



# ECOSF NEWSLETTER



## Secretary General of ECO lauds the scientific activities and the programmes of ECOSF during the last five years

Secretary General of ECO H.E. Dr. Hadi Soleimanpour said that ECOSF is very important scientific institution of ECO, during a courtesy call on him by the President ECOSF Prof. Manzoor H. Soomro on February 4, 2019.

President ECOSF presented the Five Years Report of ECOSF initiatives and activities to the Secretary General of ECO and briefed him about the inception of the Foundation and its programmes and activities initiated since its formal functioning in June 2013. President ECOSF further said that despite financial difficulty, the Foundation managed to initiate the programmes and activities and developed collaboration with numerous renowned international and regional organizations to engage them for the support and betterment in the scientific fields and scientific communities of ECO region. Prof. Soomro further shared that the Foundation has worked in diverse fields of Science, Technology and Innovation (STI) and carried out the activities in engineering, climate change, water, biosciences & biotechnology, seismology and energy etc.

He further said that strong STI base is very much important for significant development in the region. In this regard, ECOSF has also initiated the programme of Inquiry Based Science Education (IBSE) pedagogy for teaching Science, Technology, Engineering and Mathematic (STEM) from Astana, Kazakhstan in June 2015. The programme is successfully being implemented in Pakistan and Iran. More ECO countries such as Azerbaijan and Tajikistan are being negotiated with, to launch IBSE programme in those countries.

Secretary General of ECO thanked President ECOSF for presentation of beautiful Five Year Report of ECOSF. He



expressed his pleasure for the efforts that have been made by ECOSF to pursue economic development through STI in the region. He assured ECO support for future endeavours of the Foundation and hoped that ECOSF will play more vibrant role for promotion of STI in the region.

**Children have a joyful learning experience at the Science Fun Mela held at the Lok Virsa Museum in Islamabad**

Two-day “Scientific Activities for Children and Students” were organized by ECO Science Foundation (ECOSF), in collaboration with Pakistan Science Foundation (PSF), LearnOBots, Indus Cultural Forum (ICF) and Lok Virsa Museum of Pakistan at the Lok Virsa Museum, Islamabad on 16-17 February 2019. The event was a part of Pakistan Mother Languages Literature Festival (MLLF) - 2019. ECOSF has continued to support these scientific activities during the MLLF every year since 2017. The main objective of the idea of organizing Scientific Activities for Children and Students during the MLLF-2019 was to inculcate among children the urge for learning science around us and in the universe, as well as to emphasize on the importance of writing on science in mother languages; so as to promote Science Culture in the country.

During the event, the interactive scientific activities (demonstration + hands-on) were performed with active participation of children, senior students and adults, which included; Maze Challenge, Dino Jump, 3D Printer, Solar House, Catch the mouse Game, Makey Makey Piano, Robo Soccer, AC Trainer, Catch the Fruits Game, Obstacle Avoidance Robot, Planetarium Show and Scientific Mobile Bus, etc. The latest technologies such as Robotics and 3D Printing were part of the activities.



A large number of the children and general public attended the activities. The participants enthusiastically participated in the activities where they learnt new concepts about robotics, 3D printing and astronomy etc. The kids and young students had a joyful experience and were thrilled to learn about emerging technologies with their active participation in the event.

President ECOSF Prof. Dr. Manzoor Hussain Soomro participated as a panelist in one of the sessions titled; “**What We Are Not Writing?**” during the MLLF-2019. Amongst others distinguished speakers of the session were Dr. Khalid Suhail, Ms. Nargis Sultana and Mr. Abid Mir. The session was moderated by Mr. Farnood Alam. Prof. Soomro stressed that science promotion must be part of cultural festivals so as to promote a scientific culture. Science literature, poetry on science concepts, drama/theatre and story-telling in mother languages could play an important role in stimulating the interest of general public and young children to increase their scientific literacy.





