



ECOSF NEWSLETTER



Corona Virus - COVID-19: Situation in Numbers for the ECO Member Countries

| Country | Total confirmed cases due to COVID-19 | Total confirmed deaths due to COVID-19 |
|-------------|---------------------------------------|--|
| Afghanistan | 1,949 | 60 |
| Azerbaijan | 1,766 | 23 |
| Iran | 93,657 | 5,957 |
| Kazakhstan | 3,205 | 25 |
| Kyrgyzstan | 769 | 8 |
| Pakistan | 15,759 | 346 |
| Turkey | 117,589 | 3,081 |
| Uzbekistan | 2,002 | 9 |

Date Stamp: April 30, 2020

Source: <https://ourworldindata.org>

Note: So far, no case has been reported for COVID 19 in Tajikistan and Turkmenistan.

Message by President of ECOSF, Prof. Dr. Manzoor Hussain Soomro on Leveraging Science, Technology and Innovation to respond to COVID 19 for the 7th Science and Technology Exchange Program (STEP)



Global introduction of SARS-CoV-2 (the virus that causes COVID-19) has dramatically disrupted almost all aspects of modern life, including health, education, transportation, finance and businesses. We are currently facing an unprecedented challenge and global anxiety about the lack of knowledge, scientific evidence and control over the situation; and uncertainties about this pandemic because we know very little about this pathogen, so far. Much of this uncertainty relates to the unknown nature and behaviour of the novel viral pathogen. However, I am very optimistic that science, technology and human intellect, can find a solution to this pandemic.

Over the centuries, biological evolution has continued and challenged human capacities to tackle resulting threats to human health, and the concept of “survival of the fittest” in nature has been reminded time and again. However, the human experiences and scientific and technological developments have enhanced the capabilities of the human race. In fact science has played a critical role in the development of this world, and scientific innovations and inventions have led to significant technological advancements, which have continuously improved our lives. There are numerous aspects of life upon which science has a tremendous beneficial impact including the health sciences. Therefore, I am very optimistic that scientists and researchers around the world trying their best to explore the fundamentals of this virus would eventually come up with some solutions.

We need to realize that we are all (worldwide) in this together, and the SARS-Cov-2 virus does not discriminate between cast, creed, color, culture or religion. Therefore, scientific research community must put their acts together; and political leaders must shun their differences to cooperate and collaborate to overcome the COVID-19. This is the only way forward that we can combat this hidden enemy of humans in this 21st century.

There is an urgent need for science and scientists to play a much larger role in public education and discourse. Thus as an immediate action, we all must adhere to the national guidelines of lockdown and maintain safe social/physical distancing to flatten the curve and help break the spread of this virus.

The COVID 19 situation is extremely serious. Today, the world needs more scientists and researchers to utilize their research and scientific expertise into effective communication on global concerns and challenges. Although medical doctors and paramedics all over the globe are playing their important role in handling and treating the patients, some have even laid their lives in the line the epidemic; they must be supported with provision of personal protection equipment (PPEs).

However, I would like to emphasize that this is a potential opportunity for Young Scientists from across the globe but more so the youth of the Islamic World, to put their heads together, network and utilize their diversity of disciplines and expertise for a common global cause. We must take advantage of digital tools for presentations, meetings, workshops and conversations, as well as a variety of media platforms – to respond to different audiences and interests to address this mammoth challenge.

I am glad to observe that Healthcare researchers around the world are working tirelessly to discover new life-saving medical innovations. I believe, for a short term goal, we need to ramp-up the testing rates, because without widespread testing, we will not be able to know the extent of the spread and track it, understand the biology and epidemiology of the virus and contain it. Therefore, researchers, technologists and engineers must come up with innovative and inexpensive testing kits and as well essential production of Personal Protection Equipment (PPEs).

