

Volume 2

Urban Mobility, Transport & Air Pollution

A Regional Perspective



Urban Mobility, Transport & Air Pollution

A Regional Perspective

Compiled by: Safyan Kakakhel

No part of this report may be reproduced, transmitted, altered or built upon in any form or by any means, electronic or mechanical, including photocopying, recording or information storage and retrieval system, without acknowledgment given to the copyright holder. You must cite the name of the copyright holder (without creating the impression that you have been paid to do so or paid for using this work).

The opinions expressed in the report are solely those of the speakers and presenters, and publishing them does not in any way constitute an endorsement of the opinion by Institute of Urbanism.

A publication of the Institute of Urbanism – an independent, non-profit think tank working on making urban settings nature-inclusive.

Volume 2 in the publication series of Urban Dialogue

© 2020 by the Institute of Urbanism

Printer: AGLOW Graphics, Islamabad

Cover Page Photo Credits:

Photo 1: Farooq Naeem, Agence France-Presse

Photo 2: Arif Ali, Agence France-Presse

Photo 3: Journalist from Eco-Journalists' Cohort

This publication can be ordered from: Institute of Urbanism, 10 D West, Office # 1, Mezzanine Floor, Taimur Chambers, A. K. Fazl-ul-Haq Road, Blue Area, Islamabad, Pakistan

T: + (92-51) 8891213

E: info@iupk.org

W: <https://iupk.org>

Contents

Abbreviations i

Acknowledgementsii

Foreword iii

Introduction 1

The Global Urban Mobility Landscape 2

Mobility and Air Pollution – A Regional Overview..... 6

Urban Mobility and Environmental Issues – Perspectives from the
Regional Media 11

References..... 14

Annexure A: Agenda of the Eco-Journalists’ Cohort Meeting 15

Annexure B: List of Eco-Journalists (alphabetical order) 16

Annexure C: List of Speakers and Organizers..... 20

Abbreviations

CNG	Compressed Natural Gas
hbs	Heinrich Boell Stiftung
IoU	Institute of Urbanism
LPG	Liquefied Petroleum Gas
NEPA	National Environmental Protection Agency (Afghanistan)
PEMRA	Pakistan Electronic Media Regulatory Authority
PM	Particulate Matter
SDPI	Sustainable Development Policy Institute
TLO	The Liaison Organization
WHO	World Health Organization
WWF	World Wide Fund for Nature Pakistan

Acknowledgements

Institute of Urbanism (IoU) would like to thank all the participants from Afghanistan and Pakistan who generously contributed to the dialogue.

A special thanks to the speakers; Dr. Stefanie Groll – Heinrich Boell Stiftung (hbs), Berlin, Ms. Farah Rashid – World Wide Fund for Nature (WWF), Pakistan, Dr. Hussain Etemadi and Mr. Tawab Stanikzai – The Liaison Organization (TLO), Afghanistan for generously sharing their knowledge and expert analysis. We are grateful to Ms. Rina Saeed, Environmental Journalist for moderating the session, Ms. Swaiba Saeed – Institute of Urbanism (IoU), for rapporteuring, and Mr. Saleem Khilji – Sustainable Development Policy Institute (SDPI) for editing the report.

We are grateful to hbs for their financial and technical support, TLO for co-hosting the event and engaging journalists from Afghanistan, and SDPI for providing logistical support to carry out this event.

Foreword

Pakistan has the highest rate of urbanization in South Asia. According to an estimate, in 2020, a total of 37.16% population lives in urban areas. One of the key issues of urban life in Pakistan is the lack of adequate public transportation facilities. This in turn has increased reliance on individual mobility. Increased number of fossil fuel based motorized vehicles has added to the burden of air pollution. In recent years, cities of Pakistan have been among the top ten most polluted cities of the world.



The World Bank estimates that Pakistan's annual burden of disease due to outdoor air pollution accounts for 22,000 premature adult deaths and 163,432 days lost to illness, disability, or premature deaths/year. The World Health Organization (WHO) Global Health Observatory estimates that about 25 deaths per 100,000 are attributable to outdoor air pollution (World Health Organization, 2021).

