

## **Policy Brief / Recommendations**

### **CPEC & CLIMATE CHANGE – PAKISTAN TOWARDS A CLIMATE COMPATIBLE PARADIGM**

**BY**

Dr. Saleem Janjua & Ms. Numra Asif

A roundtable conference was hosted by Urban Development Division of Centre of Excellence -China Pakistan Economic Corridor (CoE-CPEC) with the title of “CPEC & Climate Change-Pakistan Towards a Climate Compatible Paradigm”, organized by Dr. Saleem Janjua, Head of Policy and his team members on Dec 20<sup>th</sup>, 2017. The roundtable conference (RTC) was a side event of the International Science - Policy Conference on Climate Change in Pakistan, which was arranged in collaboration with the Global Change Impact Studies Center (GCISC), Ministry of Climate Change, Islamabad. Researchers, climate change experts, policy makers, implementers, practitioners and scholars participated in the RTC. Some of the distinguished guests were as under:

- ❖ Dr. Tariq Banuri (Executive Director, Global Change Impact Studies Centre (GCISC))
- ❖ Dr. Shahid Rashid (Executive Director, CoE-CPEC)
- ❖ Dr. Saleem Janjua (Head of Policy, Urban Development Division, CoE-CPEC)
- ❖ Ms. Fauzia Bilqis Malik (Manager Islamabad Programme Office, International Union for Conservation of Nature (IUCN), Pakistan)
- ❖ Prof. Syed Ahmad Ali Shah (Director CESTaC, Fatima Jinnah Women University, Rawalpindi)
- ❖ Prof. Mazharul Alam (Regional Coordinator Climate Change, UNEP-Bangkok)

The key objective of the roundtable was to assess the current state of knowledge on the subject, identify data and research gaps, and provide guidance for future policy research on climate related threats to the ongoing and planned CPEC developments in Pakistan. The RTC was structured in the form of an open discussion amongst selected policy makers and experts, including international experts. The key points of the discussion are summarized as follows:

- ❖ Climate change is the defining challenge of our time. The resilience and sustainability of the modern world require that the key issues posed by the climate change are well addressed with suitable adaptation and mitigation strategies. Countries around the world are adopting measures and implementing policies to minimize the impact of climate change.
- ❖ Pakistan, despite being a low GHG emitting country, is being severely impacted by climate change for the last four decades. In Pakistan, out of the 15 recurring natural disasters, 13 were triggered by the changing climate. The impacts of recurrent floods, flash floods, glacier lake outburst floods, landslides, avalanches, drought, seawater intrusion and cyclones have resulted in significant damage to life, property, and natural eco-systems as well as to the economy of the country.
- ❖ Some recent events that depict Pakistan's climate vulnerability include the localized cloud-bursts that caused urban flooding in Lahore (1996), Islamabad (2001) and Karachi (2009); history's worst drought in Tharparkar (1999-2002) and Cholistan (2014); heat waves during 2003, 2005, 2007 and 2010 (53.7 °C); and historically unprecedented cyclones in 1999, 2007

and 2010. Besides the loss of lives, these events also resulted in significant economic losses. The estimated damage caused by the 2010 floods alone was US\$9.7 billion.

- ❖ Future climate vulnerability concerns for Pakistan include increased variability of monsoons, projected recession of HKH glaciers threatening flows, increased risks of extreme events (floods, droughts, cyclones, extreme high / low temperatures etc.), degradation of water and heat stressed conditions in arid and semi-arid regions leading to reduced agricultural productivity, increase in deforestation, loss of biodiversity, increased intrusion of saline water in the Indus delta due to sea level rise, and risk to mangroves and breeding grounds of fish etc.
- ❖ The China-Pakistan Economic Corridor, a framework of regional connectivity, is considered as a game changer both for Pakistan and China. The economic corridor is envisaged to carry massive development/ infrastructure work especially in the areas of energy, infrastructure and communications followed by the establishment of special economic zones (SEZs). The investment under CPEC is part of China's OBOR strategy, which includes the Silk Road Economic Belt and the 21st Century Maritime Silk Road. The completion of CPEC projects is expected to boost economic growth.
- ❖ However, this revival of economic growth through CPEC can be hampered by climate change, and climate vulnerability of Pakistan can also impact the development and economic activity under CPEC. Conversely, in the absence of ancillary policies or measures, CPEC projects could also contribute to the exacerbation of Pakistan's vulnerability to and impact upon climate change. As such, it is important to undertake a systematic and comprehensive review of the potential effects of climate change on planned investments and vice versa.

