Event Report

on

Consultative Webinar on Circularity in the Construction Industry and Climate Resilience in Pakistan

17th March 2025 | 11:00 AM to 1:30 PM |

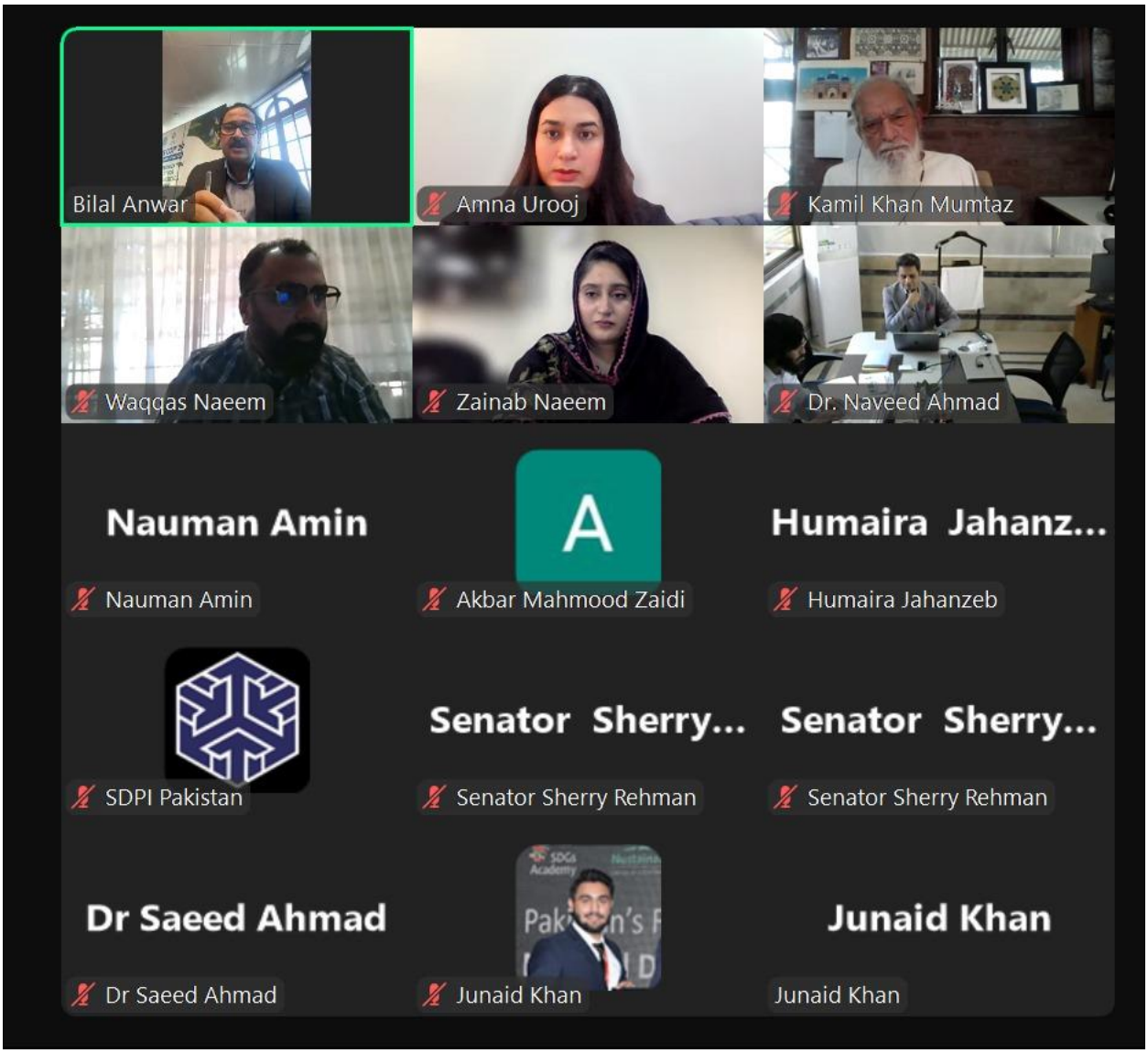

Bilal Anwar
Amna Urooj
Kamil Khan Mumtaz
Waqqas Naeem
Zainab Naeem
Dr. Naveed Ahmad
Nauman Amin
Nauman Amin
A
Akbar Mahmood Zaidi
Humaira Jahanz...
Humaira Jahanzeb
SDPI Pakistan
Senator Sherry...
Senator Sherry Rehman
Senator Sherry...
Senator Sherry Rehman
Dr Saeed Ahmad
Dr Saeed Ahmad
Junaid Khan
Junaid Khan
Junaid Khan

