World Environment Day 2025
On the theme of
"Ending Plastic Pollution"
Held on June 14, 2025

WORLD ENVIRONMENT DAY 2025 HELD ON JUNE 14, 2025 ON THE THEME OF ENDING PLASTIC POLLUTION

On June 14, 2025, the Pakistan Engineering Congress hosted a thematic seminar in observance of World Environment Day 2025, dedicated to the pressing global challenge of Ending Plastic Pollution. The event attracted a broad spectrum of attendees including engineers, researchers, environmental professionals, and students, underscoring widespread commitment to sustainable development.

Technical Sessions & Presentations

The seminar featured the presentation of **ten research papers** focused on innovative strategies, policy frameworks, and engineering solutions aimed at eliminating plastic pollution. Each paper offered practical insights aligned with the seminar's environmental mandate. The following papers were presented at the event:

- "IRREVERSIBLE ENVIRONMENTAL IMPACTS OFPLASTI USE AND ITS MITIGATION STRATEGIES"
- "MANAGING PLASTI WASTE"
- PRODUCTION AND EVALUATION OF BRIQUETTES FROM MIXED ORGANIC FRACTIONS AND PLAXTI WASTE STREAMS"
- RECYCLING OF PLASTIC WASTE BY PRODUCING PRODUCTIVE CONSTRUCTION MATERIAL"
- POLLUTION REDUCTION THROUGH ALTERNATIVES TO USE OF PLASTICS – PAKISTAN CONTEXT"
- DETERMINING HEAVY METALS AND MICROPLASTIC IN DIFFERENT ENVIRONMENTAL COMPARTMENTS OF MANGLA LAKE"
- PLASTIC POLLUTION – A CHALLENGE FOR OPERATION OF CANAL IRRIGATION & DRAINAGE NETWORK IN PUNJAB PAKISTAN"
- ECO-FRIENDLY PAPER MANUFACTURING: MARBLE WASTE AND PLASTIC IN MAKING AN ECO-FRIENDLY STONE PAPER"
- MICROPLASTICS POLLUTION: DO THEY HAVE CONSEQUENCES FOR SOIL MULTIFUNCTIONALITY AT ECOSYSTEM SCALE?"
- MICROPLASTICS FROM PAINT INDUSTRIES: AN EMERGING THREAT TO ENVIRONMENT AND ITS TREATMENT POSSIBILITIES:

Interactive Segment & Closing Remarks

A vibrant Question & Answer session followed the technical presentations, fostering constructive dialogue and exchange of ideas among participants and speakers. The session was chaired by Engr. Ali Habib, former Director General WWF-Pakistan and Chairman of the Technical Session, who provided concluding remarks emphasizing the urgency of collaborative action and policy integration in combating plastic pollution.

Recognition & Acknowledgment

To honor the contributors, Pakistan Engineering Congress Shields and Certificates were formally conferred upon the speakers. The ceremony recognized their valuable input and reaffirmed the Congress's role in promoting thought leadership on environmental challenges.

This widely attended seminar served as a dynamic platform for knowledge sharing, advocacy, and commitment to sustainability, marking a meaningful contribution to Pakistan's environmental discourse.

Address of Welcome

By

Engr. Ch. Muhammad Arif, President
Pakistan Engineering Congress

On the eve of

World Environment Day 2025

On the theme of

“Ending Plastic Pollution”

Welcome Address
Engr. Ch. Muhammad Arif,
President Pakistan Engineering Congress
at the eve of
World Environment Day, 2025
On the theme of
"Ending Plastic Pollution"

Honorable Chief Guest,
Distinguished Delegates,
Executive Council Members,
Fellow Engineers, Ladies & Gentlemen,

Assalam-o-Alaikum !

Ladies & Gentlemen!

Today, as we gather to mark World Environment Day 2025, we are united by a shared purpose—a commitment to protect and nurture our planet for future generations. This year, the theme that calls us to action is *Ending Plastic Pollution*. It is a theme that resonates deeply, for plastic pollution is a crisis that touches every corner of the Earth, every living creature, and every human being. It is time for us to face this challenge head-on, armed with determination, innovation, and compassion.

