



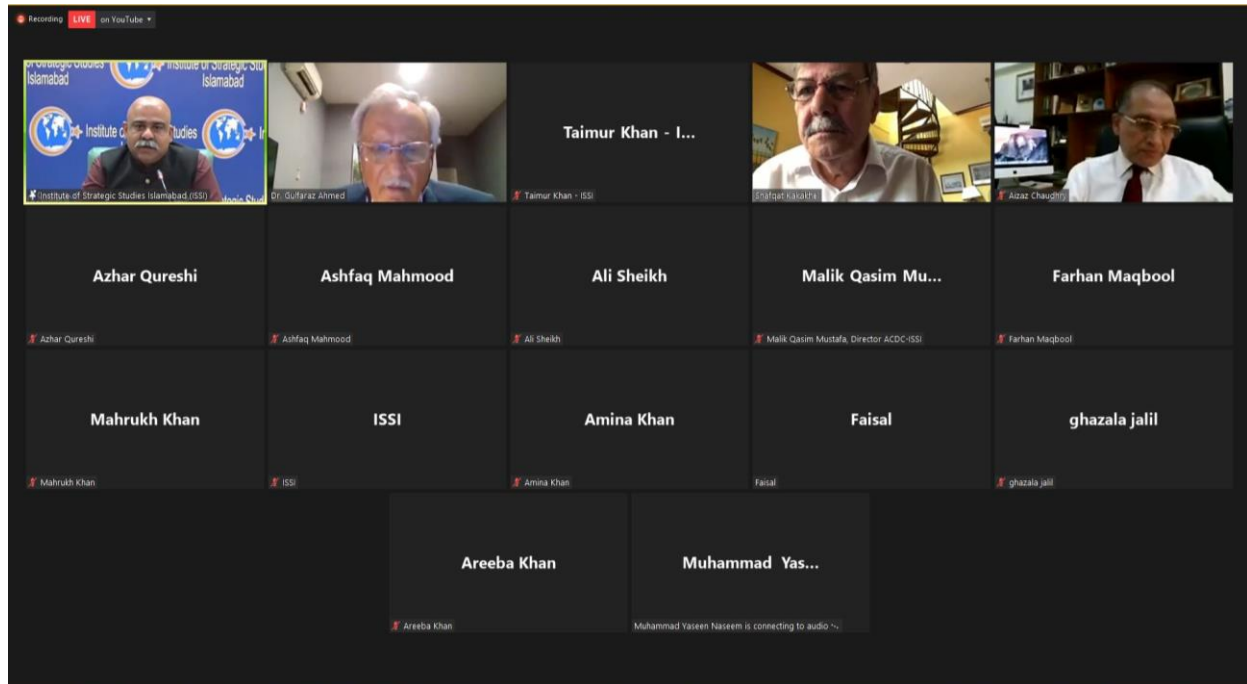
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## *Report – Webinar*

# **“Strategies for Mitigating Impacts of Climate Crisis”**

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### PICTURES OF THE EVENT



The Centre for Strategic Perspectives (CSP), Institute of Strategic Studies Islamabad (ISSI) organised a Webinar titled “Strategies for Mitigating Impacts of Climate Crisis,” on August 12, 2021. Mr Ali Tauqeer Sheikh, Climate Change and water expert was the keynote speaker on the occasion. Other speakers for the webinar included Mr Ashfaq Mehmood, former Federal Secretary, Water and Power, Government of Pakistan; Dr Gulfaraz Ahmad, former Federal Secretary, Petroleum and Natural Resources, Government of Pakistan; Dr Arjumand Nizami, Country Director, Helvetas, Pakistan and Ambassador Shafqat Kakakhel, Chairperson BoG, Sustainable Development Policy Institute (SDPI). The Talk was moderated by Mr Malik Qasim Mustafa, Director ACDC & CSP at the ISSI.

