

# ECOSF NEWSLETTER



## Eid Greetings



## ECOSF as a grant winner participated in the post-completion review meeting of UNESCO Grants hosted by PNCU.

ECOSF participated in the review meeting hosted by Pakistan National Commission for UNESCO (PNCU) to evaluate the successful and meaningful outcomes of the UNESCO grants awarded under the under the Participation Programme 2020-21 on April 6, 2022. The meeting was Chaired by H.E. Ms. Naheed Shah Durrani, the Secretary to Government of Pakistan, Ministry of Federal Education and Professional Training (MoFEPT). The meeting was attended by representatives of the organizations who had won the project grants under UNESCO Biennium Participation Program. On behalf of ECOSF, President ECOSF Prof. Dr. Manzoor Hussain Soomro, Scientific Officer Engr. Khalil Raza and Assistant Director Mr. Ghulam Abbas Rahar participated in the event.



It is important to mention that ECOSF and Sukkur IBA University (SIBAU) had jointly won the grant under participation programme of the UNESCO for co-organizing the Capacity Building Workshop for Science Teachers on Climate Change Education which was held on March 28 – April 1, 2022.

Syed Junaid Akhlaq, Secretary General, PNCU briefly introduced the roles and functions of the PNCU, which is the Government of Pakistan’s focal point for the UNESCO to policy advice to the on UNESCO matters and acts as a point of liaison between government, the community, and UNESCO in Pakistan.

During the meeting, Prof. Manzoor Hussain Soomro expressed his gratitude to PNCU and MoFETP for their cooperation and support in the form of grant that enabled the Foundation to conduct a very successful workshop.

Later, Engr. Khalil Raza presented the workshop objectives, major outcomes, and challenges during the course of the workshop. Mr. Raza concluded his presentation with a way forward to recognize the immediate need for integrating climate change education for mainstreaming and replicating this workshop at much larger scale for widespread adoptability of climate science content at Pakistani schools. Subsequently, other grantees also made presentations.

Ms. Naheed Shah Durrani appreciated the efforts and this unique initiative undertaken by the ECOSF to help train science teachers in Pakistan in critical area of Climate Change. She hoped that such an initiative will be scaled up at countrywide level.

**Shareholderism vs Stakeholderism: A Misconceived Contradiction Prof. Nisar A. Siddiqui Memorial Lecture by Eiretus Prof. Colin Mayer from the Oxford University held virtually on 25 April 2022**

A Memorial Lecture on “Shareholderism versus Stakeholdersm: A Misconceived Contradiction” by Prof. Colin Mayer from the Oxford University was held virtually on 25 April 2022 in the memory of Prof. Nisar Ahmed Siddiqui, the Founder Vice Chancellor of Sukkur Institute of Business Administration University (SIBAU), Sukkur Pakistan. Professor Siddiqui (Late) had been a legendary educationist and an able administrator. He began his career as secondary school teacher, went onto become a civil servant and served as Commissioner of Sukkur and Secretary to the provincial government of Sindh including for Education. After retirement, he was entrusted to lead the Sukkur Institute of Business Administration, which he endeavoured to elevate it as a university. Considering the deficiency in quality of education among the newly inducted students in the university, he traced back to deficiency at school level and went on to open schools linked with the university; which are called the University Community Colleges imparting education from Primary to higher secondary level, preparing them for university education.

The virtual Memorial Lecture by an eminent professor from the Oxford university was a tribute to him by his friends and colleagues; Prof. Bhawani Shankar Chowdhry the Distinguished National Professor and Prof. Emeritus of Mehran University of Engineering and Technology (MUET) Jamshoro; Prof. Manzoor H. Soomro the President of ECO Science Foundation; Prof. Zahid Hussain Khand, Registrar of SIBAU, QS Merit Institution and Engr. Prem Saghar Menghwar a Visiting Scholar at the Boston College, USA. The Honorable Speaker of the lecture was an Emeritus Scholar known worldwide, Prof. Colin Mayer CBE from the Oxford University, UK.



