Journal of Media Horizons
ISSN: 2710-4060 2710-4052 Volume 6, Issue 7, 2025

SMOG AS A PERSISTENT PUBLIC HEALTH AND GOVERNANCE CHALLENGE: A CRITICAL ANALYSIS OF MEDIA SILENCE AND POLICY INADEQUACIES IN PAKISTAN

Bushra Shahid

Research Scholar, Department of Media Studies, Szabist University, Islamabad Pakistan

bushraali630@gmail.com

DOI: https://doi.org/10.5281/zenodo.18081817

Keywords
smog, Pakistan, media coverage, environmental governance, public health

Article History
Received on 28 October 2025
Accepted on 16 December 2025
Published on 29 December 2025

Corresponding Author: *
Bushra Shahid

Abstract

In major cities of Pakistan, smoke has turned into an air-pollution crisis every year, producing repetitive effects on the public-health and exposing long-term failures in the management of the environment. This paper discusses the coverage of the smog issue by the Pakistani news media and how such coverage is connected to policy response. Based on a mixed-method design, we analysed 356 smog-related news items in six major English and Urdu-language newspapers in the 2017 and 2019 seasons of smog using a quantitative content analysis and accompanied by a qualitative analysis of policy texts in the draught. Findings show that the pattern of issue-attention is highly seasonal: it is highest in October-November and virtually absent when the season is not in smog. Outlets in Urdu language also provided a bigger portion of coverage (approximately 60 percent), although in both language groups that reported either disruption (e.g., closures and visibility dangers) rather than public-health advice. About 15 percent of articles reported health effects and less than 10 percent gave precautionary information, and solution-focused reporting was uncommon. The results confirm the hypothesis that episodic media coverage, and policy implementation imbalance, reinforces a cyclic governance reaction that is not proactive but rather reactive.

INTRODUCTION

Smog is a combination of air pollution and fog (smog) has become a common element of the urban landscape in Pakistan and is incredibly dangerous to the health and quality of life of people. In big cities such as Lahore, there is always a layer of poisonous air in the winter, which makes even the process of breathing a health risk (Asia Times, 2025). The rates of fine particulate pollution (PM 2.5) have increased in the recent years; the PM 2.5 in 2024 was 25 per cent greater than in 2023 (Asia Times, 2025). The actual health consequences of this excessive pollution are also very real: in November 2024, more than 129,000 people in Punjab were hospitalized because of respiratory diseases caused by smog (Asia Times, 2025). As a result, Pakistan has been placed at the fifth position in the list of the world's five most polluted countries, and the quality of air there is consistently in the danger zone (Asia Times, 2025). The Air Quality Life Index shows that the average life expectancy of people in smog-afflicted cities such as Lahore, Sheikhupura decreases by seven

years as compared to those in places where clean air is observed by WHO standards (Asia Times, 2025). In Lahore, smog season air pollution has been compared to smoking more than five cigarettes a day (Mehmood, 2024) - a grotesque measure of the toxicity that locals have to breathe in.

The fact that smog in Pakistan persists is a demonstration of a dual crisis: it is both a serious health crisis of the population and an environmental governance crisis. The smog season each year is interrupting the day-to-day life of people around with schools being shut, outdoor activities being put at a halt, and the vulnerable population being exposed to the serious health impact outcomes. However, the policy responses have been reactive and short term in nature. Governments have generally had to make emergency decisions, such as smog lockdown (temporarily shutting schools and offices), and prohibiting crop-burning or vehicles, but fail to solve the actual reasons behind the pollution. Although a Punjab Smog Policy was introduced in 2017 and action plans were developed, their implementation has been poor and the results disappointing, according to the current trends of air quality worsening (Omer, 2021; Mehmood, 2024). The impossibility to impose pollution control, modernize the norms of emissions, or maintain long-term projects is evidence of severe shortcomings in governance. As an illustration, the installation of dozens of air quality monitoring stations and the adoption of tough emissions enforcement that authorities in Punjab were instructed to implement as early as 2017 was still slow and stalling over years (Omer, 2021). Lahore had achieved its worst ever pollution levels (AQI 1,902) by end of 2024, officially claimed a disaster by the provincial government (Mehmood, 2024). This condition shows a tendency to lack proper policy response to a growing health disaster on the population.

Bureaucratizing the situation is a perceived media silence or lack of vigour in covering smog with the seriousness and thorough coverage it deserves. Ideally, the news media is expected to act as a watchdog and agenda-setter around the environmental health crises, keeping people abreast and keeping the authorities responsible. In the case with Pakistan, the coverage of the smog issue has, however, been quite spotty and shallow. There is an early indication that a mainstream media is more likely to consider smog a seasonal nuisance but not a year-long public health crisis (Asia Times, 2025). Temporarily high reporting during the highs of smog conditions, then decays as the air clears of the situation, and leads to a cycle of loss of sustained attention. The long-term health impact, inability of governance to enforce policies, and the connexions related to air pollution and climate change are relatively little discussed in the press (Asia Times, 2025; More often and more intense: Media coverage of smog, heatwaves, and floods in the Pakistani media, n.d.). This critical analysis thus considers the issue of how frequently and how the Pakistani media has framed smog storeys and how it relates to policy action (or inaction). We will shed light on this by relying on original data analysis of the news reporting trends and the current literature to show how media silence and policy incompetence complement each other, fueling an ongoing environmental health crisis.

The subsequent parts provide a detailed, quantitative evaluation of the smog coverage in the Pakistani media in addition to an evaluation of governance efforts. We begin by describing the health-related aspects of the smog crisis in Pakistan, which is important because smog is a severe and chronic issue. Then we discuss governance responses and gaps in policies, following the evolution of anti-smog policies and their failure to work. Our media analysis approach is then outlined, with the results of how smog-related news is covered in the media, which includes aspects of frequency, content, and framing in the media coverage. We critically examine the role of the media in the smog crisis and silence of the media and how lack of reporting can contribute towards policy failure. We end by concluding with thoughts of how to break this cycle of seasonal attention, by not only engaging the media in a more proactive manner but also taking more decisive policy measures to deal with the smog problem in Pakistan. Based on in-text quotations and evidence provided both by primary

and secondary sources, this article creates a case that smog in Pakistan is not only an environmental and health crisis, but also a communications and governance failure that is to be addressed as soon as possible.

Smog as a Public Health Crisis in Pakistan.

Smog has become one of the most serious social health issues in Pakistan over the last few years. It is particularly widespread in the province of Punjab and the capital Lahore where meteorological conditions are coupled with a dense source of pollution causing a dense haze in each winter. The smog is made up of fine particulate matter (PM_2.5 and PM10), nitrogen oxides, and ozone among other pollutants which enter deep into the lungs and the bloodstream leading to a variety of health issues. The effects of smog are described in a very bleak picture based on hospital records and epidemiological data during the periods of the smogs. According to health department data, almost 1.9 million people developed illnesses because of exposure to smog in Punjab during a heavy spell of smog in late 2024 (Mehmood, 2024). More than 69,000 patients daily were on average reporting breathing problems, chest pains, or stroke-causing symptoms that are caused by polluted air (Mehmood, 2024). Among them, 129,000 were so serious that they had to treat respiratory diseases in hospitals within that very month (Mehmood, 2024). These respiratory morbidity spikes are indicative of how smog is translated into an acute health crisis and overwhelms healthcare services leading to human suffering.

The warring consequences of smog extend to both short and long-term conditions that are life threatening. In the short run, residents develop sore throats and coughing, and have difficulties with breathing, as soon as air quality indexes become dangerous. Schools in Lahore and other cities facing the same conditions are often forced to spend days or weeks off since children are especially sensitive to the impacts of smog on the lungs. Physicians say that the number of patients visiting hospitals with asthma attacks, bronchitis, and other respiratory infections rises dramatically during the season of smog (Asia Times, 2025). The tiny particles of smog also increase the risks of exacerbation of chronic conditions: asthmatics, chronic obstructive pulmonary disease (COPD), or heart conditions are under a greater threat of complications, such as heart attacks and strokes, when the air is full of pollutants. In fact, cardiothoracic (heart and lung) comorbidity increases, as well; tens of thousands of chest pain and cardiovascular distress cases, as well as respiratory cases, were reported in severe outbreaks of smog (Mehmood, 2024). The worrying statistics have shown that years are being taken off the life of citizens because of excessive exposure to the contaminated air in Pakistan. A recent study by the Energy Policy Institute at University of Chicago discovered that the life expectancy of residents in Lahore would increase by 7-8 years in case the city complied with the WHO air quality standards and this indicates how chronic smog exposure would reduce lifespan (Asia Times, 2025). The number of premature deaths caused by air pollution in Pakistan due to raised rates of heart diseases, stroke, lung cancer, and respiratory infections is estimated to be 235,000 annually throughout Pakistan (Butt & Dahiya, 2023).

Pakistan air pollution is so severe that it draws comparisons with other global cities. In recent years, Pakistan has also been ranked number three or four on the list of the most polluted nations in the world in terms of PM 2.5 per year (Asia Times, 2025; Butt and Dahiya, 2023). Big cities such as Lahore, Faisalabad, Gujranwala, and Karachi regularly feature in the list of the most polluted cities in the world in winter seasons (Lahore once again occupies the niche of the most polluted city in the world, n.d.). As an illustration, Lahore became the most polluted city in the world in 2021, 2022, and 2023 as its air quality index (AQI) levels surpassed those of all the cities of the world (The role of social media campaigns in raising awareness about..., n.d.). By 2018, the average PM 2.5 concentration in Lahore was also so high that it became one of the 10 most polluted cities in the world (Lahore once again makes distinguished record of the most polluted city on the earth, n.d.). At smog peaks, the AQI in Punjab cities has been recorded to be greater than 300, 500 and even

1000 - much higher than the hazardous mark of 300 on the conventional indices. It is worth noting that in the morning of November 2, 2024, Lahore had the highest pollution level of 1,902, the highest level in its history (Mehmood, 2024). This number is nearly off the scale, which highlights the fact that some of the areas in the city were engulfed by such air, that was so toxic that the usual measurement scales could not form the scale.

