Assessment of the Progress of Air Quality Management Plan (2021-2025) Implementation in the case of Addis Ababa, 2024

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Abstract

This assessment reviews Addis Ababa AQMP progress, identifying 14 implemented objectives, 10 in progress, and 7 lacking clear status. Key areas for attention include setting city-specific air quality standards, regulating emissions, improving AQ data collection, fostering collaboration, and enhancing AQ public awareness for improved health outcomes.

1. Introduction

Addis Ababa, like many African cities, faces significant challenges with air pollution. In response, the city has developed an Air Quality Management Plan (AQMP) with the assistance of the The U.S. Environmental Protection Agency's Megacities Partnership.

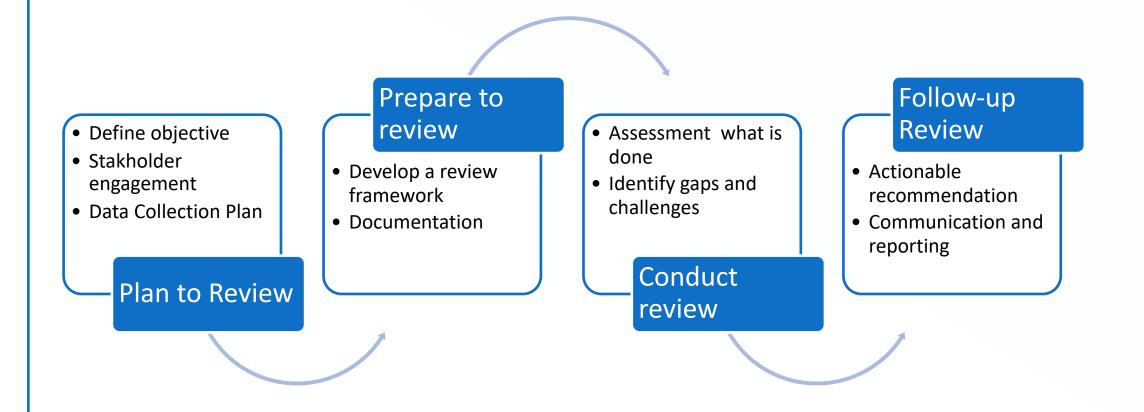
The plan was launched in May 2021, the primary aim of this plan is to achieve compliance with the national air quality standard by 2025 specifically targeting a PM2.5 concentration of $15 \mu g/m3$..

Objective

The objective of this assessment is to review the advancement of the AQMP implementation and to suggest the remaining goals and objectives that should be prioritized as per the plan by 2025.

2. Methods

The assessment was followed a methodology involved reviewing existing research on the internet, conducting interviews, and organizing group discussions with the Addis Ababa EPA team regarding the implementation of AQMP. This process primarily followed four steps: 1) planning the review, 2) preparing for the review, 3) conducting the review, and 4) following up on the review.



3.1. Overview of AQMP

Addis Ababa AQMP has 5 goals, 31 objectives and activities.

➤ Goal 1: Compliance with Standards (with 10 Objectives and activities))

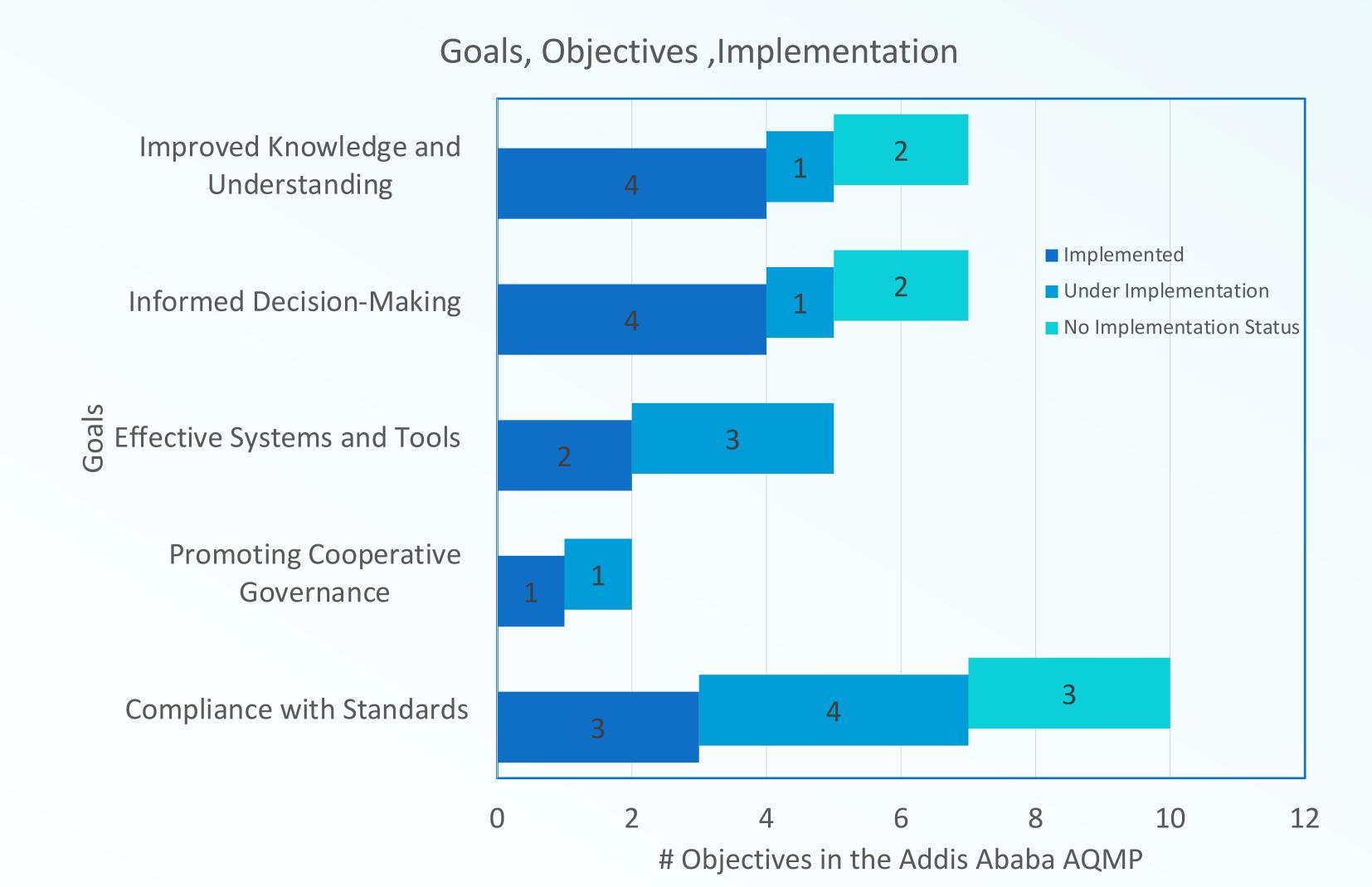
➤ Goal 2: Promoting Cooperative Governance (2 Objectives and activities)