Table of Contents

Background and Rationale

Pakistan, the 5th most populous country in the world, is experiencing rapid urbanization and infrastructure expansion. With a population of 220 million, a growing middle class, and a labour force exceeding 60 million, the demand for housing and commercial infrastructure continues to rise. The country's annual population growth rate of 2.4% (Census 2017) further intensifies the housing demand, driving construction sector growth. The construction industry contributes 2.53% to Pakistan's GDP and employs 7.61% of the workforce, making it a crucial pillar of the economy. Investments in the sector have surged, with Gross Fixed Capital Formation (GFCF) in the private sector growing by 20.6% between FY2019 and FY2020, accounting for over 95% of total GFCF. Additionally, large-scale infrastructure projects under the China-Pakistan Economic Corridor (CPEC), including highways, power plants, and dams, have further fuelled the sector's expansion.[1]

However, the rapid growth of Pakistan's construction industry has also led to significant environmental challenges, including high resource consumption, construction and demolition (C&D) waste generation, and carbon emissions. Traditional linear construction practices based on the "take-make-dispose" model contribute to resource depletion and environmental degradation. Moreover, climate-induced risks such as extreme heat, flooding, and water shortages pose serious threats to the built environment, necessitating climate-resilient infrastructure.

To address these challenges, adopting circular economy principles in Pakistan's construction sector is essential. Circular construction emphasizes material reuse, modular design, resource efficiency, and sustainable construction techniques to minimize waste and emissions.[2] While alternative cement technologies, green building certifications, and waste recycling initiatives are emerging, policy gaps, financial constraints, and a lack of technical expertise hinder large-scale adoption.

Workshop Objectives

The webinar will:

- ✓ Highlight the role of circular economy principles in making Pakistan's construction industry more sustainable.
- ✓ Discuss climate risks affecting the sector and the need for resilient infrastructure.
- ✓ Explore innovative materials and construction techniques (e.g., recycled aggregates, low-carbon concrete, alternative cements).
- ✓ Showcase best practices and case studies from Pakistan and other countries.
- ✓ Engage industry professionals, policymakers, and researchers in knowledge-sharing.

Identify policy gaps, financial barriers, and potential solutions for promoting circularity in construction.

[1] https://invest.gov.pk/housing-and-construction

[2] Eberhardt, L. C. M., Birkved, M., & Birgisdottir, H. (2022). Building design and construction strategies for a circular economy. *Architectural Engineering and Design Management*, *18*(2), 93-113.

Opening Remarks

Zainab Naeem (Head of Ecological Sustainability and Circular Economy)

In her opening remarks, Ms. Zainab Naeem highlighted the critical role of the construction sector in achieving sustainability. She emphasized that the industry's transition towards circular economy principles is essential for minimizing environmental degradation and resource depletion. She also highlighted the need for fostering in-depth coordination among various stakeholders, including policymakers, government bodies, private sector entities, and researchers. By strengthening collaboration, she noted, Pakistan can create a more resilient and sustainable built environment that aligns with global best practices in circular construction.

Special Remarks

Bilal Anwar (CEO-National Disaster Risk Management Fund (NDRMF)

In his special remarks, Mr. Bilal Anwar emphasized the pivotal role of the construction industry in advancing sustainability efforts, not only in Pakistan but also in regions such as Africa and the Gulf nations. He highlighted that the industry serves as a significant source of employment in Pakistan, offering the potential to absorb a large workforce. However, despite its economic importance, the construction sector has not yet fully embraced discussions on sustainable materials and environmental responsibility. He stressed that addressing sustainability within the industry is crucial for fostering long-term resilience and reducing its ecological footprint.

Mr. Bilal Anwar further pointed out that Pakistan is experiencing rapid urbanization, which necessitates the urgent alignment of the construction sector with the broader sustainability agenda. He observed that the materials currently used in construction do not meet sustainability standards, contributing to environmental degradation and resource inefficiency. To address these challenges, he advocated for a more integrated approach, where various industries collaborate with the construction sector to drive innovation, enhance resource efficiency, and adopt sustainable building practices.