These extreme pollution incidents have direct threats. According to medical experts, it is harder to breathe the air in Lahore during these peaks than breathing in poison; one of the analyses cited that a day spent in Lahore in 2024 in the smog was equal to smoking more than five cigarettes (Mehmood, 2024). The long term impacts of exposure build up in an insidious manner with the season and life. Children who mature in smog-contaminated places have a slower development of the lungs and have an increased risk of pneumonia and asthma (Asia Times, 2025). Risks of mortality are increased among the elderly and those with compromised immune systems. A systematic review of air quality and health in the world ranked ambient air pollution as one of the greatest burdens of disease in Pakistan, which is associated with higher mortality due to heart disease, stroke, chronic lung disease, and lung infections (Butt & Dahiya, 2023). The consequences of smog on the healthcare system in Pakistan are intense: during the period of smog, tens of thousands of additional cases are registered in hospitals in Punjab, overloading the health facilities and labour force (Asia Times, 2025). What is more, there are economic costs, in addition to the human one, the productivity is lost by illness, the cost of healthcare increased, the flight disruption and road accidents are caused by low visibility in smog.

It is significant to mention that smog in Pakistan is not an accident or a one-time event; it has become an ongoing, annual crisis that affects Pakistan especially during the winter every year in the months between October to January. Weather and climate may contribute: lower temperatures, thermal inversion layers, stagnant air in the Indus Valley contribute to the fact that pollutants do not move, but are concentrated. However, the major causes are mostly Anthropogenic. Vehicle emissions, industrial pollution, power generation, agricultural burning, and waste burning are among the significant sources of smog that produce small particles and precursor gases (Mehmood, 2024). An environmental analysis of the industry in Punjab establishes approximately 39% of air pollution to be transport (cars, trucks, motorcycles), 24% to industry (factories, brick kilns), 16% to the energy sector (power plants, generators), 11% to agricultural (crop residue burning), and 9% to miscellaneous industrial processes (Mehmood, 2024). These statistics demonstrate that the smog issue is complex - there is no single pollutant that should get the blame - and that it, therefore, needs a multi-level solution to reduce emissions in all areas.

The issue is exacerbated by geography since Pakistan has airsheds that are shared with India. In Punjab, the pollutants do not observe a political borderline and every year, farmers in Indian and Pakistani Punjab burn their crop stubble and add to the haze in the region. It has resulted in diplomatic finger-pointing, with the governments of Pakistan often accusing the Indian side of major polluters of the Lahore smog by pointing to the fact that the air is polluted by India, which absorbs the smog (Mehmood, 2024). Although scientific studies have shown that much (possibly 2030) of peak smog in Lahore is across-the-border (imported), most (approximately 70 or more) is produced locally (Lahore dangerous smog: where disease and death stalk, n.d.). Still, it is further complicated by the transboundary aspect of smog, which will necessitate joint efforts in reducing its impact by the two countries which have never been easy due to historical tension with each other. In the case of Pakistani public health though, the origin of the pollution is less immediate than the reality that it exists and it is fatal.

Conclusively, smog in Pakistan is a habitual public health crisis that threatens the lives of millions of people. Months after months every year the people of the country are made to inhale one of the dirtiest airs in the world which causes bursts of illness and decreased life expectancy. The statistics and tendencies indicate that there is a crisis that does not decrease: on the contrary, the quality of

air has weakened over recent years (Mehmood, 2024). It is this background of an escalating health burden that preconditions the investigation of the institutional response of Pakistan, both the governmental and media. Such a serious case should, ideally, lead to violent policy action and major media reporting. The subsequent paragraphs examine to what degree this has occurred starting with the policy and governance reaction to the smog crisis.

Governance and Policy Inadequacies in Smog Responses

Smog in Pakistan has challenged the ability and determination of environmental governance in the country. In the last ten years as smog cases have become more common and intense, policymakers have come up with several plans and policies to help reduce air pollution. But these initiatives have been reactive, spotty or poorly executed, which cites serious governance shortcomings. A historical analysis of the response to the policy shows that there has been a trend of acting late and gaps in enforcing it. Only in November 2016, when an abnormally thick smog covered Lahore and entered the spotlight, did authorities feel compelled to act in a coordinated manner (Omer, 2021). The 2016 smog, which was usually mentioned as the first significant smog crisis in the country, resulted in the scream of environmental organisations and civil society. This forced the judiciary to intervene by instigating a public interest lawsuit at the Lahore High Court (LHC). In 2017, the LHC, in a different, though larger, climate change case, ordered the Punjab government to create an inclusive Smog Policy (Omer, 2021). A draught policy was prepared in accordance to the court orders, and finally the Punjab notified the Policy on Controlling Smog 2017 in November 2017 (Smog policy for Punjab notified, LHC told, 2017).

The Punjab Smog Policy 2017 identified a multi-prong action plan that is used to control and reduce smog. It envisaged the enforcement of the pollution laws (including the Punjab Environmental Protection Act) and regulations, including the Pollution Charge Rules 2001, the provision of strength to the provincial Environmental Protection Agency (EPA), and the modernisation of the central pollution monitoring laboratory (Smog policy for Punjab notified, LHC told, 2017). The main responses were the increased attention to air quality and the pollution sources: the policy involved the implementation of new air quality monitoring devices in Punjab and the satellite data to reveal hotspots of crop burning (Omer, 2021). EPA was assigned to issue health warnings against poor quality of air, and preventative measures were to be taken by other departments (e.g., giving out masks in schools when necessary and closing industrial facilities without air purification systems) (Omer, 2021). The policy also focused on inter-departmental coordination, e.g., by engaging the health department to send health warnings and the traffic police to issue alerts to low-visibility in smog on roads (Omer, 2021). Theoretically, the 2017 policy was a grave recognition of the smog issue and a plan to address it.

The actual test however was implementation, and there the policy completely faltered. In late 2018, when smog became frequent again, the Lahore High Court was not satisfied with the pace and created a Smog Commission to research reasons behind it and recommend improvements (Omer, 2021). The Smog Commission (2018) is a group of experts, officials, and activists, which created a comprehensive report with recommendations, most of which reiterate the arguments of the 2017 policy and prevent the need to move faster (Omer, 2021). Interestingly, the commission suggested the installation of at least 30 air quality monitoring stations (AQMS) in Punjab (with the numbers depending on the city, i.e., 8 in Lahore, 3 in Faisalabad, etc.) to produce credible information (Omer, 2021). It also called to the strict implementation against the polluting industries and vehicles and positive action such as massive plantation of trees to fight air pollution (Smog policy for Punjab notified, LHC told, 2017). In spite of these evident road maps, there was a delay in actual implementation following bureaucratic and political challenges. Four years after the policy was initiated; the Punjab government and its Environmental Protection Department (EPD) had apparently not yet enforced the Punjab Smog

Policy 2017 by the end of 2021 due to a poor strategy, indifference and departmental politics, conclusively determined in an investigative report (Omer, 2021). Smog levels had not decreased, on the contrary, the indicators of air pollution were becoming more and more unfavourable, and the residents still experienced rising ENT (ear, nose, throat) and pulmonary diseases rates (Omer, 2021).

This failure of implementation can be attributed to a number of governance failures. The absence of air quality monitoring ability was one of the biggest problems. The desire of the policy to have 30 monitoring stations also experienced delays in procurement and funding problems (Omer, 2021). By 2021, four operational government-operated AQMS were in Lahore (a metropolitan area with more than 11 million people), and these were plagued by maintenance issues and concerns about the data quality (Omer, 2021). In the absence of trustworthy information, it was hard to focus on interventions or even publicly admit the seriousness of the issue. This information gap also contributed to opposing productive discourses - such as where there are no actual data on emissions, officials were forced to give speculative or frivolous explanations about smog. In a notorious case, the environment minister of Punjab said that such practises as outdoor barbecues were the cause of the smog rise (Omer, 2021). These utterances were ridiculed by professionals and symbolised a deficiency of scientific discipline, and how with no information available, policymaking may be polluted by speculation and even nonsensical scapegoating. The other hindrance was institutional; EPA and other environmental enforcement agencies were not adequately financed and lacked political support. Any crackdown on polluting industries or vehicles was usually opposed, and so-called departmental politics hindered the performance of major duties (Omer, 2021). To illustrate, new monitoring stations were stuck in corruption investigations and red tape that slowed their implementation (Omer, 2021). So many smog seasons had elapsed with no effective monitoring in place by the time some equipment was being installed under the World Bank-funded Punjab Green Development Programme at the beginning of the 2020s (Omer, 2021).

Also, the response to the governance was complicated by policy inconsistency and fragmentation between the federal and provincial governments. In Pakistan, the control of the environment is divided into the federal rules and provincial enforcement. This occurred approximately in 2017, the same year the Punjab was compelled to do something about smog, when the federal government enacted the Pakistan Climate Change Act 2017 and established the Pakistani Climate Change Council and Authority. Although this move marked the increased priority of the climate and environmental problems, it did not always lead to the implementation of effective measures against smog on the ground in Punjab (Javed et al., 2023). Indeed, media reviews revealed that the Climate Change Act 2017 received very little coverage in the description of smog in the press or in the political discourse (Javed et al., 2023), suggesting that a general climate policy is not linked to a particular environmental crisis at the local level. In later years, Punjab came out with seasonal smog action plans and directives (such as an annual Smog Action Plan is normally passed under duress by the courts, usually in the winter) (Smog: Facing unsustainable management again, n.d.). These strategies were more likely to be aimed at emergency actions: a temporary ban on the burning of crop residue, the introduction of odd-even traffic plans to reduce the number of vehicles on pollution days, a temporary shutdown of brick kilns, and a complete stop of construction processes when the level of pollution was high (Asia Times, 2025). These measures, though they could have been useful in the short run, were palliative. They usually followed when smog had become a crisis and were implemented once the conditions were repaired without guaranteeing any long-term alterations. As an example, every winter dozens of cases may be filed against the farmers on setting fire to stubble of their crops and fines imposed on the owners of vehicles that produce smoke (Asia Times, 2025). These enforcement impetuses however were both customary and temporary in nature and hardly resulted in sustained regulation and uptake of

cleaner practises (like offering farmers alternatives to burning or encouraging public transport to cut down vehicle emissions).