Let us first reflect on the magnitude of the problem. Plastic, once hailed as a miraculous invention for its versatility and convenience, has become an emblem of environmental destruction. Every year, over 400 million metric tons of plastic are produced, and a significant portion of it is single-use—destined to be discarded within minutes of its use, yet haunting our ecosystems for centuries to come. Our oceans are choking under the weight of nearly 12 million tons of plastic waste annually. Marine life is entangled in a web of microplastics and debris, and human health is at risk as plastics infiltrate our food chain.

Ladies & Gentlemen!

The staggering scale of plastic pollution may seem insurmountable, but despair is not an option. Today is a reminder of the power of collective action—of what we can achieve when we come together with a shared vision. Ending plastic pollution is not merely an environmental imperative; it is a moral duty, a social responsibility, and an opportunity to transform our world for the better.

It begins with awareness. We must confront the reality of our choices and understand the true cost of convenience. Each item we discard—a plastic straw, a food wrapper, or a water bottle—has a story, and that story doesn't end in the trash bin. Instead, it continues in landfills, rivers, and oceans, creating a legacy of harm. By educating ourselves and others, we can ignite a spark of change that grows into a flame of transformation.

But awareness alone is not enough. We need action—bold, decisive, and sustained action at every level of society. Governments must enact and enforce policies that curtail the production and use of single-use plastics, while encouraging innovation in biodegradable alternatives. Businesses must take responsibility for their environmental footprint, adopting practices that prioritize sustainability over profit. Communities must come together to clean up plastic waste and demand change from the authorities and corporations. And as individuals, we must embrace the principles of reduction, reuse, and recycling, making conscious choices that reflect our commitment to the planet.

Ladies & Gentlemen!

Innovation will be a key ally in our fight against plastic pollution. The bright minds of today are designing solutions that inspire hope—from creating edible packaging and advanced recycling technologies to developing methods to extract microplastics from water bodies. We must support and invest in these innovations, fostering a culture where sustainability is the driving force behind progress.

As we look ahead, let us also honor the resilience and beauty of nature. Despite the scars of pollution, our planet continues to sustain us, offering breathtaking landscapes, vibrant biodiversity, and resources that fuel our lives. We owe it to Earth to be stewards of its care—to tread lightly and live mindfully.

Ladies & Gentlemen!

In the end, I urge each of you to reflect on your role in this journey. The challenge of ending plastic pollution is immense, but so too is our collective power to overcome it. Together, we can rewrite the story of plastic—not as a tale of waste and destruction, but as a conquest of human ingenuity and responsibility.

Let this World Environment Day be a turning point—a moment where we pledge to act with courage and urgency. For the sake of our oceans, our wildlife, our health, and our future, let us rise to the challenge. Let us end plastic pollution and let us do so with unwavering resolve.

Thank you.

-: Pakistan Paindabad :-

Address
By
Engr. Riaz Nazir Tarar

Chief Guest
World Environment Day 2025

Address by the Chief Guest
Engr. Riaz Nazir Tarar
at the eve of
World Environment Day, 2025
On the theme of
"Ending Plastic Pollution"

Distinguished Delegates,
Executive Council Members,
Fellow Engineers, Ladies & Gentlemen,
Assalam-o-Alaikum!
Ladies & Gentlemen!

It is with great humility and an unwavering sense of purpose that I address you today as both a policymaker and your chief guest on this World Environment Day 2025. Today, we stand united under a singular and pressing theme: *Ending Plastic Pollution*. This theme is not just a call for change; it is a resounding demand for decisive and immediate action. The responsibility is ours to shoulder, the challenge ours to overcome, and the legacy ours to create.

Ladies & Gentlemen!

Let us reflect for a moment on the magnitude of the crisis we face. Plastic pollution has become one of the most formidable threats to our planet. It is an invisible intruder in our food, air, and water, and a glaring scar on our landscapes, rivers, and oceans. Over the past century, what began as a revolutionary invention has spiraled into an environmental catastrophe.