Insights of Speakers from Session I

Akbar Mehmood Zaidi (Resident Engineer at ACES, Eighteen)

Mr. Akbar Mehmood Zaidi highlighted several critical challenges facing Pakistan's construction industry, particularly in its transition towards sustainability and circularity. He pointed out that the sector generates approximately 25% to 30% of construction waste, which significantly contributes to environmental degradation. Additionally, he noted that much of the construction material used in Pakistan is outdated and inefficient, further exacerbating resource wastage. Despite the pressing need for sustainable practices, there is a complete absence of policies that specifically address sustainability and circularity in the construction sector. He also emphasized that Pakistan lacks a national framework dedicated to sustainable development in construction, making it difficult to implement structured reforms.

Mr. Zaidi stressed the importance of financial incentives, sustainable energy options, and the adoption of replaceable construction materials to facilitate a shift towards circular construction. However, he observed that the current policies fail to integrate sustainability into construction sector regulations, creating a significant barrier to progress. Another key challenge he highlighted was the reluctance of investors and builders to move away from conventional materials, which hinders the adoption of circular construction practices. To address this, he advocated for tax breaks and other financial incentives to encourage industry stakeholders to transition towards more sustainable and circular construction methodologies.

Kamil Khan Mumtaz (Founder & Champion of Vernacular and Sustainable Architecture, Kamil Khan Mumtaz Architects)

Mr. Kamil Khan Mumtaz expressed a critical perspective on the relationship between the circular economy and the building industry. He argued that the two are fundamentally incompatible in their current forms, as the conventional construction sector prioritizes economic growth over environmental responsibility. He emphasized the need for a trade-off between industry development and circular economy principles, stressing that a balance must be struck to ensure both economic progress and environmental sustainability.

Mr. Mumtaz further highlighted the alarming consequences of unchecked industrial growth, noting that humanity is now among the six most endangered species on Earth due to unsustainable development practices. He underscored the urgent need for rethinking construction methodologies to align them with ecological preservation. Without a fundamental shift towards sustainable architecture, he warned, the industry's continued expansion could further exacerbate environmental degradation and threaten the long-term survival of both natural ecosystems and human societies.

Humaira Jahanzeb (Team Lead, National Adaptation Plan)

Ms. Humaira Jahanzeb, Team Lead of the National Adaptation Plan (NAP), highlighted the comprehensive framework that NAP provides to address climate challenges, particularly in the construction and urban planning sectors. She explained that NAP encompasses risk assessment and climate-conscious urban planning to mitigate environmental threats. The framework also sets standards for building development, ensuring that infrastructure projects align with sustainability principles. A key focus of NAP is the promotion of sustainable construction materials, which not only enhance durability but also help in reducing urban flood risks by minimizing environmental impact.

Ms. Humaira further elaborated on NAP's role in water management, emphasizing its advocacy for rainwater storage systems and efficient water conservation strategies. She noted that the framework

prioritizes community training on urban flood management and risk reduction, equipping local populations with the knowledge and skills needed for resilience against climate-induced disasters. Additionally, she underscored the importance of climate finance within NAP, which includes subsidies, grants, and dedicated funding allocations to support climate-resilient construction and urban development. By integrating these measures, NAP aims to create a more sustainable and adaptive built environment.