In this respect, I strongly feel that the university faculty and students can play a major role by opening up their laboratories and making their expertise available to healthcare services of their countries. Invariably the universities have well trained human resources and better equipped laboratories, especially when it comes to the Real Time Polymerase Chain Reaction (RT-PCR) machines; which are the only machines used for testing SARS-COV-2 virus so far. This is mainly because the quick tests kits based on serology/antibodies are not available so far, and countries across the world are depending on RT-PCR testing method. Thus the university laboratories and their research students can help to increase testing capacities of their countries which seems to a major impediment in scaling up the testing for the virus presence in asymptomatic populations. The university students quickly trained on COVID-19 protection protocols can also play a greater role in public literacy and creation of awareness on the epidemic with particular reference to personal hygiene and human-to-human spread of the virus. This would be a great “corporate social responsibility (CSR)” contribution of higher education sector for their nations.

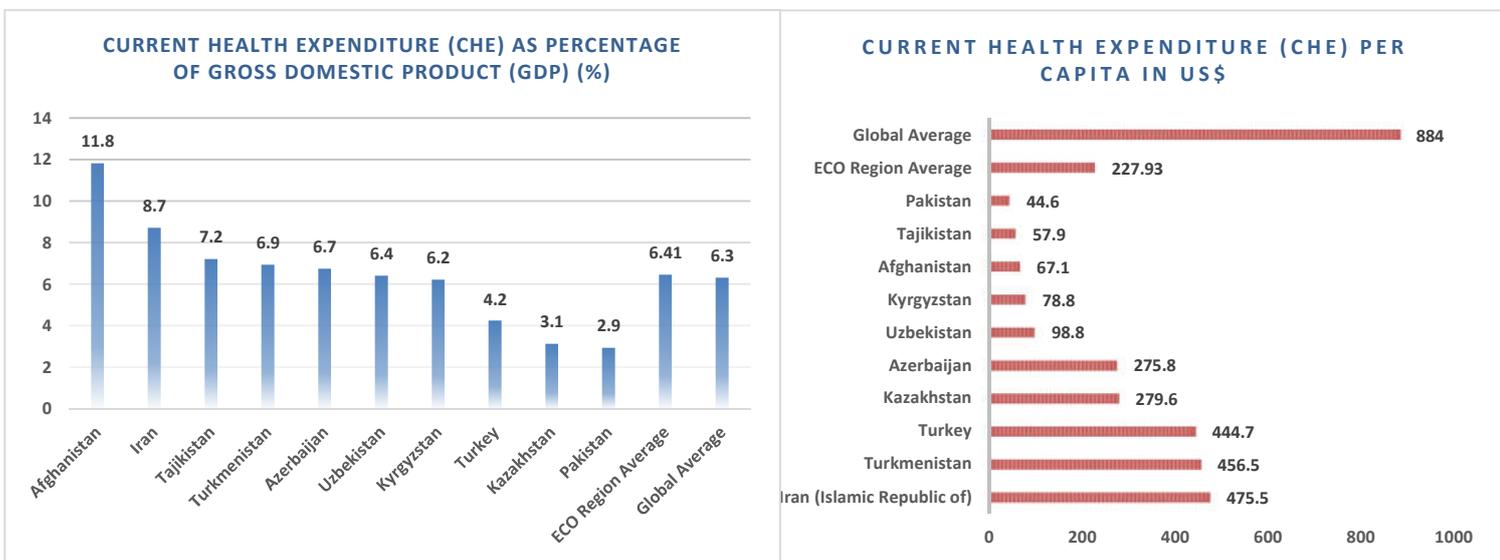
While in the medium and long term, we need to divert substantial resources, both in terms of human and capital resources towards scientific exploration of this pathogen - so that we could be able to develop a treatment and vaccines as quickly as possible to avoid the loss of precious human lives. Unfortunately, there will not be a silver bullet for tackling this pandemic; however, I am hopeful that the researchers around the world could come up with possible solutions that would incrementally help stop the spread of the virus, mitigate symptoms for those infected, and help lower the overall death toll.

In the end, I would like to express my gratitude and appreciation to Mustafa (pbuh) Science and Technology Foundation (MSTF) for taking this important initiative to respond to the unprecedented global crisis of COVID-19. I would also like to assure the fellow scientists, researchers and students that ECOSF will leverage all its possible resources to address this overwhelming pandemic and continue to serve the interests of the ECO Member States, the Islamic world and beyond.

