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Smog Diplomacy: Strengthening Pakistan-India Cooperation for Transboundary Air Pollution

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ABSTRACT

This research presents the concept of "Smog Diplomacy," addressing South Asia's air pollution crisis and it demands a cooperative diplomatic approach between India and Pakistan, transcending longstanding political tensions. The primary sources of this pollution, including vehicular emissions, crop burning, industrial smoke, and rapid urbanization, are widely recognized, less attention has been paid to the geopolitical and environmental challenges that hinder effective cross border solutions. The major objective of this study is to analyse the issue of transboundary air pollution between India and Pakistan in context of smog diplomacy using the lens of green theory with a focus on developing effective strategies to mitigate the issue. This research adopts a qualitative research design using a case study approach to examine the emerging smog as form of environmental diplomacy. By examining current pollution levels, environmental policies, and the geographical factors contributing to smog in border regions. This study advocates for joint collaboration on air quality initiatives and provides policy recommendations for sustainable, cooperative action. The findings suggest that while both countries face unique challenges, they share an urgent need to mitigate air pollution to protect public health, economic stability, and regional cooperation.

Keywords: *Smog Diplomacy, Transboundary Pollution, Green Theory, Regional Environmental Governance, Environmental Security, Vehicular emissions.*

Citation: APA

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Introduction

Each year, as winter takes over autumn, a dense, hazardous smog settles over large parts of South Asia, posing severe health risks to millions of living individuals. Among the most affected are cities in northern India and eastern Pakistan, with cities like Lahore, Dehli, and others frequently topping global rankings for air pollution levels during this period. In recent years, the problem has intensified to crisis levels, with visible declines in air quality, reported increases in respiratory diseases. According to the World Health Organization (WHO), fine particulate matter (PM2.5) concentrations in these cities often reach several times the safe threshold, resulting in immediate and long-term health consequences. While the local and international media often cover these alarming statistics, an underlying geopolitical dimension of the crisis is seldom explored.

Satellite imagery from NASA Worldview show heavy smog over Pakistan's eastern parts and northwest parts of India. Picture was taken on November 10, 2024 on the other hand same region is pretty clear on August 31, 2024. NASA Worldview/ CNN

As shown in above image, cities across Pakistan and India, especially people residing in Punjab of both countries, find themselves covered in a thick blanket of smog. Main source of smog is usually discussed the vehicle emission and burning of waste while there are other geographical elements which also become the reason for this phenomenon for both countries.

Geography is a big reason as Himalayas are in the north. These mountains act like a huge wall to stop crossing of the air. They block all the fresh winds from Central Asia. These winds could blow the smog away, but the mountains stop them. The smog gets stuck against the mountains. The suffering area is part of a large, flat plain also called the Indo-Gangetic Plain. Think of it like a giant, narrow bowl. This shape traps pollution. Air can't easily go up or sideways, so the smog stays in the region for a longer time. The long stay of smog makes it more vulnerable for health of people breathing in it (Chaudhary & Mishra, 2020).

November weather also plays a role. Winds get weaker in November. There's not much wind to clear the air. It's like a still pond where things settle. Normally, warm air rises and takes pollution up. But in an inversion, warm air traps cooler, dirty air near the ground. This makes the smog worse. So, the shape of the land, the mountains, and the November weather all work together to create smog we see every year.

Since the origins of sub-continent's yearly smog period are complex, Including a combination of human activities, climate conditions and geography. Key contributing factors comprise of the burning of crop residues after harvest especially crop of rice, the lack of stringent vehicle emissions standards, industrial pollution, de-forestation, and rapid urban expansions (Eckersley, 2004). However, the Indo-Gangetic Plain, where many of these cities are located, is geographically prone to smog. The flat, low-altitude terrain and seasonal weather patterns effectively trap pollutants, worsening air quality over prolonged periods. As a result, the air quality crisis extends across borders, impacting both cities Lahore and Dehli alike.

Research Objectives

Following are the objectives of the study:

To analyse the geographical factors contributing to the transboundary smog issue affecting Pakistan and India.

To assess the impacts of transboundary smog on public health, the environment, and the economies of both Pakistan and India.