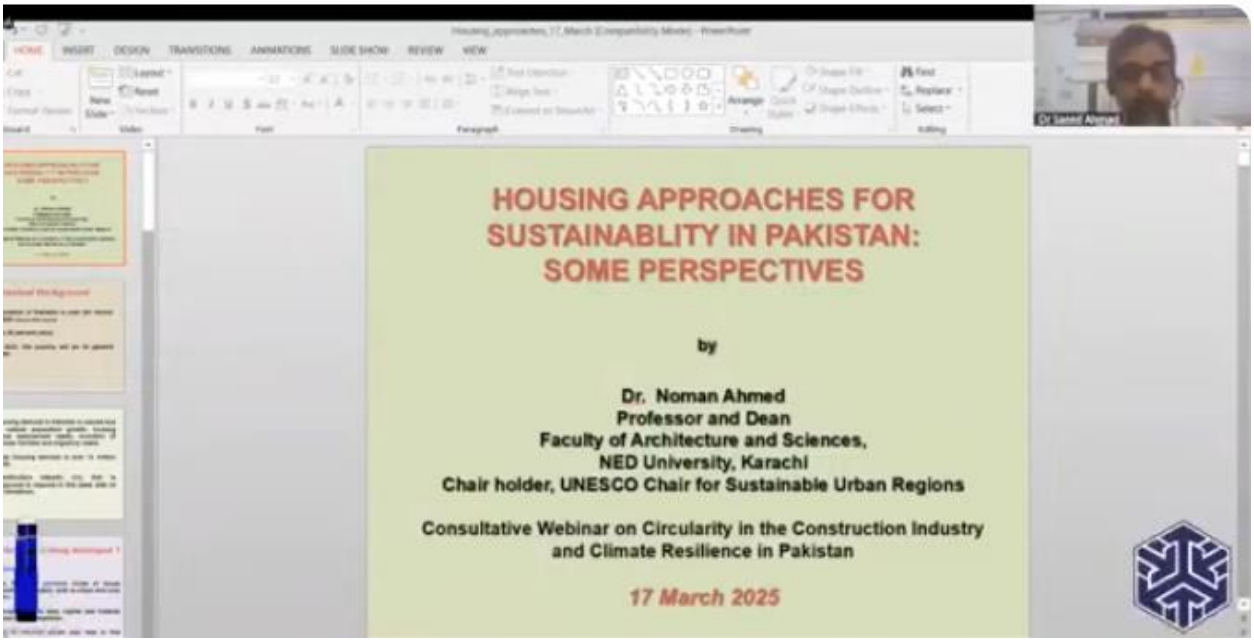
Insights of Speakers from Session II

Dr Saeed Ahmad (Professor, Faculty of Architecture & Management Sciences, NED University)

Dr. Saeed Ahmad delivered a presentation titled Housing Approaches for Sustainability in Pakistan, in which he provided an in-depth analysis of the country's housing sector and its challenges in achieving sustainability. He highlighted that Pakistan's population has reached 243 million, with approximately 38% residing in urban areas. The total housing demand stands at around 10 million units, creating immense pressure on the construction industry. He noted that self-built housing is the most common practice in Pakistan, often relying on traditional and informal methods. However, the dominant construction approach remains linear, with minimal or no incorporation of recycled materials, making circularity nearly non-existent in the sector.

Dr. Ahmad further pointed out that conventional wisdom and the experience of masons dictate much of the construction process, which presents a significant hurdle in adopting circular construction

techniques. In some cases, material reuse occurs only when new materials are unavailable, rather than as a standard sustainability practice. He acknowledged government-supported initiatives, such as the Naya Pakistan Housing Program launched in 2020, which aims to provide housing finance for lower-middle-income groups. As a way forward, he emphasized the importance of implementing the Green Building Code 2023 and highlighted successful examples from interior Sindh, where sustainable housing practices have been introduced. He urged policymakers and industry professionals to integrate these initiatives into mainstream construction practices to foster long-term sustainability and resilience.



Waqqas Naeem (Architect, Architects Den)

Mr. Waqqas Naeem highlighted the persistent lack of significant efforts toward climate sustainability in Pakistan's construction sector. Despite the increasing threats posed by climate change and environmental degradation, he noted that meaningful actions to integrate sustainability into the industry remain largely absent. While various government policy frameworks exist, their implementation has been minimal, leaving a substantial gap between policy formulation and practical execution.

Mr. Naeem emphasized that without concrete actions and industry-wide commitment, the construction sector will continue to operate in an unsustainable manner, further exacerbating climate risks. He stressed the urgency of translating policy frameworks into actionable strategies that drive real change. To achieve this, he called for stronger enforcement mechanisms, stakeholder engagement, and the promotion of sustainable building practices to ensure that climate resilience becomes an integral part of Pakistan's construction industry.

Insights of Speakers from Session III

Nazish Sheikha (Pakistan Business Council)

Ms. Nazish Sheikha from the Pakistan Business Council highlighted key examples of sustainable construction practices in Pakistan, emphasizing the need for greater adoption of circular economy principles in the industry. She pointed out that the walls of the Telenor office in Islamabad adhere to circularity standards, demonstrating that sustainable building practices are achievable within the country. Additionally, she noted that many industries within the textile sector are actively ensuring compliance with green building initiatives, setting an example for other industries to follow. However, she stressed that a broader call to action is needed at the industry level to prioritize green building as a standard practice rather than an exception.

Ms. Sheikha further emphasized the importance of enforcing building codes for both rural and urban commercial sectors to promote sustainable construction across different regions. She also underscored the critical role of the banking sector in this transition, noting that financial institutions serve as key lenders for housing finance. By involving the banking sector in sustainability discussions, she argued, Pakistan could create stronger financial incentives and investment opportunities for green building projects. She urged policymakers, industry leaders, and financial institutions to collaborate in shaping a more sustainable future for the country's construction industry.