COVID-19 in the ECO Region: Impact, Status of Healthcare and ICT infrastructure, & Response by the Member States

In this brief report, Scientific Officer ECOSF explores and assesses the status of healthcare and Information & Communication Technology (ICT) infrastructure in the ECO Member Countries and how Member Countries have responded during the outbreak of this this pandemic.

The COVID 19 has exposed the fragile limits of healthcare facilities and infrastructures around the world. This report assesses the healthcare capabilities of each ECO Member State against the Global Health Security Index (GHSI). The GHSI is a comprehensive assessment and benchmarking of health security and related capabilities across the 195 countries to address one of the world’s most omnipresent risks: infectious disease outbreaks that can lead to international epidemics and pandemics. A snapshot of ECO Member profiles is also provided at the end of this report.



Current Healthcare Spending in the ECO Countries (left) as % of GDP (right) per capita in US\$ (Source: WHO)

It is even more challenging when we think of resource-limited regions with poor sanitation and weak health systems, which is actually the case in some of the ECO Member Countries. The COVID-19 outbreak is creating significant additional pressure on an already overburdened health system in the Member Countries.

The report also highlights the Scientific and Technological response towards the research on vaccines and drug development by the Member States. It also highlights the issues of internet and broadband connectivity in the region.

The report can be accessed at: <http://ecosf.org/COVID-19-in-the-ECO-Region>

Online Family Summer Science Camp jointly launched by ECOSF and PSC

Almost the entire world is experiencing that the deadly COVID-19 pandemic has badly affected daily lives of people and they have been confined to their homes. The schools have also been closed and it has adversely affected the education of children. In this situation, an Online Family Summer Science activity has been launched by ECOSF and Pakistan Science Club (PSC) since April 6, 2020. Different sessions of scientific activities are being arranged online and students and families are invited to participate. So far, two series have been completed; whereas, more sessions will be arranged till the end of June 2020.

So far, 10 sessions (each session duration was 1:15 hour) have been arranged wherein, 450 families were registered but around 150 families with children joined the sessions.

Before the start of new session, the registration is offered online through website (<https://paksc.org/camp-form>) and Facebook (<https://www.facebook.com/groups/FamilyScienceCamp>).



Note: Due to holy month of Ramadan, the camp has been halted; next camp sessions will begin from 1 June 2020.

Uzbekistan: A timely response on learning during school closures

Courtesy of the World Bank



With the spread of the coronavirus (COVID-19), education systems are facing a new crisis worldwide. More than 180 countries (as of April 22) are mandating some form of school closures, impacting at least 1.7 billion students. Extended closures may cause not only learning losses in the short term, but also losses in human capital and diminished economic opportunities over the long term.

Read more: <https://blogs.worldbank.org/europeandcentralasia/uzbekistan-timely-response-learning-during-school-closures>

IAP-SEP Global Council Annual Meeting held online; President ECOSF attended as a Member

Annual Meeting of Global Council of InterAcademy Partnership – Science Education Programme (IAP-SEP) was scheduled to be held in Washington DC, USA and was to be hosted by the Smithsonian Science Education Center (SSEC) on April 22, 2020. However, due to the global spread of pandemic of COVID-19 and resulting lockdowns and travel restriction; the meeting was held virtually on the same date at 12:00 hours UTC/GMT (14:00 hours Europe time). The meeting was coordinated and facilitated from the secretariat of IAP SEP based in TWAS/ICTP Trieste-Italy. The meeting was arranged online for the first time ever,

Agenda of the meeting was circulated among the Global Council (GC) Members and it was meant to review the progress on various activities carried out by the Regional Networks of IAP and the collaborating organizations as well as GC member since the August 2019 meeting held in Bangkok- Thailand. The meeting had to discuss the plans and the budgetary matters for 2020.