Malik Qasim Mustafa in his introductory remarks said that countries like Pakistan are among the top 10 countries, which are suffering from the Climate Change phenomenon. According to the latest IPCC report, “Climate change is widespread, rapid and intensifying.” The Climate Change threat is real now and Pakistan needs to work and develop strategies to reduce and mitigate the impact of the climate crisis.

Earlier in his welcome remarks, Ambassador Aizaz Ahmed Chaudhry, Director General ISSI, said that there is a need to raise awareness among the country’s policymakers that Climate Change is an existential threat and needs appropriate action to deal with the vulnerabilities arising out of it. He identified three main issues in this regard. Firstly, this is a serious crisis, secondly, area of vulnerabilities and strength need to be defined, and thirdly, a plan must be put in place and implement it.

Mr Ali Tauqeer Sheikh thanked the Institute for inviting him to the occasion. He began by saying that this very event coincides with two important developments: One is the release of 6th IPCC Report and the other Pakistan is in the process of completing its Nationally Determined Contributions (NDC). This will speak volumes about Pakistan's contribution to global efforts on climate change. Sharing key highlights of the report, he said that the world has passed beyond the linear changes of Climate Change, and moving towards abrupt system changes. The report is extremely credible since it has been compiled by the scientists all over the world. The frightening part is, as the report says, is the time to avert the climate crisis is passed now the world is left with only one option which is to make drastic changes in order to lessen the impact of the crisis.

The impact of climate change would be more severe than what the report forecasted. There is consensus among scientists that the rate of climate change has accelerated. In the South Asian context, we can see similar patterns of Monsoon. They are changing with increased precipitation and in Pakistan heat waves, droughts and flash floods can be associated with Climate Change. Pakistan is not a big emitter but it is among the most vulnerable countries from climate change. Pakistan's programs such as tree plantation schemes, forestry initiatives, electrical vehicles scheme, hosting of world environment day, and other climate-related measures are worth appreciation. However, the policy-makers must come up with a well thought-out plan and improving economic growth through green growth policies will benefit the country.

Mr Ashfaq Mehmood said that Pakistan is already in a crisis regarding water availability. Pakistan is approaching water scarcity. Pakistan is an arid country with an average rainfall of 250mm rain per annum in 70 per cent of the area. In fact, we are approaching to a very catastrophic water scarcity situation which is around 500 so because of population growth our availability is going down. Pakistan needs to build to store water, as it will be available for a shorter period. Water pricing is also needed for the efficient use of water.

Not only today but in fact in 1991 when Indus river system record was repaired between the provinces and the federations. The availability of water was assessed as about 102 million acre feet for agriculture and water uses for diversion whereas the distribution was done at the assessment of 114. In other words, when an accord was signed a shortage of 12 million acre feet was already acknowledged. Then, WAPDA has done some recent work and the project describing that this shortage will increase to 70 million acre feet by 2050. Now we are diverting about 102 and if there is another shortage of 70 million acre feet it means it's more than 70 percent of the shortage. By 2050 not only we are in crisis we are heading towards a catastrophic situation where we will be very seriously impacted.

Pakistan is an arid country. It receives 250 millimeters of rainfall on 75 per cent of its area and in fact 25 percent 20 of the area receives even less than 125 millimeters in the in a year. The current monsoon current will shift slightly towards the east which means that even though if there are more precipitations. The precipitation will be shifting more towards east which means towards India. Therefore, Pakistan might actually find some areas facing more scarcity of water

than they actually are receiving about 80 percent of its water comes from snow melt and about 20 per cent is from the precipitation which is going to be infected. Due to temperature increases and global warming, the availability pattern of water is also going to change. As the climate change pundits have told that not only that the window in which this melting takes place will reduce. If it is from April to October, it will be concentrated in two months and the intensity of availability will increase there will be more floods leading to greater periods of the drought in a year. The drought cycles on a year-to-year basis will also increase so Pakistan is not only facing the situation of per capita scarcity. In Pakistan, consensus efforts are being made to build more dams. Bashar dam and Mohammand Dam are under construction but more dams need to be built in order to store water.