Dr. Naveed Ahmad, (Director Buildings Energy Research Center, UET Peshawar)

Dr. Naveed Ahmad provided key insights into energy demand across various sectors, emphasizing the need for sustainable and efficient solutions in the construction industry. He highlighted how poor thermal conditions in buildings not only increase energy consumption but also have a detrimental impact on public health, particularly in extreme weather conditions. To address these challenges, he stressed the importance of adopting climate-resilient and energy-efficient building solutions that enhance sustainability while reducing long-term operational costs.

Dr. Ahmad also discussed the role of Environmental Product Declarations (EPDs) in supporting climate resilience, noting that these frameworks promote the use of low-carbon, reusable, and resource-efficient materials in construction. He presented a financial analysis comparing the costs of passive building solutions and green-building practices, demonstrating their long-term economic and environmental benefits. Additionally, he underscored the urgency of implementing the Energy Conservation Building Code (ECBC) 2023 and ensuring adherence to a pre- and post-construction checklist to enhance sustainability across all stages of building development. His insights reinforced the need for regulatory enforcement and financial incentives to accelerate the transition toward sustainable construction in Pakistan.

Ahad Nazir (Associate Research Fellow, SDPI)

Mr. Ahad Nazir highlighted the critical gaps in Pakistan's existing building codes, noting that they fail to incorporate circular economy principles. He stressed that without explicit guidelines on circularity, the construction sector continues to rely on traditional, resource-intensive practices that hinder sustainability efforts. To address this, he emphasized the necessity of material certification to ensure that construction materials meet sustainability standards, reducing environmental impact while promoting efficient resource utilization. Additionally, he underscored the need to prioritize green building initiatives that focus on optimizing water, energy, and material consumption to create more sustainable infrastructure.

Mr. Ahad also pointed out that one of the major challenges in achieving sustainability in the construction sector is the weak enforcement of policies. Despite having frameworks in place, the lack of stringent implementation mechanisms prevents meaningful progress. He further discussed hurdles in fostering public-private partnerships, particularly the issue of project size, which often limits collaboration between stakeholders. To overcome these challenges, he advocated for the creation of incentives that would encourage compliance with green building codes and promote a favourable business environment for investors, developers, and regulatory bodies. Strengthening policy enforcement and incentivizing sustainable practices, he argued, are crucial steps toward achieving a more circular and climate-resilient construction industry in Pakistan.

Junaid Khan (Civil Engineer, Nespak, Islamabad)

Mr. Junaid Khan highlighted that a mere 0.2% of Pakistan's 12 million building units currently meet green building requirements—a statistic that underscores the critical need for enhanced sustainability measures in the construction industry. He emphasized that incorporating initiatives such as green bonds and other sustainability-driven financial instruments is essential to bolster circularity within the sector and drive a significant shift toward eco-friendly practices.

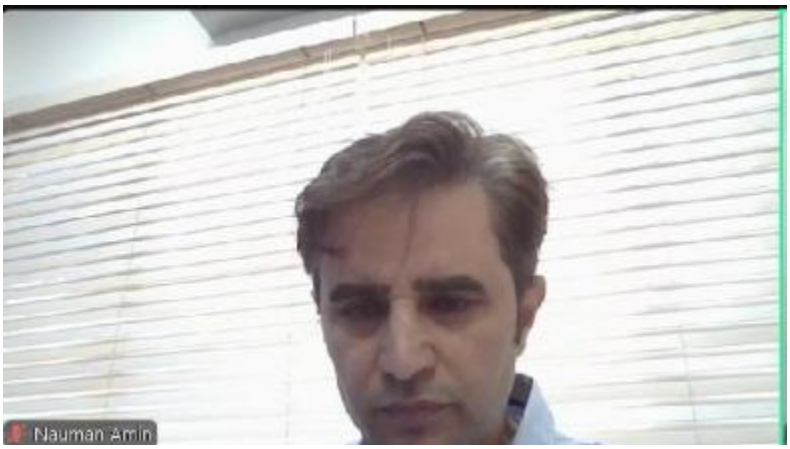
Drawing on successful international examples, Mr. Khan noted that in Singapore, developers have been incentivized through subsidies to adopt green building codes, setting a robust example of government-led sustainability initiatives. He also referenced the approach in Germany, where low-interest loans provided by financial institutions like FW have accelerated green building projects. These international

practices, he argued, offer valuable insights and a potential roadmap for Pakistan to follow, fostering an environment where green building and circular construction can thrive through supportive financial and regulatory frameworks.