These statistics are alarming and hint towards the need for policies and practices that ensure resource conservation and sustainable urban development. In this regard, it is the partnerships across spectrum of stakeholders that will help find and implement sustainable urban development. It is only through multiple stakeholder engagement that a collective impact can be generated. Among others, media and journalists are instrumental in dealing with various dimensions of the issue e.g. encouraging behavior change for adoption of eco-friendly ways of living, disseminating knowledge, and influencing policy for better planning.

Since 2019, IoU has engaged journalists and media personnel to provide support in enhancing their role on environmental issues as opinion makers and policy influencers. At the moment there are more than 215 members of this cohort at national level. As environment doesn't have boundaries, there are efforts underway to expand the network for amplifying voice on environmental issues at regional level. The first regional meeting was held to discuss issues of transport and environment with journalists from Afghanistan and Pakistan which are documented in the form of this report.

Mome Saleem
Founding Executive Director

Introduction

Emissions from vehicles are a major source of outdoor air pollution worldwide (Faiz et al., 1990), which is proven to have adverse effects on human health. Ambient air pollution accounts for an estimated 4.2 million deaths per year globally due to stroke, heart disease, lung cancer and chronic respiratory diseases. Around 91% of the world's population lives in places where air quality levels exceed the limits prescribed by the WHO (WHO, 2016). Research studies have linked vehicle tailpipe emissions alone to over 361,000 premature deaths from ambient PM_{2.5} and ozone worldwide in 2010, and over 385,000 in 2015. Together, PM_{2.5} and ozone concentrations from transportation emissions resulted in 7.8 million years of life lost and approximately \$1 trillion (2015 US\$) in health damages globally (Anenberg et al., 2019).

The hefty contribution of vehicular air pollution to the global, regional, and national disease burden points to the need for emissions reduction from the transportation sector. It should, therefore, be considered a key focus area for sustainable development, policies and strategies. Journalistic reporting for public awareness could also prove instrumental in making the sector ecologically compatible.

In the aforementioned context, IoU organized a regional workshop of the Eco-Journalists' Cohort¹ on 12 November, 2020 (Annexure B). The aim was to share knowledge and discuss key issues related to urban mobility and sustainable transport, the impact on air quality and environmental pollution, and challenges faced by journalists in Pakistan and Afghanistan while reporting these issues in the mainstream news media. The Workshop comprised of talks by experts followed by a dedicated discussion and exchange between environmental journalists on increasing fact-based reporting on issues related to eco-mobility and sustainable urban transport (Annexure A).

1 The Eco-Journalists' Cohort is a group of like-minded journalists focusing on the reporting of environmental issues in various news media, including electronic/TV/radio, print and online media.

The Global Urban Mobility Landscape^{2,3}

It is important to understand the global urban mobility landscape and highlight the issues faced by cities due to varied models of transportation worldwide. Essentially, urban areas are a battleground for shaping better mobility options. Cities also face a considerable demographic pressure which results in increased traffic and road congestion. This in turn has significant impacts on the environment and human health.

The vision of eco-mobility is, “improved mobility with less traffic and less emissions”. While talking about eco-mobility, it is pertinent to consider the needs of pedestrians along with the entities that move goods. As the latter contribute to the country’s economy, efficient (timely and safe) transportation of goods is also of great importance while taking mobility patterns into account.

Best Practices of Eco-Mobility from European Cities

Copenhagen, the capital and most populous city of Denmark, is known as the “cycling capital” of Europe as 40% of all travelers in the city use bicycles. To accomplish this, Copenhagen invests significant

resources to build and support its cycling infrastructure. To this end, the city administration has taken steps such as designating exclusive bike lanes, ensuring safety precautions, and introducing public bicycle availability systems to promote the use of bicycles. When it snows in winter, the city administration prioritizes clearing the bike lanes so the cyclists can travel safely.

