Technical Cooperation Project: Air Pollution Reduction in Bangalore, India

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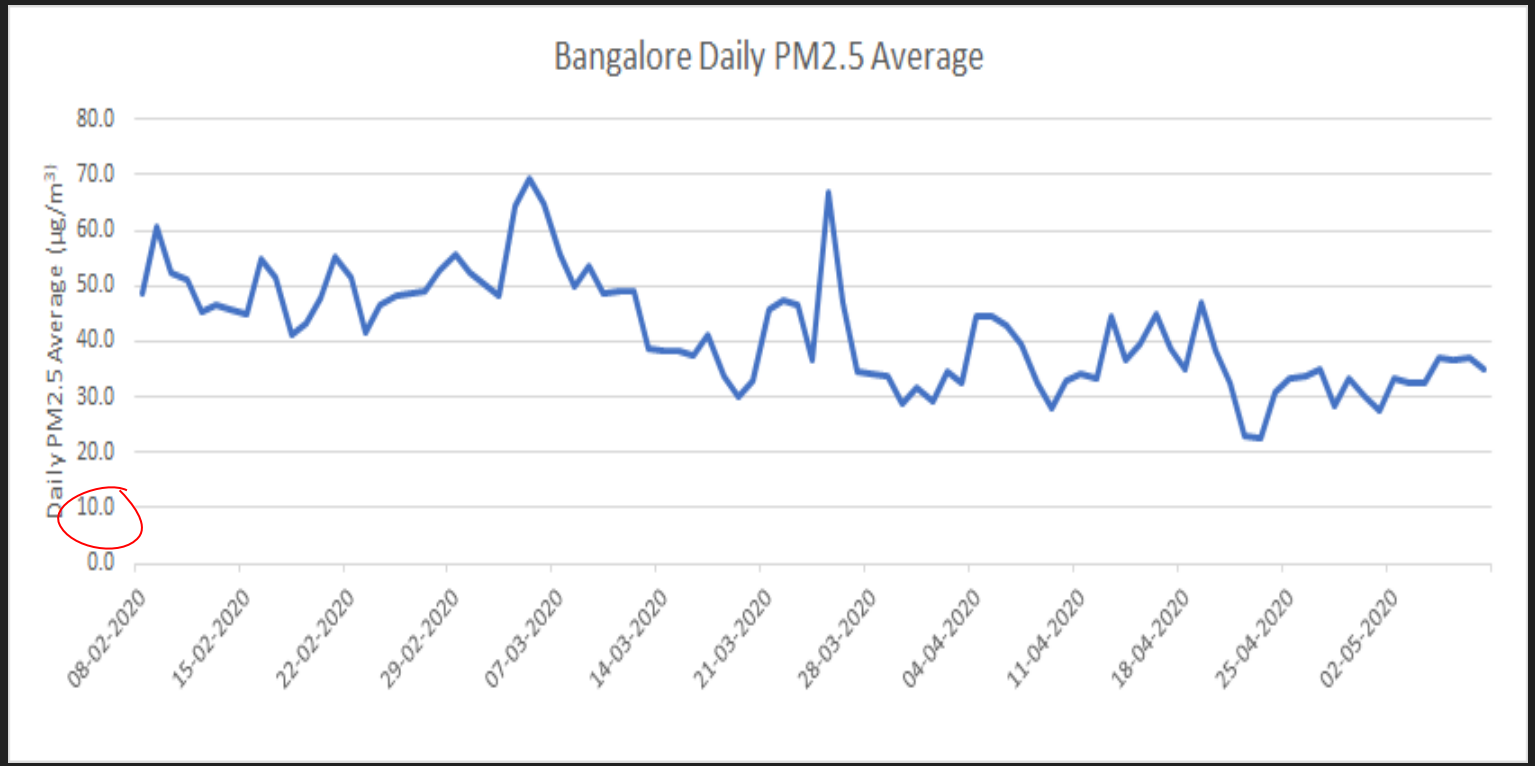
Introduction

Estimated Air pollution impacts in major Indian cities (2020)

Name	Estimated Deaths absolute	Estimated Cost (USD)	Estimated Cost (INR) cr
Delhi	54,000	8.1 billion	58,895
Mumbai	25,000	3.7 billion	26,912
Bengaluru	12,000	1.7 billion	12,365
Hyderabad	11,000	1.6 billion	11,637
Chennai	11,000	1.5 billion	10,910
Lucknow	6,700	1.1 billion	80,01

Myllyvirta, L. (2020) Revealing the Cost of Air Pollution in World's Cities – in Real Time. July 2020. CREA. https://energyandcleanair.org/revealing-the-cost-of-air-pollution-in-real-time/