**Digital B&R Double Hundred University Cooperation Program (DHUCP) begins in Pakistan - ECOSF welcomes the Chairman of DHUCP International Advisory Board**

ECOSF hosted the 1st Brainstorming and Consultation Session on “Digital B&R Double Hundred University Cooperation Program (DHUCP)” and hosted the Chinese Delegation in Pakistan led by Prof. Shi Zhumei. Prof. Shi, the Fellow of Academy of Engineering and Technology of the Developing World (AETDEW) and the DHUCP Expert, Executive Member, Chinese Association for International Exchange Fujiang along with Mr. Liu Bo, Director Quality of Sugon Ruiyi Education Cooperation Centre, Shenzhen (SRECC) visited Pakistan from February 27-March 4, 2019. During this first exploratory visit to Pakistan, Chinese delegates along with President ECOSF Prof. Dr. Manzoor Hussain Soomro and ECOSF Coordinator for DHUCP Engr. Khalil Raza held consultative meetings with number of high officials and the leaders of the Member Universities of DHUCP as well as some higher authorities from Pakistan.



DHUCP is aimed at selecting 100 colleges or universities throughout B&R Countries and connecting them with counterpart 100 universities in China for establishing the Big Data and Artificial Intelligence (AI) Application Innovation Centers to provide scientific research support with particular focus on key emerging technologies such as ICTs, Big Data, Artificial Intelligence (AI) and key national industry applications.

This program has been launched with strategic vision that there is a need for massive technical capacity building and infrastructure development for the participating countries in the One Belt One Road (OBOR). Thus, Academy of Engineering and Technology of the Developing World (AETDEW) and Sugon Ruiyi Technology Company of China supported by the Ministry of Education of China, in collaboration with ECOSF and ISTIC Malaysia launched the “Double Hundred Universities Cooperation Program (DHUCP)” under the Belt and Road initiative of People’s Republic of China in 2018.

**Chinese Delegation on DHUCP met with Representatives of NAMAL College Mianwali**

**On February 25, 2019:** ECOSF hosted the 1st consultative meeting between the Chinese Delegates and the degree awarding NAMAL College Mianwali, which is one of the Member institutions of DHUCP. The delegation of NAMAL College was represented by Prof. Dr. Adnan Iqbal Head of Computer Science Department and Mr. Usman Ashraf Manager ORIC (Office of Research, Innovation and Commercialization). President ECOSF Prof. Soomro welcomed the delegates and appraised them about the strategic vision of Belt and Road - DHUCP and the roles of ECOSF, AETDEW and SRECC. During the Meeting, Mr. Khalil Raza



Scientific Officer ECOSF and ECOSF Coordinator for DHUCP made a presentation on behalf of ECOSF where he laid down the activities of ECOSF as a coordinating agency for Belt and Road Programs of China, including the DHUCP in the ECO region. Mr. Liu Bo Director Quality, SRECC made a power point presentation and gave a detailed account of DHUCP.

Mr. Shi Zhumei appreciated the efforts of ECOSF as a partner under DHUCP and bringing together Member Universities from the ECO region to participate in this important program. It aims to develop human resource capacity in digital technologies to achieve sustainable development under China’s One Belt and One Road cooperation program, he added.

The delegates deliberated on development of cooperation mechanism among member universities and SRECC. It was agreed upon that as a first logical step, a comprehensive plan of action needs to be developed in consultation with all relevant stakeholders. The DHUCP could begin by inviting Member Universities and provide training opportunities to faculty members and students through a cultural exchange programme. At later stage, this program could be extended with establishment of training centers on emerging technologies in the Member Universities.