In the City Center of Berlin Germany, some roads remained clogged with traffic, therefore, the city government decided to make the entire area car-free. This drastically improved the quality of life for the public and encouraged citizens to use bicycles in the entire locality. To achieve this, the city administration provided necessary facilities for cyclists in the area, such as fixing benches and providing seating arrangement which enables people to take a break when they need to or socialize and dine outdoors in a clean and quiet traffic-free environment. Moreover, automobile manufacturers in Germany are also making efforts to switch to electric trucks and heavy vehicles for freight transport and cargo in addition to regular electric vehicles to reduce the amount of harmful vehicular emissions.

-
- 2 Presented by Dr. Stefanie Groll, who heads the Ecology and Sustainability Department at the hbs headquarters in Berlin and is also the co-author of the hbs Mobility Atlas. The presentation was based on the findings of the Atlas. Dr. Groll’s main focus is the promotion of the German energy transition and de-carbonization of the economy. She is also active in the anti-coal and climate movement in Germany. She holds a PhD in political science and is also a communications expert.
 - 3 The hbs Mobility Atlas is a dossier on sustainable transport containing articles and info-graphics on technologies, policies and new concepts of e-Mobility such as multimodality, flexible public transit, and the transformation of the automotive sector (<https://www.boell.de/en/mobilityatlas>)



Dr. Stefanie Gröll delivering talk on 'The Global Urban Mobility Landscape' at the Regional Eco-Journalists' Workshop on Urban Mobility, Transport & Air Pollution (12 November, 2020).

In Vienna, Austria, a highly affordable public transport system has been introduced which costs 365 Euros per year, i.e. one Euro per day for all public transit. It is a well-known example for empowering public transit in Europe. Vienna, Berlin, Copenhagen, Helsinki, Amsterdam, and Zurich are the cities and capitals that are known for their innovative eco-mobility interventions with remarkable results for public health and quality of life. Other cities of the world can also learn from these examples. Key elements of these interventions are the right policy, political will, government investment and public expenditure to promote and support these measures.

Cornerstones of Better Mobility and Transport

Following are the foundations of better mobility and transport that are taking place around the world:

- i. Studies have shown that “**multi-modality**” and “**Mobility-on-Demand**” are key elements for improved urban mobility. Multi-modality refers to the availability of a combination of multiple means of transport based on specific needs. In other words, one does not require a car for every journey, and it may be efficient to have alternatives. When people utilize various means efficiently according to their needs, it is termed as “Mobility-on-Demand” i.e. ability of an individual to utilize various modes of transportation in an efficient manner for both transportation of goods and commuting.
- ii. **Electro-mobility** (e-mobility) is another important foundation of better mobility. However, it is important that renewable energy sources are used for power supply to vehicle charging

stations as fossil based power production would lead to greenhouse gas emissions, air pollution and smog. Therefore, the transition to cleaner energy and sustainable transport system go hand-in-hand.

- iii. **Digital technology** will shape the future of mobility. Digital infrastructure and smart gadgets such as mobile phones help advancement in transportation. They have efficient returns in freight and cargo as well since they can help trace the most efficient transport routes in real-time, and optimize cargo time consumed in loading/unloading. Thus, it is pertinent to digitalize transport sectors.

Steps in Achieving improved Mobility

- i. **Formulation of a policy framework:** It is important to formulate policies that (a) facilitate low emission zones, car-free zones, customized mobility transport plans, and (b) reduce overall congestion and pollution. In developing countries road infrastructure is preferred over mass transit system which in turn damages the surrounding environment and negatively impacts the quality of life. Although mass transit infrastructure has an initial high cost, the cost benefit analysis illustrates that in the long run, the benefits of introducing mass transit system out-weigh the expenditures on healthcare

due to increased air pollution, fossil fuels imports and related environmental damages.

