SHARADINDU ADHIKARI 19BCE 2105

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prof. Sangeetha D.

a INTRODUCTION:

In addition to land and water, an is the prime resource for sustenance of life. With the technological advancements, a vast amount of data on ambient air quality is generated and used to establish the quality of air in different ways & areas.

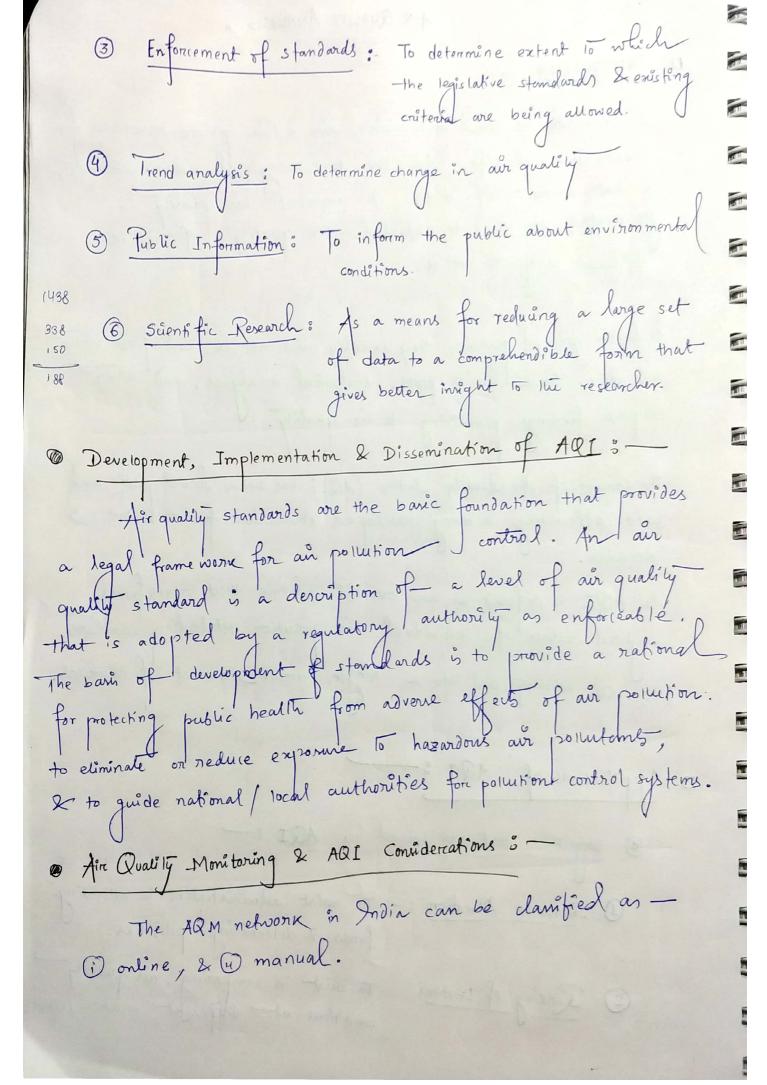
As for the general public, they usually will not be satisfied with raw data, time servies plots, statistical analyses, and other complex findings pertaining to air quality.

The Concept of Air Quality Index (AQI) has been developed and used effectively in many developed countries for over last 3 decades.

An AQI is defined as an overall scheme that transforms weighted values of individual air pollution related parameters (502, CO, visibility, etc.) into a single number or set of numbers.

11 Applications of AQI:

- 1 Objectives that are served by AQI:
 - Desource Allocation: To amist administrators in allocating funds & determining priorities.
 - 2) Ranking of Locations: To amist in comparing our quality conditions at different locations / cities



Online Monitoring retwork: These are automated air quality monitoring stations which record continuous hourly, monthly or annually averaged data. In India, ~40 automatic monitoring stations are operated e.g. continuous stations in Delli. 2 Manual: - The manual stations mostly involve intermittent our quality data collection, thus such stations are not suitable for AQI calculation particularly for its quick dissemination. In India, air quality (is being monitored manually at 573 locations under National Air Monitoring Trogramme (NAMP). Air Quality Data Assessment & Analysis : Individuals who breathe polluted air experience health effects within a few hours or days. The district meanures pollutant concentrations in the local ambient an 2 ares historical data to predict polutant · Air Quality Trends: The District determines the effectioner of air quality regulations using the results of monitoring

· Aire Quality Forecasts; The Distruct is attaining the national ambient ain quality standards for all portutants except ground-level ozone. Ground-level ozone, also known as smag, is created by a chemical reaction between precursor poliutions, primarily Voxides of nitrogen (NOx) & volatile organic compounds (vocs) in the prevence of sunlight I high temperatures. · Fenstock Air Quality Index (AQI) :-WET THE M Fenstock (1969) proposed an index to aver the relative -50 Severity of air pollution and applied it to assen AQI of 29 us uties. This was me first index to estimate the air postulant concentrations from the data on source eminions & meteorological conditions in each city: AQI = W; I; where, W: = weightages for CO, TSP and SO_ I: = estimated sub-indices for CO, TSP & SO_ · Current Status of AQI application in India: There have not been significant efforts to develop & we ARI in India, prindrily due to the fact that the National Air Quality Monitoring Programme has

Started only in 1984. Although many technical papers proposing specific indices appeared in international literature, no detailed study was undertaken to use an index in India. Executive Summary e-- towareness of daily levels of air pollution is important to the citizens, especially for those who suffer from illness caused by exposure in an pollution. Further, success of a nation to improve air quality depends on the support of its citizens who are wellinformed about Ideal & Inational air pollution problems 2 about the progress of mitigation efforts. Thus a simple yet effective communication of air quality is important. That concept of an AQI that transforms weighted values of individual air pollution A scientific barn in terms of attainment of air quality standards and dose-response relationships of Ovarious portuetant parameters have seen derived & used in arriving at breakpoint concentrations for each All category.