**DHUCP Delegation meets leadership of China Pakistan Economic Corridor**

**On February 26, 2019:** Prof. Shi Zhumei and Mr. Liu Bo along with their host President ECOSF Prof. Manzoor Hussain Soomro held a meeting with Mr. Hassan Daud Butt, Project Director of China Pakistan Economic Corridor (CPEC) at CPEC Secretariat in the Planning Commission, Govt. of Pakistan. Prof. Shi underscored the idea behind DHUCP and emphasized on developing adequate human resource capacity, especially in the emerging technologies in order to achieve sustainable development along the Belt and Road countries. Mr. Shi said Pakistan is one of the most important partners of China. China being a leader in technological world, it has a great potential to bring real and positive development in the region, including Pakistan. However, we need to equip our young generation with digital competence to achieve sustainability and transfer necessary technical skills to Pakistani youth so that they become proficient to support development, he added. Mr. Hassan Daud Butt underscored the role of emerging technologies amidst the 4th Industrial Revolution and acknowledged that Pakistan needs to prepare for it. He appreciated and showed his willingness to support the idea of DHUCP; however, he advised to develop and framework and tentative plan of DHUCP activities to be shared with participating countries and that the communication should come through the Chinese Government institutions and diplomatic channels in order to ensure ownership by participating countries.



**DHUCP Delegation meets Higher Education Commission (HEC) of Pakistan**

**On February 26, 2019:** DHUCP delegation comprising of; Prof. Shi Zhumei, Mr. Liu Bo, Prof. Manzoor Soomro and Mr. Khalil Raza held a meeting with Prof. G. Raza Bhatti Member Operation & Planning HEC and Dr Syed Sarfraz Ali Director General CPEC at the Higher Education Commission (HEC) of Pakistan. Prof. Shi shared the idea behind the “Digital B&R Double Hundred University Cooperation Program (DHUCP)” which aims to develop human resource capacity in digital technologies to achieve sustainable development under China’s One Belt and One Road cooperation program,





including Pakistan. Prof. Bhatti appreciated the initiative and assured the visiting delegation that HEC would be willing to support DHUCP Program but sought the action plan and modalities, by engaging relevant agencies of the two countries. He further shared that HEC has established robust cooperation amongst a number of Chinese and Pakistani university through various scholarships. He also shared the information that Govt. of Pakistan through HEC has established six national centers of excellence in emerging futuristic technologies including one each in Big Data and AI. Thus those institutions could also be taken on board if possible. It was agreed in principle to keep HEC on board and in picture for success of the project in Pakistan.

### DHUCP Delegation calls upon the Secretary, Ministry of Science & Technology of Pakistan

**On February 26, 2019:** The DHUCP delegation; Prof. Shi Zhumei, Mr. Liu Bo together with President ECOSF Prof. Soomro met called upon Ms. Yasmeen Masood, the Secretary to Govt. of Pakistan for Ministry of Science and Technology (MoST). Prof. Shi shared with Secretary the idea behind DHUCP to develop human resource capacity in digital technologies to achieve sustainable development under China's One Belt and One Road cooperation program, including Pakistan. Ms. Masood had numerous questions on how



the universities selection would take place and whether there would be any evaluation and monitoring etc. Prof. Shi and Prof. Soomro explained that this was the first visit to meet universities' leadership and high government officials and that modalities and action plans would be shared with partners institutions and authorities. The Secretary Ms. Masood then showed her satisfaction, appreciated this idea and assured the delegation that MoST would be happy to patronize DHUCP Program, however, she advised to work closely with HEC by keeping MoST in picture.



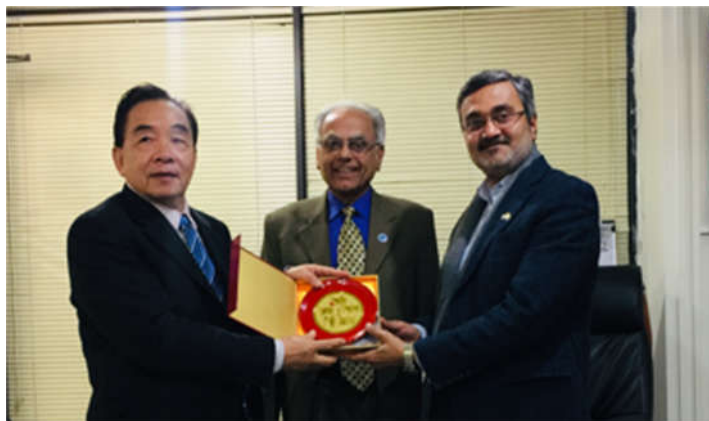
**On February 28, 2019:** A meeting between DHUCP delegation and Partner Universities (i.e., Mehran University of Engineering & Technology, Jamshoro, Sir Syed University of Engineering and Technology, Karachi and Balochistan University of Information Technology, Engineering and Management Science (BUIITEMS), Quetta) was scheduled at Karachi, however, due to flight disruptions, the team could not travel to Karachi; thus telephonic discussions were held with representatives of partner universities and consensus developed as under:

