Background

Air pollution is rapidly growing environmental problem in Pakistan. Highly inefficient energy use, accelerated growth in vehicle population and vehicle kilometres travelled, increasing industrial activity without adequate air emission treatment or control, open burning of solid waste including plastic, and use of ozone depleting substances (ODSs) are some of the major causes of deterioration of ambient air quality.

Chemical substances introduced as a result of air pollution by exhaust gas from motorized vehicles are Carbon Monoxide, Nitrogen oxides, Sulphur oxides and suspended particles. These air pollutants are dispersed in our atmosphere in concentrations high enough to cause serious health problems, environmental issues, global warming and climate change. Until recently, air pollution problem was not taken seriously because of the Earth's own ability to purify certain quantities of pollutants. The rapid industrial development and increased usage of motorized vehicles contributed to growing air pollution problem and environmental issues. The magnitude of air pollution has increased multiple folds and it is time to find methods to clean up the air and to keep air pollution, global warming and climate change in control. **The level of air pollution in Pakistan's two largest cities, Karachi and Lahore,** is estimated to be 20 times higher than World Health Organization standards, and continuing to rise. Islamabad, the capital, is perpetually smothered by a thick cloud of smog that hides views of the Margalla Hills that tower over the city's tree-lined streets.

Suggested Readings

Strategies

- The National Conservation Strategy (NCS, 1992)
- Provincial Conservation Strategies
- The National Environmental Action Plan (NEAP)
- National Environmental Quality Standards for Ambient Air, 2012

Statutes

- Pakistan Environmental Protection Act, 1997
- The pollution Charge for Industry(calculation and collection) Rules, 2001
- Provincial Motor Vehicles Ordinance, 1965
- Provincial motor vehicles rules, 1969
- Factories Act,1934
- Punjab Local Government Act, 2013
- Provincial Sustainable Development (Procedure) Rules, 2001.
- National Environmental Quality Standards (self-monitoring and Reporting by Industries) Rules, 2001
- Provincial Sustainable Development Fund (Utilization) Rules, 2001.
- Composition of Offences and Payment of Administrative Penalty Rules, 2000.
- Environmental Samples Rules, 2001.

The views expressed in this presentation are the views of the author/s and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this presentation and accepts no responsibility for any consequence of their use. The countries listed in this presentation do not imply any view on ADB's part as to sovereignty or independent status or necessarily conform to ADB's terminology.

- Hazardous Substances Rules, 2000.
- Pakistan Environmental Protection Agency (Review of IEE/EIA Regulations, 1998).
- National Environmental Quality Standards (Environmental Laboratories Certification Regulations), 2000.
- Sector specific EIA guidelines have also been developed by Pak-EPA for major thermal power stations, oil and gas exploration and production, major chemical and manufacturing plants and industrial estates.
- Section. The Pakistan Penal Code, 1860
- The West Pakistan Prohibition of Smoking in Cinema Houses Ordinance, 1960

International Conventions

- United Nations Framework Convention on Climate Change, 1992
- Vienna Convention for the Protection of the Ozone Layer, 1985
- Montreal Protocol on Substances that Deplete the Ozone Layer, Montreal, 1987 and amendments
- Stockholm Convention on Persistent Organic Pollutants (POPs), 2001

Case Law

Pakistan

- Syed Mansoor Ali Shah and 4 others vs. Government of Punjab, through Housing, Physical and Environmental Planning Development, and 3 others, 2007 CLD 533 Lah. /PLD 2007 Lah 403(a)
- Islam Hussain vs. City District Government and others, 2007 CLC 530 Kar
- Anjum Irfan vs. Lahore Development Authority through Director General and others, PLD 2002 Lah 555
- Anjuman Tajran Charam vs. The Commissioner, Faisalabad Division, Faisalabad and three others, PLD 2002 Lah. 555

India

- M. C Mehta vs. Union Of India, AIR 1997 SC 734
- Chhetriya Pardhushan Mukti Sangharsh Samiti vs. State Of Uttar Pradesh, AIR 1990 SC 2060
- Ajeet Mehta vs. State of Rajasthan, **1990 Cri.L.I. 1596**
- M. Purushothaman vs. Union of India, AIR 1993 Ker 297

International

• Trail Smelter Arbitration (United States vs. Canada), 1941 3 U.N. R.I.A.A. 1905

Relevant Websites

- Regional Resource Centre for Asia and the Pacific (RRC.AP). The National View of Air Pollution. <u>http://www.rrcap.ait.asia/male/baseline/Baseline/Pakistan/pakch1.htm</u>
- Pakistan Bureau of Statistics. Compendium on Environment Statistics of Pakistan 2010. http://www.pbs.gov.pk/content/compendium-environment-statistics-pakistan-2010

- The National Academies of Sciences, Engineering, and Medicine. Pakistan-US Science and Technology Cooperation Program. <u>http://sites.nationalacademies.org/PGA/dsc/pakistan/PGA_052763</u>
- Environment Protection Department, Government of Punjab. Establishment of Air Quality Monitoring System in the Punjab. <u>http://epd.punjab.gov.pk/?q=quality</u>
- <u>www.suparco.gov.pk/.../environmental-monitoring-brochure.pdf</u>