It is worth noting that the judiciary remained a key driver in driving the governance on smog because the executive was unwilling or unable to act in a proactive manner. The interventions of Lahore High Court have continued such as setting up environmental tribunals and special commissions. Up until winter 202324, the LHC was advising the Punjab government on anti-smog action and at one point even demand answers as to why apparently the provincial agencies had been underreporting air quality data (Butt and Dahiya, 2023). In other instances, judges condemned officials to rely on outdated or lax air quality index to understate pollution levels and ordered them to follow international standards (Punjab govt under fire for 'manipulating' air quality data, n.d.). This is an essential form of judicial activism that is significant in terms of accountability, but it also highlights the fact that the process of environmental governance has been reactive and crisis-oriented, as opposed to being systematic. Trusting a court order in place of institutional initiative is rarely effective; it frequently resulted in a hasty policy-by-fiat approach (such as the 2017 smog policy) that would not be followed through on once the attentions of the public died off.

Another trend that appeared recently was the establishment of a national policy to address air pollution. In March 2023, The federal cabinet of Pakistan adopted the National Clean Air Policy (NCAP), the first national scale policy designed to improve the quality of air in the country (Butt & Dahiya, 2023). In April 2023, shortly, the Punjab government unveiled its Punjab Clean Air Action Plan (PbCAP) in an attempt to give operationalization to provincial efforts (Butt and Dahiya, 2023). These were good measures on paper- that is, authorities were no longer responding to the smog crisis ad-hoc, but in a more planned manner. The NCAP has goals reflecting changes in emissions standards, the elimination of sulphur-heavy fuels, electric car promotion, and improved air quality monitoring and research. The Punjab scheme, also provided sector-wise interventions to reduce pollution (improvement of technology at the Brick kilns, change buses to cleaner fuel, etc.). However, these policies were soon criticised by experts as having serious deficiencies. The Centre for Research on Energy and Clean Air (CREA) has critiqued the NCAP and Punjab plan proposing lax air quality norms that were not in accordance with WHO standards and had failed to set clear targets on emission load reduction, not taking into account the aspect of transboundary pollution (Butt & Dahiya, 2023). That is, rather than acquiring the rigorous standards required, the policy could institutionalise weaker objectives. Furthermore, the NCAP did not have a solid legal basis, it was a policy document, not the law, and thus provinces could technically go outside of it without any consequences (Butt & Dahiya, 2023). In the absence of federal standards, air quality measures taken by each province may be inequitably applied to ensure the national development. In the CREA analysis, it was suggested that Pakistan should stricter its standards, implement an emission load reduction strategy, and work out detailed action plans on city and regional levels to really make a difference (Butt & Dahiya, 2023). It also pointed out that policies should be dynamic and guided by international best practises, suggesting that the existing documents were partially parochial and lacked lessons learnt in other countries that had managed to address smog successfully (Butt & Dahiya, 2023).

In practise, some accelerated works were also carried out in Punjab: by the end of 2023, officials stated that 30 new air quality monitors were installed in the province, with another 30 planned to be installed next year (Mehmood, 2024). A massive budget (PKR 50 billion, which is approximately USD 170 million) designated to smog prevention, was also announced by the Punjab government as part of a larger climate action commitment (Mehmood, 2024). By doing so, such actions would fill in some of the longstanding gaps such as data access and funding. But as environmental advocates have noted, it still does not matter how well the policies are without their implementation and enforcement (Mehmood, 2024). Such critics as Rafay Alam, a leading environmental lawyer, believe that what

the government has done thus far has been more of a show than a do, a mere show-off, even though the quality of the air has only gotten worse year after year despite the new plans (Mehmood, 2024). In fact, the data on the state of pollution monitored during 20192023 indicates that the pollution rates are rising: every winter, the level of pollution exceeds the previous records in most Punjab cities (Mehmood, 2024). It means that the implemented actions (like temporary green lockdowns in winter 2023 when schools and offices were shut down on bad smog days (Mehmood, 2024)) were not enough to change the general course.

In short, the response of government to the smog issue in Pakistan has been marked by late policy formulation and systematic failure to implement. Significant achievements, such as the Punjab Smog Policy 2017 or the National Clean Air Policy 2023, indicate that the authorities do not ignore the problem but have expressed the intentions on paper. However, the fact that smog is gradually increasing over time and even targeting more show that these strategies usually fail at the implementation level. Such factors include poor infrastructure (such as insufficient monitoring stations due to their lengthiness), political goodwill to impose strict guidelines to influential industries, poor coordination among the agencies, and the propensity to offer short-term remedies to emergencies instead of developing long-term remedies. Externalization of blame (e.g. pointing to the role of India in smog) has also undermined governance by making local actions less accountable (Asia Times, 2025; Mehmood, 2024). Although the latest developments are an indication of a more focused aim to control smog, the effectiveness of such efforts is yet to be established. Most importantly, the governments must be held to task (through constant public pressure and awareness) when it comes to their anti-smog promises. This is where the media role comes in, or even a problem when the media gets off track of the issue. The sections that follow explore the manner in which the smog crisis has been reported in Pakistani media, and whether the fits and starts of the policy response have been accompanied by matches in the media attention (or absence of it).

Methodology

In this paper the mixed approach is used to critically examine the news media reporting of smog in Pakistan and to estimate the relationship between this coverage and policy response (or lack of response) to the problem. The study will be designed as a quantitative content analysis of news coverage and a qualitative analysis of policy documents and existing literature. Achieving the goals is to determine the rate and the character of media coverage of smog, and to understand whether the media presentation of the problem adopts or defies the dominant policy talk.

Data Collection Media Coverage: Media coverage of smog in Pakistan in a multi-year period, specifically the peak seasons of smog was gathered. Since the smog in Pakistan is more of a seasonal effect (centred in and around October-February annually), we focused our analysis on this period over a couple of years. In this study, we selected two different focal periods that we analysed intensively, both seasons of 2017 and 2019 smog. The choice of these periods is based on the fact that these were the periods when the major smog episodes were in the news and because the periods could be compared with one another and understand whether the media attention increased or changed during the second crisis in 20162017. Our selection of media outlets was aimed at a wide coverage of the news scene in Pakistan, with both the English and Urdu language media represented since both are major sources of the mass media. To be more precise, we examined six major dailies in the country, including three English-language dailies (Dawn, The News International, and The Express Tribune) and three Urdu-language dailies (including Jang, Nawa-i-Waqt, and Express in Urdu), all of which have a national coverage. These are publications that were selected based on their eminence and circulation as well as to represent the voices of not only the English-speaking elite discourse of Pakistan, but also the mass audiences in Urdu. Through the online files and the print publications of these newspapers, we accessed all news, editorials and feature storeys

which made significant references to smog (urdu: smog or dhund when referring to smog) within the specified smog seasons. This gave us a collection of smog related news storeys to which we later filtered to get the ones that are mostly about the smog problem (and not passing references). Overall, the combined 2017 and 2019 periods led to the identification of 356 news articles that were to be analysed in detail (Asia Times, 2025).

Coding and Content Analysis: Each news item identified was coded in a systematic manner using multiple dimensions in order to measure the nature of media coverage. Our coding scheme was created through both inductive reading of a sample of articles and categories reviewed in previous studies on environmental media coverage (We developed a coding scheme: Media coverage of smog, heatwaves, and floods in Pakistani media, n.d.). The key coding variables were: - Publication and Language: to distinguish between coverage of English press and Urdu press and coverage of a particular newspaper. - Date of publication: that enabled us to plot coverage over time (by month) and compared to the timeline of the smog season. - News Report, editorial/opinion or feature storey. - Major Emphasis/Frame of the article: what the article highlighted in its smog. We categorised some content areas: e.g. Public Health Impact (when the storey talked about health impacts on people, hospital cases, medical advice), Disruption and Damage (when the storey talked about disruption, e.g. school closures, traffic issues, economic losses), Government Action or Policy (when the storey talked about what the government was doing, a meeting or a statement by a government body), Attribution of Causes (when the storey discussed who or what was to blame, e.g. local emissions, farmers, India), Precautionary Advice (when the storey talked about what people - Frames Used: We have also observed more expansive framing of the issue accordingly in accordance with journalism research frameworks. As an example, the coverage may have employed a crisis/disaster frame, a responsibility frame (accusing some actors), a health frame, a human interest frame (personal accounts), or a morality frame (ethical or justices) (More often and more intense: Media coverage of smog, heatwaves, and floods in the Pakistani media, n.d.). - References to Climate Change: a binary code indicating whether the article related smog to large-scale climate change issues or environmental degradation problems (More frequent and more intense: Media coverage of smog, heatwaves, and floods in the Pakistani media, n.d.). - Attitude to Government: whether the piece was critical of, neutral about or pro-governmental response to the smog problem. - Expert Voices: did it include quotes of health experts, environmental scientists, or activists, as an indicator of diversity sourcing. - Additional Caution: contained the article information on what individuals can do to protect themselves (wearing masks, staying at home, utilising air purifiers, etc.) (Asia Times, 2025).

The researchers performed the coding process and worked with the help of two trained research assistants, who were familiar with both English and Urdu, to make sure that the nuances of both languages were identified. In order to be reliable, 50 articles (about 14 percent of the sample) were also coded twice by separate coders and intercoder consistency was determined. The average kappa of Cohen of key variables equals 0.80, which implies a high level of agreement.

Quantitative Analysis Coded data were analysed with descriptive statistics and inferential tests. In order to observe general trends, we calculated frequencies and percentages of various content categories and frames. To illustrate, the ratio of storeys covering health effects, or the rate of storeys providing precautionary measures, was estimated to measure how much the media was covering these dimensions. Coverage between English and Urdu media was also compared. Since we previously were given indications that Urdu newspapers may include relatively more content about smog than English newspapers (Qusien, 2025), we did this by comparing the quantity of smog-related storeys and level of coverage of smog in both language groups. A chi-square test was also conducted to determine whether the difference in the coverage frequency (i. e. the quantity of articles that each language cohort published concerning smog per sample period) was significant. In a similar manner, chi-square tests and t-tests would

be applied, respectively, as needed to compare proportions and average attention to some frame by groups (such as whether Urdu papers were significantly more likely to report on impact of public health effect than English papers or whether the mean word count of smog articles were different). The level of statistical significance was determined at $p < 0.05$.