1. All partner universities endorsed the DHUCP and are happy to join the project
2. Partner Universities will share their needs and propose some action points for consideration of DHUCP leadership
3. All partner institutions will be communicated by keeping the HEC of Pakistan in the loop

4. DHUCP will share the expectations from partner universities in terms of commitment on part of member universities as the universities should have the idea approved from their forums like Syndicates etc.

**DHUCP Delegation meets Pakistan Engineering Council (PEC)**

**On March 4, 2019:** A Double Hundred University Cooperation Program (DHUCP) delegation comprising of Prof. Shi Zhumei and Mr. Liu Bo from China and President ECOSF Prof. Manzoor Soomro and Engr. Khalil Raza met with Engr. Dr. Nasir Mehmood Khan Head Engineering Accreditation Division and International Liaison at Pakistan Engineering Council (PEC) Headquarters in Islamabad. Mr. Mujeeb-ur-Rehman and Mr. Aijaz Hussain Shah of PEC Unit of PEC, were also present during the meeting. Prof. Soomro introduced the visiting team and overall purpose of the meeting. Prof. Shi shared the idea behind the project. Prof. Shi underscored that role of China Pakistan Economic Corridor (CPEC), where Pakistan can be a base model for other developing countries under Belt and Road Initiative push the engineering technology development to address many challenges especially in the public governance through digital technologies.



Dr. Khan welcomed the DHUCP delegation especially the Chinese colleagues to Pakistan and appreciated the concerted efforts of ECOSF and AETDEW to promote engineering technology and education in the ECO region and beyond. Dr. Khan shared that role of PEC, which acts as a professional body for accreditation of engineering education and regulation of engineering profession in Pakistan. Dr. Khan affirmed that Pakistan is gradually transitioning to adopt digital and e-governance in many public and private sector organizations. There is certainly an area with huge potential where technological capacity in Pakistan is still lacking, and this is where China could help Pakistan, he said. Dr. Khan further proposed to constitute a working group on DHUCP in Pakistan with participation of all relevant stakeholders to effectively steer and manage the DHUCP program.

Prof. Soomro added that a the AETDEW has a Council; however, a BRI Coordinating Committee of the project and a working group in each participating country would be a good step if approved by the DHUCP management.

It is pertinent to mention here that PEC has already developed a high level working group on CPEC for its effective implementation with particular reference to infrastructure and Engineering.

However, the President ECOSF and Council Member of AETDEW Prof. Soomro emphasized on the importance of CPEC and the need for Infrastructure Repair and Maintenance Training Center for Engineers and Technicians in Pakistan, which could also be utilized for



other BRI countries. Thus he advised Dr. Khan to include DHUCP project concept for discussion in Working Group of PEC for CPEC. Dr. Khan assured the delegation that PEC will put forward the DHUCP project concept in the meeting of the working group.

### National Dialogue on Women in Science held at Lahore

The two-day Conference on “National Dialogue on women in Science “ was organized by UNESCO in partnership with UN-WOMEN, Pakistan Alliance for Maths and Science and Lahore College for Women University on 11-12 February 2019 at Lahore College for Women University (LCWU), Lahore Pakistan. The United Nations General Assembly adopted a resolution declaring this day, to achieve full and equal access to and participation in science for women and girls, and further achieve gender equality and the empowerment of women and girls.



The main objective of the Conference was to exchange experience on how to achieve Gender Equality in Science, Technology and Innovation (STI) and Contribution to progress on Sustainable Development Goals-5 (Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.)

