

House of the Federation

SENATE OF PAKISTAN

REPORT OF THE STANDING COMMITTEE ON CLIMATE CHANGE ON

*“Starred Question No.56 asked by Senator Fawzia Arshad:
Whether guidelines under Climate Change Policy 2021 have
been issued to all stake holders including multinational firms
to take measures for the promotion of green environment, if
so, the details thereof indicating also the present status of
implementation of the same”*

Presented by:

**SENATOR SEEMEE EZDI
CHAIRPERSON**

STANDING COMMITTEE ON CLIMATE CHANGE

SENATE SECRETARIAT

Subject: REPORT OF THE SENATE STANDING COMMITTEE ON CLIMATE CHANGE.

I, Chairperson of the Senate Standing Committee on Climate Change, have the honor to present the report of the Committee on Consideration of Starred Question No.56 asked by Senator Fawzia Arshad regarding "Whether guidelines under Climate Change Policy 2021 have been issued to all stake holders including multinational firms to take measures for the promotion of green environment, if so, the details thereof indicating also the present status of implementation of the same" in the Senate Sitting held on 26th December, 2023. The instant matter was referred by the Hon'ble Chairman Senate to the Committee for consideration and report.

2. The composition of the Standing Committee is as follows:-

1.	Senator Seemee Ezdi	Chairperson
2.	Senator Dr. Shahzad Waseem, Leader of the Opposition	Member
3.	Senator Mushahid Hussain Sayed	Member
4.	Senator Taj Haider	Member
5.	Senator Sherry Rehman	Member
6.	Senator Dr. Mohammad Humayun Mohmand	Member
7.	Senator Keshoo Bai	Member
8.	Senator Kamran Michael	Member
9.	Senator Khalida Ateeab	Member
10.	Senator Abida Muhammad Azeem	Member
11.	Senator Imamuddin Shouqeen	Member
12.	Senator Faisal Javed	Member
13.	Senator Farooq Hamid Naek	Member
14.	Minister for Climate Change	Ex-Officio Member

3. The Senate Standing Committee on Climate Change placed the matter on the agenda of the Committee on 22nd February, 2024. The following Honorable Senators were present at the time of consideration of the matter:-

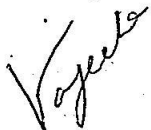
1.	Senator Seemee Ezdi	Chairperson
2.	Senator Dr. Mohammad Humayun Mohmand	Member
3.	Senator Abida Muhammad Azeem	Member
4.	Senator Taj Haider	Member
5.	Senator Keshoo Bai	Member
6.	Senator Khalida Ateeab	Member
7.	Senator Fawzia Arshad	Mover

4. The Mover elaborated her question for the Committee thereafter the Ministry informed that all provincial coordination plans stem from the Climate Change Policy 2021. The Committee was informed that in accordance with the Constitutional scheme the federal Ministry of Climate Change acts as a focal point on all international climate change related treaties and negotiations. The Committee was further briefed that the policy is displayed on their website. Moreover, the Climate Change Ministry has assisted the provinces in development of Provincial Climate Change Action Plans which provides a comprehensive framework to support provinces in maximizing their efforts on adaptation and mitigation.

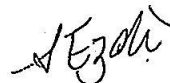
5. The Mover shared her concerns regarding the impact of climate change on residents of Islamabad especially those residing in Katchi Abadis. Furthermore, she desired that the Ministry may share a detailed report on the status of implementation of the National Climate Change Policy in the Islamabad Capital Territory which was also endorsed by the Committee. The same is attached at annex A. The Ministry informed that Islamabad Capital Territory due to its relatively smaller size is performing better than other provinces. Furthermore, the Mover and the Committee appreciated the efforts of the Ministry in steering the agenda of climate change in a positive direction.

RECOMMENDATIONS:

6. After deliberations, the Committee made the following recommendation:
- i. The Committee recommended that the Ministry should share on the status of implementation of the National Climate Change Policy in the Islamabad Capital Territory.
 - ii. The Committee appreciated the efforts of the Ministry in steering the agenda of climate change in a positive direction.
7. Following the exhaustive deliberations, the agenda item was disposed of.



(WAJEEHA RIAZ)
S.O/ Secretary Committee



(SENATOR SEEMEE EZDI)
Chairperson Standing Committee on Climate Change

Implementation of National Climate Change Policy in ICT

The Ministry of Climate Change and Environmental Coordination (MoCC&EC) is implementing a multipronged strategy for the effective execution of the National Climate Change Policy within Islamabad Capital Territory (ICT). This strategy involves close collaboration with various line departments operating in ICT, including the Pakistan Council of Research in Water Resources (PCRWR), Capital Development Authority (CDA), Pakistan Environmental Protection Agency (EPA), and Islamabad Wildlife Management Board (IWMB). Furthermore, MoCC&EC is partnering with United Nations (UN) organizations to strengthen its efforts in addressing climate change challenges within the ICT. Details of initiatives is given in the succeeding paragraphs.