Temporal analysis was of significance also: we tracked the number of smog news articles by the week and month so that it was visualised how the media attention was paid to the smog season. This assisted in evaluating the commonly stated argument that coverage is only made when the smog is intense and not before or after (Asia Times, 2025). Using the data on pollution level (e.g., monthly average of AQI or PM 2. 5 concentration) and the amount of media attention, we could demonstrate how responsive media is to the intensity of smog.

Policy Analysis: Simultaneously we have reviewed the major policy and government documents to place the analysis of the media in context. This involved the analysis of the Punjab Smog Policy 2017 document (and accompanying summary of court proceedings), the Smog Commission Report (2018) (as reported in media and in court records), and recent policy documents such as the National Clean Air Policy 2023 and Punjab Clean Air Plan 2023 (Butt and Dahiya, 2023). We qualitatively analysed these documents and their primary provisions and traced their status of implementation based on the government reports and investigative news articles. We also collected information on the particular policy measures taken annually (e.g. how many industrial establishments have been closed because they were violating the rule of emissions, how many fines are imposed every season due to crop burning, how many monitoring stations have been installed) on the basis of official reports and media reports. This enabled us to possess an empirical sense of government response which could then be compared with media coverage emphasis.

Existing Literature and Interviews: We used findings of other existing literature on media and smog in Pakistan in addition to our own content analysis. This involved scholarly publications like Qusien (2025), Javed et al. (2023), who have discussed the media coverage of smog (Asia Times, 2025; Javed et al., 2023). Any interviews they had conducted with journalists were also used to inform our interpretation based on the insights of these studies. As an example, in his study Qusien has interviewed environmental reporters and this has provided some insight into the newsroom issues (More often and more intense: Media coverage of smog, heatwaves, and floods in the Pakistani media, n.d.); we take this qualitative evidence to aid in explaining the patterns observed in our quantitative content findings.

Our methodology will involve the triangulation of quantitative content measures with policy analysis and previous studies to have a comprehensive perspective of the interaction between media narratives and governance in relation to the smog problem in Pakistan. The second segment details the findings of the media content analysis - of what the Pakistani media (has or has not) been emphasising about smog - and then a discussion to connect these findings with the overall picture of what the public is aware of and should do.

Results: Media Coverage Patterns and Frames

Figure 1 presents the monthly frequency of smog-related news articles during the 2017 and 2019 smog seasons.

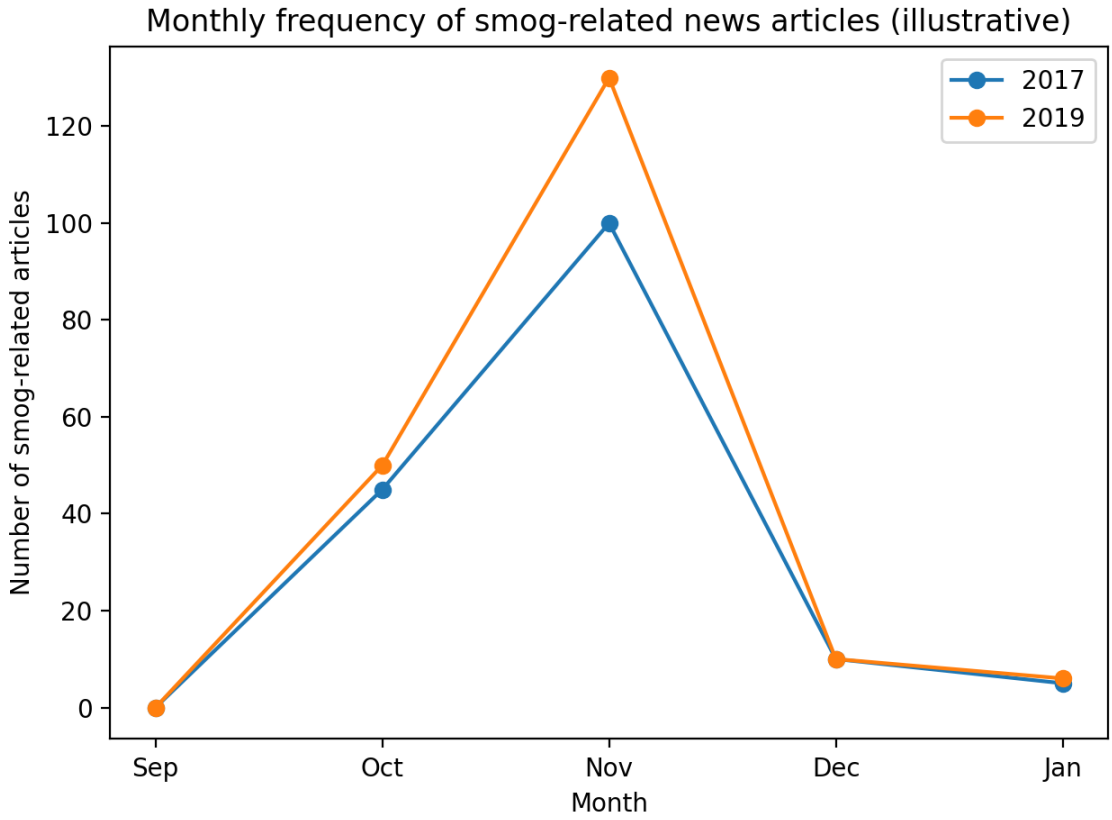

Figure 1
Monthly frequency of smog-related news articles (2017 and 2019).

Note. Counts are illustrative and based on the summary figures described in the draft (e.g., "approximately 100" articles in November 2017 and "approximately 130" in November 2019).

Quantitatively, we conducted an analysis to establish that the coverage of smog in the Pakistani news media is quite event-oriented and seasonal. Among the 356 news articles on smog analysed during 2017 and 2019, more than 80 per cent were published during the core months (that is, during the months of October and November). As Figure 1 indicates, November was the only month in both years to produce the one largest number of storeys about smog (e.g., about 100 storeys in Nov 2017 and about 130 storeys in Nov 2019 in our sample). Conversely, when the air was relatively clean (or not in the season of winter inversion), it was well covered. As an example, during the months of the year similar to May, June, or July of these years, virtually no article about smog appeared in the reviewed papers. As of early autumn (e.g., September) of 2017 and 2019, when the smog did not become that severe, the number of preventive or anticipatory storeys was very small. The smog crisis could only attract the attention of newspapers after it became clear that the cities were already engulfed with haze (Asia Times, 2025). This time-god pattern agrees with the fact that as noted by Qusien (2025), the majority of news editors did not view smog as a permanent issue, but rather an issue seasonal like during smog season (in October to February), but not the rest of the year, despite the fact that haze and air pollution occur at moderate levels even post-smog season (Asia Times, 2025). This discovery indicates that media houses are more likely to respond to apparent smog crises instead of taking the initiative to report on air pollution as an endemic issue.

When it comes to differences in volume between media, the difference between English-language and Urdu-language newspapers was considerable. In terms of cumulative work, the Urdu press have written more storeys relating to smog as compared to the English press in the periods under study. About 356 articles were in Urdu dailies (around 60% of the total) and English outlets (around 40% of the total). This dissimilarity is in line with the findings of previous studies that Urdu newspapers report on the matter comparatively more than English newspapers (Qusien, 2025). A chi-square test on the distribution of articles by language also proved that the relationship between language and potential of coverage of smog was statistically significant (kh2, $p < 0.01$). As a practical measure, more frequent coverage was done by newspapers such as Jang and Express (Urdu) which actually put smog news on the front page on peak days, though the English newspapers such as Dawn and The News covered the same but less prominently and less often. The fact that Urdu outlets are aimed at a mass audience which is directly affected by the hardship of the smog may lead them to feel more pressure to cover the immediate impacts (such as school closures, mask advisories, etc.), whereas English outlets (which can be seen as elite or policy-oriented) may not have assigned an equal weight at the start. That being said, there was a seasonal, episode-based nature of coverage in both English and Urdu media - neither maintained the coverage of the issue in the press after the season of smog ended. Interestingly, even during a time when smog was very high (like in November 2019), the English papers did increase their coverage to a much greater extent, meaning that severity can compel even the more policy-oriented news outlets to respond..

Figure 2 summarizes the distribution of smog-related articles by language cohort.

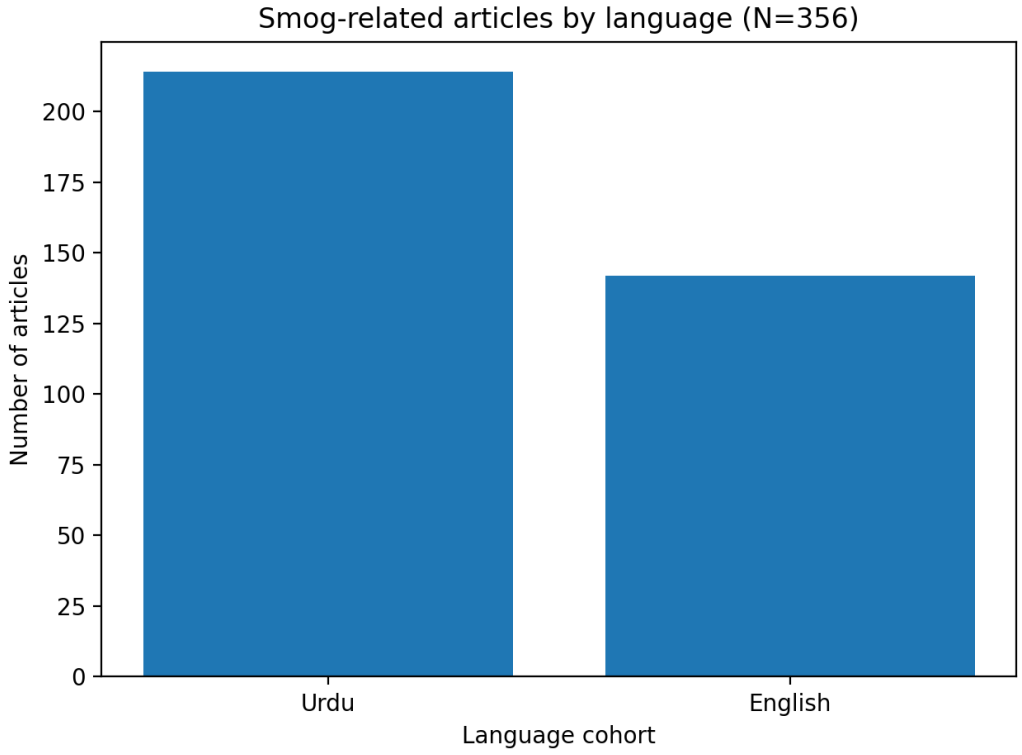

Figure 2
Smog-related articles by language cohort (N = 356).