The conference was organized in five Sessions on the following Themes:

- Role Models and Gender Roles
- Social Innovation and Entrepreneurship
- Skills-bridging the gap
- Science and Health
- SDG and Youth

The Vice Chancellor of LCWU Prof. Dr. Farkhanda Manzoor welcomed the distinguished guests and thanked the UNESCO and organizers to arrange the important event at her university. She introduced the university and said that it is one of the historic and the largest Women University and is a hub of academic excellence for women empowerment and entrepreneurship in Asia. This institute has played a pivotal role in empowering generations of women by providing quality higher education and has been contributing in the socio-economic development of the country since its inception. She hoped that the conference will provide platform to the participants to devise policy for women in scientific field.

Over 20 panelists and speakers from Indonesia, Malaysia and Pakistan including H.E. Ms. Zartaj Gul, Minister of State for Climate Change, Senator Ms. Aeysha Raza, Ms. Rabiya Javeri Agha Federal Secretary for Human Rights, Ms. Shandana Gulzar, Ms. Shagufta Naz, Director Research LCWU, Ms. Vibeke Jensen Country Representative of UNESCO in Pakistan, Mr. Salman Naveed



Khan CEO, Pak Alliance for Maths and Science (PAMS), Mr. Jamshed Kazi Country Representative of UNWOMEN in Pakistan, spoke on the importance of women and girls involvement and participation in all fields of science and shared their experiences with the audience while highlighting the challenges as well as government's initiatives for women and girls to excel in the field of science.



President ECOSF Prof. Dr. Manzoor Hussain Soomro joined the conference on special invitation by UNESCO. In his speech during the conference, President ECOSF congratulated and appreciated the organizers and partners for this initiative and generating this important Dialogue. Prof Soomro further said that Pakistan faces many development challenges where Science, Technology and Innovation (STI) could help to provide viable solutions to pull the country out of serious economic challenges. He further added that developed nation around the world have exhibited a strong linkage between investments in STI and economic prosperity. Thus, it would be critical for Pakistan to invest heavily in her human capital with focus on STI for socio-economic transformation and to pave the way towards building a prosperous nation.

Prof. Soomro also said that in general, education system should provide necessary conditions to promote innovative science pedagogy in the classroom while taking advantage of use of ICTs, online educational resources and open resources learning assessment. These innovative pedagogies should not just acquisition of knowledge but they also need to stimulate the curiosity and interest in Science, Technology, Engineering and Mathematics (STEM) subject with a certain degree of inquisitiveness. A better response to this challenge may well lay in the education of future generations. The young children, through combining the evidence based learning with digital and modern technologies. This combination can be an extremely powerful aid, which can play a constructive role by Encouraging children to question, negotiate, Challenge and promote rational use of ICTs and modern technology tools for them to able to construct a sustainable future.

He also shared that incorporating evidence based learning or Inquiry Based Science Education (IBSE) and judicious use of ICT/modern tools into Schools, College and University Curricula, can help develop required skills to bridge the gap. This can enable children and youth to be more rational citizens, who base their decisions on the assessment of evidence, the scientific way and make logical use of modern Technology. The ECOSF has undertaken several initiative that supplement and complement its STI programmes with the help of Strategic partners and collaborators to boost regional cooperation, promote socio-economic potential and cultural integration through promotion of IBSE for STEM education and science Literacy activities in Pakistan and region, he concluded.



The Speakers at the National Dialogue on Women in Science unanimously stressed the need to rapid increase in the opportunities and participation of women and girls in science if the country wanted to achieve Sustainable Development Goals. The dialogue led to preparation of charter on Women in Science to be finalised and issued on the occasion of “Women’s Day 2019” on 8 March, 2019.

### President Maarif Foundation of Turkey keen to work with ECOSF in ECO Region

Prof. Birol Akgün President Maarif Foundation of Turkey who have acquired Pak-Turk Maarif schools and colleges in Pakistan, visited ECOSF along with his team on 26 February 2019. He was warmly welcomed by the President ECOSF Prof. Manzoor Hussain Soomro. Prof. Birol thanked President ECOSF for the warm welcome and expressed his pleasure to visit the Foundation.