To explore the potential for and challenges to enhanced Pakistan-India cooperation in addressing transboundary air pollution.

Purpose and Scope of the Study

This study mainly talks about the concept of "Smog Diplomacy," recently introduced by the Chief Minter of Pakistani Punjab, urging India and Pakistan to transcend their political differences to address a pressing environmental threat that respects no borders. Her statement is given below:

"There is an issue of smog in Pakistan's Punjab, especially in Lahore. So, we must do this diplomacy with India. I am thinking to write a letter to the chief minister of Indian Punjab that this is not a political issue, on which if we [Pakistan] are taking steps, then the Indian side should have a matching response, the same measure should be taken there because ***the winds don't know that there is a borderline in between****. So, for the health of people there [Indian Punjab] and for their betterment of our side of border, for our health, for the health of our people, until both Punjab's take joint measures, we won't be able to fight smog"*

Advocating the above statement and the interconnected nature of the atmosphere, isolated policy measures are unlikely to produce meaningful improvements in air quality in either country. Instead, a collective framework, including shared environmental policies, synchronized emissions standards, and joint monitoring efforts, is essential to make a sustainable impact. This article aims to explore the causes and consequences of air pollution in India and Pakistan. It is evident that the countries like USA and Canada have set examples for the environmental diplomacy by signing Acid Rain Treaty back in 1991to improve air quality in both countries by managing transboundary pollutions which were reportedly caused due to emissions of sulfer dioxide and nitrogen oxides from industrial outputs. That clearly shows the potential for adversarial neighbours to unite for the betterment of environment. Pakistan and India may also go through such practices for the sake of millions of lives across the borders this will surely promote regional stability and shall lay the groundwork for further diplomatic collaborations.

Research Questions

Focus of the study is based on following research questions:

What are the primary sources of smog in India and Pakistan?

How do geographical factors contribute to the intensity of smog in the Indo-Gangetic Plain?

Can diplomatic cooperation between India and Pakistan provide a viable solution to the smog crisis?

Research Methodology

This study adopts a qualitative approach where analyses are combined with causes, impacts and potential diplomatic solutions to offer the future recommendations. This study primarily is descriptive and analytical, using case study approach to examine the emerging situation of climate diplomacy between India and Pakistan Data is secondary in nature and gathered from academic documents, environmental monitoring agencies and policy documents. Research applies a thematic analysis approach to find out diplomatic engagements between India and Pakistan and for the recommendations of policy framework. This methodology aims to provide a comprehensive perspective on the transboundary air pollution issue. The approach is designed to support the concept of "Smog Diplomacy" as a practical, cooperative framework for India and Pakistan to tackle this seasonal issue.

Theoretical Framework

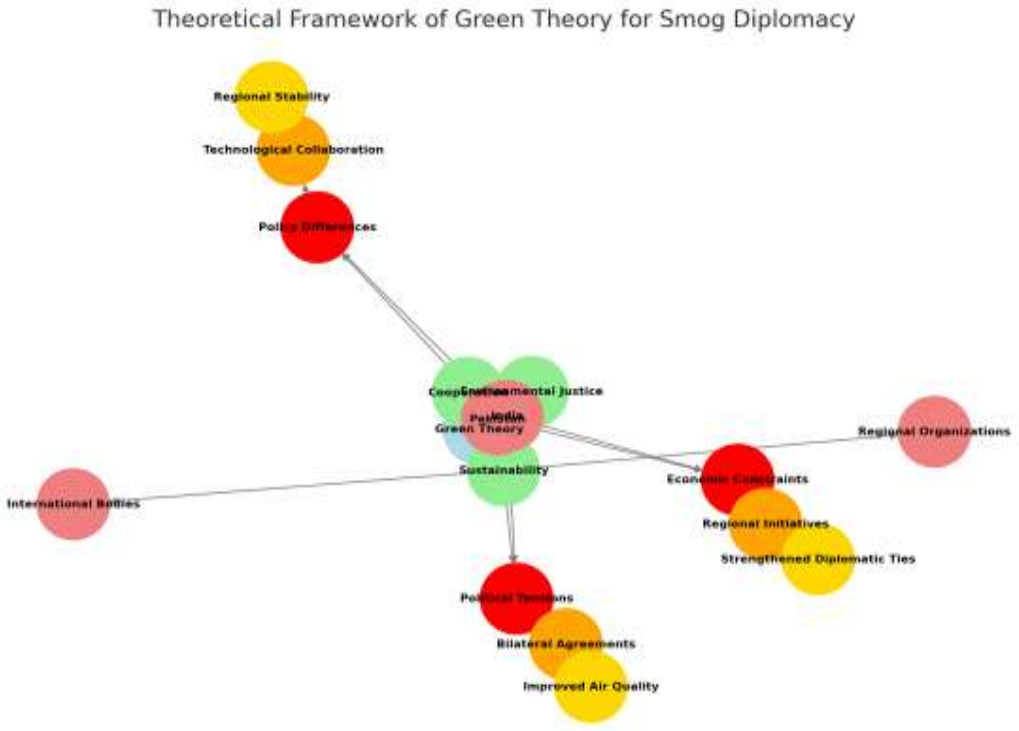
The article adopts a modern-day International Relations Theory known as "Green Theory". Green theory helps us to understand the idea of long-term ecological values, rather than short-term human interests. The theory explains why climate change is a difficult problem for states to solve it all alone as they are already in race of economic and military games. Green theory tells us that humans and nature are connected. It states that we