The meeting was chaired by Dr. Wafa Skalli of the National Academy of Sciences of Morocco as the current Chair of the Global Council and attended by 13 Members from Europe, Asia, Americas and Africa. Prof. Manzoor Soomro, President ECOSF also attended the meeting as its Member; so did the immediate past Chair, Dato Lee Yee Cheong of Malaysian Academy of Sciences.

Dr. Wafa welcomed all the participants and appreciated their online attendance of the meeting. Then the agenda was discussed item-wise and decided with consensus. Later, the members were invited to present the progress of their Networks and organizations.

Dato Ir. Lee Yee Cheong, immediate past Chair of IAP-SEP stressed that the UNESCO may be taken onboard to include the pandemic in the curriculums of the UN member countries which was supported by Prof. Soomro and other members.

Prof. Manzoor Soomro shared that ECOSF has been continuing capacity building activities on STEM education through Inquiry Based Science Education (IBSE) methodology in ECO region. A workshop for capacity building on STEM education through IBSE was organized at Suukur in Pakistan, wherein, the participants from various parts of Pakistan were trained. During the workshop, a session on climate change education was also organized in collaboration with Children and Youth Science Center of China under the framework of Belt and Road International Science Education Coordinating Committee (BRISECC). He further shared that the piloting of Curriculum of Fusion of Civilization Education (FoCEd) was also initiated in Pakistan. Dr. Soomro also requested for IAP-SEP support for an IBSE Capacity Building workshop in Tajikistan as requested by the President of Tajikistan Academy of Sciences to IAP and ECOSF. On which, Dr. Peter McGrawth from IAP Secretariat assured that budgetary matter are still under discussion.

Dr. Carol O'Donnell, Director of SSEC USA regretted that due to COVID-19 situation, the Smithsonian Science Education Center could not host the meeting in Washington. She shared that they are in close contact with the Government and are preparing material for health sector. In this context, they are in search of public health experts/doctors to help prepare the material.



During the meeting, it was also shared by the members from Africa that The Africa-European-Mediterranean Academies for Science Education (AEMASE) network has moved forward with plans to establish a series of Centres for Education in Science for the Africa-Mediterranean-Europe region (CESAME). In 2019, a teacher-training workshop and AEMASE Steering Committee meeting were held in Cape Town, South Africa.

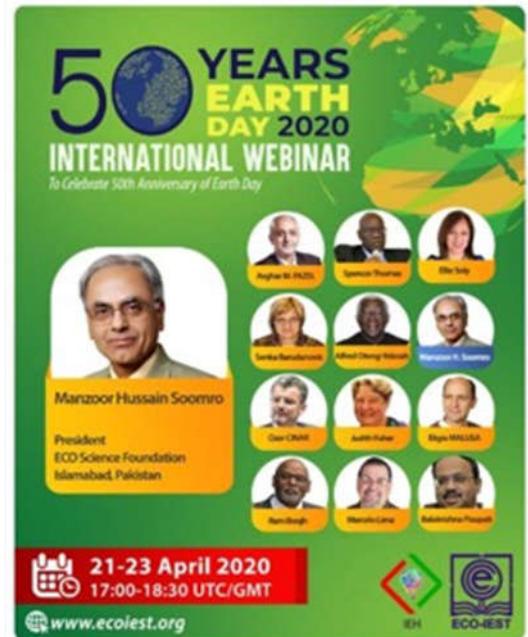
The next meeting (2021) of the Global Council of IAP-SEP will be held in Washington, USA.

50 Years of Earth Day 2020 Celebrated through an International Webinar 21-23 April

ECO Institute of Environmental Science and Technology (ECO-IEST) Iran organized an International Webinar on Earth Day 2020. The Earth Day is an annual event celebrated around the world on April 22 to demonstrate support for environmental protection of the planet. This year marked the 50th Anniversary of the Earth day. The International Webinar was conducted in three sessions spread over three days from April 21, 2020 to April 23, 2020.

It is important to mention here that human activities and excessive use of fossil fuels have had severe impact on the planet earth. This year’s theme was “Climate Action” which laid great emphasis on the need to take drastic and immediate action.