## RECOMMENDATIONS

The conference concluded with an insightful discussion among speakers and delegates aimed at designing policies and recommendations to address climate change with respect to CPEC portfolio so that the development under CPEC is made climate-compatible and climate-resilient. A number of recommendations were made. Some of them are as follows.

- ❖ The usage of coal as a source of power generation is the need of time, however the usage of latest technologies such as super critical technology can significantly reduce emissions from the power plants being constructed under CPEC.
- ❖ Energy generation under CPEC is based on the usage of coal; however, a number of renewable energy projects also need to be planned and executed. The policy focus in near future should be on the planning, management and operation of renewable energy projects, so that the energy mix of Pakistan includes significant portion of clean energy.
- ❖ China has applied stringent environmental quality standards, and is also implementing practical measures to protect environment and ensure climate resilient development. The need of the hour is that Pakistan may also follow the footprint of China and adopt guidelines from the international experience, so that the climate resilient development is ensured under CPEC.

- ❖ Under the Pakistan Environmental Protection Act, 1997 / provincial environmental protection acts, it is mandatory to conduct EIAs of development projects. The same legislative requirement should also be followed for all CPEC projects with diligence both at federal and the provincial levels.
- ❖ Biodiversity assessments along CPEC alignments need to be initiated in coordination with the relevant Pakistani institutions.
- ❖ Consultative sessions with key stakeholders from research, academia, policy makers, civil society, private sector and media and awareness raising through dialogues and seminars about the climate change issues along CPEC alignments should be conducted. It is imperative to support and intensify networks between civil society and other actors in the respective regions.
- ❖ National and local action plans may be developed to address CPEC specific issues related to pollution, environmental degradation, climate change and biodiversity loss.
- ❖ SEAs (Strategic Environmental Assessments) should be carried out for analytical, participatory and integrated approach to environmental considerations into CPEC projects. This will help evaluate the inter linkages of environment, economic and social considerations.
- ❖ There is a need for designating a central body to oversee the implementation of mitigative measures outlined in the EIAs / SEAs of CPEC projects.
- ❖ Identification of economic, environmental and social benefits of low carbon development should be carried out. Pakistan may avail carbon credits and setup a regional market for trading carbon credits.
- ❖ Baseline assessments of cross-border environmental pollution should be made on priority basis by the Climate Change Ministry and cases of compensation in terms of carbon credits may be taken up to the relevant international forums.
- ❖ Financial mechanisms such as Green Climate Fund (GCF) may be explored for CPEC projects. In order to tap GCF opportunities for CPEC projects there is a need for understanding of GCF modalities that include GCF basic concept orientation, project identification, development and project implementation.
- ❖ Clean Development Mechanism (CDM) can allow Pakistan with emission-reduction / emission-limitation commitment under the Kyoto Protocol. CDM is a global environmental investment and credit scheme of its kind that provides a standardized emissions offset instrument - CERs. In the context of CPEC, CDM can also be explored for industrial cooperation so that the eco industrial development is promoted in the country.
- ❖ CPEC energy projects may lead to an increase in Greenhouse Gas (GHG) emissions. Expected change in “GHG Inventory” over time needs to be carefully calculated, so that Pakistan may successfully comply with its international commitments.