need to think about the whole ecosystem. Green Theory gives more importance to environmental safety other than economic or power advancements. The theory also emphasizes that we must think for our future generations and must make this environment clean and breathable. Primary focus of the study belongs to the term Smog Diplomacy where Pakistan and India are the actors and this cooperation is desired to benefit the humans who share a connected environment

Here is a Table showing the Green theory vis a vis Application to the study:

Green Theory Themes	Application Pakistan-India Smog Diplomacy
Environmental Justice	Both Pakistan (Lahore) and India (Delhi) suffer from unequal health and environmental burdens due to shared smog, requiring just and inclusive air quality policies.
Sustainability	It highlights the need for long-term bilateral environmental agreements and air quality cooperation over reactive, seasonal measures.
Ecological Interdependence	Both countries Acknowledge that atmospheric pollutants do not respect political borders, necessitating a cooperative regional response.
Critique of state-centric IR	The traditional hostility in Pakistan-India relations can be challenged by promoting environmental collaboration over geopolitical rivalry.
Shared Responsibility	Promotes mutual accountability in addressing sources of air pollution such as stubble burning, industrial emissions, and vehicular pollution.
Transboundary Environmentalism	Call for the need for joint monitoring systems, cross-border early warning mechanisms, and regionally coordinated air pollution reduction plans.
Non-State Actors and Civil Society	The role of environmental NGOs, research institutions, and local activists in pushing both governments toward cooperation.
Green Norms and Soft Power	It compels to use of soft power tools such as environmental diplomacy, science diplomacy, and green negotiations to build trust.

Here is visualization of green theory for Smog Diplomacy:



Literature Review

Khan (2018) emphasized the severe health impacts of air pollution in major South Asian cities, emphasizing the disproportionate burden on population. Their research presented a strong correlation between PM2.5 levels and respiratory illnesses. His research underscored the urgency of effective mitigation strategies. Similarly, studies by Ahmad et al. (2020) and Sharma (2019) have documented the economic costs associated with air pollution being paid every year by the humans of Pakistan and India. These studies underscore the need for regional cooperation to minimize the shared economic burden.

The transboundary nature of the smog problem has been discussed by several researchers. Aggarwal et al. (2015) used atmospheric modeling to track the movement of pollutants across the Indo-Pak border. He predicted that neither country can effectively address the issue unilaterally. Their findings underscore the necessity of joint monitoring and coordinated policy intercessions.

Furthermore, research by Hussain (2017) proposes that meteorological factors, such as temperature inversions and weak wind patterns during specific months, exacerbate the smog problem in the Indo-Gangetic Plain. His research emphasized early warning systems for the meteorological conditions which are not suitable for human health.

A report by the World Bank (2021) identified agricultural practices, particularly crop residue burning, as a significant contributor to air pollution in both countries. The report also highlighted the role of industrial emissions and vehicular traffic in urban centers. These sources of smog have also been discovered and discussed by many other studies but importance of geographical factor is seldom prioritized.

