

Thesis Summary: Islamabad Air Quality

This study analysed seasonal trends in ambient air pollutants across Islamabad from Mar 2022 to Feb 2023 using HAZ-Scanner HIM-6000. Six pollutants were measured (PM_{10} , SO_2 , NO_2 , NO , CO , O_3) and compared against WHO and Pakistan NEQs standards.

Key Findings:

- PM_{10} peaked in January ($171 \mu\text{g}/\text{m}^3$)
- SO_2 in March exceeded PAK-NEQs by 12.8x ($473 \mu\text{g}/\text{m}^3$)
- O_3 8-hour levels in March exceeded WHO by 512%
- Temperature showed positive correlation with SO_2 and NO
- Spearman's rank used for correlation analysis