President ECOSF briefed Prof. Birol about the establishment of ECOSF and its aims and objectives. He mentioned that Republic of Turkey is the founding member of Economic Cooperation Organization (ECO) along with Pakistan and Iran earlier known as Regional Cooperation for Development (RCD). The core programmes of ECOSF such as promotion and implementation of Inquiry Based Science Education (IBSE) for STEM subjects, Engineering Qualification Standardization, research in areas of energy, climate change, water, food security and Sustainable Development Goals (SDGs). Prof. Soomro also shared with Prof. Akgün that the Foundation has also developed collaboration with



renowned regional and international organizations including; La main a la pate Foundation of France, UNESCO, China Association for Science and Technology (CAST) and its Children and Youth Science Center (CYSC), Islamic Development Bank (IsDB), Korea Institute of Science & Technology Evaluation and Planning (KISTEP), Turkic World Educational and Scientific Cooperation Organization (TWESCO), Astana.

Prof. Birol Akgün thanked the Prof. Soomro for attending 14th National Inter-School Maths Olympiad (ISMO) prize distribution ceremony held on February 25, 2019 at Islamabad. He introduced the Maarif Foundation and said that Maarif Foundation aims at elevating Pak-Turk Maarif Schools in Pakistan as an institution that will raise children as individuals of goodwill, enriched with knowledge and wisdom and focus for intending welfare of humanity. Prof. Akgün expressed the happiness about performance of the students of Pak-Turk Maarif Pakistan and wished that the Maarif will put more efforts to make the schools better.

President Maarif Foundation was highly appreciative of the programmes of ECOSF and the achievements gained in a short span of time. He expressed his willingness to work with ECOSF especially for IBSE in ECO Region and proposed to sign MoU between the two Foundations. He also proposed to organize the next ISMO (Inter-School Mathematics Olympiad) jointly in Pakistan and possibly for the students of ECO region, which was agreed in principle by the President ECOSF.

At the end of the meeting, the two Presidents exchanged the souvenirs.

**The Executive Director of ECOSF (designate) made a Presentation of at the joint workshop on “Introduction of international grants for sabbaticals and joint research projects” at Isfahan University of Technology (IUT), Iran**

Professor Seyed Komail Tayebi, the Executive Director of ECOSF (designate) and a faculty member of the University of Isfahan, presented the ECOSF at the first session of the joint workshop series on “Introduction of international grants for sabbaticals and joint research projects” at Isfahan University of Technology (IUT), Iran on February 4, 2019. He briefed the objectives of ECOSF in promoting and funding Science, Technology and Innovation (STI) research collaboration in order to lead to economic development among the member states of the ECO region. He also mentioned that the ECOSF tries to popularize science at grass root levels (such as IBSE – Teachers Workshops, Travelling Science Expos, Science Camps, STI Fairs & STEM Policy Forums etc.).

Professor Tayebi also delivered ECOSF core activities and programs in terms of holding and supporting workshop series on Inquiry Based Science Education (IBSE) in which related programs have been launched by the ECOSF in June 2015 from Astana, Kazakhstan, in Islamabad in 2016, in Isfahan in 2017 and 2018. The ECOSF has also cooperated with Central Asia, particularly focused on Engineering Qualification Standardization, Accreditation and Professional System (EQSAPS). The ECOSF have been in collaborations with Science and Technology Coordination Program for the ECO Region under the Belt and Road Initiative (BRI), Belt and Road Double Hundred Universities Cooperation Program and ECOSF and IsDB Partnership – Reverse Linkages Programme. It supports fundraising of STI Conference, Workshop and Fair Grants.



Professor Tayebi explained scientific activities of the foundation related to Science, Technology & Innovation for Sustainable Development Program under the Asian Innovation Forum. He called the academia, young scholars and postgraduate students from the important Isfahan universities for close relationship with the ECOSF.