Khan and Ali (2016) analyzed the policy frameworks for air pollution control in India and Pakistan. They acknowledged the gaps and weaknesses that hinder effective implementation. Their analysis uncovered that while India has made some progress in implementing stricter emission standards, enforcement remains a challenge. Pakistan, on the other hand, faces challenges in developing and enforcing strong environmental regulations.

The importance for regional cooperation has also been explored scholars. A study by Chowdhury (2022) proposed that joint research initiatives and data sharing can build trust and facilitate collaborative policymaking. He emphasized the importance of community engagement and public awareness campaigns to promote behavioral changes and implementation of policies.

Rahman (2023) wrote that political tensions and mistrust between the Pakistan and India may pose significant hindrances to effective cooperation. Their analysis highlights the need for confidence building measures and sustained diplomatic efforts to overcome these challenges. Despite these hindrances, the shared vulnerability to the transboundary smog problem provides a compelling incentive for both countries. Both countries may work together to find common ground to protect the health and environment of their people.

The social and political scopes of the smog problem have also received attention. A study by Sethi (2020) analyzed the role of public awareness and community participation in promoting effective air pollution control policies. He argued that empowering local communities and raising awareness about the health and environmental is crucial. He states that such awareness may help for achieving sustainable solutions.

Applying this concept to Pakistan and India, a region marked by long lasting political tensions, raises complex questions. Studies, such as one by Gupta and Verma (2023), advise that environmental issues like air quality might offer an opportunity for India and Pakistan to engage in diplomacy beyond traditional rivalries. By working together on environmental pollution like smog reduction strategies, both countries may set the stage for greater regional stability and cooperation.

Research Gap

Various studies tell the importance of the broader geopolitical tensions between India and Pakistan. Few studies are also found who explains the facts of applying bilateral quests for various setups. Furthermore, the idea of combating this environmental catastrophe remains unexplored. The factor of Indo-Gangetic plain being the major reason for smog also may be the major reason for cooperation for both parties. This article seeks to

address these gaps by advocating for Smog Diplomacy as a unique form of environmental cooperation. This approach highlights the immediate public health benefits and also the long-term potential for Smog Diplomacy. By learning lessons from successful cases of environmental cooperation in other countries, both countries have the reason to work together. This study highlights the importance of a novel collaboration that Pakistan and India may take for the sake of public health.

Limitations and Delimitations

Because of historical political tensions between Pakistan and India, accessibility of data may be limited. Official government reports and sensitive environmental data is seemed to be accessed limited for being sensitive and confidential in nature. The research is only dependent of verified open access datasets and third-party data from international organizations.

Since this research is primary focusing on transboundary smog issue particularly in region of Punjab's of both countries may be regarded as delimitations of on the topic.

Geographic and Atmospheric Factors for Smog

It is easy to understand that the Indo-Gangetic Plain (the area where most of the smog effected cities are situated) is the major and natural contributor. Due to geographical characteristics of the area intensity and vulnerability of smog is automatically increased. The plain is a low-altitude area bordered by the Himalayas, which effectively traps pollutants, especially during winter when temperature inversions prevent dispersal. This natural feature creates a "pollution bowl" effect, wherein flying particulates from industrial emissions, vehicle exhaust, and crop residue burning gather and continue over time. Problem is further worsened due low wind speeds and high humidity in November. During this period, the air remains still, and pollutants become highly concentrated, creating hazardous air quality levels across cities like Lahore, Delhi, Faisalabad and Amritsar. This finding underline that addressing air pollution in these regions requires strategies beyond local efforts. There is a must need of transboundary cooperation is necessary to mitigate pollution across the shared air basin (Betsill, Hochstetler, & Stevis, 2006). Smog in not caused by just one thing; it is a mix of different human activities. Here are some of the biggest reasons which are usually discussed and highlighted in the news and media.

Farming Practices: A major source of the smog problem is the burning of leftover crops, especially in the Punjab region of both Pakistan and India. Farmers wants to clear their fields quickly so the quickest way for them is to put the stubble on fire. Smoke caused by this fire issues a lot of harmful particles and gases into the air. While both governments have tried to offer other solutions, farmers often find it hard to switch because of the costs and time involved.

