AIR QUALITY ANALYSIS IN TAMILNADU

PHASE 5 PROJECT

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INTRODUCTION

- The term air quality refers to the degree to which the air in a particular place is free from pollutants.
- Air pollutants are substances present in the atmosphere at concentrations above their normal background levels which can have a measurable effect on humans, animals and vegetation.

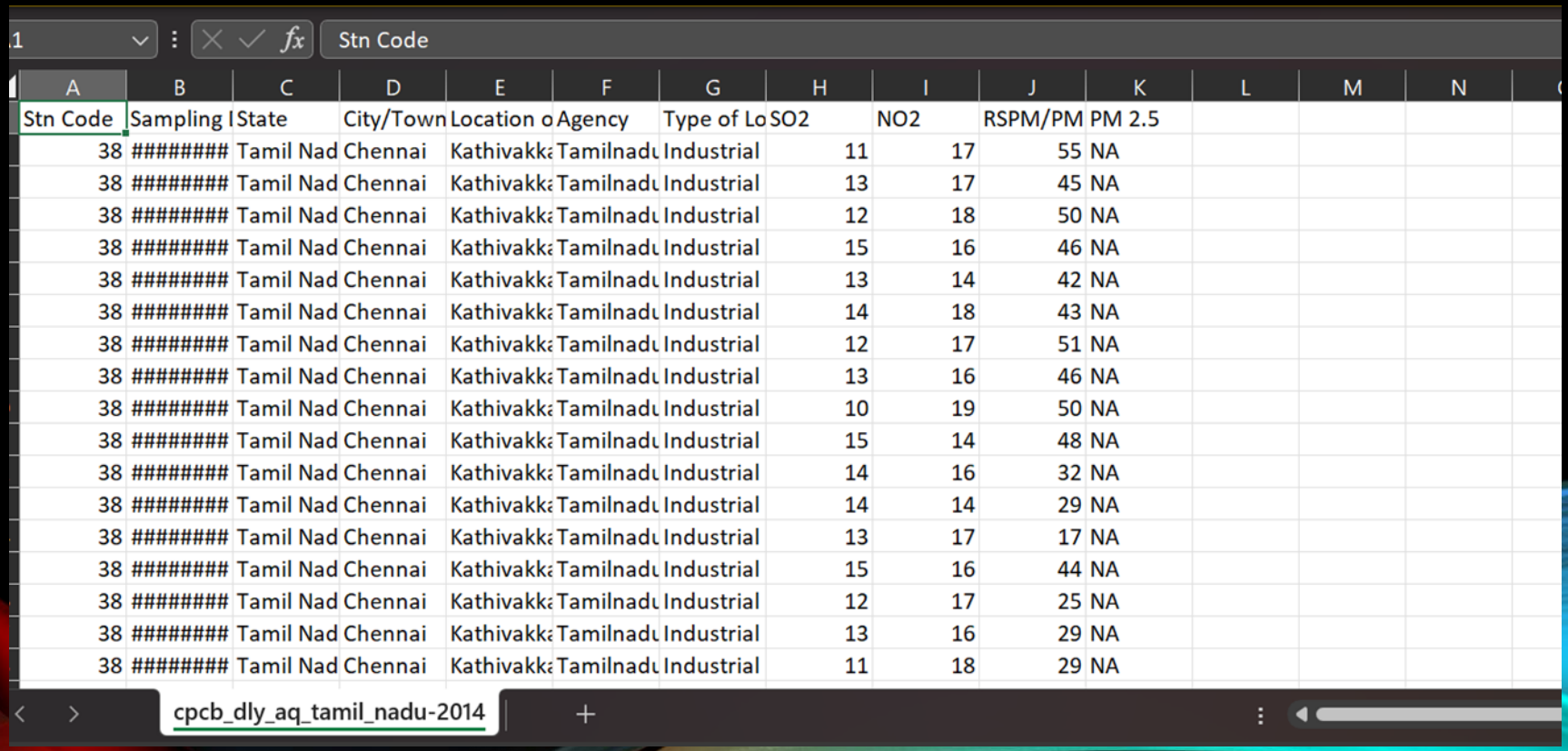
OBJECTIVES

- The main objectives of these Networks is to record the concentration levels of atmospheric pollutants in order to define air quality levels and establish action plans if high levels of contamination are detected.

DATA SET

- url = "https://tn.data.gov.in/resource/location-wise-daily-ambient-air-quality-tamil-nadu-year-2014"

