

AN OVERVIEW OF AIR POLLUTION IN URBAN AREAS OF TANZANIA

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By

G. J. Kombe

Senior Environment Management Officer

Introduction

- Pollution of air is the most widespread form of pollution that impacts at local, national and global levels affecting human health and well-being, vegetation, crops, wildlife, buildings and other materials, and world's climate.
- In Africa, as the rate of urbanization, motorization and economic activities increase air quality in cities is progressively more deteriorating.
- Air pollution is emerging as key threat to human health, the environment and the quality of life of millions of Africans.
- Tanzania like many developing countries, have been facing air pollution problems.

- Dar es Salaam city has a population of more than 3millions
- hosts 80% of the industries in Tanzania

Causes

- The causes of urban air impairment include:
 - open waste burning
 - biomass burning
 - dust
 - particulate matter
 - high noise
 - Vehicular emissions and
 - industrial emissions
- Others include natural methane emissions from wetlands

Initiatives

- Phase out of leaded gasoline
- Environmental Management Act Cap. 191 provides for stronger emphasis on Local Government Authorities to participate in management of air quality, section 132(1)
- Development of Air Quality Standards
- Control of imported old cars
- APINA
- SADC initiatives
- R&D institutions
- Research and Academic institutions

Initiatives

- Efforts are underway to reduce the sulphur content in the fuel
- The Implementation of both Lusaka and Nairobi Agreements on Better Air Quality
- Clean Air Initiatives in Sub Saharan Africa
- Implementation of AQMCB project to monitor ambient air in urban areas in Dar es Salaam.

IMPLEMENTATION OF AQMCBP



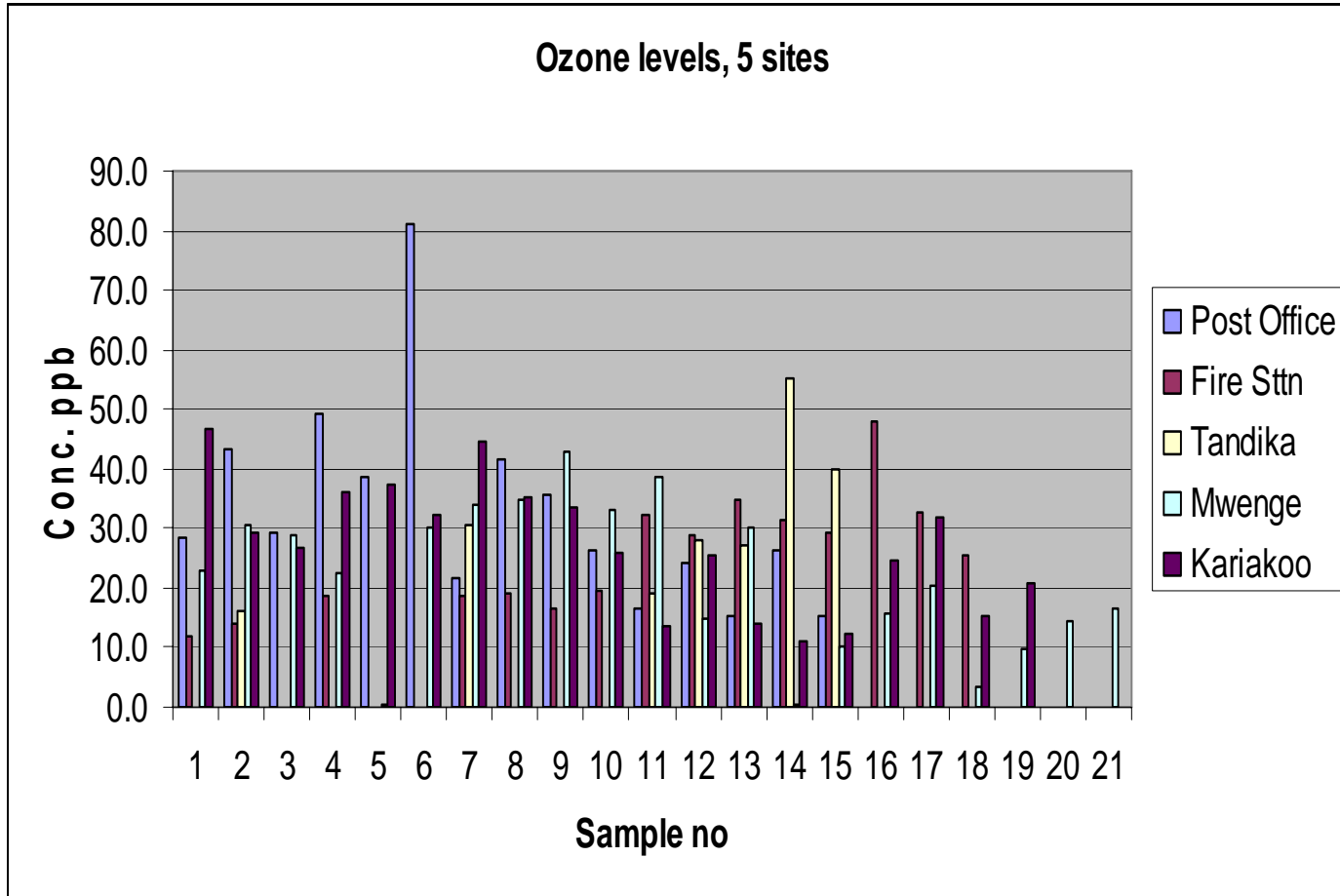
- The Air Quality Monitoring Capacity Building Project (AQMCBP) is a project which was implemented in three municipalities of the city of Dar es Salaam with the aim of establishing baseline data and information on the content of selected impurities in ambient air.