Dr. Asghar Mohammadi Fazel, the President of ECO-IEST based in Tehran- Iran moderated the entire webinar during three sessions. The 12 Webinar speakers were; senior environmentalists, climate change experts, agricultural scientists, education and water resource experts including the President ECOSF Prof. Dr. Manzoor Hussain Soomro. Over 300 other participants from different parts of the world also joined the online seminar.



The webinar discussed a number of complex challenges of changing climate, and how these impacts extend well beyond an increase in temperature, affecting ecosystems and communities around the world. During the sessions, the discussion centered around sustainability of planet and issues, such as water, science education, energy, transportation, wildlife, agriculture, ecosystems, and human health.

During the first session held on April 21, 2020, President ECOSF Prof. Manzoor Hussain Soomro delivered his talk on “Climate Change and School Education”. He emphasized that Science Education plays a critical role in achieving Sustainable Development Goals and putting into practice a global agreement on climate change. By raising awareness and promoting knowledge and skills-development, science education is an essential component and a catalyst for responding to global climate change, he added. Prof. Soomro highlighted some of the important initiatives undertaken by the Foundation to promote science education at schools to address the Climate Change in the ECO region. He also appreciated the efforts

undertaken by the global scientific community, including the InterAcademy Partnership Science Education Program (IAP SEP) and La main à la pâte (LAMAP) Foundation of France. Prof. Soomro called for taking distinctive measures to include a number of aspects of climate change in school curricula and in their respective national development agendas. He also stressed upon the global ownership and promotion of climate change education and epidemic prevention as part of school curriculum under the auspices of UNESCO.

The sessions were followed by questions and answers where experts, speakers and participants interacted on a number of issues relating to the climate actions and mitigation to protect the mother Earth.

The complete webinar sessions can be accessed through below weblinks

Session – 1st day:

<https://www.aparat.com/v/4e26d>

Session - 2nd day:

<https://www.aparat.com/v/Md2QZ>

Session 3rd day:

<https://www.aparat.com/v/92iTO>

ECOSF participated in a Webinar on Shared Responsibility, Global Solidarity – A virtual dialogue on SDG 17 and Public Private Partnership

A webinar on Shared Responsibility, Global Solidarity – A Virtual dialogue on SDG17 and Public Private Partnership was held on April 29, 2020. The Webinar was co-hosted by the UN Department of Economic and Social Affairs (DESA), United States Council for International Businesses (USCIB) and International Organization of Employers (IOE). The webinar discussed as to how this partnerships can be catalysed and scaled up in the COVID-19 era to advance the 2030 Agenda and inform the future work of High Level Political Forum on Sustainable Development. The webinar was participated by a number government officials, private sector experts and development practitioners. The wide range of speakers and experts laid out new and innovative partnership opportunities to curb the pandemic, safeguard business, and accelerate global research and innovation. On behalf of ECOSF, President ECOSF Prof. Dr. Manzoor Hussain Soomro and Scientific Officer Engr. Khalil Raza participated in the webinar.

H.E. Ambassador Munir Akram, Vice-President of the UN Economic and Social Council and Permanent Representative of Pakistan to the UN made the opening remarks. Ambassador Akram called for practical joint efforts by international development partners and the governments around the world to deliver on the ground solutions to suppress COVID19 transmission and save lives.

**SHARED RESPONSIBILITY,
GLOBAL SOLIDARITY**

**A VIRTUAL DIALOGUE ON SDG 17 AND
PUBLIC-PRIVATE PARTNERSHIPS**

**COVID-19 Response & Recovery in the
Framework of the 2030 Agenda**

Join our webinar that aims to provide ideas about how partnerships can be catalyzed and scaled up in the COVID-19 era to advance the 2030 Agenda.

**WED., 29 APRIL 2020
9-10:30 A.M. EDT**

Register by 27 April:
is.gd/sdg17webinar

DESA | Department of Economic and Social Affairs

USCIB | UNITED STATES COUNCIL FOR INTERNATIONAL BUSINESS

IOE | A powerful and balanced voice for business

100 | 1920-2020

Business Partners for Sustainable Development
AN INITIATIVE OF THE USCIB FOUNDATION

Ambassador Akram was later joined by Elliot Harris, Assistant Secretary-General and Chief Economist, United Nations and Roberto Suarez Santos, Secretary General, International Organisation of Employers (IOE).