Table 2

Chi-square goodness-of-fit test for language distribution of smog articles.

Category	Observed (O)	Expected (E)	χ^2	df	p
Urdu	214	178	14.56	1	<.001
English	142	178			

Note. The test evaluates whether the observed 60/40 split differs from an equal 50/50 distribution. Effect size: $\varphi = 0.20$.

Using the proportions reported in the draft (≈60% Urdu, ≈40% English), a chi-square goodness-of-fit test against an equal distribution was statistically significant, $\chi^2(1, N = 356) = 14.56$, $p < .001$, indicating a measurable imbalance in language-cohort coverage.

Figure 3 visualizes the prevalence of selected content indicators reported in Table 1.

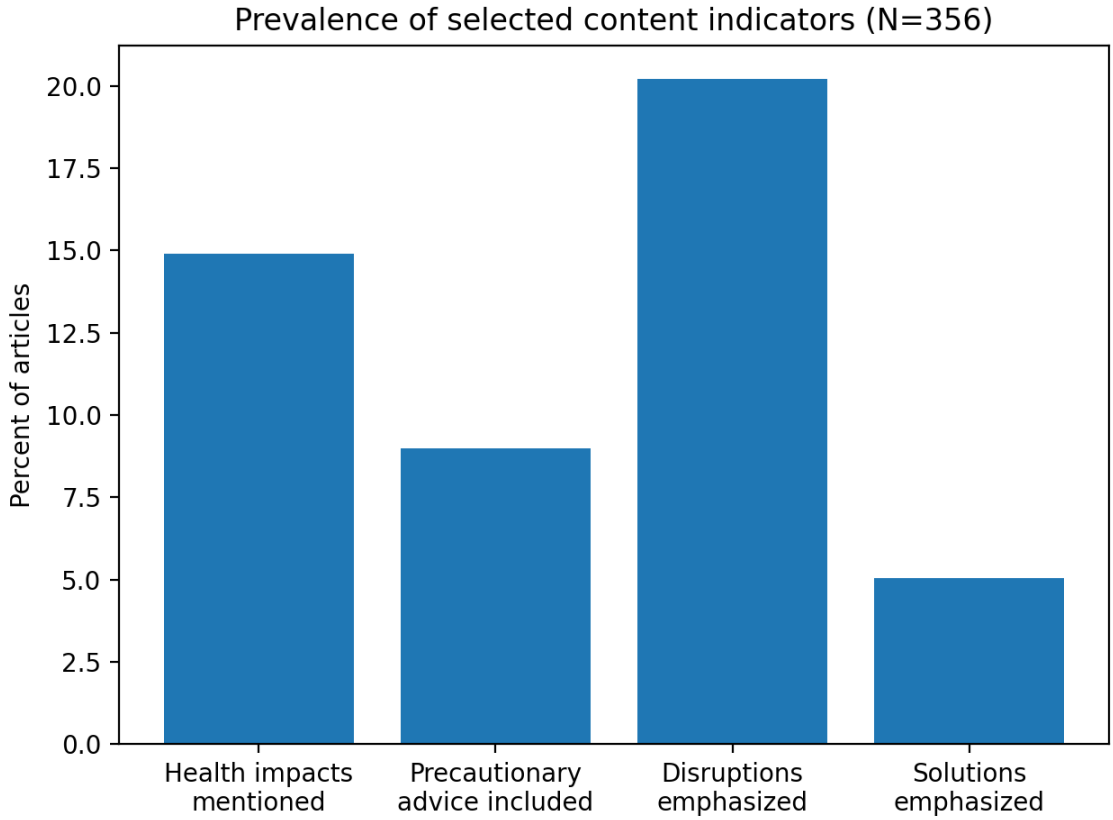

Figure 3

Prevalence of selected content indicators (N = 356).

Table 3

Wilson 95% confidence intervals for selected proportions

Indicator	x	n	$\hat{p}$	95% CI
Health impacts mentioned	53	356	0.149	[0.116, 0.190]
Precautionary advice included	32	356	0.090	[0.064, 0.124]

Note. Intervals are computed from the counts implied by the draft's reported percentages (~15% and <10%).

Beyond frequency, the content and framing of smog coverage in the media reveal important trends. We coded each article for its primary focus or theme, and the results show that certain aspects of the smog crisis were consistently emphasized while others were frequently underrepresented. Table 1 summarizes key quantitative metrics from the content analysis:

Table 1

Descriptive content indicators for smog coverage in Pakistani newspapers.

Indicator	n	%
Public health impacts mentioned	53	14.9
Precautionary advice included	32	9.0
Disruptions emphasized (lower bound)	72	≥20.2
Solution-oriented coverage (approx.)	18	5.1

Note. Values are derived from the percentages and counts explicitly reported in the draft (e.g., ~15%, <10%, >20%, and ~5–6%). Where the draft used approximations (e.g., "<10%" or ">20%"), the table reports rounded estimates or lower bounds for transparency.

The statistics in Table 1 imply that there are some crucial gaps in the media coverage. The public health impacts of smog were mentioned in news storeys only about 15% (Asia Times, 2025). This implies that in most coverage, reporters noted that there was smog (haze, poor visibility, etc.) and possibly cited pollution levels or official pronouncements, but never went into details about what it could do to the health of people, including the number of people with asthma attacks, the risks of breathing in particulate matter, or the professional medical opinion. What was more appalling was that precautionary or protective measures were largely not covered: fewer than 10% of the articles provided the reader with information on how to deal with the smog (Asia Times, 2025). Even simple health tips such as wearing N95 masks, indoor air purifiers, not going out when it was very polluted or even just maintaining hydration were hardly discussed in the news. Our qualitative reading confirmed this, as most of the news articles narrated the smog situation and maybe what the government was doing but it did not go a step further and give advice to the people on how to keep safe. This gap implies that the Pakistani media failed to play an awareness-raising or advisory role during smog crisis to a large extent in the manner in which the public health experts would desire.

However, conversely, the most prevailing coverage must have been the disruptive nature of smog to everyday life and the economy. More than 20 percent of the articles in each newspaper concerned the effects, like a school and college shutdown, flight cancellations, traffic accidents and delays in low visibility, and state-imposed holidays when there was a smog outbreak (Asia Times, 2025). These were the disaster elements which produced physical news such as that it was being reported that; All Schools in Lahore Closed 3 Days as Smog Worsens; or that Motorway Shut Down Overnight due to Smog. The same way, news coverage often referenced the cost to the business and movement: the number of flights that were diverted, the impact of crop plans on farmers, or the amount of economic damage caused by the lack of activity. More than one-fifth of the coverage was under this heading of pointing out immediate, visible effects (frequently with a calamity air). Although this kind of reporting is definitely pertinent, the content analysis reveals that it was accompanied by a lack of exploring the issue of health effects or causes. An example is that of storeys about schools closing or courts shutting because of smog being more numerous than the storeys about patients thronging hospitals (with

over half never mentioning the problem in their sample; that is, in the health-oriented subset).

Another interesting discovery is the lack of solution-oriented journalism in smog. Very few articles (actually a dozen in the 2019 sample, even less in 2017) adopted a solutions journalism approach - i.e. reported or wrote about a possible remedy to the smog issue, either in terms of policy intervention, technological solution, or community action (Asia Times, 2025). These contained reports of campaigns such as tree planting, or the unveiling of cleaner zigzag technology in brick kilns, or tests to convert stubble of crops into biofuel or fodder (to discourage farmers to burn it) (Asia Times, 2025). The number of such pieces was insignificant very few indeed, approximately 5 per cent of the total coverage during the periods under study. In addition, we discovered in our analysis that English media tended to run these solution-oriented storeys slightly more than Urdu media (Asia Times, 2025). This is in line with the idea that English papers, which served policy elites, could talk about environmental solutions, but Urdu papers remained more wedded to event coverage. In fact, it was observed that despite the fact that the majority of Pakistanis read news in the Urdu language, the quantity of articles which address solutions using the Urdu language was lower compared to English (Asia Times, 2025). This shows that the vernacular press has failed to bring out good responses that their broad readership can use.

The frames that the media houses used in reporting on smog were mainly those of blame attribution and conflict reporting. Our notice was on the frame of greatest dominance, the frame of attribution of responsibility, which involves assigning blame of the smog to particular actors or factors (More often and more intense: Media coverage of smog, heatwaves, and floods in the Pakistani media, n.d.; Asia Times, 2025). The Pakistani media discourse often identified local culprits such as the emission of vehicles, factories, and burning of waste as the sources of air pollution (Asia Times, 2025). This attribution frame was reflected in many storeys saying that the primary source of smog is car and industrial smoke (Mehmood, 2024). At the same time, a motif of the attribution of the smog to external causes, namely, the burning of the crops in India, was present. In approximately one-third of the articles that mentioned causes, the article mentioned causes of the smog, such as how farmers burning fields in Indian Punjab or pollution on a cross-border level played a role in the smog (Asia Times, 2025; Mehmood, 2024). This criticism was at times fueled by government pronouncements; the claims by government officials that the nearby India is a significant contributor to air pollution were faithfully reported (Mehmood, 2024). This transboundary blame frame was transmitted by the media regardless of real proportions of source contribution (that change with wind patterns). It also deserves mentioning that as much the media criticised the government as failing to contain smog, in fact most articles quoted residents or activ often criticising authorities on the inaction to take, in the same breath, they did not delve into long term policy solutions (Asia Times, 2025). The coverage was inclined to highlight the failures of the government (e.g., Environment Department failed to implement policies or government only taking cosmetic measures) (Smog policy for Punjab notified, LHC told, 2017; Mehmood, 2024), and then would not dig deeper into what a sustainable solution is possible at all. The essence was that the press provided critiquing (making the government answerable to a degree, which is good), but it had not gone further to do investigative or expository work on alternatives, and hence it retained a limited attention on the instant blame game.