Traffic: Population in cities is growing rapidly, and this brings more vehicles on the road. Cars, truck, and motorcycle exhaust is a big source of tiny particles (PM2.5) and nitrogen oxides (NOx), which are major parts of smog. India has started using cleaner emission standards (Bharat Stage) similar to those in Europe, but they aren't enforced everywhere. Many outdated and without fitness certificate vehicles rides on Pakistani roads and creates big problems to pollute the air.

Industries and Power Plants: Both India and Pakistan have a lot of industries that often use coal and other muddy energy sources. Having these factories and power plants near population makes the smog problem even worse. India has a National Clean Air Programme to try and reduce pollution. On the other hand, Pakistan's rules for industry are weaker.

It is certain that people from both countries contribute pollution in the air. This is surely a shared problem and both countries need to work together to find solutions.

Precedents for Smog Diplomacy

An example of same model is available. The United States and Canada offer compelling and enduring examples of successful environmental cooperation. Both countries share border and also had complex relations in the past. But at the time of need, for the betterment of their public they sat together for collaboration. They proved that doing work for the betterment of public is not only desirable but also achievable, even amidst the complexities of political relations. Their partnership on managing shared is a powerful case study in transboundary resource management.

Signed in 1909, The Boundary Waters Treaty, forged at a time when disputes over water resources were a significant concern for the nations. It established a framework for cooperation that has underwent for over many years (Ghosh, 2016).

Beyond water, the US and Canada have also confirmed a strong commitment to tackling shared air quality challenges. Both countries recognized that air pollution as a threat to human health. In the famous Air Quality Agreement of 1991 both countries committed to reduce emissions of pollutants contributing to acid rain and transboundary smog. The Ozone Annex to the agreement further focused on reducing smog forming pollutants. This agreement showcases that, even with occasional disagreements and policy differences on other matters, neighbouring countries can successfully cooperate on addressing shared air pollution problems. The examples of cooperation's between Canada and the US, highlight an encouraging point for others. Nations can and do work together on environmental issues, even when they have complex relationships. This gives a valuable lesson that similar cooperation can be useful the betterment of humanity. Highly challenging issue like Smog directly affecting human heaths of Pakistan's and Indian population may also be resolved. Both countries should understand that they have the shared vulnerability and the potentials for mutual benefits. The US-Canada experience establishes that sustained commitment, institutional mechanisms, and a focus on shared interests. Countries together can overcome political obstacles and pave the way for effective environmental diplomacy (Agarwal & Narain, 1991).

Haze has been a prominent environment problem southeast Asian country. Under the umbrella of ASEAN member countries sat together and agreement on a point to eradicate or at least minimize it for the sake of human health. Haze is caused by the fire of burning crops and other wastages, the smoke created by this fire travels across the borders. This dirty smoke has been making air quality bad for everyone. To deal with this, the countries in the region made an agreement called the ASEAN Agreement on Transboundary Haze Pollution. This agreement is like a promise to work together to minimize the haze. Countries agreed to try to prevent fires in the first place, keep an eye on where fires are happening, and help each other put out fires when they start. They also agreed to make laws in their own countries to address the problem. While this agreement is a good idea, it is sometimes hard to put into practice. Some countries struggle to enforce the rules and do not have enough resources to fight all the fires. Even with the agreement, haze still occurs. But it shows that even in a region with different countries and challenges, working together on-air pollution is possible (UNEP, 2019).

Opportunities for Diplomatic Cooperation

While both India and Pakistan have individual initiatives to address air pollution. All the efforts are largely uncoordinated and often reactive rather than preventive. India's NCAP, for instance, aims to reduce air pollution by 20-30% by 2024 in major cities but lacks cross border plans for regions near the Pakistani border. Similarly, Pakistan's Clean Green Pakistan Index seeks to address environmental issues but lacks specific provisions for transboundary pollution or collaborative measures from neighbours (Gupta, 2014).