➤ Goal 3: Effective Systems and Tools (5 Objectives and activities)

➤ Goal 4: Informed Decision-Making (7 Objectifies and activities)

➤ Goal 5: Improved Knowledge and Understanding (7 objectives and Activities)

3.2. Status of the AQMP Accomplishment



1) Implemented: Plans that have been successfully executed and achieved their intended objectives.

2) Under Implementation: Plans that are currently in progress or being actively implemented but have not yet reached completion.

3) No Implementation Status: Plans for which there is no indication of progress or implementation activity. These require follow-up or further attention to determine their status.

3. Result

Goal 1-Compliance with Standards

- Review standards, national against WHO.
 Establish city standards.
- Z. Establish City Standards.
- 3. Research on vehicle emissions.4. Set Addis Ababa vehicle standards.
- 5. Align national, city standards.
- 6. Monitor vehicle emissions.
- 7. Enforce city regulations on mobile sources
- 8. Monitor industrial facilities (boiler & diesel)
 9. Enforce national regulations (boiler & diesel)
- 9. Enforce national regulations (boiler & diesel) 10. Assess construction building emission standards.

Goal 4-Informed Decision-making

- 1. Coordinate public health research.
- 2.Utilize monitor data.
- 3.Research pollution health links.
- 4.Establish coordinating committee to link
- university researches
- 5. Develop health impact analysis.6. Form monitoring, evaluation team.
- 7.Undertand the extent of open burning

Goal 2-Promoting Cooperative Governance

- 1. Form steering committee, Mayor.
- 2. Establish working groups.

Goal 3-Effective Systems and tools

- 1. Develop monitoring strategy.
- 2. Implement monitoring strategy.3. Collect, manage, disseminate data.
- 4. Enhance monitoring capabilities.
- 5. Explore emissions inventory options.

Goal 5-Improved Knowledge & Understanding

- 1.Understand health impact of waste burning.2. Improve technology for cookstoves and
- 3. Educate on indoor, outdoor pollution.
- 4. Promote transport emission reduction.
- 5. Assist compliance to regulations stakeholder and regulated community
- 6.Inform health providers the impact of AQ
 7. Enhance public awareness.

*The color are Implemented, under implementation and no implementation status

4. Conclusion and Recommendation

- AQMP has outlined 31 objectives. Currently, 14 objectives have been successfully implemented, 10 are in the process of implementation, and 7 lack any indication of implementation status.
- Key areas requiring attention for the remaining implementation period up to 2025 include:
- ➤ Reviewing national standards and establishing city-specific AQ standards, including construction emissions. Progress in regulating and enforcing mobile and stationary sources, such as energy usage in buildings and industries, needs to be monitored closely.
- Establishing working groups to support the steering committee is crucial for effective implementation.
- Enhancing air quality data collection, dissemination, and capability improvement is essential for informed decision-making.
- Establishing a coordinating committee to facilitate collaboration between university researchers and establish monitoring and evaluation mechanisms.
- Assisting stakeholders and regulated communities in complying with regulations and informing health providers about the impact of air quality on public health.