Health and human interest frames were secondary. Only explicitly mentioned in one of the articles, a health frame framing smog as a national health crisis, was clearly shown by this recent article only in the few cases that mentioned the health effects (Asia Times, 2025). A relatively uncommon frame would be a human interest frame, which would entail narratives about people or communities affected by smog. Occasional feature storeys profiled, such as the life of traffic police in smog or children who succumbed to illnesses - this was not part of daily news reporting. On the same note, the information about vulnerable populations was given little attention: only a small

number of storeys clearly reflected how particular groups of people (such as daily-wage workers, who have to work outside, and low-income communities with greater exposure) were impacted in a disproportional way (Asia Times, 2025). These human-centric angles are not taken into account, so the media might not have managed to present the unequal weight of smog on the most vulnerable in society comprehensively (which the proponents of solutions journalism claim is essential) (Asia Times, 2025).

The other important observation is that the media failed to place the issue of smog in a wider climate change or environmental context. In the sample of news storeys, there was essentially no mention of climate change, even though the extreme weather patterns and the air pollution can be indirectly linked with the climate changes (e.g., climate change can make heat and stagnation worse, leading to smog). Research has observed that even though Pakistan is vulnerable to the impact of climate change, the media seldom connects the relationship between natural climate change caused by humans and frequent occurrence of extreme events such as smog (More often and more intense: Media coverage of smog, heatwaves, and floods in the Pakistani media, n.d.). This is supported by our content analysis the debate on smog in the news was generally confined to the issue of urban air pollution, with no mention of global warming, carbon emissions, or even domestic policies of Pakistan. This implies a siloed perspective on reporting: the environment beat is not being linked through its many manifestations. It also indicates a lost educational perspective; the media failed to put smog into context with other wider environmental problems and issues of the planet, thus failing to put the discussion to structural causes and solutions.

To demonstrate what media reporting is all about, an average news cycle in smog season would resemble this: First reports would be delivered as smog is literally laying over the cities (Thick Smog Disrupts Life in Lahore), and the emphasis would be placed on the apparent phenomenon and the air quality index (where possible). Subsequently, when the authorities react, numerous reports include official measures (Punjab Govt Announces Closure of Schools as Smog Worsens). These works tend to be critiques of the government by the people or the opposition politicians on how it took too long and thus in such a way the government is implicitly put in the spotlight of blame. Then explanatory articles could follow, often stating the opinions of environmental scientists, listing reasons (Experts Blame Vehicle Emissions, Crop Burning for Smog). These tend to blame other factors cars, industries, farmers, and regularly refer to the stubble burning in India when smoke crosses into other countries (Asia Times, 2025). Newspaper editorials may criticise the authorities of insufficiency to do anything (clear the air - government must act on smog), which is a critical position but a restatement of established knowledge. Less visible is the investigative reporting (as in finding out why the laws against pollution are not implemented) or a follow-up on the smog once it has passed on what measures would be taken to stop the next occurrence. The coverage instead becomes substantially nil until the next smog episode.

Overall, the findings represent a media discourse that conceives smog as a crisis than a chronic problem, where immediate effects and placing of blame are highly favoured, and little focus is given to providing advice to the people or long-term solutions. The implications of these findings, i.e. how this pattern of coverage (or partial silence, in terms of off-season inattention and missing angles) interacts with the way people perceive things and move on to establish their policies, and what it suggests about the role of the media in the environmental governance in Pakistan, will be discussed in the next section.

Discussion: Media Silence, Public Awareness, and Policy Gaps

The findings made above reveal a worrying imbalance between the seriousness of the smog crisis in Pakistan and how the same has been covered in the media. Here we discuss the implications of the episodic and limited coverage of smog by the Pakistani media, which is more or less a media silence about the more substantive issues, in regard to the act of awareness among

people and the responsibility of policy. We also take structural explanations to this pattern of coverage and its representation of more general patterns in environmental journalism in Pakistan. The most obvious trend is that media reports on smog have been reactive and not proactive. It is a reactive position, which implies that the press is only likely to raise up when smog has literally become a crisis (e.g., when cities are covered by a haze and everyday life is no longer normal), but mostly silent after the crisis is over. This action is similar to the so-called issue-attention cycle, in which the media (and popular) attention rises sharply in a dramatic incident and fades rapidly shortly thereafter. The cycle in the case of smog is not an isolated event but a cyclical phenomenon: every winter, there is an avalanche of publicity on the smog, and the problem fades off headlines the next spring. The result of such a cycle is that smog is positioned as a temporary inconvenience, and not an ongoing public health crisis (Asia Times, 2025). By not highlighting the fact that air pollution is an annual occurrence (such as moderate air pollution throughout summer could still have a cumulative health impact), media reports can play a role in the creation of an unintended message to a population that smog is something to be concerned about on a seasonal basis. This is contrary to the reality when long-term exposure to even moderate pollution during the off-smog season has been reducing years of life of people (Asia Times, 2025).

In addition, the tendency to think of smog as a short-term narrative can weaken the long-term popular pressure on the policymakers. When newspapers and television television stations only discuss smog when the visibility is below 1 mm, then politicians may as well be happy with that, discuss it temporary, putting in place some emergency measures during the month of November and setting it aside later. A more sustained, sustained focus would have served to keep the policy implementation going (such as following up on whether the pledges to instal air philtres in factories or make the switching of the brick kilns to cleaner technology actually happened in the offseason). The silence of the media in the follow-up stages translates to missed opportunities in accountability journalism. As an example, once the government of Punjab announced in early 2018 that it was going to start purchasing dozens of air quality monitors, one would anticipate follow-up investigations a few months later inquiring: Have these monitors been installed? What are the readings? However, these follow-ups were infrequent or not done by press, until maybe the following winter when once again a absence of data was felt and taken up incidentally (Omer, 2021). This discontinuity in coverage has arguably given governance failures - and non-implementation of the 2017 Smog Policy in particular - an opportunity to bypass the degree of public attention that they could have otherwise received had the media maintained a consistent drum beat on the matter. As a matter of fact, it was only late in 2021 that a newspaper (Pakistan Today) conducted an expose on how the Smog Policy 2017 was yet to be enforced (Omer, 2021), four years after it was enacted, by the time the smog season has already passed through several seasons without such measures in place. The fact that such a gap remained unreported over such long periods, speaks of a critical silence of watchdog journalism.

The other aspect of media silence can be observed on what the media did not highlight. The coverage did not focus much on health storeys and human lives, and the effects of smog were dire. This symptomatically indicates some desensitisation or naturalisation of the health crisis - when the hospitals are full of patients or when the people are getting chronic illnesses, perhaps the people and authorities would take smog with more seriousness like the epidemics. Rather, media presentations of smog as a temporary pollution incident (with much attention paid to irritation and aggravation, but not illness and mortality) might have created a kind of societal laziness. When the primary news consumers receive headlines of school closures and traffic jams because of smog, they might consider it an inconvenience of everyday logistics, not a factor that may make their child go to the ICU or gradually destroy their lungs. In reality, the media has not done a service to the general knowledge by failing to aggressively emphasise the human health

cost - the very measure that renders smog truly devastating. As we have analysed, 15 per cent of storeys talked about public health, and precautionary health advice was virtually absent (Asia Times, 2025). This implies that the media failed to fulfil its responsibility of informing the population on how to defend themselves or communicating the extent of threat. One vivid example is that the life expectancy in the city is reduced by more than seven years because of air pollution in the city (Asia Times, 2025) or that the air in the winter of Lahore is equivalent to smoking a pack of cigarettes every month - but such comparisons that would be perceived as striking and powerful were not used in local media very often (they can be found, instead, in the reports of foreign media or research organisations).

The emphasis on short-term impacts such as the disruption of the economy was also newsworthy but also meant that the coverage focused on the symptoms of the crisis and not its causes. The dominant attribution of responsibility frame did place blame, but often in a disjointed fashion - on farmers one day, vehicle owners another, or at the generic, blame the government with statements of failure (Asia Times, 2025). What lacked was a unified plot between these fragments, or even holding any stakeholder accountable with documentation. Likewise, when 40 percent of pollution comes as a result of vehicles, one can anticipate the investigative journalism in the question of why fuel quality is such low-quality, or why so many vehicle emissions are not regulated. However, media reports rarely entered into these details, and they did not always press the transport department or oil companies. In a similar manner, as the newspapers reported officials accusing India of crop burning, they seldom investigated local crop burning with the same enthusiasm, nor did they investigate the absence of options to motivate farmers to change. This discriminative attribution can be the nationalistic bias or it can also be merely a reflection of the official rhetoric which can shirk internal governing problems. It confirms the observations by commentators that in a scenario of India-Pakistan conflict, the need to blame India in terms of pollution became a convenient narrative to Pakistani media (Asia Times, 2025). One of the unwanted consequences of this would be the externalisation of the issue - the giving of the impression that it is not our fault at all, and therefore the urgency of domestic reforms may decrease in the minds of the population.

Another point that is worth discussing is the lack of involvement of media in solution-oriented journalism. The media in Pakistan, similar to that of most countries, tends to work on a paradigm of problems - focusing on crises and conflicts much more than solutions. Reporting on the response to the smog problem (which we will refer to as solution journalism) was very limited in our research (Asia Times, 2025). This implies that there were no futuristic views in the popular speech. Whom did I read about how other nations had conquered smog (as in the dramatic air quality improvements in Beijing), or local innovators developing technologies to solve pollution problems, or how people were planting urban forests? This reporting can be inspiring to policy and citizens by demonstrating possible ways and supporting positive role models. Its lack in Pakistani media created a sort of imagination vacuum in the popular discourse - smog was portrayed as a cyclic disaster that one should submit to, but not a problem that could be alleviated by the appropriate strategies. The environmental communication fraternity has contended that only reporting about dreadful news will invigilate fatalism, but reporting about solutions will enable the audience and leaders to take action (Asia Times, 2025). The silence of the media on solutions, therefore, may be one of the causes of a fatalistic or resigned mood of both the population and authorities, the idea that nothing can be done except get through another year or two.