- ii. **Provision of infrastructure:** Safe and clean infrastructure such as open public spaces, designated lanes for cyclists, and pedestrian overhead bridges or other pathways invite people to use carbon neutral modes of transport and mobility.
- iii. **Creation of widely available and easy-to-use digital applications:** E-bikes, car-sharing etc. reduce the need of common consumer to own a private vehicle.
- iv. **Partnerships:** Eco-mobility and sustainable transport require both a technological transition and a mindset transition for which collaboration and mutual action are integral.
 - Civil society, private sector, journalists, media and the government-led partnerships and joint campaigns play a vital role in behavior change around eco-mobility, multi-modality and use of green transport practices. The approach in Europe is geared towards educating the masses on the importance of eco-friendly transportation. In many European countries cycling-related courses are introduced in schools that help students learn the benefits of cycling. For example, the Mobility Atlas by hbs is distributed among schools and young children so that they can learn about traffic and eco-mobility at a young age. The aim is to educate children

about civic behavior at an early age to inculcate culture of eco-mobility.

- Partnership with media is crucial for highlighting existing issues vis-a-vis availability, access and choice around transportation, and how they can be tackled.
- Public transport service is often considered to be inflexible to digital adoption as compared to

private sector. In recent years, public companies are opening up to private sector partnerships. For examples, e-scooters is a new concept in Europe and their use is increasing. They are provided by international companies who in turn have joint ventures with public companies, thus expanding the spectrum of Public-Private Partnerships.



Environmentally compatible modes of mobility (Designed by Sara Allauddin, IoU)

Mobility and Air Pollution – A Regional Overview

A. Air Pollution, Transportation and Smog in Pakistan⁴

Air pollution increases drastically during winter season as the smoke and vehicular emissions get trapped in the colder and denser air. Emissions from vehicles, burning of fossil fuels, crop residue and solid waste end up as major contributors to winter smog, which adversely impacts health, quality of life, environment and economy. Smog is not a new issue; it was earlier reported in the 1950s. The Great Smog of London occurred back in 1952. There have also been many cases of extreme smog in the United

States of America. In Los Angeles, a notable case of smog occurred in 1973, when an extreme level of air-pollution was reported.

Smog is a regional issue in South Asia. Across the South Asian region, cities such as New Delhi, Lahore, Peshawar, Mazar-e-Sharif and Kabul appear on the list of twenty most polluted cities in the world. In 2019, New Delhi topped the list of the most polluted cities and Lahore was ranked the second most polluted city globally. The level of air pollutants was six times above the safe limit prescribed by the WHO. In 2015, for the first time



Ms. Farah Rashid delivering talk on 'Air Pollution and Smog in Pakistan' at the Regional Eco-Journalists' Workshop on Urban Mobility, Transport & Air Pollution (12 November, 2020).

4 Presented by Ms. Farah Rashid, via video link. She is currently Coordinator Climate Energy Programme at WWF Lahore, Pakistan and has previously worked with the Urban Unit of the Government of Punjab's Planning & Development Department, National Environmental Consultants Pvt. Ltd., and NesPak. She has Master of Philosophy degree in Environmental Sciences.

a major case of smog was reported in Lahore and the second episode took place in November 2016, against which a Public Interest petition was filed in the court. As a result of the petition, the air quality in Lahore was monitored for the first time. The monitoring report observed that the carbon dioxide percentage was very high in the smog composition. The government and relevant agencies formulated a Smog Commission and a Smog Policy in 2017 which included short term and long term actions to fix the problem. Unfortunately, proper implementation and execution of the Smog Policy are yet to take place.

From 2017-2019 the smog levels were so dangerous during winter season that schools had to be shut down. Moreover, as masks were not sufficient to avoid adverse impacts of smog, people were advised to stay indoors. The Lahore High Court also ordered to shut down brick kilns as they are considered to be a major contributor to smog. There are around 20,000 brick kilns in Punjab, and to

tackle the issue of smog in future, the government introduced the “zig-zag” technology⁵. The technology is said to control the amount of pollutants emitted, however, a majority of the kilns continue to use traditional method for their operations such as burning of hazardous materials. Not only does this practice put the health of labor force at risk, it also travels to other towns and cities where it increases the burden of disease.