COLLECTION OF DATA

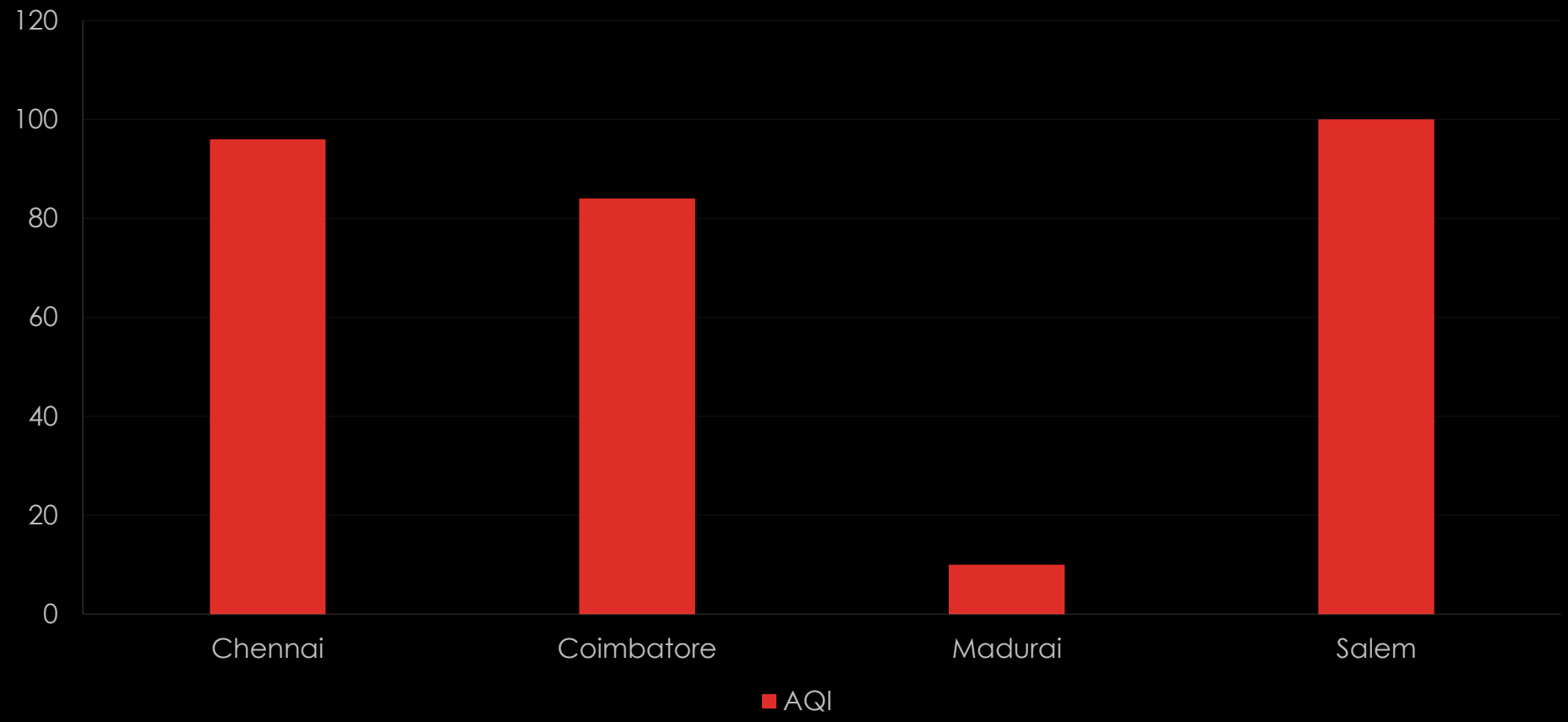


Stn Code

Stn Code	Sampling I	State	City/Town	Location o	Agency	Type of Lo	SO2	NO2	RSPM/PM	PM 2.5
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	11	17	55	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	13	17	45	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	12	18	50	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	15	16	46	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	13	14	42	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	14	18	43	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	12	17	51	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	13	16	46	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	10	19	50	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	15	14	48	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	14	16	32	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	14	14	29	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	13	17	17	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	15	16	44	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	12	17	25	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	13	16	29	NA
38	########	Tamil Nad	Chennai	Kathivakk	Tamilnadu	Industrial	11	18	29	NA

cpcb_dly_aq_tamil_nadu-2014

ANALYSIS OF DATA ABOUT AQI



MANIPULATION OF DATA

- Data manipulation refers to the process of adjusting data to make it organised and easier to read. Data manipulation language, or DML, is a programming language that adjusts data by inserting, deleting and modifying data in a database such as to cleanse or map the data

METHODOLOGY

- Source Correction Methods.
- Pollution Control equipment.
- Diffusion of pollutant in air.
- Vegetation.
- Zoning.

PYTHON CODE

```
import requests
import pandas as pd
# Define the URL of the web page you want to scrape
url = https://tn.data.gov.in/resource/location-wise-daily-ambient-air-quality-tamil-nadu-year-2014
# Send an HTTP GET request to the URLresponse = requests.get(url)
# Check if the request was successfulif response.status_code == 200:
```

```
# Use pandas to read HTML tables from the page
tables = pd.read_html(response.text)
# You might need to inspect the page's HTML to identify the correct table
# If there are multiple tables on the page, you can access them by index    # For example, to get the first table:
# df = tables[0]
# Once you have the desired table, you can save it to a CSV file
# For example, save the first table to "air_quality_data.csv"
df = tables[0]
df.to_csv("air_quality_data.csv", index=False)
```

```
print("Data saved to air_quality_data.csv")
else:
    print("Failed to retrieve the web page. Status code:", response.status_code)
```

OUTPUT:

	PM2.5-AVG	PM10-AVG	NO2-AVG	NH3-AVG	SO2-AG	CO	OZONE-AVG	air_quality_index
0	190	131	107	4	42	0	63	190
1	188	131	110	4	40	0	62	188
2	280	174	155	2	37	0	52	280
3	302	181	144	2	39	0	78	302
4	285	160	121	3	19	0	71	285

THANK YOU!