Nauman Amin (Project Management Specialist-Infrastructure, UNOPS)

Mr. Nauman Amin delivered a presentation on Climate-Resilient Infrastructure: A Pathway Towards Sustainability, emphasizing the need for resilient and sustainable construction practices in Pakistan. He highlighted key initiatives aimed at integrating climate resilience into the built environment, focusing on practical solutions that address both environmental and socio-economic challenges.

Mr. Amin shared insights from the Green Housing Affordable Resilient (GHAR) project, which has made significant progress in promoting sustainable housing. Key achievements under this initiative include training over 100 masons in sustainable construction techniques, conducting a baseline supply chain survey, testing and implementing training curricula on model houses, and providing financial support to families in need. Additionally, he discussed other UNOPS projects in Pakistan, such as Medical Waste Incineration, which aims to enhance waste management practices while ensuring environmental safety. Through these projects, Amin underscored the importance of collaborative efforts and innovative solutions in fostering climate-resilient infrastructure across Pakistan.



Remarks by Chief Guest

Senator Sherry Rehman (Chairperson/Convener, Senate Standing Committee on Climate Change and Environmental Coordination)

In her keynote address, Senator Sherry Rehman, Chairperson of the Senate Standing Committee on Climate Change and Environmental Coordination, emphasized the urgent need to prioritize zero waste and circularity in Pakistan's construction industry, which has largely been overlooked in sustainability discussions. She highlighted how the country's rapidly growing population and accelerating urbanization are intensifying challenges related to resource efficiency and waste management. The increasing pressure on urban areas has led to severe waste accumulation, not only in cities but also in rivers, making it imperative to implement circular construction practices. Additionally, she pointed out that metropolitan areas are facing immense stress due to inadequate sanitation systems, which further exacerbates the environmental burden.

Senator highlighted that despite the pressing need for sustainability, solid waste management in Pakistan remains misaligned with circular economy principles. While the formal sector has yet to fully integrate circularity into its operations, she acknowledged that the informal sector has made innovative, albeit unstructured, efforts to repurpose waste materials. She also highlighted the critical role of regulatory bodies such as the Engineering Council, which collaborates with building departments to establish standards for the construction sector. However, she stressed that beyond regulations, Pakistan must adopt a proactive approach by learning from past environmental and infrastructure-related disasters to build a more resilient and sustainable construction industry.

She further noted that the conventional construction sector is highly polluting and cost-intensive, contributing to 30% of solid waste, over 49% of water usage, and approximately 38% of carbon emissions. To counter these adverse environmental impacts, she called for the alignment of the construction industry with green building practices and the promotion of sustainable alternatives. Senator Rehman also highlighted the significant contributions of women in advancing circularity, recognizing their efforts in resource efficiency and waste management. Lastly, she urged each province to develop its own building codes, tailored to regional environmental conditions and sustainability goals, to ensure a localized yet cohesive approach toward circular and climate-resilient construction in Pakistan.

Concluding Remarks

Dr. Abid Qaiyum Suleri, Executive Director, SDPI

In his concluding remarks, Dr. Abid Qaiyum Suleri, Executive Director of SDPI, emphasized the significant environmental impact of the construction industry, noting that smog is not solely caused by agricultural activities but also by emissions and pollutants generated by construction processes. He stressed the urgent need to address these environmental concerns by integrating sustainability into the construction sector. Highlighting the role of green construction in mitigating climate risks, he called for a shift in industry practices towards eco-friendly materials, waste reduction, and energy-efficient designs.

Dr. Suleri further emphasized the importance of linking the greening of the construction industry with taxation policies. He proposed that tax incentives should be introduced to encourage green construction and the adoption of sustainable building practices. At the same time, he advocated for imposing higher taxation on conventional, resource-intensive construction practices that contribute to environmental degradation. By implementing such fiscal measures, he argued, Pakistan could create a financial framework that promotes sustainability while discouraging unsustainable construction methods.

Additionally, Dr. Suleri highlighted the need to integrate Pakistan's Nationally Determined Contributions (NDCs) under the Paris Agreement with green building initiatives. He stressed that aligning climate commitments with the construction sector's policies and practices is crucial for achieving the country's climate resilience goals. He concluded by calling for stronger collaboration among policymakers, industry stakeholders, and regulatory bodies to ensure that sustainability remains a core principle in Pakistan's construction and urban development landscape.