Vehicular emissions are also a major contributor to smog. Registered vehicles in Punjab are around 16 million, and the most common mode of transportation is motorcycles/scooters, which produce high quantities of carbon emissions as they do not have the recommended technology in place. Other vehicles that are imported to or manufactured in Pakistan also do not have efficient engines and consequently release large quantities of carbon monoxide.

Status of Initiatives Taken by the Government of Pakistan to Curb Air Pollution/Smog

- i. The draft Electric Vehicle Policy is one of the initiatives undertaken by the Government to promote eco-mobility. The policy once finalized could help reduce air pollution and emissions in the long run. Electric vehicle policy seems ambitious at present, but in the next 20-30 years it will be the need of the hour. However, in order for the policy to bring overall reduction in emission the power production needs to be shifted from coal to a cleaner source of energy.
- ii. The Vehicle Certification System is being introduced in the country, and anyone with a vehicle that has been used for over 10 years will be bound to have a maintenance inspection before the vehicle is used on the road.

5 In zig-zag kilns, bricks are arranged to allow hot air to travel in a zig-zag path. The length of the zig-zag air path is about three times that of a straight line, and this improves the heat transfer from the flue gases to the bricks, making the entire operation efficient.

- iii. In Pakistan Euro-V standard fuel has been introduced in 2020 to replace the Euro-II standard.
- iv. The Punjab province has drafted a Clean Air Action Plan and constituted a Smog Commission comprising of relevant experts.
- v. The Policy on Controlling Smog 2017 has been drafted by the province of Punjab. It highlights sectors which are responsible for contributing to the GHG emissions in Pakistan. A list of informed solutions to transform the use of high sulfur fuels is also part of the policy including, switching to a better standard of vehicular fuel, improved traffic management, eliminating the practice of crop burning, and technological shift in the brick kilns.

What is Missing?

Cycling, walking and mass transit are options which are underutilized due to lack of related infrastructure in Pakistan. While the ride-hailing services such as Careem and Uber have reduced the need for owning a private vehicle, emissions from their vehicles are still contributing to GHG. At community level, alternative means for mobility such as carpooling, pick and drop service for employees and schoolchildren, and a week designated for the use of bicycles/walking could help reduce emissions. Catalytic convertor for vehicles should be made mandatory across all provinces. At policy level discouraging single-passenger car use requires several measures and partnering with civil society and media for awareness raising and knowledge dissemination.



Same locality in Lahore with and without smog (Source: Dawar Butt, Public & Environment Policy Analyst)

B. Urban Mobility and Development Challenges in Afghanistan⁶

In order to understand the environment, mobility, and urban development situation, it is important to understand the structure and socioeconomic situation of the country along with the mandate and goals of the Afghanistan National Environmental Protection Agency (NEPA). By law, NEPA has the mandate of preparing the national adaptation program and appropriate mitigation strategies. NEPA's goal is to secure a clean and healthy environment for the people of Afghanistan, attain sustainable economic and social development while protecting the natural resource base and the environment of the country. A climate change directorate was established in 2010 under the NEPA structure as Afghanistan's global commitments on climate change.

NEPA and other concerned government institutions collect data on environment and climate change, however, there are limitations in the collection and dissemination process. Continued conflict, limited revenue generation and low budget allocations for the public institutions have impacted the performance of the environmental agency in

Afghanistan. The problem is amplified with the limited institutional capacity. Despite these challenges, substantial improvements in development outcomes have been observed in Afghanistan since 2001, particularly in expanded access to water, sanitation and electricity, education, and health services.

Air Pollution and Eco-Mobility in Kabul – Actions by NEPA

Afghanistan has been facing challenges in improving its urban mobility due to the slow pace of implementation of the urban development plans. This is primarily due to challenges in land acquisition for the public and private projects. Despite the availability of dedicated bicycle lanes in the new roads infrastructure, the environment (air quality, extreme weather) and culture in the city are not suitable for bicycling or walking. Public funded mass transit system is absent and the existing public transport services are neither socially inclusive nor environment friendly.