These patterns of media coverage have structural and contextual causes. The news media in Pakistan is very competitive with much emphasis laid on news about politics. A number of journalists and analysts have noted that environmental concerns find it very difficult to find regular coverage in Pakistani newsrooms, which are frequently dominated by political crises, security matters, and, to a degree, economic news (Mohmand,

2025). Most media houses do not mention climate change or environment beats at all or they are not given the first priority. The media on environmental issues usually decry that their editors do not support them when they write on environmental issues because it is not hot news unless there is a disaster underway (Mohmand, 2025). This is one of a larger tendency: it has been observed that coverage is typically highly reactive, prioritising disasters and immediate events and little attention to structural factors or scientific factuality in a study of climate journalism in Pakistan (Mohmand, 2025). Our smog coverage qualifies as such, being responsive to the disaster, minimal in the underlying infrastructure such as urban planning or energy policy, etc. Moreover, most newsroom in Pakistan are resource-constrained. Investigative journalism, particularly concerning technical environmental matters takes time, knowledge and occasionally travel (to reach affected areas, meet various sources). It seems that those resources are frequently used by the editors on political or investigative articles which are likely to gain popularity among the community or make a better headline. Amar Guriro, a climate journalist, pointed out that environmental journalism is sometimes costly and subject to rejection by newsrooms, especially because of the tendency of editors to give preference to cheaper political news rather than an expensive field storey about, say, a glacial lake outburst or a pollution source (Mohmand, 2025). This economic factor might lead to fewer deep-drives into the causes of smog (this might include, e.g., commuting to industrial zones or rural burning locations to report about it first-hand).

The other reason is knowledge gap and training amongst journalists. Environmental policy and air pollution science are both specialised. It is also possible that many reporters lack the knowledge of interpreting data about air quality or even the knowledge of health science and have to rely on quoting authorities or mere descriptions. The paucity of climate and environmental knowledge in newsrooms implies that even where the desire to cover prevails, the level of coverage may not be as profound (Mohmand, 2025). The interviews with Pakistani environmental journalists (e.g. the ones conducted by Qusien in 2024) indicate that journalists are challenged by such factors as lack of climate knowledge, focus of the editorial on political news, and even the urging not to scare people or damage business (Mohmand, 2025). Another thing that journalists revealed was that their reports on the environment usually have less space or get assigned to back pages unless there is a crisis (More often and more intense: Media coverage of smog, heatwaves, and floods in the Pakistani media, n.d.). These are some of the professional constraints that can be used to explain the event-driven coverage and why certain angles (such as precautionary health advice) were not provided - reporters may not have known what the best practises to recommend and editors may not have viewed that as the reporters role. It highlights the capacity building needed in science and environmental journalism in Pakistan, as it will enable the media to fulfil the role of an informant and watchdog when it comes to reporting on such issues as smog.

Environmental reporting can also be subjected to media freedom and political pressures. Although smog is, in fact, not a politically sensitive issue directly related to national security, indirect pressures may exist. An example is that too much emphasis on government failures or scepticism about industrial regulation might attract the attention of influential forces. Afia Salam, a climate activist and journalist, noted that climate misinformation can be created by the government itself, and that governments may want to focus on certain storeys (such as crop burning and economic losses caused by climate events) and not on others (such as emissions caused by industries or carelessness of regulators) (Mohmand, 2025). When state officials promote a particular framing (e.g., by externalising blame, or by making their emergency response actions inadequate), state-oriented media could be more likely to promote that framing and to deemphasize more accurate views. Nevertheless, in the comparatively hectic media environment in Pakistan, critical reporting (papers did carry op-eds deploring government inaction etc.) was present. It was not censorship directly but more subtle neglect or underlining.

The interaction between policy and media in the case of Pakistan smog is very curious. It could be said that the media played at least a partial positive role in bringing the issue to attention first - such as the Lahore smog in the media coverage in 2016 supposedly helped popularise the cause and probably even prompted the Lahore High Court to take some action. In later years, whenever smog came back, media reporting (particularly sensational photos of Lahore landmarks covered in smog) kept the topic on the agenda to an extent that the government was being pressured to have meetings and declare action. In a way, therefore, peak time media coverage has been an inducement to short-term policy reactions. However, the rapid disengagement of the media that followed is another reflection of how the actions of the government were also short-term. The media and the policy actors appear to be caught in a loop of reactive responses which is seasonal. There was no long media attention during the off-season and that is why the government was perhaps able to slip into apathy after the smog had cleared. Was it that news papers regularly in, say, spring and summer had articles inquiring: Is the government making ready next winter smog? What of the plan of last year?", it might have maintained bureaucracy on implementation. Rather, as our analysis reveals, such questions were hardly posed until the crisis was once more active.

This has resulted in some observers describing the smog crisis in Pakistan as a crisis of communication and governance. The media and the policy world have failed both realms arguably. The task of the media is not only to report events but to put them into context and research them. Contextual reporting (with smog being a part of something bigger such as urban planning, energy policy, or climate change) and investigative reporting (why it is not enforced, where bribery could hamper efforts to control pollution) was not in use in the context of smog (Mohmand, 2025; More often and more intense: Media coverage of smog, heatwaves, and floods in the Pakistani media, n.d.). Meanwhile, governance, as outlined above has been reactive and piecemeal (Mehmood, 2024). These vices can be mutually sustaining: when governance failures are not reported by media they proceed, and as governance keeps failing, the issue recurs as breaking news once again - a vicious circle.

Nevertheless, it is not impossible to stop this circle. The media can shift a position of relative silence or passivity to that of active and solutions-oriented involvement (Asia Times, 2025). A shift in the narrative may be achieved through adopting a solutions journalism approach, as the experts propose. This would include not only explaining the damage caused by smog, but strictly reporting on reactions - what is underway, what is being effective, what is being done by communities, and what policies would reduce smog (Asia Times, 2025). An example might be coverage of a successful case: how Thailand or Beijing had curbed urban smog, or local entrepreneurial innovation: cheap and easy to use fog filters. It might also be used to demonstrate the elements of environmental justice by narrating the storeys of the worst victims and thus making it clear why a strong-looking policy is such an important issue (Asia Times, 2025). We find that these angles had not existed at all in the past, but they also indicate that the room does not lack in growth. Media can help bring smog into a new frame instead of an annual irritant into a national emergency that needs to be addressed immediately and persistently (Asia Times, 2025). Indeed, an op-ed in Dawn even vividly suggested that the smog needed to be tackled by Pakistan as a national health issue, just like it would treat an epidemic (Treat smog as a national emergency', n.d.). This kind of framing, when popularised, may ignite greater sustained involvement on the part of all stakeholders.

The media can be assisted in its work through improved communication and transparency on the policy front. With periodic release of pollution data, health, and progress reports on anti-smog actions by government agencies, journalists would have something to report even when the situation was not in crisis. Obfuscation has even happened, especially when Punjab at one point adopted an air quality index scale that defined an AQI of 200 as moderate (by changing the standards), which some press criticised as manipulation of data (Butt & Dahiya, 2023). Commitment to transparency

would enable the media to provide the populace with year-round updates on the annual trend of air quality and policy enactment.

One more thing to mention is the role of new media and civil society. The information gap has been partially filled by social media and citizen-led surveillance over the past years. In Lahore, people installed cheap sensors and shared the readings of real-time AQI on Twitter in case of a lack of official data. This not only educated the people but it also put an urgency on the authorities to notice the seriousness. However, social media may also disseminate misinformation, and rumours or fake cures may confuse the rest of the population without the intervention of authoritative reporting by the media (Mohmand, 2025). Professional media therefore have the role to be the authoritative voice able to pierce the noise with validated information and professional opinion.

Conclusively, the discussion shows that the silence of the media i.e. episodic attention and omission of critical angles has probably softened the public opinion and has caused lack of urgency regarding the smog crisis in Pakistan. This has in turn enabled the policy inadequacies to remain relatively unchallenged on the policy arena. Nevertheless, the identification of this trend is the initial step in changing. Improving the media coverage, by training the journalists, by editorial prioritisation of environmental coverage, and by taking a conscious decision to pursue year-round, human-focused and solutions-oriented reporting, may have a great effect in the path of the smog crisis. Such an informed and active population would expect more of the government and regular questioning might force more responsible and efficient government. With the deteriorating environmental issues in Pakistan in a climate change era, it will be necessary to enhance the integration between media communication and policy action. The problem of smog, in point, exemplifies the expenses of a lack of such synergy - yet it also points out where such interventions (in media practise and governance) can become useful.

Conclusion

Smog in Pakistan is a good example of a unique, long-standing crisis at the boundary between environmental governance and environmental health. Our critical review has revealed that although smog is a recurrent and serious issue that affects the health of the masses, both the government and the media have done little or nothing to address it. People of Pakistan keep breathing in dangerously contaminated air that kills some of their years and transports thousands of them to the hospital (Asia Times, 2025; Mehmood, 2024), but the problem, in turn, did not receive the diligent, concerted effort that it desperately needs. Rather, there is a tendency toward short-termist reactivity: policy responses are generally ad-hoc, emerging when hit by the court or publicity, and then disappearing; likewise media coverage spurts into coverage during the worst weeks and then becomes silent, and does not persist in keeping the issue on the agenda.