The webinar hosted following mini panels:

Mini-Panel I: Partnerships to Accelerate Global Research and Innovation

Mini-Panel II: Partnerships to Support and Build Capacity for MSMEs ?

Mini-Panel III: Partnerships to Curb the Pandemic

Webinar on Smart Approaches to COVID-19 Organized by PIDE, President ECOSF attended

A webinar on smart approaches to novel Corona Virus – COVID-19 was organized by the Pakistan Institute of Development Economics (PIDE), Islamabad, Pakistan on 21 April 2020. A good number of national and international academic experts, scholars, researchers and students attended the event. President ECOSF Dr. Manzoor H. Soomro was also among the attendees.

Vice Chancellor of PIDE Dr. Nadeem ul Haq welcomed the distinguished experts and the participants and thanked them for sparing time to join the webinar. He then introduced the webinar and its importance during the prevailing situation of COVID-19. Later, he invited the experts to deliver their talks.

Experts including; Dr. Rashid Mehmood, Dr. Jawad Asghar, Dr. Samia Altaf and others said that we have to understand the pandemic. Pandemic has various aspects and it is not a single stage game but a multi-stage game. During the pandemic, the number of infected cases goes up and down many times, finally it settles down. Big threat and challenge of Pandemic is that if a single person in the area is affected, he/she can affect others exponentially. The cost of pandemic is very high even for small minority of people. The human conditions are random and isotropic; thus, the spread of diseases would be uneven. During this situation of corona virus, so far, lockdown and social distancing are the best strategies, even, if there is no case but lockdown should be placed at least for 14 days (life of the virus). Smart lockdowns can be imposed in different localities.

Experts further elaborated that the computer model does not work in this kind of pandemics especially on those where we don't have key information available. The infected numbers of people vary in every region of the countries/world. Testing is the best method to identify the cases because there are many cases with no visible symptoms of disease. Testing of every person in the country, even in the developed countries; such as USA is not possible and even, the health systems do not have capacity to do it, thus, random testing in different areas should be done. Herd strategy is also adopted by few countries of the world such as Sweden, which allows no lockdown and no social distancing.

Words of appreciation for the President ECOSF and Message from Mustafa (PBUH) Science and Technology Foundation (MSTF) based in Iran

“Most sincere thanks for your kind and positive response and interest in collaboration with virtual STEP event. It is a big opportunity and honours for us. STEP wish the best for you and all of ECOSF members in their scientific journey.

At first, we would like to appreciate President ECOSF for his worthwhile concern about the future of the world. His scientific, warm and humanitarian message and his comprehensive response to our questions have been received. It will be a great honour for us to be collaborated with him and ECOSF members in this scientific event. In this critical time, sharing and transferring experiences, experiments, as well as scientific ideas, can be an impressive impact on fighting with the current pandemic.

Regarding STEP aims and your noticeable contribution with us, the valuable and important results will be expected from this event. We proudly invite President ECOSF to participate in the virtual conference as a keynote speaker and panel discussion member for sharing their outstanding experiences.

Additionally, STEP thanks again President ECOSF for introducing our program to other members in ECOSF. We look forward to hearing from your recommended colleagues.”

Transport Potential of the ECO Region

Courtesy of the Eurasian Research Institute (ERI) Kazakhstan

Developed and developing countries, in addition to taking part in international integration initiatives, strive for creating regional unions among themselves. One such regional structure is the Economic Cooperation Organization (ECO), which focuses on contributing to the development of its member states, removing trade barriers within the ECO region, improving intra-regional trade and ensuring the integration of the ECO region with global markets. With an area of 8 million square kilometers and a population of more than 440 million, the ECO is a regional inter- governmental organization, which includes Afghanistan, Azerbaijan, Iran, Kazakhstan, Kyrgyzstan, Pakistan, Turkey, Turkmenistan, Uzbekistan, and Tajikistan. The ECO region that covers a large geographic area has the potential to reach Europe through Pakistan and Turkey. The fact that other member states except Turkey and Pakistan do not have direct access to the sea makes the ECO valuable for the member states. In case of Iran sanctions towards the country might hinder using its ports for other member states.