Around 30% of the total population in Kabul lives in the unplanned areas where environmental protection measures are not taken into consideration. The city of Kabul is divided into 22 municipal districts and

6 Presented by Dr. Hussain Etemadi, Environment Specialist and Researcher, Kabul, via video link. Dr. Hussain Etemadi is an academic and researcher. He has worked as the director of urban water supply, environment and sanitation in Afghanistan's Ministry of Urban Development. He has also worked in the United States, Afghanistan, Iraq, Iran, Germany and Switzerland for various private sector organizations, international organizations and government departments and has been engaged in conducting several major environmental, water and wastewater projects for different sectors including urban development, water and energy. Dr. Hussain Etemadi has a Masters and PhD in environmental engineering.

four main zones which have distinct demographic importance. NEPA has been working on the subject of air pollution and eco-mobility and has presented the following recommendations:

- Phasing out old vehicles
 - Improving traffic management
 - introducing improved public transport to reduce traffic congestion
 - Adopting clean vehicle emission standards and switching fuel type to LPG or CNG in vehicles. This also includes improving diesel quality and checking fuel adulteration
 - Implementing the National
- Introducing proper zoning system and constructing public transport terminals and stations at each sub-urban area
 - Rehabilitating the electric trolley bus system
 - Improving and developing the road network system
 - Expanding parking capacity in cities and designating parking spaces for buildings

Ambient Air Quality Strategy and training the concerned department personnel for use and installation of air quality monitoring system for all major cities



Smog in Afghanistan (Source: Kairm Haideri, <https://theglobepost.com/2017/12/13/afghanistan-kabul-pollution/>)

Urban Mobility and Environmental Issues – Perspectives from the Regional Media⁷

In the final session of the Workshop, participants from Pakistan and Afghanistan discussed key socioeconomic and technical challenges faced by journalists in reporting environmental, transportation, and air pollution issues in their respective countries. A summary of the perspectives shared by the journalists from the two countries is given below.

Key Challenges & Recommendations – Perspectives from Pakistan

PAKISTAN	
Key Challenges	Recommendations
Media houses are businesses and they focus on retaining the viewership and improving rating of the channel which are important for expansion of the business. Therefore, news that can attract more viewers for the purpose of entertainment or socio-economic topics is preferred. This unfortunately doesn't include environment related topics especially for the prime time	News editors and senior management of media companies/ houses should be engaged to highlight how environment is an existential challenge to human health, economy and human capital. It is important to work with them and discuss ways to mainstream environment related reporting during prime time transmission in ways that attracts viewership
The news beat of a journalists is an important part of their career progression. Journalists who cover political, social and economic issues are considered to get more importance by the editor's desk hence environment is usually not a preference of journalists	Concerned Government authorities such as Pakistan Electronic Media Regulatory Authority (PEMRA) should step in to incentivize and prioritize the reporting of issues that impact citizens' welfare such as environment on private media channels
The access of journalists is limited to the environment related government authorities/departments. This hinders quick access to reliable data	Government departments should appoint focal persons who are available for providing comments, information, or updates on current and future government plans, policies or projects to the journalists

7 Participants in this working group exercise included journalists and media persons from Pakistan and Afghanistan connected via video link (complete list of participants can be found in Annexure B). The session was moderated by Ms. Rina Saeed, an environmental journalist based in Islamabad

<p>Journalists are not subject experts hence need support. The access of journalists to credible sources and right experts on the subject of environment is crucial yet largely missing</p>	<p>Formal contact directories of environmental experts and literature in both languages (Urdu and English) could be made available by civil society for media personnel</p> <p>Relevant government and civil society organizations should prioritize capacity building of journalists, reporters, and media persons including TV anchorpersons and producers on environmental issues</p>
<p>A lot of information on environment is in technical terminology and available only in English language</p>	<p>To eliminate the language barrier, documents and publications containing information and research should be translated into local languages or at least in the Urdu language to help reporters understand and report comprehensively</p>