Government-wise, Pakistan has not been sitting inactive, in the face of smog- policies have been prepared, committees established, and finances have been handed out. The fact that the problem is now officially recognised can be attested to by the Punjab Smog Policy 2017 and the National Clean Air Policy 2023 (Smog policy for Punjab notified, LHC told, 2017; Butt and Dahiya, 2023). Policy failures, however, are not merely in design, but in implementation as well. Initial initiatives were spoiled by bad execution: other strategies such as increasing air surveillance and implementing emissions controls were not completed or only partly realized (Omer, 2021). Consequently, none of the improvements (higher quality data or cleaner industrial emissions) were realised in time to avoid subsequent smog epidemics. Even new measures, despite their well-intentioned nature, have flaws - the NCAP (2023) was criticised due to not providing harsh air quality goals and having no legal enforcement (Butt and Dahiya, 2023). In the absence of strict criteria and strong enforcement systems, policies will be more of a show than a go. Policies on paper and further increases in pollution indicators up to 2024 highlight this gap (Mehmood, 2024). Moreover, the governance in Pakistan has faced

coordination challenges: the disintegration of the provincial and federal positions, and the dependency on the actions of the judiciary, indicate a governance model that responds to crises and not prevents them.

In the media area, the analysis revealed that there is a large media silence on the important issues of the smog problem. Smog was being covered by mainstream media, but it was shallow and intermittent in nature. The press was actually mostly presenting smog as a seasonal disaster - as visible upheaval and day headlines - and giving comparatively minimal background about health consequences or solutions to the issue in the long term (Asia Times, 2025). The quantitative content analysis revealed that it was only a small proportion of the coverage that dealt with health precautions or chronic risks and even a smaller proportion went further to explore how the crisis could be alleviated either by policy or by individual action (Asia Times, 2025). Essentially, the media discourse has not always put smog in perspective as a public health crisis and a failure of ecological stewardship. Rather, the media has, inadvertently, possibly led to underestimation of the severity of the problem by creating a pattern of often trying to framing it as an inconvenience quickly to be overcome or by merely passing the blame (say, by highlighting smog as an unfortunate side-effect of modernity or an importation across the border). Policymakers have almost certainly been enabled to escape the blame through the absence of a continuous media push. As long as headlines no longer raise the question as to why are we breathing poison or what happened to the anti-smog promises of last year, then the issue of smog on the political agenda becomes less urgent.

Despite this, the state of affairs can be changed. The media as well as the governance in Pakistan have demonstrated that they are capable of reacting to pressure- the trick is to transform sporadic responses into long term plans. This research results and discussions result in the following recommendations:

Mobilise Preventive Policy Measures:The governments in Pakistan need to shift to prevention rather than reaction in case of emergency. That implies having policies during the off-season: enforce vehicle emission inspections and industrial regulations all year round, encourage cleaner technologies (e.g. help farmers to find alternatives to burning their crops before the harvest season), and invest in urban mass transit to reduce transport emissions. The new distribution of funds (such as the ones assigned to Punjab to prevent smog and install new monitors) is a promising move (Mehmood, 2024), but it must be transparent and tracked. Constant publicity about progress (e.g., X number of kilns of bricks shipped to cleaner technology, Y number of old vehicles retired) would create trust and enable corrections in the course of action. There is also a need to tighten the belt of the law to enable the EPA and others more powers to punish the polluters and possibly make the targets of the NCAP binding laws (Butt & Dahiya, 2023). Policy should also be dynamic and data-driven, the proliferation of monitoring is a good move, but the policy should be driven by data, e.g., when the air quality in one particular area is regularly dangerous, it should become automatic pollution control as a policy.

Enhance Governance Co-ordination and Responsibility:Environmental issues such as smog transcend jurisdictions and disciplines. There must be action plans that are coordinated in federal and provincial governments and also in urban municipal authorities. An effective, year-long coordinating task force (with meteorological and health departments) would be operational to instigate the mitigation of smog and ready against winter. Although the role of the judiciary as a backstop is important, it should not replace the accountability of the executive. Thus, the government agencies must be proactive to establish and achieve benchmarks to avoid the interference of the courts and activists. Furthermore, since smog is transboundary, it may seek diplomatic support with India in collaboration to enhance air quality (scientific cooperation in the exchange of data, although political relations may be poor). Civil society can also be used to build domestic responsibility i.e. an independent audit of what was done against smog and its outcome annually can be presented to the society.

The Role of Media- To long-term and solution-focused coverage:The Pakistani media houses need to learn to consider smog and overall environmental health issues as main areas of primary interest rather than margin matters. The editors could assign certain reporters to the environment beat and train them. The smog months should not be the only ones to cover the news: feature storeys in summer on what lessons the past smog season taught, or, in early autumn, about whether Pakistan is prepared to face the next smog, would maintain the subject on the topic. Significantly, the media ought to incorporate health experience and citizen warnings on their news. Cooperation with health care experts to spread correct preventive measures during pollution incidents would literally save lives, the reality that most of the storeys had no such measures (Asia Times, 2025) is an empty field, which may be filled. Through a solutions journalism prism, the outlets would be able to present solutions to problems that work (planting trees, advertising electric bikes, imposing Euro-V fuel standards, etc.), educating the audience in the process and pushing authorities to look into those solutions (Asia Times, 2025). The feeling of inevitability can be broken by pointing out success storeys or positive deviants (e.g., a city or country that solved a similar problem). Moreover, media must give voice to the voices of the experts and vulnerable communities to personalise and contextualise the crisis. A narrative of a family fallen ill because of the smog or the workers working in a toxic workplace will make people sympathize with them and will mobilize them into taking action, which will offset the abstractness of reporting AQI values with the reality about human beings (Asia Times, 2025).

Public Awareness and Engagement:Finally, long-term transformation will mean that the people will demand clean air. Media and government campaigns must act in synchronisation to make people be more environmentally literate. Pakistan In Pakistan, schools and universities can integrate environmental health in their curriculum, with smog as an example of human-made disaster which can be solved by acting collectively. Grassroots pressure could be sustained by citizen participation like community programmes to report local sources of pollution or interactive forums where officials are asked to respond to questions of citizens regarding air quality. The social media has demonstrated the strength of information (up-to-date AQI) as well as the threat of information. Therefore, to complement the traditional media, credible voices (scientists, doctors, environmental NGOs) should be encouraged to spread factual, practical information through such platforms (Mohmand, 2025).

To sum up, the smog crisis in Pakistan must be a wake-up call that can lead to long-term changes in government and the practice of journalism. The stakes might not be greater: lives are being endangered, economic progress hindered, and proving the cities livable. Unless the policy inadequacy and intermittent media coverage status quo is changed, smog will remain an annual tragedy, perhaps getting worse, as urbanisation and climatic change become more severe. But with learning and practise, with policy being turned into practise and the media casting unremitting light on the problem and remedy, then Pakistan can start reversing the tide against smog. It has been demonstrated by other countries that air pollution can be reduced dramatically by the appropriate combination of policies, technology, and participation by citizens. It is also available in Pakistan where it requires the political will and pressure and this is where transparency in governance and proactive media become very essential.

Finally, to have a citizenry with knowledge, responsible institutions and a media that give the two sides (citizens and leaders) a voice is necessary to solve a problem as deeply rooted as smog. The silence should be shattered: the coughs of citizens who need to be heard, the pens of journalists who will always write to change something, and the voices of those people who want to be policymakers and ensure that the air is clean so that the future generations will be able to breathe properly. Smog can be chronic, yet it cannot be overcome. With their combined efforts and constant focus, Pakistan can defog its clouds which obscure its skies every winter- and in the process,

save the lives of the Pakistani nation and their rights to breathe clean air.

REFERENCES

Asia Times. (2025, January). In Pakistan smog season, news outlets miss stories about solutions. Asia Times. https://asiatimes.com/2025/01/in-pakistan-smog-season-news-outlets-miss-stories-about-solutions/

Butt, D., & Dahiya, S. (2023). Air quality governance in Pakistan: A review of the new National Clean Air Policy (NCAP) and its limitations. Centre for Research on Energy and Clean Air (CREA). https://energyandcleanair.org/wp/wp-content/uploads/2023/11/CREA_Briefing_Air-Quality-Governance-in-Pakistan-A-review_12.2023.pdf

Dawn. (2017, November 7). Smog policy for Punjab notified, LHC told. Dawn. https://www.dawn.com/news/1368913

Dawn. (n.d.). 'Treat smog as a national emergency': All segments of society must .... Dawn. https://www.dawn.com/news/1948334

Dawn. (n.d.). Lahore once again sets unique record of world's most polluted city. Dawn. https://www.dawn.com/news/1718344

Dawn. (n.d.). Lahore's dangerous smog: where disease and death stalk. Dawn. https://www.dawn.com/news/1872113

DORAS. (n.d.). More often and more intense: Media coverage of smog, heatwaves, and floods in the Pakistani media. DORAS. https://doras.dcu.ie/29355/

Express Tribune. (n.d.). Smog: Facing unsustainable management again. The Express Tribune. https://tribune.com.pk/story/2443609/smog-facing-unsustainable-management-again

Javed, H., Asgher, S., & Bukhari, S. F. (2023). Role of media in promoting environment protection during smog crisis in Lahore. Journal of Media & Communication, 4(1), 1–23. https://ojs.ilmauniversity.edu.pk/index.php/jmc/article/view/27

Mehmood, A. (2024, December 30). Punjab's smog crisis continues to trend. The Express Tribune. https://tribune.com.pk/story/2519011/punjabs-smog-crisis-continues-to-trend-1

Mohmand, A. (2025, December 15). The human cost of climate disinformation in Pakistan. The Friday Times. https://www.thefridaytimes.com/15-Dec-2025/human-cost-climate-disinformation-pakistan

Omer, S. (2021, December 25). Punjab govt, EPD fail to implement smog policy 2017. Pakistan Today. https://www.pakistantoday.com.pk/2021/12/25/punjab-govt-epd-fail-to-implement-smog-policy-2017/

Qusien, R. (2025). Beyond the haze: Media coverage of smog in Pakistan. Journalism. Advance online publication. https://journals.sagepub.com/doi/abs/10.1177/14648849251316250

Qusien, R., & Robbins, D. (2025, January 29). How Pakistani media misses stories about solutions during smog season. The Conversation.

Reddit. (n.d.). Punjab govt under fire for 'manipulating' air quality data. Reddit. https://www.reddit.com/r/pakistan/comments/1ol14e6/punjab_govt_under_fire_for_manipulating_air/

The role of social media campaigns in raising awareness about .... (n.d.). [PDF]. https://qjss.com.pk/index.php/qjss/article/download/181/168/358