The ECO predecessor, the Regional Cooperation for Development (RCD), which was established in 1964 by Iran, Pakistan, and Turkey, remained in existence up to 1979. The organization suspended its activities following the Iranian Islamic Revolution in 1979. In 1985, it was re-established as the ECO. After the dissolution of the Soviet Union, in 1992, Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan became members of the organization.

Read more:

<https://eurasian-research.org/web/publications/Weekly-e-bulletin-25-11-2019-01-12-2019-No-235.pdf?1578455744>

Here are the drugs, vaccines and therapies in development to tackle COVID-19



- Even though a vaccine could be more than a year away, researchers are experimenting with drugs and therapies to help ease the strain on overwhelmed healthcare systems.
- Currently, there are more than 70 vaccine candidates in development around the world.

With much of the world living in lockdown, the spread of the new coronavirus, SARS-CoV-2, that was first detected in China late last year is beginning to slow in some places. As of April 19, 2.4 million had been infected and 165,000 killed by COVID-19, the disease caused by the virus.

While a safe, effective vaccine is still more than a year away, researchers are rushing to repurpose existing drugs and non-drug therapies as well as testing promising experimental drugs that were already in clinical trials.

Even moderately effective therapies or combinations could dramatically reduce the crushing demand on hospitals and intensive care units, changing the nature of the risk the new pathogen represents to populations and healthcare systems. New drugs, together with new diagnostics, antibody tests, patient- and contact-tracing technologies, disease surveillance and other early-warning tools, mean the anticipated next 'wave' of the global pandemic does not have to be nearly as bad as the first.

More than 70 vaccine candidates are also in development around the world, with at least five in preliminary testing in people. Here are some of the drugs, vaccines and other therapies in development

Read more: <https://bit.ly/2Wtt8To>

Upcoming Events posted on ECOSF website and Facebook page

Islamic Development Bank to support pioneering ideas in the fight against COVID-19 via \$500m Transform Fund

The Islamic Development Bank (IsDB) has announced the "Call For Innovation" which will focus on supporting member countries' long-term preparedness and response to the current COVID-19 pandemic.

For more details, please visit: <http://ecosf.org/IsDB-fund-to-fight-for-COVID-19>

7th Science and Technology Exchange Program (STEP) – Virtual Summit

The Mustafa (PBUH) Science and Technology Foundation in collaboration with its partners, including ECOSF is planning to hold its 7th Science and Technology Exchange Program (STEP) through a virtual summit on May 18, 2020 and May 28, 2020. The first day (May 18, 2020) will be focused on “Sharing Experiences and Observations of the Islamic Countries' Medical Staff in Dealing with COVID-19” and on May 28, 2020 “Scientific discoveries, Technological innovations and Strategies Facing Coronavirus Challenges” will be highlighted. The summit will be an opportunity to synergize the capacities and capabilities of scientists and experts in the Islamic world to solve this global crisis.

Submission deadline: May 14, 2020

For detail program and further information, please visit:

<http://ecosf.org/7th-Science-and-Technology-Exchange-Program-STEP->



Nominations for TWAS Awards To Scientists/Researchers

The World Academy of Sciences (TWAS) has announced call for nomination for following awards in various fields for the scientists/researchers of Developing Countries.

- The 2020 TWAS-Fayzah M. Al-Kharafi Award
- The 2020 TWAS-Abdool Karim Award
- TWAS CAS Young Scientists Award for Frontier Science
- TWAS Atta-ur-Rahman Award in Chemistry
- TWAS Mohammad A. Hamdan Award
- TWAS Samira Omar Innovation for Sustainability Award

For more details, please visit: <http://ecosf.org/TWAS-AWARDS-TO-SCIENTISTS-RESEARCHERS>