Pakistani Eco-Journalists and Institute of Urbanism Team pose for a group photo at the Regional Eco-Journalists' Workshop on Urban Mobility, Transport & Air Pollution (12 November, 2020)

Key Challenges & Recommendations – Perspectives from Afghanistan

AFGHANISTAN	
Key Challenges	Recommendations
Technical capacity of journalists in Afghanistan is a major challenge. There is a significant lack of capacity/training programs and regional and international exposure for Afghan journalists, particularly for reporting on environmental issues	Capacity building and exposure visits should be introduced for improved technical expertise among Afghan journalists
One of the major issues in Afghanistan is the availability of updated information on key environmental issues especially in the regions with active conflict	Government should improve the performance of its data collection departments to make reliable data available
In Afghanistan there are no specific beats when it comes to journalists reporting on environmental issues	Media companies should introduce environment as a beat for reporting National-level efforts for awareness, educational and informational campaigns on environmental issues need to be in place, aimed at all segments of society, in all local languages, and across all sources of information such as print, TV, radio and social media



Afghan Eco Journalist Cohort members and The Liaison Organization team members participate via online video link in the Regional Eco-Journalists' Workshop on Urban Mobility, Transport & Air Pollution (12 November, 2020)

References

Anenberg, S., Miller, J., Henze, D., & Minjares, R. (2019). A Global Snapshot of the Air Pollution-related Health Impacts of Transportation Sector Emissions in 2010 and 2015. The International Council of Clean Transportation. https://theicct.org/sites/default/files/publications/Global_health_impacts_transport_emissions_2010-2015_20190226.pdf

Faiz, A., Sinha, K., Walsh, M., & Varma, A. (1990). Automotive Air Pollution: Issues and Options for

Developing Countries. World Bank. <http://documents1.worldbank.org/curated/en/743671468739209497/pdf/multi-page.pdf>

International Platinum Association. "Catalytic Converters – By how much do they reduce pollution?". Available online at: <https://ipa-news.de/index/pgm-applications/automotive/catalytic-converters/by-how-much-do-they-reduce-pollution.html>

World Health Organization. (2016). Ambient air pollution: A global assessment of exposure and burden of disease. <https://www.who.int/publications/i/item/9789241511353>

World Health Organization. (2021). <http://www.emro.who.int/pak/programmes/environmental-health.html>

Annexure A: Agenda of the Eco-Journalists' Cohort Meeting

PROGRAM / AGENDA		
10.15-10.30 AM	Arrival of Participants & Registration	
10.30-10.50 AM	Setting the Stage – Introduction to the Workshop	<p><i>Ms. Mome Saleem</i> Founding Executive Director, IoU Pakistan</p> <p>&</p> <p><i>Mr. Ismail Qarizada</i> [via video link] The Liaison Office (TLO), Afghanistan</p>
10.50-11.20 AM	The Global Urban Mobility Landscape <ul style="list-style-type: none"> – <i>Interventions & Best Practices for alternative mobility</i> – Q&A 	<p><i>Dr. Stefanie Groll</i> [via video link] Department Head Ecology and Sustainability, Berlin</p>
11.20-11.55 AM	Smog/Air Quality and Transport in Pakistan and Afghanistan <ul style="list-style-type: none"> – <i>Issues, Challenges & Solutions</i> – <i>The need for a shift towards Eco-Mobility</i> – Q&A Session 	<p>Speakers: <i>Ms. Farah Rashid</i>, WWF Pakistan <i>Dr Hussain Etemadi</i>, Researcher / Env. Expert, Afghanistan [via video link]</p> <p>Moderator: <i>Ms. Rina Saeed</i> Environmental Journalist</p>
11.55-12.10 PM	[Tea Break]	
12.10-1.30 PM	Group Discussion between Journalists from Pakistan and Afghanistan <ol style="list-style-type: none"> Challenges of Reporting on environment and urban mobility in Afghanistan and Pakistan and lessons Ideas and Solutions for Enhanced Reporting on environment and Urban Mobility Issues in Afghanistan and Pakistan 	Facilitator: Ms. Rina Saeed
1.30–1.45 PM	Vote of Thanks , Distribution of Certificates, and Group Photograph	TLO and IoU
1.45 PM	Closing remarks	