It is notable that South Asian countries signed the "Male Declaration" in 1998 in an effort to address transnational air pollution through monitoring, capacity building, research, and impact assessment. Despite the establishment of an effective foundation for regional cooperation the Declaration's efficacy was paused due to insufficient funding and a lack of political wills. These challenges require healthy collaboration and dialogue. Because of bilateral tensions between India and Pakistan this has never been easy to bring progress. To overcome the air pollution crisis, India and Pakistan must find a way to cooperate, even if it is to establish dialogue and collaboration limited to this specific issue.

These gaps highlight a diplomatic opportunity for both countries to align their efforts through "Smog Diplomacy." Coordinated policies may include:

Joint Monitoring and Data Sharing:

Establishing a shared air quality monitoring network would enable real time data exchange. This will help both countries to track pollution sources more accurately and respond accordingly. Shared data could also build transparency and trust, which is an important aspect to normalize

political tensions.

Emission Standards:

Both countries may introduce and implement synchronized vehicle emissions standards. With joint enforcement mechanisms, could help reduce vehicular pollution on both sides of the border. Shared guidelines on advanced agricultural practices could also lessen the reliance on burning. Pakistan and India should encourage the adoption of alternative agricultural practices. If stubble burning ends, crop residue may be used for the production of biogas or charcoal. The two countries may offer all of these techniques within their farming communities through collaboration on research, training, and financial incentives.

Environmental Agreements:

Taking inspiration from international models like the U.S.-Canada Air Quality Agreement, India and Pakistan could formalize an environmental treaty. This agreement could outline specific goals for reducing PM2.5 and PM10 levels and include penalties or incentives to ensure compliance.

Both India and Pakistan face growing civil society pressure to address this public health emergency. People of both countries are direct effecters of this. This is also true that public opinion is also shifting towards cooperation over conflicts. This trend could provide a strong social foundation for Smog Diplomacy, as the shared health threat unites citizens across national boundaries (Raza & Butt, 2021).

Economic Costs and Benefits of Collaborative Action

The health costs associated with pollution related illnesses, hospitalizations, and lost workdays strain national healthcare systems and reduce overall productivity. According to estimates from the World Bank, South Asian economies lose billions of dollars each year due to air pollution related health expenses and labour inefficiencies. However, cooperative efforts will yield mutual economic benefits. Furthermore, by reducing air pollution, both countries could improve tourism and attract foreign investment, enhancing regional economic stability.

Both Pakistan and India have specific comparative advantages that may benefit the other. For example, Pakistan has plans of installation of air purifiers in all shopping malls and commercial plazas in Lahore. These air purifiers may be sourced from India, where air purification is already a mature industry. On the other side, India can also collaborate with Pakistan on the implementation of eco-friendly practices, like solar energy and sustainable urban development. This partnership can capitalize on India's manufacturing abilities and Pakistan's creative investments in sustainable technologies. Both countries can also work with each other to improve the adoption of electric vehicles (Najam, Huq, & Sokona, 2003). Success in fighting smog will not only improve the lives of millions of people in the region but will also bring both nations close.

Conclusion

Smog is affecting millions of people in terms of health and economic activities. People living in Pakistan and India are highly affected by it each year. Along with the other factors of smog, the geographical shape of the Indo-Gangetic Plain amplifies pollution levels by trapping airborne pollutants across the region. It is surely a transboundary crisis
Our study demonstrates that despite the individual efforts undertaken by India and Pakistan to manage air quality, the lack of coordination between these neighbouring nations lessens the effectiveness of these efforts. In this context, "Smog Diplomacy" emerges as a critical framework for addressing the pollution crisis cooperatively. Given the practical examples of US and Canada on their issues on water and mainly for air support the argument that environmental cooperation is more important for the sake of public health. This diplomatic approach can also serve as a foundation for addressing other pressing transboundary issues. Thus, contributing to broader regional stability and setting a precedent for future collaborative efforts. Ultimately, the need for both countries to prioritize the health and wellbeing of their nationals. It is a call for a commitment to Smog Diplomacy as an essential component of foreign and environmental policies for the both countries.

Recommendations

To operationalize Smog Diplomacy, India and Pakistan should consider the following strategic recommendations.