A. Efforts to Convert Brick Kilns to Zig-Zag Technology in ICT

The Ministry of Climate Change and its Pakistan Environmental Protection Agency (Pak EPA) have embarked on a transformative initiative to mitigate the adverse environmental impacts of brick kilns in the Islamabad Capital Territory (ICT). With approximately 64 brick kilns operating in the ICT, these facilities have been identified as significant contributors to air pollution and smog issues during winter months. To address this pressing concern, the Ministry of Climate Change, in collaboration with provincial EPAs, has prioritized the conversion of conventional brick kilns to Zig-Zag technology. This initiative aligns with the directives of the Federal cabinet, emphasizing the importance of implementing National Environmental Quality Standards (NEQS) and labor laws in the brick kiln industry.

Efforts to revamp brick kilns in the ICT have yielded promising results, with 100% kilns This transition holds immense potential for reducing emissions and improving air quality in the region. Moreover, the adoption of Zig-Zag technology offers several tangible benefits, including a significant decrease in air pollution and greenhouse gas emissions, as well as substantial energy savings of up to 20-40% compared to traditional kilns. Additionally, this initiative creates job opportunities for young professionals involved in the conversion process and establishes a regime of energy audits to further enhance efficiency in brick kiln operations.

B. Integrated Resource Recovery (IRC) Centers in Islamabad

The Ministry of Climate Change & Environmental Coordination is actively engaged in initiatives to enhance environmental sustainability through the establishment of Integrated Resource Recovery Centers (IRRCs) in the Islamabad Capital Territory (ICT). IRRCs play a crucial role in shifting from conventional waste management practices towards a resource management approach, focusing on composting, recycling, and biodigestion to convert waste into valuable resources. These centers, implemented in collaboration with the United Nations Economic and Social Commission

for Asia and the Pacific (ESCAP) and Waste Concern, Bangladesh, aim to process 80-90% of municipal solid waste, thereby diverting it from landfills or open dumpsites.

The first IRRIC in Pakistan, situated in Islamabad's sector G-15, serves as a pilot project to assess the feasibility and potential replication of this model in other cities across the country. With a capacity to process 3 tons of municipal solid waste per day, the IRRIC operates as a business entity, aiming for financial sustainability through the sale of compost and other recovered resources. Stakeholders, including UN-Habitat, Dr. Akhtar Hameed Khan Memorial Trust (AHKMT), and local community organizations, play integral roles in the establishment and operation of the IRRIC, demonstrating a multi-stakeholder approach towards sustainable waste management. Additionally, the IRRIC serves as a training center, facilitating capacity building and knowledge exchange among various stakeholders, including government officials, investors, and academia, to promote the transition towards a more sustainable and resource-efficient waste management paradigm in Pakistan.

C. Harnessing Rainwater Runoff in ICT

Climate change adaptation in Islamabad Capital Territory are imperative due to water scarcity exacerbated by rapid urbanization. Groundwater depletion poses a significant challenge, prompting initiatives like rainwater harvesting for groundwater recharge. Development of 100 recharge wells across Islamabad aims to harness rainwater runoff, combating urban flooding and enhancing groundwater resilience. These initiatives strategically implement rainwater harvesting systems in various locations, addressing immediate water scarcity concerns.

Establishment of groundwater monitoring sites and data-driven approaches ensure effectiveness in enhancing water security and sustainability. Islamabad's adoption of rainwater harvesting for groundwater recharge showcases a promising pathway towards resilience and adaptation.

D. Rain Harvesting of Islamabad Capital Territory Building Control Regulations-2020

Under these Regulations, it is now mandatory in ICT to construct rainwater harvesting tanks in all types of buildings constructed on plots having a size of 400 sq. It has also been clarified that rainwater harvesting tanks with recharging wells and storage tank as per approved drawings is mandatory in all types of building irrespective of size and usage.

E. Islamabad/Pakistan Climate Change Vulnerability Assessment

The vulnerability assessment has been conducted in Islamabad Capital Territory (ICT) to assess need for climate-resilient planning and actions to address the escalating impacts of climate change in the region.

The study identifies the most climate vulnerable locations in Islamabad. It does this by pinpointing the locations that are the most exposed to climate hazards, have the highest sensitivity and lowest adaptive capacity. In Islamabad, major hotspots are mainly located in unplanned settlements which have developed along streams that are prone to flooding. Most houses built in unplanned settlements – mainly slums – from local materials such as mud, stone and wooden logs. Slums are severely impacted during flood events. Heavy rains and floods damage slum houses and cause injury and death. Four major hotspots have been identified, as follows:

- Mera Jaffar is the largest slum in Islamabad. There are 24 slums across Islamabad, totalling 81,000 residents; 28,500 of these live in the Mera Jaffar slum. The slum is located downstream of Jodh Kas, one of the Nullah Lai's major tributary streams.
- Muslim Colony is a slum of labourers working on Islamabad's largest hospital construction project (Pakistan Institute of Medical Sciences). Muslim Colony is situated near streams feeding into Rawal Lake, Muslim Colony is the second largest slum in Islamabad with 15,000 residents.
- 100 Quarters, is a slum which had developed around 100 quarters built by the Capital Development Authority for low-paid employees. It is located along the Saidpur Kas stream, which feeds into the Nullah Lai. The settlement has over 6000 residents.
- French Colony is a slum built for Christian laborers at the Pakistan Institute of Medical Sciences construction site. It is located on the banks of the Kanitawali Kas, a stream which feeds into the Nullah Lai. It has a population of 6,000 residents.