Dr Gulfaraz Ahmad said that Pakistan is an energy deficient country. The international market is cartelised and wild changes in prices in oil has negative effects on Pakistan economy. The international petroleum market is catalyzed and subject to violent changes in price and availability which continues to affect Pakistan's economy. Energy security depends upon total exports and energy intensity. natural gas that had been the mainstay of our energy economy for a long time, now, it is at an advanced stage of depletion and it is forcing us to increase the import of natural gas which has its own challenges. New reserves are also going to slowing down because of the lower potential as most of the foreign exploration production companies have left. Positive developments are now taking place enhancing the hydra potential as more than 10, 000 megawatt of power projects are being built at this point in time. Similarly, Pakistan is also making good headway in terms of nuclear energy. Pakistan needs to improve energy efficiency by implementing effective policies. Energy sustainability needs to be investigated by keeping in mind Climate Change.

Dr Arjumand Nizami said that mitigation and adaptation are both needed to address the food security issue in Pakistan. Need assessments regarding the areas, which need to focus on to address food security challenges. Climate corridors are changing due to Climate Change leading to a decline in crop productivity. Furthermore, crops need to be water productive. In terms of adaptation and particularly with relation to food security, it is better to learn to adjust and live with it and find solutions. which can bring us some very good mitigation benefits also in case of agriculture. The nexus of adaptation and mitigation solutions would be very pertinent. With good

technology and energy solutions in agriculture, wise perception of value chains can work wonders. Now the challenge of a large population is quite big in Pakistan.

On one hand, the situation of subsistence farming household and, on the other hand, a challenge of commercial agriculture earning revenue for the country are the pressing problems that the country is facing now. Pakistan is a diverse country and diversity is an opportunity but diversity is also a huge challenge to deal with. This implies a multiple range of solutions to address multiple problems. One direction is to know the local and global climate trends for making climate assessments. With all these climate related assessments and detailed work over of Helvetas in Pakistan, we have no clear division of climate zones. They are all spread all over the country. The agriculture extension services and technical research wings and the human capacity in different districts is different. However, all these zones are sufficient to address all these different requirements of agroecological zones. However, the government must work on capacity-building issues in order to enhance the already existing resources.

Ambassador Shafqat Kakakhel said that Climate change is real and that the planet is indeed facing a most serious catastrophe. The IPCC report has forecasted more frequent, intense and devastating. Extreme weather events such as wildfires because of extreme heat and moisture, devastating floods because of extreme rain events, tropical cyclones and hurricanes because of the changing temperature between the sea and the land surface. According to the IPCC, global temperature will likely rise by 2 degrees Celsius by the beginning of the next century.

warming beyond this point would result in catastrophic and reversible changes that would make it impossible for human beings and other species to survive. The IPCC has therefore called for immediate widespread rapid and large scale reductions in greener house gas emissions. The IPCC has also warned that if carbon emissions continue to spike the natural cleaners such as oceans and forests which have so far absorbed more than 50 percent so almost 55 percent of the carbon for the atmosphere. The IPCC has therefore reiterated its early account for reducing greenhouse gas emissions by 40. Compared to 2010 levels by 2030 and to reach a net zero by 2050.

Severe heatwaves across all the regions of the world in South Asia, particularly in India and Pakistan. Heatwaves and humid heat stress are likely to be more intense and more frequent.

There will also be an increase in monsoon precipitation which usually leads to flooding. In this scenario, heatwaves in Pakistan will be more intense and so will be flash floods creating challenges for the country because of Climate Change. In Pakistan, many policies about Climate Change have been postulated but their effective implementation needs to take place. The two main pillars of actions to counter climate change are mitigation and adaptation. The development and deployment of science and technology and finance are the indispensable means.

Ambassador Khalid Mehmood, Chairman BoG ISSI, in his concluding remarks said that there's no escaping from the fact that we will be living in a hotter atmosphere in the coming years. Humanity can still prevent the planet from getting even hotter. Things are likely to get worse but there is still hope if there is a coordinated effort between countries to reduce carbon emissions and keep global warming in check.