Annexure B: List of Eco-Journalists (alphabetical order)



Aamir Saeed
News Reporter, Business
Recorder, Islamabad



Ali Reza Ahmadi
News Editor, Member of
Mediothek Eco-Journalists
Network, Kabul



Asghar Hayat
Investigative Reporter, GNN TV,
Islamabad



Barat Ali Bahkam
Chief Editor, Afghan News,
Kabul



Faisal Alvi
Editor, Daily Muballigh,
Islamabad



Fakhar Yusufzai
Anchor & Producer, Khyber TV,
Islamabad



Fauzia Kulsoom Rana
Reporter, Khaleej News,
Islamabad



Ghulam Abbas
Reporter, Pakistan Today,
Islamabad



Hassan Hussain Yar
Writer & Analyst, Afghanistan
Democracy and Development
Organization, Kabul



Jaffer Ali
Editor, Daily Salam,
Islamabad



Jalil Poya
Enviromental Journalist &
Reporter, Kabul



Khalid Jameel
CEO, MediaComm,
Islamabad



Mohammad Atif Faqir Zada
Coordinator, Mediothek Journalists
Network, Kabul



Muzammil Hussain
Reporter, Royal News,
Islamabad



Naqiba Barekzai
Writer & Journalist,
Radio Azadi, Kabul



Omid Asak
Chief Editor & Publisher,
Afghanistan Daily, Kabul



Rina Saeed
Environmental Journalist,
Islamabad



Shabbir Hussain
Reporter, Express News,
Islamabad



Shams Abbasi

Reporter, Associated Press
Pakistan, Islamabad



Shazia Nayyar

Freelance Reporter,
Islamabad



Syed Osama Gilani

Special Correspondent, Khaleej
News, Islamabad



Zekria Hassani

Journalist, Kabul

Annexure C: List of Speakers and Organizers

Speakers & Organizers				
S. No.	Name	Organization	Designation	City
1.	Abdul Wahab Azad	The Liaison Organization	Coordinator	Kabul
2.	Adnan Hassan	Sustainable Development Policy Institute	Technical Support	Islamabad
3.	Ayesha Majid	Institute of Urbanism	Coordinator	Islamabad
4.	Dr Ejaz Ahmed	Institute of Urbanism	Senior Advisor	Islamabad
5.	Farah Rashid	World Wide Fund for Nature Pakistan	Coordinator	Lahore
6.	Hussain Etemadi	The Liaison Organization	Environmental Expert	Kabul
7.	Imran Khan	Sustainable Development Policy Institute	Admin. Officer	Islamabad
8.	Ismail Qarizada	The Liaison Organization	Program Manager	Kabul
9.	M. Kashif	Institute of Urbanism	Coordinator	Islamabad
10.	Mavra Bari	Institute of Urbanism	Communication Consultant	Islamabad
11.	Mome Saleem	Institute of Urbanism	Founding Executive Director	Islamabad
12.	Safyan Kakakhel	Institute of Urbanism	Organizer	Islamabad
13.	Stephanie Groll	Heinrich Boell Stiftung	Department Head	Berlin
14.	M. Tawab Stanikzai	The Liaison Organization	Coordinator	Kabul
15.	Umair Mehmood	Sustainable Development Policy Institute	Technical Support	Islamabad

Institute of Urbanism

Office # 1, Mezzanine Floor, Taimur Chambers, A. K. Fazl-ul-Haq Road, Blue Area, Islamabad, Pakistan

T: + (92-51) 8891213

E: info@iupk.org

W: <https://iupk.org>