Conclusion and Policy Recommendations

The webinar on Circularity in the Construction Industry and Climate Resilience in Pakistan provided critical insights into the challenges and opportunities for transitioning Pakistan's construction sector toward sustainability. Experts from diverse backgrounds, including policymakers, architects, engineers, and sustainability specialists, highlighted the urgent need to integrate circular economy principles into construction practices to minimize waste, optimize resource efficiency, and reduce environmental degradation.

A key takeaway from the discussions was that Pakistan's construction sector is one of the largest contributors to solid waste, water consumption, and carbon emissions. Despite the existence of policy frameworks, such as the National Adaptation Plan (NAP) and building codes, the sector lacks strong enforcement mechanisms, financial incentives, and stakeholder collaboration to drive sustainability. Speakers highlighted the role of innovative building materials, climate-resilient infrastructure, and financial instruments like green bonds and sustainability-linked incentives to facilitate this transition.

Moreover, the discussions emphasized the need to align construction practices with Pakistan's climate commitments under the Paris Agreement and Sustainable Development Goals (SDGs). The importance of tax incentives, regulatory reforms, and the integration of public-private partnerships was repeatedly stressed as a pathway to achieving circular and green construction. The webinar concluded with a strong consensus that urgent policy actions, financial mechanisms, and technical advancements are required to embed sustainability within the construction industry.

The consultation results in the following key policy recommendations to promote circularity and climate resilience in Pakistan's construction industry:

- **Strengthen Building Codes and Regulations –** Revise and enforce national and provincial building codes to incorporate circular economy principles, sustainable materials, and climate resilience measures.
- **Introduce Financial Incentives for Green Construction** – Provide tax breaks, subsidies, and low-interest financing for sustainable construction while imposing higher taxes on conventional, high-emission materials.
- **Develop a National Construction Waste Management Strategy** – Implement policies to promote the reuse and recycling of construction and demolition (C&D) waste, reducing landfill dependency.
- **Promote Public-Private Partnerships for Sustainable Infrastructure** – Encourage collaboration between the government, private sector, and international organizations to fund and implement green construction projects.
- **Integrate Climate Resilience in Urban Planning** – Align construction practices with Pakistan's Nationally Determined Contributions (NDCs), focusing on flood-resilient infrastructure, energy efficiency, and climate adaptation.
- **Enhance Water and Energy Efficiency in Buildings** – Implement policies promoting rainwater harvesting, wastewater recycling, and energy-efficient construction technologies.
- **Engage the Banking and Financial Sector** – Encourage financial institutions to offer green bonds, sustainability-linked loans, and affordable housing finance for climate-resilient and green buildings.
- **Enforce Compliance and Monitoring Mechanisms** – Strengthen regulatory enforcement, ensure implementation of green building codes, and establish a monitoring framework to track sustainability progress.
- **Promote Capacity Building and Community Awareness** – Train architects, engineers, and builders in sustainable construction methods while raising public awareness about circular economy benefits.
- **Support Gender Inclusion in Circular Construction** – Facilitate financial incentives and skill development programs for women entrepreneurs and workers contributing to sustainable construction initiatives.

Annexture

Recording Access Link

The record of webinar can be accessed through following weblink

https://m.youtube.com/watch?v=eyI109wkquk

Consultative Webinar on Circularity in the Construction Industry and Climate Resilience in Pakistan

17th March 2025 | 11:00 AM to 1:30 PM | Online via Zoom

Background and Rationale

Pakistan, the 5th most populous country in the world, is experiencing rapid urbanization and infrastructure expansion. With a population of 220 million, a growing middle class, and a labour force exceeding 60 million, the demand for housing and commercial infrastructure continues to rise. The country's annual population growth rate of 2.4% (Census 2017) further intensifies the housing demand, driving construction sector growth. The construction industry contributes 2.53% to Pakistan's GDP and employs 7.61% of the workforce, making it a crucial pillar of the economy. Investments in the sector have surged, with Gross Fixed Capital Formation (GFCF) in the private sector growing by 20.6% between FY2019 and FY2020, accounting for over 95% of total GFCF. Additionally, large-scale infrastructure projects under the China-Pakistan Economic Corridor (CPEC), including highways, power plants, and dams, have further fuelled the sector's expansion.[3]

However, the rapid growth of Pakistan's construction industry has also led to significant environmental challenges, including high resource consumption, construction and demolition (C&D) waste generation, and carbon emissions. Traditional linear construction practices based on the "take-make-dispose" model contribute to resource depletion and environmental degradation. Moreover, climate-induced risks such as extreme heat, flooding, and water shortages pose serious threats to the built environment, necessitating climate-resilient infrastructure.

