



Environmental Policy and Laws of Ethiopia and Clean Fuel

By

Meskir Tesfaye

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Addis Ababa, Ethiopia



Outline

- **The Constitution**
- **Environmental Policy of Ethiopia**
- **Environmental Legislations**
- **Environmental Standards**



Constitutional Provisions

- **Environmental rights (art.44)**
(...right to a clean and healthy environment)
- **sustainable development (art.43)**
(...right to ... sustainable development)
- **responsibility of government (art.92)**
The design and implementation of programmes and projects of development shall not damage or destroy the environment
...ensure consultation



Environmental Policy of Ethiopia

- overall policy goal:- to promote sustainable development through the sound management and use of resources...so as to meet the needs of the present generation without compromising the ability of future generations to meet their own needs.
 - **Precautionary Principle**
 - **Polluter Pays Principle**
 - **Lifecycle treatment of wastes**



Environmental Policy

Precautionary principle

★ Rio declaration 1992, principle 15

“Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing **cost-effective measures to prevent environmental degradation.”**



Environmental Policy

“Polluter Pays” Principle

“National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution...”

[Principle 16, Rio Declaration]



Environmental Policy

contd.

SECTORAL

- Soil Conservation
- Genetic, species & Biodiversity
- Water resources
- Energy resources
- Mineral Resources
- Control of Hazardous Materials and Pollution From Industrial Waste
- Atmospheric pollution and climate change
- Cultural & Natural Heritage
- Forest & woodland
- Human Settlement & Urban env.

CROSS-SECTORAL POLICIES

- Population
- Community Participation
- Gender
- Environmental Research
- Environmental Education
- EIS
- Environmental Economics
- EIA etc.
- Land use
- Tenure & Access



Environmental Policy

contd.

Policy elements which have link with clean fuel use are:

- **Energy resources**
 - renewable energy sources and reduce the use of fossil energy resources
- Control of Hazardous Materials and Pollution From Industrial Waste
- **Atmospheric pollution and climate change**



Environmental Policy

contd.

- **Atmospheric pollution and climate change**
 - commitment to the principle of containing climate change
 - take the appropriate control measures to mitigate GHG



Environmental Laws

- **Laws are needed to enforce policy objectives**
 - **Institutional set up –proc # 295/2002**
 - **EIA Proclamation - proc # 299/2002**
 - **Pollution Control - proc # 300/2002**



Environmental Pollution Control Proc.

- The most relevant instrument for compliance and enforcement of air pollution control policy objectives
- The Law requires to protect the environment, in general, and safeguard human health and wellbeing, as well as maintain the biota and aesthetic values of nature in particular



Environmental Pollution Control

- refrain from polluting
- administrative or legal measures imposed on violators (polluter pays principle)
- duty to install sound technology
- polluter cleans up or pays the cost
- closure or relocation of industrial sites to avert risks



Environmental Standards

- On the basis of Proc 300/2002 two standards are prepared
 - industrial emission standards
 - ambient environment standards



Environmental Standards

- **industrial emission standard**
 - set the maximum permissible pollutant emission into the atmosphere and
 - the extent to which individual sector must reduce their emissions.



Environmental Standards

- **ambient environment standards**
 - Set criteria for evaluating the air pollution to which humans and the environment are exposed
 - the impact-based values recommended by WHO
 - Compliance with ambient air quality standards generally means that no harmful effects



Ambient Environmental Standard

1 Guideline Air Quality Standards (e.g. SO₂)

• Compound	Guideline Value [$\mu\text{g}/\text{m}^3$]	Averaging time
• Sulphur dioxide	500	10 minute
	125	24 hours
	50	1 year



Environmental Standard



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Results from a pilot-scale air quality study in Addis Ababa, Ethiopia

V. Etyemezian^{a,*}, M. Tesfaye^b, A. Yimer^c, J.C. Chow^d, D. Mesfin^b, T. Nega^b,
G. Nikolich^a, J.G. Watson^d, M. Wondmagegn^b



Environmental Standard

device. Likewise, the diffusion tubes used for SO₂ sampling yielded non-detect results at all sites where they were used. The manufacturer of the SO₂ diffusion tubes states a nominal lower detection limit of 50 ppm h. Therefore, non-detect values obtained after a 24-h exposure suggest average SO₂ concentrations that are less than ~2 ppm. This value is far greater than the annual Ethiopian EPA standard of 0.03 ppm and the 24-h standard of 0.14 ppm. Therefore, it is not possible to use these SO₂ data to determine if Addis Ababa air quality is more or less in compliance with the Ethiopian guidelines for SO₂. O₃ test sticks with a nominal



- Use of cleaner-burning alternative fuels is one of air pollution abatement strategy (should be looked in conjunction with other abatement strategies)
- Such approach must be cost-effective and
- a scrutiny on the costs of
 - the conventional fuel and alternative fuels
 - and control technologies



Thank you for your attention!!!