As mentioned by Mr. President in his address, Each year, we produce over 400 million metric tons of plastic, and a significant proportion of this finds its way into our environment. Marine ecosystems are choking with 12 million tons of plastic waste annually, and microplastics are now present in the bodies of fish we consume and even in the rain that falls from the sky.

These statistics are staggering, but behind them lies an even greater tragedy. Plastic pollution knows no boundaries. It affects every community, every country, and every ecosystem on Earth. It threatens marine life, suffocates wildlife, and undermines the health of humans across the globe. This is a challenge that cannot be ignored, a battle we cannot afford to lose.

Ladies & Gentlemen!

We stand at a crossroads. The decisions we make today will shape the future of our environment and define our legacy. Ending plastic pollution requires bold leadership, courageous action, and unwavering commitment. We cannot continue with business as usual. We must rethink, redesign, and reform.

Our first responsibility is to enact robust policies that address the root causes of plastic pollution. This means introducing and enforcing bans on single-use plastics, incentivizing the development and adoption of sustainable alternatives, and setting ambitious reduction targets across all sectors. It also means holding corporations accountable through extended producer responsibility, requiring them to manage the life cycle of the plastic they produce.

Second, we must invest in innovative solutions and infrastructure. Recycling systems in many parts of the world are inefficient and underdeveloped. We must modernize these systems, making them more accessible and effective. Moreover, we must support the research and development of groundbreaking alternatives to conventional plastics, such as biodegradable materials and advanced recycling technologies. These solutions have the potential to revolutionize the way we consume and manage resources.

Third, international collaboration is essential. Plastic pollution is a global crisis that transcends borders. To tackle it effectively, we need collective action and global cooperation. This includes establishing international agreements to reduce plastic waste, sharing knowledge and resources, and committing to a shared vision for a sustainable future.

Fourth, let us empower communities and individuals. Education and awareness are the cornerstones of change. By informing citizens about the impacts of plastic pollution and equipping them with practical solutions, we can inspire a groundswell of action. From reducing personal plastic use to participating in cleanup campaigns, every small action contributes to the larger mission.

But let us also remember that this fight for our planet must be grounded in equity and justice. Vulnerable communities often bear the brunt of plastic pollution, from living near landfills to facing polluted waterways. Our policies must prioritize these communities, ensuring that environmental justice is at the heart of our efforts.

Ladies & Gentlemen!

As your chief guest today, I am moved by the passion and commitment I see in this room and beyond. There are countless stories of hope and resilience—students mobilizing plastic cleanup drives, entrepreneurs pioneering eco-friendly innovations, and activists pushing for stronger laws. Together, these efforts remind us that change is not only possible but inevitable when we work together.

Ladies & Gentlemen!

The theme of this year's World Environment Day—*Ending Plastic Pollution*—is both a challenge and an opportunity. It is an opportunity to reimagine our relationship with plastic and redefine what progress means in a sustainable world. It is an opportunity to leave behind a legacy of stewardship and responsibility for our children and grandchildren.

So let us take this moment, this gathering, this World Environment Day 2025, as a pivotal point. Let us reaffirm our commitment to ending plastic pollution—not tomorrow, not someday, but starting now. Let us lead with purpose, act with determination, and inspire with vision.

Together, we can and will create a future where our rivers run clean, our oceans thrive, and our Earth flourishes. Let us rise to the challenge, united in our mission and guided by hope.

Thank you.

-: Pakistan Paindabad :-

Glimpses
Of
World Environment Day 2025

WORLD ENVIRONMENT DAY 202 ON THE THEME OF "ENDING PLASTIC POLLUTION" AT PAKISTAN ENGINEERING CONGRESS HEADQUARTER ON SATURDAY JUNE 14, 2025



Engr. Muhammad Usman Rasheed Member Executive Council Conducting the Proceedings



Engr. Ch. Muhammad Arif President-PEC delivering Address of Welcome



Chief Guest Engr. Riaz Nazir Tarar Addressing the Audience



(From Left) Engr. Ali Hassan Habib Chairman of the Technical Session, Engr. Husnain Ahmad Vice President-PEC, Engr. Muhammad Usman Rasheed Member Executive Council