The talk was introduced and moderated by Engr. Prem Saghar Menghwar. Prof. Khand introduced the Late Prof. Siddiqui and Prof. Chowdhry introduced the eminent speaker.

Professor Mayer spoke on different concepts and principles of Business viz-a-viz, Shareholderism and Stakeholdersm were in the impact in the role of a company leader and the objectives of a company;

which he said, should be to address the problems of society/people worldwide rather than just profitability of a company. The Speaker also highlighted the importance of socio-cultural acceptances of the target community or market. The lecture was for 30 minutes. followed by 40 minutes of a lively Q&A session moderated by Mr. Antonio Daood. Altogether, over 200 participants worldwide from across the world joined the lecture.

Concluding remarks were then offered by Prof. Soomro. He highlighted and acknowledged the contributions of Professor Siddiqui in education sector and thanked the speaker, his co-organizers and the participants for joining the lecture and interacting through the Q&Q and chats.

**Report on “Open Science and Digital Inclusion in China” presented and reviewed virtually – President ECOSF joined as Expert Peer Reviewer**

An Expert Review Meeting on the “Report on Open Science and Digital Inclusion in China” held virtually on 22 April 2022 under the auspices of UNESCO Cluster Office Beijing China. The meeting was opened by the Director and Representative of UNESCO Cluster Office, Prof. Shahbaz Khan and followed by presentations by the authors of the report led by Prof. Zhao Yandong of the Renmin University of China. It was attended by the experts from UNESCO, Chinese Research Team and External Peer Reviewers who had been involved in developing recommendations by the experts from the Asia and Pacific region including Prof. Manzoor Soomro, President of ECOSF. Objective of the meeting was to review the report on a study commissioned by UNESCO Beijing entitled; “Open Science and Digital Inclusion in China”.



It is pertinent to mention that Open Science is a movement to make science more open, accessible, efficient, democratic and transparent. Driven by the unprecedented development of digital technology, Open Science will greatly facilitate the exchange and communication of scientific information and data to serve a wider global population more widely, equally and reliably.

Keeping in view the importance of Open Science, UNESCO in its 41st session of General Conference held in November 2021 recommended to define shared values and principles for Open Science and identify concrete measures on Open Access and Open Data, with proposals to bring citizens closer to science and commitments to facilitate the production and dissemination of scientific knowledge around the world [<https://en.unesco.org/science-sustainable-future/open-science/recommendation>].

In line with the UNESCO’s Recommendation, a study was instituted by UNESCO Beijing Office, and supported and undertaken by the Chinese Academy of Sciences (CAS), Deep-time Digital Earth (DDE), Renmin University of China, Nanjing University China, who prepared the report; “Open Science and Digital Inclusion in China”.

The study team conducted a questionnaire-based investigation and prepared the report, which surveyed existing understanding and perception of the concept of “Open Science” and enabling environment for Open Science from the Chinese scientists and the public. Experts also analyzed the policy development for Open Science in China.

Later, the External Peer Reviewers asked questions to the researchers/presenters for clarifications. Subsequently the peer reviewers including Prof. Soomro will share their review reports to the UNESCO Beijing office in due course of time. Dr. Soomro in his comments appreciated the undertaking of such a study and said that it can be turned into a template for similar studies in other developing countries which would help in implementing the recommendations of UNESCO on Open Science in those countries.

According to the report, China has built the world’s largest 5G network, and digital industrialization scale has reached 7.5 trillion yuan. More than 44 TB of Popularization of Science and Technology (PST) content and resources has been created, the cumulative page-views and shared posts have reached 365 billion, and the number of users has exceeded 10 million. There were 1,477 PST venues nationwide, each physical S&T museum serving an average of 950,000 people.

The status quo of Chinese research infrastructures was also investigated. It is indicated that the China Science & Technology Network and the China Education and Research Network present typical network infrastructures in China. The CNGrid is a new generation information infrastructure testbed that aggregates sundry high-performance computing resources. The China Science and Technology Cloud (CSTCloud) is Integrated infrastructures combine different research resources and systems, including network services, computing and storage resources, data and others, as hyper converged infrastructures.