Rationale - PM 2.5, minimum 10 µg/m3



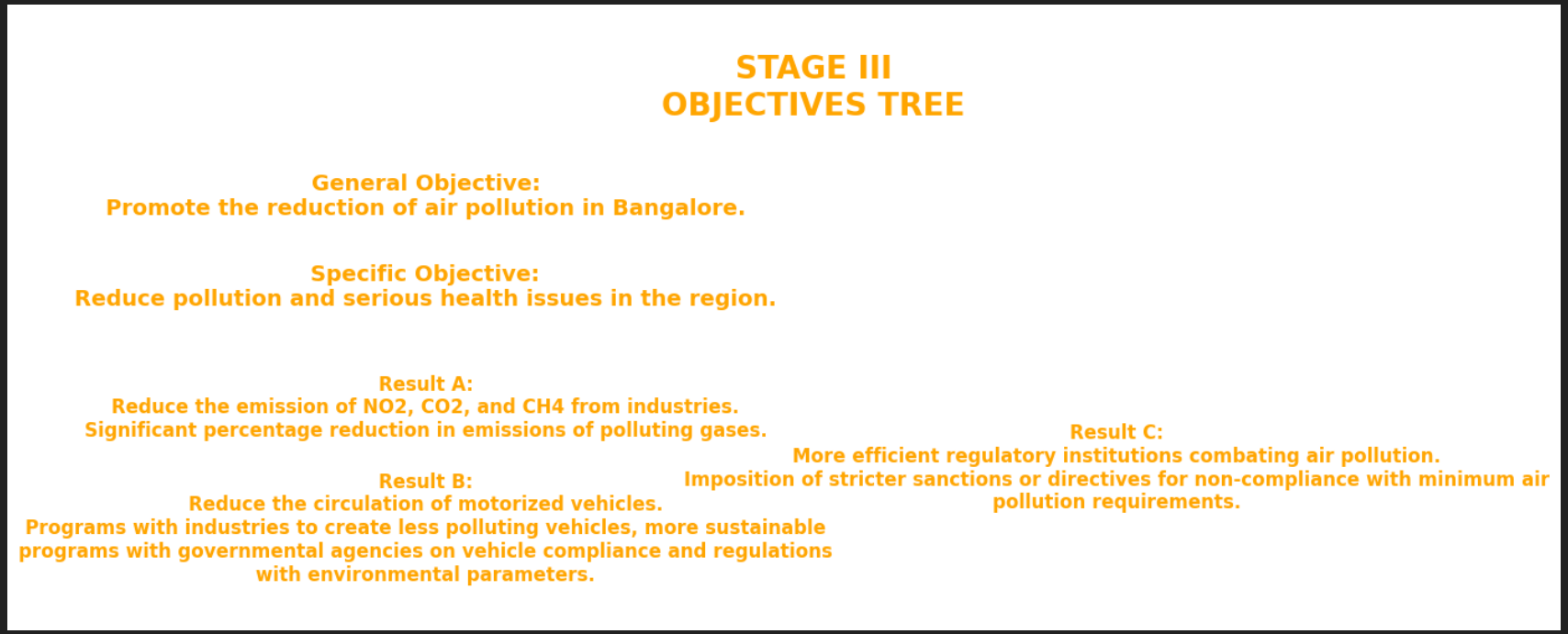
Source: adapted by the author; Heal Health and Environment Alliance, 2020.

Rationale

- Bengaluru, often referred to as the "Silicon Valley of India," sees significant life expectancy reductions due to air pollution, with individuals potentially losing 4 to 5 years of life. (Source: Company Clarity, 2019).
- Rapid increase in vehicular traffic.
- Note: Peenya, a neighborhood in Bangalore.

Image: Traffic congestion in Bangalore.

Objectives and Expected Outcomes



Work Plan

- Duration: 60 months.
- Increase in sustainable vehicles by 50% (including electric models and better CO2 filtration).
- 70% reduction in traffic congestion.
- Verification reports from BMTC and BMRDA and annual or quarterly sustainability reports from regional hospitals like Ayu Health Bangalore Baptist Hospital.

External Cooperation

- Institutional Framework: BMRDA/OECD/MRE.
- Rationale: WHO guidelines (Australia) recommend a PM 2.5 limit of 10 μg/m^3.
- Long-term collaboration with researchers (profiles include experts or engineers).

External Cooperation

Training on Compliance and Metrics for Tabulating Atmospheric Impurity Indices.

External Cooperation

Experts/Specialists: USD 2,550,000.
Training: USD 300,000.
Total Budget: USD 2,850,000.

External Cooperation

Counterpart Funding - Tax incentives (ranging from 15% to 10%).

The corporate income-tax (CIT) rate applicable to an Indian company and a foreign company for the tax year 2020/21 is as follows:

Income*	CIT rate (%)					
	Turnover does not increase INR 4 billion in FY 2018/19		For other domestic companies		Foreign companies	
	Basic	Effective**	Basic	Effective**	Basic	Effective **
Less than INR 10 million	25	26.00	30	31.20	40	41.60
More than INR 10 million but less than INR 100 million	25	27.82	30	33.38	40	42.43
More than INR 100 million	25	29.12	30	34.94	40	43.68

* Surcharge of 10% is payable only where total taxable income exceeds INR 10 million.

Source: PWC, (2021).

Conclusion

Bangalore suffers from severe air pollution, leading to numerous health problems and fatalities. Implementing this project with the aforementioned regulatory agencies could significantly improve the region's quality of life.