- AQMCBP was implemented through National Environment Management Council in collaboration with other stakeholders such as DoE-VPO, MoH&SW, DCC, TBS, TMA, and ARU.
- The major project activities included monitoring of air quality through sampling and establishing a database information on ambient air quality

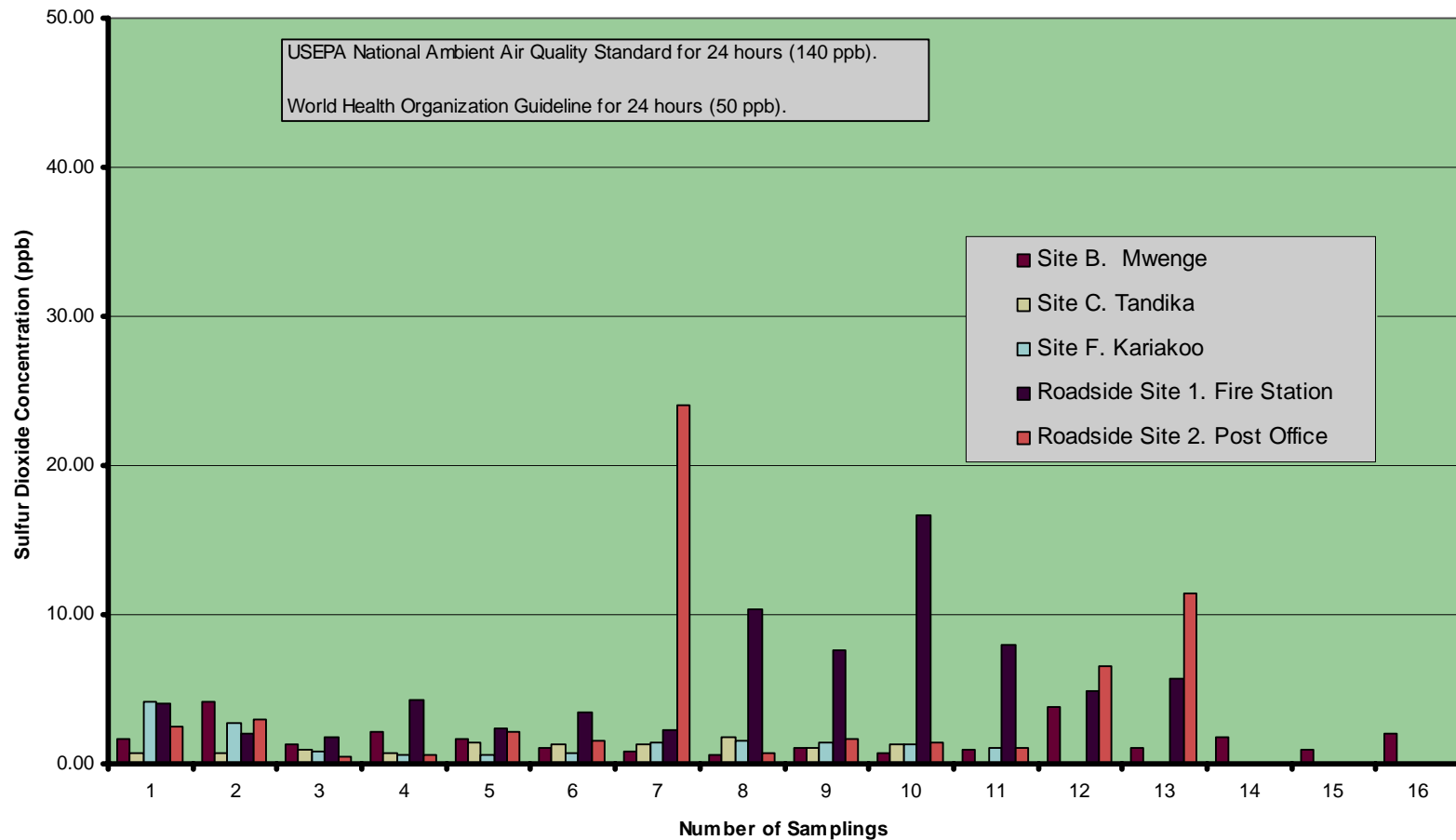
- The project was implemented in two phases:
- Phase I started in March 2005 and ended December 2005
- Phase II started Jan. 2006 and ended Dec. 2007
- Both phases were supported by funds from UNEP and technical assistance and equipment from USAID