GLIMPSES OF AUDIENCES





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QUESTIONS / ANSWERS SESSION





QUESTIONS / ANSWERS SESSION





Chairman of the Session Mr. Ali Hassan Habib, responding to the Questions of the Audience



(From Right) Engr. Ch. Muhammad Arif President-PEC, Mr. Ali Hassan Habib Chairman of the Session, Engr. Riaz Nazir Tarar Chief Guest, and Engr. Husnain Ahmad Co-Chairman of the Session presenting Pakistan Engineering Congress Shield to Engr. Shariq Ahmad
Presenting paper on "Irreversible Environmental Impacts of Plastic Use and its Mitigation Strategies"



(From Right) Engr. Ch. Muhammad Arif President-PEC, Mr. Ali Hassan Habib Chairman of the Session, Engr. Riaz Nazir Tarar Chief Guest, and Engr. Husnain Ahmad Co-Chairman of the Session presenting Pakistan Engineering Congress Shield to Engr. Ahsan Iqbal Bela
Presenting paper on "Managing Plastic Waste"



(From Right) Engr. Ch. Muhammad Arif President-PEC, Mr. Ali Hassan Habib Chairman of the Session, Engr. Riaz Nazir Tarar Chief Guest, and Engr. Husnain Ahmad Co-Chairman of the Session presenting Pakistan Engineering Congress Shield to Ms. Rimsha Azhar Presenting Paper on " Ending Plastic Pollution in Pakistan: A Review of National Progress, Alternatives to Plastic, and Sustainable Waste Management Practices"



(From Right) Engr. Ch. Muhammad Arif President-PEC, Mr. Ali Hassan Habib Chairman of the Session, Engr. Riaz Nazir Tarar Chief Guest, and Engr. Husnain Ahmad Co-Chairman of the Session presenting Pakistan Engineering Congress Shield to Ms. Amina Shahbaz Presenting Paper on "Determining Heavy Metals and Microplastic indifferent Environmental Compartments of Mangla Lake"



(From Right) Engr. Ch. Muhammad Arif President-PEC, Mr. Ali Hassan Habib Chairman of the Session, Engr. Riaz Nazir Tarar Chief Guest, and Engr. Husnain Ahmad Co-Chairman of the Session presenting Pakistan Engineering Congress Shield to Engr. Dr. Tahir Anjum Qureshi Presenting Paper on "Plastic Pollution – A Challenge for Operation of Canal Irrigation & Drainage Network in Punjab Pakistan"



(From Right) Engr. Ch. Muhammad Arif President-PEC, Mr. Ali Hassan Habib Chairman of the Session, Engr. Riaz Nazir Tarar Chief Guest, and Engr. Husnain Ahmad Co-Chairman of the Session presenting Pakistan Engineering Congress Shield to Ms. Sumbal zaheer Presenting Paper on "Microplastics from Paint Industries: An Emerging Threat to Environment and its Treatment Possibilities"



(From Right) Engr. Ch. Muhammad Arif President-PEC, Mr. Ali Hassan Habib Chairman of the Session, Engr. Riaz Nazir Tarar Chief Guest, presenting Pakistan Engineering Congress Shield to Engr. Husnain Ahmad Co-Chairman of the Session



(From Right) Engr. Ch. Muhammad Arif President-PEC, Engr. Riaz Nazir Tarar Chief Guest, Engr. Husnain Ahmad Co-Chairman of the Session presenting Pakistan Engineering Congress Shield to Mr. Ali Hassan Habib Chairman of the Session



(From Right) Engr. Riaz Nazir Tarar Chief Guest, , Mr. Ali Hassan Habib Chairman of the Session, Engr. Husnain Ahmad Co-Chairman of the Session presenting Pakistan Engineering Congress Shield to Engr. Ch. Muhammad Arif President-PEC



(From Right) Engr. Ch. Muhammad Arif President-PEC, Mr. Ali Hassan Habib Chairman of the Session, Engr. Husnain Ahmad Co-Chairman of the Session presenting Pakistan Engineering Congress Shield to Engr. Riaz Nazir Tarar Chief Guest