Based on these findings, the 14 planning interventions have been prioritized aimed at enhancing the climate resilience of Islamabad. With climate change projections indicating marked changes in climate variables, city authorities have been sensitized to prioritize climate-resilient planning and adaptation measures.

F. Efforts for Improved Air Quality in Islamabad

With a robust monitoring system in place, Pak EPA routinely assesses pollutant levels from various sources such as tyre burning units, asphalt plants, industries, and construction sites. The establishment of a data surveillance room enables 24-hour monitoring of emissions by steel industries to ensure compliance with National Environmental Quality Standards (NEQS).

Additionally, Pak EPA collects stack emission reports from major industries and operates a fixed monitoring station to analyze air quality data continuously. Particularly during winter months, high concentrations of PM_{2.5} are recorded due to winter fog and smog, prompting Pak EPA to intensify

efforts to enforce NEQS compliance among stakeholders through awareness campaigns and regular exhaust emission checks.

In January 2024, Pak EPA, in conjunction with Islamabad Traffic Police, conducted a vehicular emission control and monitoring campaign, inspecting 383 vehicles and imposing fines on violators. The table illustrates a noticeable improvement in air quality indicators from 2018 to 2023, reflecting Pak EPA's concerted efforts towards enhancing environmental quality and public health in Islamabad.

G. Regulation of Polythene Bags in Islamabad Capital Territory

The Ban on Polythene Bags Regulations, 2019 and Single Use Polythene Bags 2023 in Islamabad Capital Territory marks a significant stride in addressing the environmental menace posed by plastic waste, particularly single-use polythene bags. With an estimated usage of 55 billion polythene bags annually in Pakistan, the ban represents a crucial component of the Prime Minister's Clean Green Pakistan Movement, endorsed by a Senate Resolution on 29-4-2019 and approved by the Federal Cabinet on 16-07-2019. The implementation strategy involves a comprehensive awareness campaign, administrative penalties, and distribution of alternative materials, while considering the socio-economic impact and piloting the ban in Islamabad before encouraging emulation by other federating units.

H. Clean Green Pakistan Index

The introduction of the Clean Green Pakistan Index (CGPI) underscores the city's commitment to this cause, aiming to rank cities and tehsils based on indicators related to cleanliness and greenery. With seven pillars encompassing water, sanitation, hygiene, solid waste management, cleanliness of streets, usability of parks, and the number of trees, the CGPI provides a comprehensive framework for assessing and improving the environmental quality of Islamabad and other participating cities. As part of the pilot phase, Islamabad's performance will be evaluated alongside other cities, fostering healthy competition and encouraging continuous progress towards a sustainable and clean green Pakistan.

I. EV Charging Stations in Islamabad

As the transport in Islamabad burgeons, concerns about climate change and air pollution have intensified, propelling a shift towards electric vehicles (EVs). In response, both the MoCC&EC and major car manufacturers are actively promoting the adoption of EVs, necessitating the establishment of a robust EV charging infrastructure. Islamabad, being a focal point for this transition, has witnessed the development of several operational EV charging stations, including PSO Electro, BMW ChargeNow, Solar EV, and Attock EV Ultra Fast. These stations not only facilitate the transition to electric mobility but also offer significant climate benefits by reducing greenhouse gas emissions and air pollution in the city. By encouraging the use of EVs and supporting the

development of EV charging infrastructure, Islamabad is taking proactive steps towards mitigating climate change and fostering a sustainable future for its residents.

J. Urban Miyawaki Forest Initiative in Islamabad

World's largest Urban Miyawaki Forest has been established in Islamabad. Covering an expansive area of 17 acres (740,520 square feet), the forest initiative aims to enhance biodiversity and combat climate change through the planting of 20,000 large-sized saplings of various species. This significant endeavor underscores Islamabad's commitment to environmental sustainability, with plans for further expansion and collaboration with other departments to bolster green initiatives across the city.

K. Strengthening Islamabad Wildlife Management Board for Climate Action

The Islamabad Wildlife Management Board (IWMB) has undergone significant strengthening measures facilitated by the Ministry of Climate Change and Environmental Conservation (MOCC&EC), including the formalization of rules, the constitution of a dynamic board, and enhanced monitoring of Islamabad's parks and wildlife. This revitalization has bolstered the IWMB's role in implementing the national climate change policy by promoting biodiversity conservation, protecting natural habitats, and contributing to carbon sequestration efforts. Through its proactive conservation initiatives, the IWMB is playing a crucial role in advancing Islamabad's commitment to sustainable environmental practices and climate resilience.