**The Embassy of Turkmenistan and the Oxbridge Society jointly organized the Oxbridge lecture “Strategic Importance of TAPI in the Region”**

The Embassy of Turkmenistan and the Oxford and Cambridge Trust (Oxbridge) jointly organized the Oxbridge lecture on “Strategic Importance of Turkmenistan, Afghanistan, Pakistan and India (TAPI) Pipeline in the Region”. Mr. Irshadullah Khan, the secretary general of Oxbridge, the Oxford and Cambridge Society welcomed the audiences and Mr. Muhammetmyrat Amanov, CEO and Chairman of Board of Directors of “TAPI Pipeline Company Ltd., Turkmenistan was the guest speaker. Mr. Amanov shared that TAPI is one of the most important projects in the region. He said the price of gas provided through this pipeline would significantly be lower as compared to the price of liquefied petroleum gas (LPG).



Mr. Amanov shared that Afghanistan has made serious commitment to provide foolproof security to the staff of project. “From political point of view, I believe that all countries, including the United States and China, are supportive of this project. Moreover, Russian, Japanese and American machinery and support is being used in the project,” he added.

The Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline is a 1,814KM trans-country natural gas pipeline running between four countries. Also known as the Peace Pipeline, the TAPI pipeline will begin in Turkmenistan and traverse Afghanistan to reach Pakistan and India. Turkmenistan has already completed the construction of gas pipeline in its section, following which a ground breaking ceremony was performed in February this year at the Turkmen border city of Serhetabat to take the pipeline to Afghanistan.

The Ambassador of Turkmenistan and the Dean of Diplomatic Corps, His Excellency Atadjan Movlamov also spoke on this occasion in full support of TAPI. At the end of question and answer session; Atadjan Movlamov, Ambassador of Turkmenistan to Pakistan expressed thanks to all participants.



**One day conference on 'Building Innovative Pakistan through Science, Technology and Innovation policy' held – President ECOSF invited as a Guest Speaker**

A one-day conference on 'Building Innovative Pakistan through Science, Technology and Innovation policy' was co-organized by the Quaid-i-Azam University (QAU) and Institute of Research Promotion (IRP) in collaboration with Mehran University Institute of Science and Technology Development (MUISTD), ECO Science Foundation (ECOSF), Pakistan-France Alumni Network (PFAN), University of Management and Technology (UMT), Pakistan Institute of Development Economics (PIDE), Ripah Institute of Public Policy (RIPP) and Institute of Space Technology (IST) on February 14, 2019 at QAU.



The event was an effort to respond to emerging challenges and focus on factors of the triple helix model for understanding the science, technology, and innovation policy, governance and innovation ecosystem.

The panelists highlighted various ways and means to connect science with society, strengthen education and STI organisations, increase exports, develop industries and achieve socioeconomic development through science and technology initiatives. Speakers presented various model policies for science and technology- led economic growth of Pakistan.

Mr. Shafqat Mahmood, Federal Minister for Federal Education and Professional Training was the Chief Guest in the event. He underlined importance of Science, Technology and innovation ecosystem and Education in the country to achieve economic growth in Pakistan. We have to make our higher educational institutes as centers of excellence with people of great knowledge, he added.

Prof. Dr. Manzoor Hussain Soomro, President ECOSF while delivering his address underscored the need for developing adequate human capital in the country that could be achieved with effective implementation of existing Science, Technology and Innovation policies. He highlighted that quality education at schools is the key to achieve robust scientific and technological capacity at higher institutions. This is where the Inquiry Based Science Education can play its role to provide quality input for the universities.

Prof. Dr. Muhammad Ali, Vice Chancellor QAU while addressing the conference emphasized on the need for a policy change to encourage the faculty for innovation and collaboration. He said the Faculty appointment and promotion in the Universities should be on the basis of applied work done, industrial linkages, and market based research projects of social sector.

Abid H K Shirwani CEO, IRP said that Science & Technology progress has direct links with economic progress of any country, our exports to a competitive market largely depends on S&T budgets and S&T quality in the country.

Mr. Mushtaq Ahmed, Chairman, Senate Standing Committee for Science & Technology, said that innovation should not merely be a discovery; it should also be time value creation. He said that passion to serve the nation through science & technology should be inculcated in all academicians and policy makers.

Prof. Dr. Anees Ahmed by Vice Chancellor, Riphah International University and Dr. Marc Baréty, Ambassador of France to Pakistan also addressed the conference.