Pariyal Fazal Shah
Research Analyst NDRMF

The Air We Breathe

Among the numerous environmental challenges Pakistan faces, air pollution stands out as one of the most pressing issues. According to the 2023 World Air Quality Report published by IQAir, Pakistan is now the second most polluted country in the world, with its cities consistently ranking high on global air quality charts for hazardous air pollution. Almost all the air we breathe has become polluted, claiming thousands of lives every year. This is no longer just an environmental issue; it has become a public health emergency. According to the World Health Organization (WHO), air pollution causes around 22,000 premature adult deaths annually in Pakistan.

What UN experts warned in 2022, **"The air that keeps us alive is now making us sick"**, is frighteningly becoming a reality in the country.

In December 2023, I traveled to Lahore and witnessed firsthand the suffocating smog that blankets the city during winters. The air felt heavy, toxic, and inescapable. It is said that on a typical December day, Lahore averages between 300 to 400 micrograms per cubic meter of PM2.5, which is more than twenty times above international health guidelines. This experience scared me and made me realize the scale of the crisis. It seemed that the problem was no longer invisible; it's in our eyes, our lungs, and our daily lives, because breathing is something we do every second, and we live with it constantly.

The causes of Pakistan's air pollution are varied and deeply ingrained in the country's development path. Emissions from outdated and poorly maintained vehicles continue to pollute urban centers. Industrial activities, brick kilns, and coal-based power generation add heavy particulates to the atmosphere. Additionally, construction and demolition sites produce constant dust clouds, while cross-border burning of crop residues in Punjab worsens seasonal smog. Even natural factors such as sandstorms and declining tree cover magnify the severity of air pollution in many regions. The result is that major urban hubs often record pollution levels twenty times higher than the WHO's safe limits.

The crisis is clear and well-known, but why does Pakistan still struggle to escape it?

Pakistan lacks long-term, consistent, and comparable datasets on air quality. The absence of comprehensive monitoring networks and localized studies leaves major evidence gaps, which in turn weaken policymaking. Without reliable data, interventions often remain reactive rather than preventive. This is compounded by weak environmental regulation and a lack of multisectoral coordination.

For example, past policies have rarely considered the environmental consequences of urban transport expansion or industrial growth. Without an integrated vision, challenges have multiplied rather than reduced. Moreover, public transport infrastructure remains insufficient, pushing millions of people onto private vehicles that add to more emissions. Also, cities are expanding rapidly, but without proper planning for green spaces or dust-control mechanisms, which has further intensified the problem. Most importantly, the lack of widespread awareness about the daily health risks of polluted air has allowed the issue to fester without adequate public pressure for reform.

Despite these challenges, Pakistan has introduced some notable frameworks and initiatives. However, recognition alone is not enough. The gap between what is promised and what is practiced continues to widen.

Therefore, there is an urgent need to increase enforcement of existing regulations and strengthen emissions standards for long-term protection. On the other hand, a complete solution cannot be achieved in isolation, but only through mutual and multi-pronged efforts. Strengthening enforcement mechanisms and equipping environmental agencies with adequate resources must be the starting point. Transport modernization should be prioritized through investments in public transit, phasing out old vehicles, and accelerating the adoption of electric mobility. Industrial practices, particularly brick kilns and power plants, need to be regulated and modernized with clean technologies. Expanding nationwide monitoring networks and commissioning apportionment studies will help close critical data gaps and guide evidence-based policy. Moreover, urban greening, dust control, and afforestation can act as natural filters to improve air quality, while regional cooperation with neighboring countries remains essential to tackle the problem of cross-border smog.

In a nutshell, Pakistan is choking, but it does not have to be this way. If policies are enforced, industries are regulated, transport is made cleaner, and communities are mobilized to take ownership of the environment, then the air we breathe can once again be the air to live in. And finally, as the world prepares for COP30, we need to ask: will air pollution take its rightful place on the global stage in climate conversation?