To address these challenges, adopting circular economy principles in Pakistan's construction sector is essential. Circular construction emphasizes material reuse, modular design, resource efficiency, and sustainable construction techniques to minimize waste and emissions.[4] While alternative cement technologies, green building certifications, and waste recycling initiatives are emerging, policy gaps, financial constraints, and a lack of technical expertise hinder large-scale adoption.

This webinar, organized by the Sustainable Development Policy Institute (SDPI), aims to explore how circular economy approaches can drive sustainability and climate resilience in Pakistan's construction industry by bringing together industry leaders, policymakers, researchers, and sustainability professionals for knowledge-sharing and strategic discussions.

Workshop Objectives

The webinar will:

- ✓ Highlight the role of circular economy principles in making Pakistan's construction industry more sustainable.
- ✓ Discuss climate risks affecting the sector and the need for resilient infrastructure.
- ✓ Explore innovative materials and construction techniques (e.g., recycled aggregates, low-carbon concrete, alternative cements).
- ✓ Showcase best practices and case studies from Pakistan and other countries.
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- ✓ Identify policy gaps, financial barriers, and potential solutions for promoting circularity in construction.

Agenda

Time	Session	Speaker(s)
11:00 AM – 11:10 AM	**Welcome Remarks**	**Ms. Zainab Naeem,** Head of Ecological Sustainability & Circular Economy, SDPI
11:10 AM – 11:55 AM	**Session 1: Circular Economy in Pakistan's Construction Sector – Challenges & Opportunities** - Understanding circular construction & material reuse - Innovative building materials (recycled aggregates, low-carbon concrete, alternative cements) - Waste reduction & modular design - Global & local case studies - Barriers to adoption & stakeholder collaboration	1. **Kamil Khan Mumtaz**, Founder & Champion of Vernacular and Sustainable Architecture, Kamil Khan Mumtaz Architects 2. **Akbar Mahmood Zaidi**, Resident Engineer at ACES, Eighteen
11:50 AM – 12:30 PM	**Session 2: Climate Risks & Resilient Infrastructure in the Construction Sector** - Climate change impacts on the built environment - Water-efficient construction & wastewater recycling - Designing climate-resilient infrastructure - Best practices from Pakistan & beyond	3. **Humaira Jahanzeb**, Team Lead, National Adaptation Plan 4. **Dr Saeed Ahmad**, Professor, Faculty of Architecture & Management Sciences, NED University 5. **Waqqas Naeem**, Architect, Architects Den
12:30 PM – 01:10 PM	**Session 3: Policy & Financial Gaps and Opportunities for Sustainable Construction** - Regulatory frameworks & policy gaps in circular and climate-resilient construction - Green financing mechanisms & investment opportunities - Incentives, subsidies, and tax benefits for sustainable construction projects - Role of public-private partnerships in scaling up adoption - Case studies on successful financial models	6. **Nazish Sheikha**, Pakistan Business Council 7. **Junaid Khan**, Civil Engineer, Nespak, Islamabad 8. **Dr. Naveed Ahmad**, Director- Buildings Energy Research Center, UET Peshawar 9. **Ahad Nazir**, Associate Research Fellow, SDPI 10. **Nauman Amin**, Project Management Specialist-Infrastructure, UNOPS
01:10 PM – 01:20 PM	**Remarks by Chief Guest**	**Senator Sherry Rehman**, Chairperson/Convener, Senate Standing Committee on Climate

		Change and Environmental Coordination
01:20 PM – 01:30 PM	**Closing Remarks & Way Forward**	**Dr. Abid Qaiyum Suleri**, Executive Director, SDPI

Expected Outcomes

- Enhanced awareness of circular economy benefits in the construction sector.
- Practical insights into climate-resilient and sustainable building practices.
- Policy recommendations for promoting circular construction in Pakistan.
- Networking opportunities for professionals, policymakers, and industry stakeholders.
- Identification of financial and technical barriers to implementing circular solutions and pathways to overcome them.
- Potential partnerships for pilot projects and research collaborations on circular construction.