Kesang Yangzom Sherpa, I offer my sincerest thanks for your unwavering support and inspiring leadership.
4. Our national and international guests and resource persons played a pivotal role in making this conference a success. Their insightful presentations and engaging discussions sparked fruitful collaborations and ignited new ideas. To all of you, I extend my deepest appreciation.
5. Finally, this conference would not have been possible without the dedication of our research scholars. The quality of your papers has enriched the discourse and set the stage for further investigation. The release of the first part of these proceedings represents an encouraging step towards realizing our shared vision of a sustainable future.
6. Let these proceedings serve as a testament to the power of collective dialogue and shared knowledge. May the insights shared here inspire further research, collaboration, and action towards a sustainable future for all.

"JAI HIND"

Abhilasha Gautam

Date: 16 Feb 2024

Place: Greater Noida

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