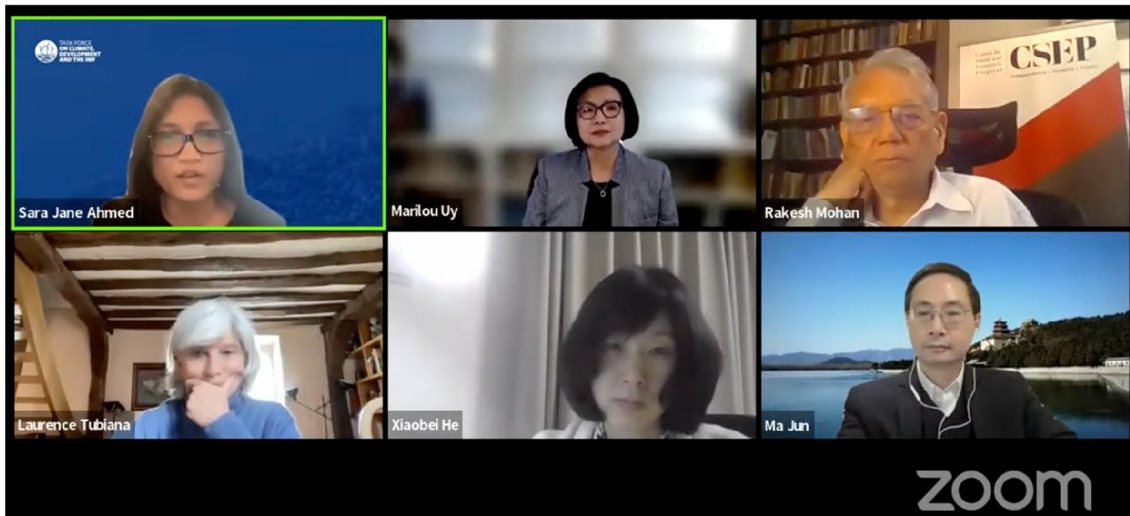
In view of the open science and digital inclusion development goals and the current implementation of Chinese policies and related issues, four open science and digital inclusion policy strategies are suggested by the report, to improve the current policy system, including differentiated promotion of open science elements and digital inclusion phases, maximum coverage of open science and digital inclusion stakeholders, open science roadmap implementation with action and evaluation, and the establishment of open science centers to advance the implementation guarantee of open science as a whole.

**ECOSF participated in the Webinar on the Role of the IMF in Mitigating Climate Risks: From Physical Impacts to Just Transitions.**

Boston University Global Development Policy Center hosted on April 14, 2022, a webinar discussion on how the International Monetary Fund (IMF) can help mitigate climate risks. The discussion featured members of the Task Force on Climate, Development and the IMF, a consortium of experts from around the world utilizing rigorous, empirical researches to advance a development-centred approach to climate at the IMF. The panel discussed the role of the IMF in supporting climate resilient development as the only rules-based, multilateral institution charged with maintaining the stability of the international financial and monetary system. On behalf of ECOSF, Engr. Khalil Raza joined the webinar.

Sara Jane Ahmed, Sustainable Finance Advisor to the Group of Vulnerable 20 (V20) moderated the session. She opened by highlighting the most recent Intergovernmental Panel on Climate Change (IPCC) report and how it is a ‘now or never’ moment for decisive action on climate change.

Next, Ma Jun, Director of the Macro and Green Finance Lab at Peking University, introduced a technical paper on the macroeconomic impact of the European Union’s (EU) carbon border adjustment measures (CBAM) on emerging market and developing countries. The paper uses a dynamic computable general equilibrium model to quantify the impacts. The findings show the magnitude of spillover impact on developing countries and that the CBAM was likely to worsen income distribution across countries.



Next, Rakesh Mohan, President of the Centre for Social and Economic Progress (CSEP), presented CSEP’s latest technical paper for the Task Force, which assesses the challenges presented by India’s fiscal and energy transition, given that fossil fuel revenues alone are currently more than double India’s entire defense expenditure. Mohan emphasized the “triple challenge” faced by developing countries of economic growth, renewable energy and revenue shortfalls.