- Sites were selected based on:
 - Residential
 - Commercial
 - Light industrial
 - Roadside
- Parameters monitored were PM_{10} , NO_x , SO_x , O_3 and CO
- 5 monitors were set in 5 sites in Dar es Salaam
 - 2 roadside sites along Morogoro road
 - 2 residential and 1 commercial

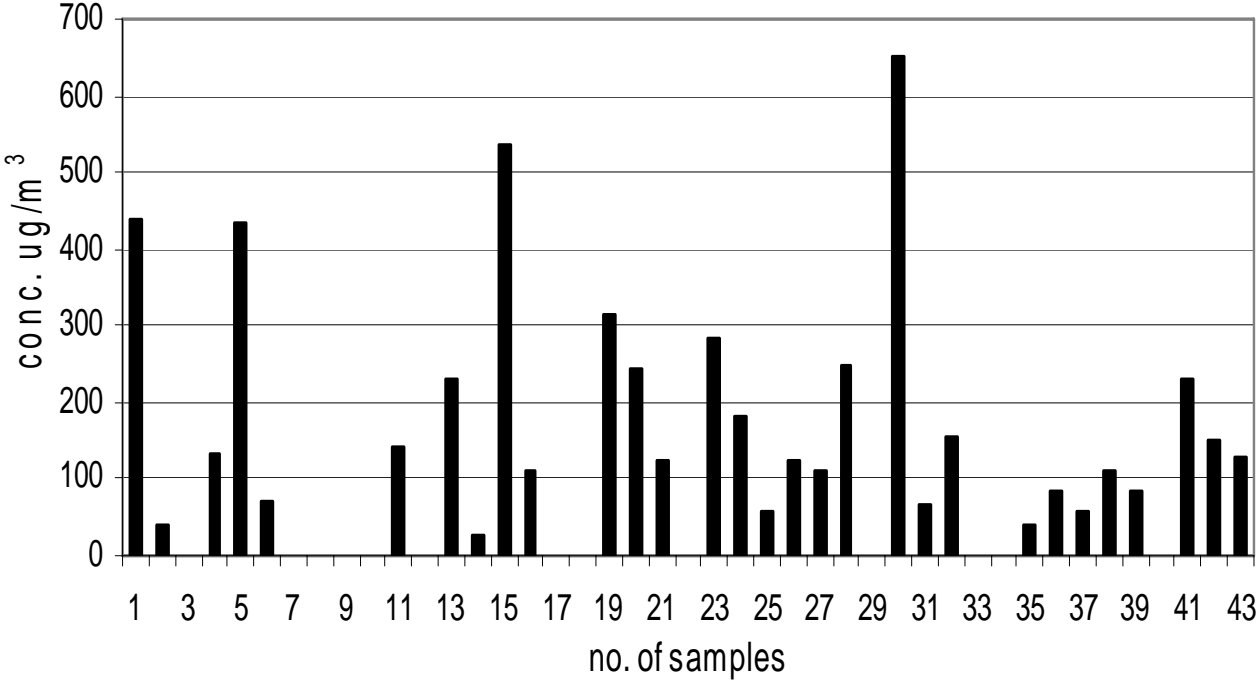
Results



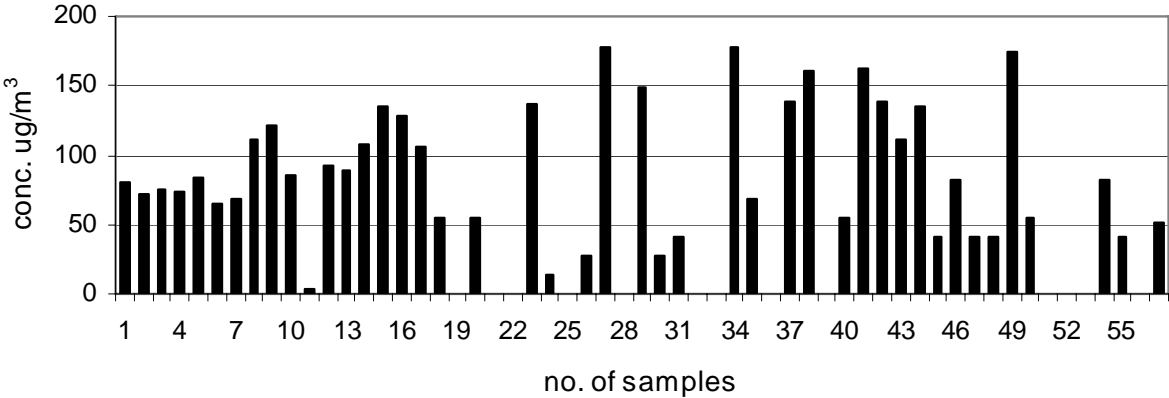
Graph: SO₂ for 5 sites in Dar es Salaam



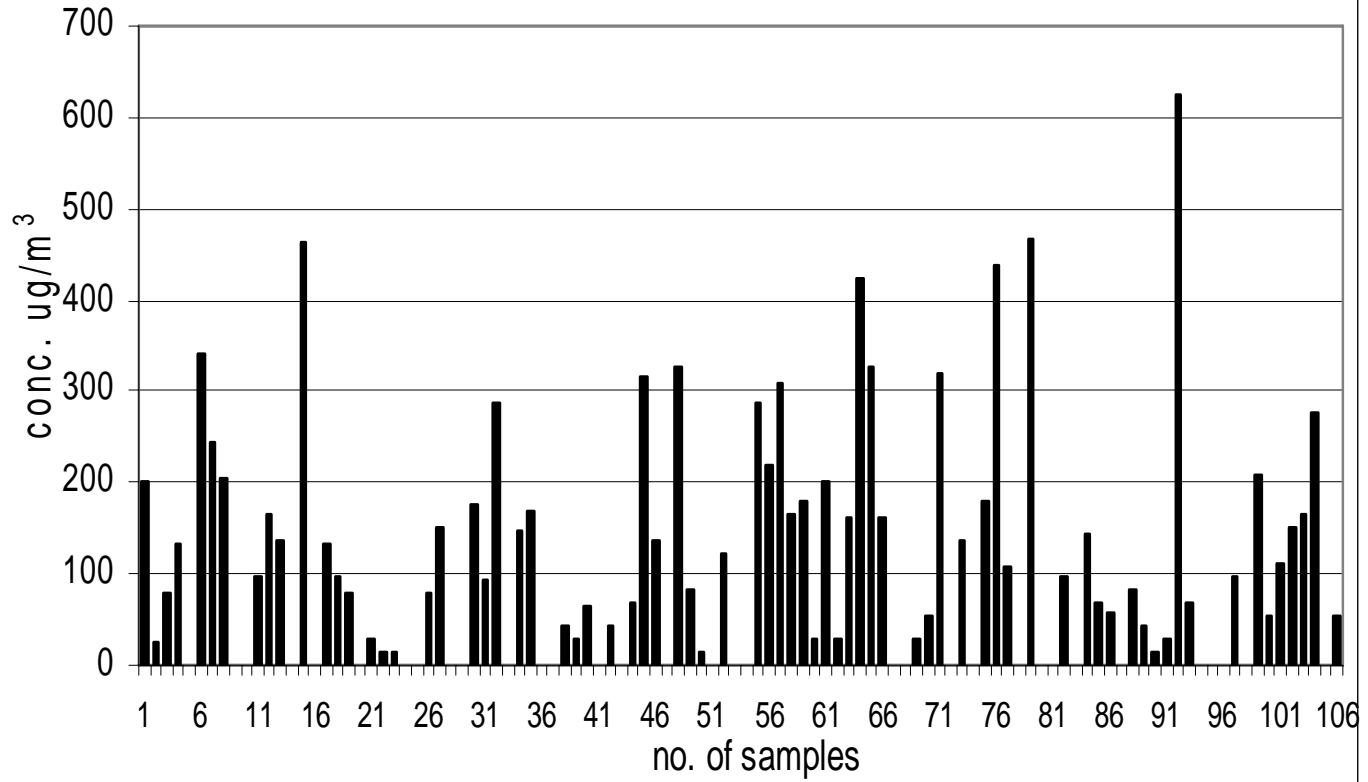
PM 10 DATA AT MWENGE



PM 10 DATA AT KARIAKOO-DDC



PM 10 DATA AT FIRE STATION



PM 10 DATA AT POST OFFICE- UBUNGO



- CO data was not obtained due to the inefficiency of the sampling equipment used.

gaps

- Lack of laboratory analytical instruments
- Inadequate supply of equipment
- Inadequate programs on experience sharing
- Lack of proper and efficient equipment to monitor CO
- Inadequate time to establish health effects caused by air pollution

Conclusion

- There is a need to strengthen the air quality monitoring in DSM .
- More data need to be gathered to be able to develop a trend and identify the sources of pollution
- Indoor air quality need to be monitored to establish the link with increasing respiratory diseases.

Thank you