1. Establish a Joint Air Quality Monitoring System

Pakistan and India should formally establish a dedicated bilateral commission to address transboundary smog. This commission should be co-chaired and have equal representation from both countries. A real time, joint air quality monitoring system would be a practical example of it. JAQMS may enable both countries to share pollution data. It will also identify high emission areas, and track the impact of policy measures across borders. This system will be able to involve strategically placed air quality sensors along the borders. Environmental agencies from both countries may share and discuss updates on the subject. This transparency in data sharing will enhance trust and will also provide a basis for targeted smog minimizing strategies.

2. Harmonize Vehicular Emissions Standards

A major source of air pollution in the Indo-Gangetic region is outdated vehicular emissions standards. By aligning their emissions regulations, such as implementing uniform Bharat Stage (BS) standards or an equivalent in Pakistan, both nations could collectively reduce vehicular pollution. Bilateral agreements could also include provisions for joint inspections and enforcement in regions close to the border, minimizing discrepancies in emissions control.

3. Bilateral Agricultural Policy on Stubble Burning

A bilateral agricultural policy specifically addressing stubble burning is a crucial for effective smog diplomacy between Pakistan and India. Exercise of stubble burning is a significant contributor to smog. India and Pakistan could establish a bilateral agricultural policy that includes incentives for farmers to adopt alternative methods of remainders of agriculture wastes. This idea could be supported through subsidies, technical assistance, and educational programs. Sustainable farming practices are much important for the region. By addressing this common source of pollution together, both countries would benefit from improved air quality.

4. Border Environmental Task Force

A dedicated cross-border environmental task force would provide a formal structure for managing joint initiatives. Task Force will act as a bridge for diplomatic agreements and on-the ground implementations. Task force may address policy inconsistencies, and ensuring accountability. This task force could include representatives from each country's environmental agencies, health ministries, and scientific communities. The task force to meet regularly to evaluate progress and recommend policy adjustments based on shared data and scientific findings.

5. Leverage International Support and Funding

Both countries may seek financial support from organizations like the United Nations Environment Programme (UNEP), World Health Organization (WHO), and the World Bank. Financial help provided for a joint cause may ease struggles for India and Pakistan implement their cooperative initiatives. Organizations could assist for this cause by funding joint facilitating technology transfers, and promoting knowledge sharing. Additionally, seeking international attention and support may add legitimacy to the Smog Diplomacy. This example will surely encourage other countries to follow similar transboundary environmental policies.

6. Promote Public Awareness and Civil Society Engagement

Public support is important for the success of Smog Diplomacy. Awareness campaigns should be conducted to educate citizens in both countries. People on both sides of the borders must know about the health risks of smog and the benefits of cross border cooperation. Civil society organizations and environmental advocacy groups can play a pivotal role in mobilizing public opinion and encouraging support for bilateral initiatives.

7. Formal Environmental Cooperation Treaty

Finally, formalizing Smog Diplomacy through an environmental cooperation treaty would underscore the commitment of both governments to address air pollution as a shared crisis. This treaty could specify clear targets for pollution reduction. Additionally, it could include contingency plans for addressing pollution spikes and provisions for periodic review and adjustment of cooperative strategies. A formal treaty would institutionalize Smog Diplomacy. Bilateral

relations of both countries may also find positive direction due such official engagements. Both countries may also consider to revive the Male Declaration for regional cooperation.

Way Forward for Environmental Futures and Regional Peace

By following these recommendations, Pakistan and India can make significant success toward mitigating the smog crisis that affects millions of lives each year. The Smog Diplomacy framework not only provides a practical approach for immediate relief but also offers as a potential model for environmental cooperation between two hostile nations. With climate change and environmental degradation on the rise, 'Smog Diplomacy' can be a model for how countries can cooperate to address shared environmental threats. Success in this effort would mean healthier populations, a more stable region, and a step towards peace and prosperity. Keeping in view the imperative for "Smog Diplomacy" is obvious. To safeguard the shared environment and the wellbeing of citizens, both countries must work together. to pursue a cooperative approach for this crisis. It is clear that tackling the smog problem requires both countries to work together with diplomatic engagements for lasting solutions

Conflict of Interest

The authors showed no conflict of interest.

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