Following the research presentations, Laurence Tubiana, Chief Executive Officer of the European Climate Foundation, welcomed the findings and shared reactions. She said it was important to understand the impact of CBAMs on emerging markets and climate vulnerable nations, and that carbon pricing tailored to the level of development of each country could help to create a level playing field. She also emphasized the need to integrate the investment requirements for a net-zero world with macroeconomic analyses. She called on the IMF to undertake the required analyses.

The webinar concluded that investment to support decarbonization in developing countries was critical and called attention to countries that do not have robust financial sectors to help generate investment. Experts underlined that the cost of capital is a crucial factor that will shape how quickly countries can increase renewable energy and that it is important to expand the work of Multilateral Development Banks (MDBs) on de-risking facilities.

**Near East University in Cyprus hosted the 3rd World Children Conference**

Near East University in Cyprus hosted the 3rd World Children Conference on April 22 – 24, 2022. The objective of holding this conference was to engage in a meaningful dialogue amongst scholars to understand the unique challenges and opportunities for today’s children with the purpose of serving the educational, developmental social policy environment for Child Development and Youth Empowerment. The Conference connected researchers, academicians, activists, practitioners and policymakers around the world to a single platform to interact with each other and share knowledge for the betterment of Children and Youth.

Academician Dato Lee Yee Cheong, President of Belt and Road International Science Education Consortium (BRISEC) (under the China Association of Science and Technology, Beijing); who is also a Member of the ECOSF’s International Advisory Board, participated in the Conference as an Invited Keynote Speaker. In his talk, Dato Lee emphasized the need to inculcate peace and harmony through evidence based science education for children in the light of the current conflict and increase in violence in societies, and terrorism resulting in atrocities and displaces persons.



He Further highlighted the initiative on development of “Fusion of Belt and Road Civilizations” or the Fusion Project over the period of 2017-2020, that ECOSF too has been part of. Dato lee said that education plays a key role in producing citizens of today for tomorrow. The idea of implementing the Fusion curriculum in the existing educational program is the conviction that by understanding and having good perception of different civilizations that contribute to present day knowledge, children will appreciate the need and importance to live in peace and harmony.

**New Digital Revolutions: Current Developments Based on Metaverse**

*Courtesy of Eurasian Research Institute*

Internet usage, especially with the COVID-19 pandemic, has almost become an obligatory part of our lives, where we not only spend our free time and carry out various works, but also spend a considerable portion of our daily lives. In this process, we frequently hear the word “Metaverse”. The Metaverse can be expressed as a three-dimensional (3D) virtual world in the simplest terms. Our life, which has changed with the beginning of the Internet era, has been moved to the next stage with the development of Metaverse infrastructures and offers us a virtual reality.

When we look at the findings of some research on Metaverse, as a result of the research conducted with people of different ages in the USA, China and UK, it is stated that 93% of the participants consider Metaverse as the technology of the future. In the same research, it was reported that 64% of the participants’ social lives depend on technology and informatics, and 61% of participants’ income depends on technology and informatics infrastructures. As we can see from these numbers, the concept of the Metaverse

is not faced much resistance, and it is likely that it can be adopted by societies to an increasing extent thanks to the opportunities it offers.

Currently, we are witnessing a lot of developments in the virtual world experiences in many different areas ranging from the creation of virtual tours to the museums, and exhibitions due to COVID-19 restrictions to buying virtual land with cryptocurrencies in virtual worlds. Many companies, which are interested in this trend, announce their investments in Metaverse technologies and some even open virtual stores in various virtual worlds. For instance, Facebook's decision to change its company name to Meta and popular companies around the world such as Nike, Adidas, Gucci, H&M and Walmart, express their decisions on opening their virtual branches. On this point, in Turkey, we see that LC Waikiki is also starting a similar initiative.

When the word Metaverse is mentioned, it would be appropriate to perceive it as a general definition given to virtual worlds that are created rather than just a single virtual world. In these virtual worlds that are being created, there is a competitive environment in order to attract attention. In this regard, the leading Metaverse projects are trying to attract the attention of people as potential investors with the economic opportunities they offer. For instance, it is stated that virtual real estate sales in the four big Metaverse worlds, including Sandbox and Decentraland, have reached 501 million dollars in 2021. It is estimated that this number will double in 2022. In addition to these, all the consumption needs which we need in the real-world and more are created in the virtual worlds, and even the competition in the branding process is heating up. Thus, it could be said that the economic system within the Metaverse is also quickly establishing itself.

Like in every new technological development and innovation, expansion of Metaverse infrastructure would bring positive and negative effects to the environment. Considering the positive aspects, Metaverse will make its contribution to the reduction of transportation-related environmental pollution by allowing people to carry out their work in the virtual environment without leaving their homes. In this regard, it is predicted that the share of transportation in global environmental pollution is around 30-35% and this rate may decrease to 20% with the widespread use of Metaverse worldwide. On the other hand, the negative environmental conditions that will be created by the extraction of chips and other materials, which are necessary for the production of this technological infrastructure and necessary devices, could increase the harmful experiences of the mining sector.

In addition to that, an increase in electricity consumption will also cause more production and consumption of energy resources. In short, mining and energy sources have the potential to increase pollution, despite the possible decrease in transportation-related environmental pollution. Moreover, the possibility of causing different health problems due to inactivity should also be considered as an additional negative factor.

With the possibility of creating a copy of our real lives in virtual worlds many opportunities are rising, which puts many individuals and companies in a competition in order to not stay behind this technological innovation. At this point, it is known that many states are interested in Metaverse infrastructure and are working to benefit from its practical advantages.

Read more: <https://www.eurasian-research.org/wp-content/uploads/2022/04/Weekly-e-bulletin-21.03.2022-27.03.2022-No-347.pdf>

### Upcoming Events posted on ECOSF website and Facebook page

#### 5th Noor School Student Competition

Mustafa Science and Technology Foundation of Iran in collaboration with ECO Science Foundation (ECOSF) and other organizations is organizing "5th Noor School Student Competition" in memory of the great scientist and mathematician of the Islamic world Abu Rayhan al-Biruni in year 2022. The objective of the Competition is to create identity and promote science among the teenagers of the Islamic world to engage them in educational and scientific programs. By accepting 60-second scientific and educational films and celebrating their top works, the competition aims to get students (national and international) to participate in this Competition and find science and technology more amusing.

The interested/relevant educational institutes/organizations are invited to encourage the students for the large participation in the Competition. The deadline for submission of the entries (60 second scientific videos) is July 2022. The winners of the Competition will be awarded with cash prizes along with the certificates

Read More: <http://ecosf.org/5th-Noor-School-Student-Competition>

**International Virtual Workshop on ‘Role of Science, Technology and Innovation (STI) in Achieving Sustainable Development Goals – 2030’, 24-25 May 2022**

Science, Technology and Innovation (STI) have been recognised as one of the main drivers of economic development and environmental sustainability. STI plays an even more important role in the context of the “Global Agenda - 2030” and for achieving the Sustainable Development Goals (SDGs).

STI is an important driver for increased productivity and value addition that stimulates the growth and competitiveness of a nation. Application of STI is necessary for enabling and accelerating the global transformation towards prosperous, inclusive and environmentally sustainable economies in developing and developed countries alike. For effective implementation of most of the 17 SDGs and achieving their set targets, it is necessary that STI has to be directly and indirectly applied with appropriate focus, especially in the Emerging Economies (EE), Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

In order to deliberate on the role of STI in achieving SDGs and to discuss the dynamics of the STI system, the Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre), New Delhi and the Indian Ocean Rim Association (IORA), Mauritius is jointly organising of a 2-days International Workshop on the topic “Role of Science, Technology and Innovation (STI) in Achieving Sustainable Development Goals – 2030” during 24 - 25 May, 2022. The Workshop will be hosted by the IORA Secretariat and organised in Virtual-Mode.

Read More: <http://ecosf.org/Role-of-STI-in-Achieving-STGs-2030>