

Male' Declaration

Tandi Dorji
Chief Communication Officer



1. Brief Introduction

■ Who are involved

- Thinley Namgyel, Jigme Zangmo, Tandi Dorji

■ Year of inventory

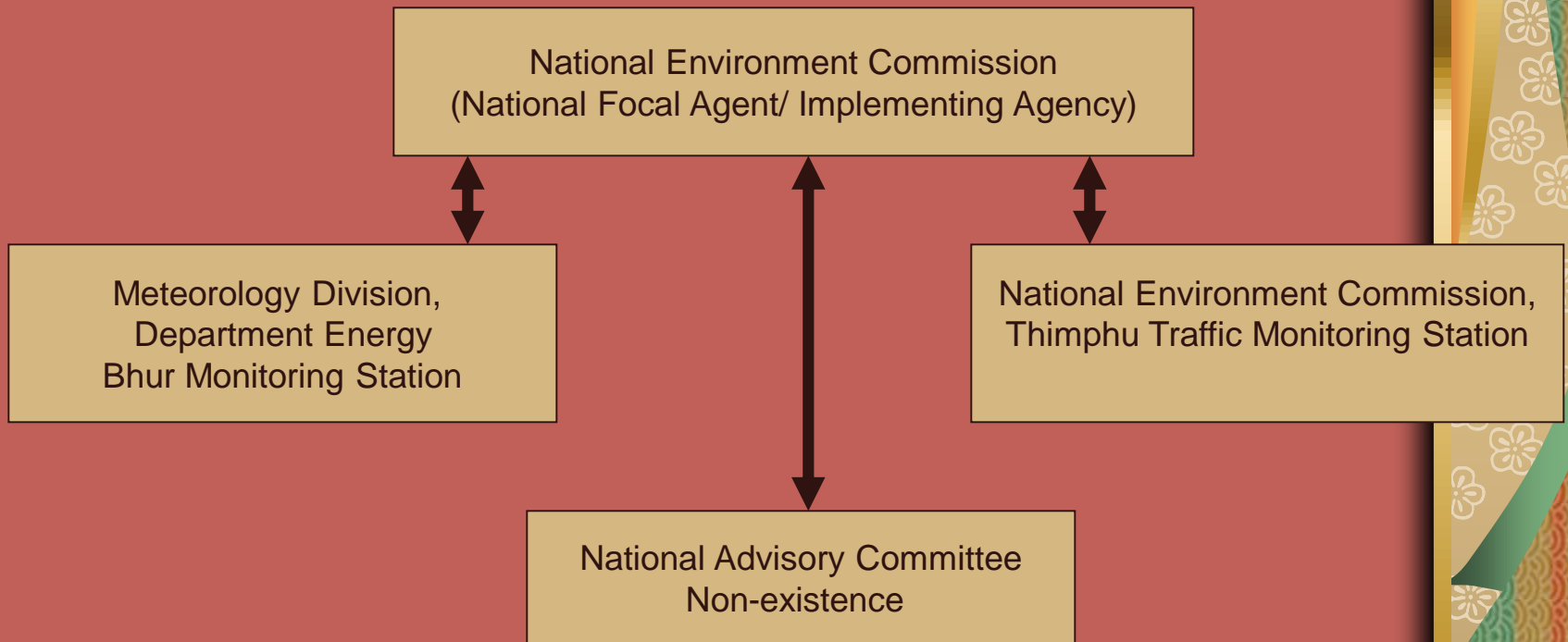
- 2004 June till date (Thimphu) PM10
- 2004 till date (Bhur) Male' Monitoring Site

■ Data available

- PM10 for Industrial Estates and Thimphu Town
- Transport Sector
- Annual Forest Fire incidents

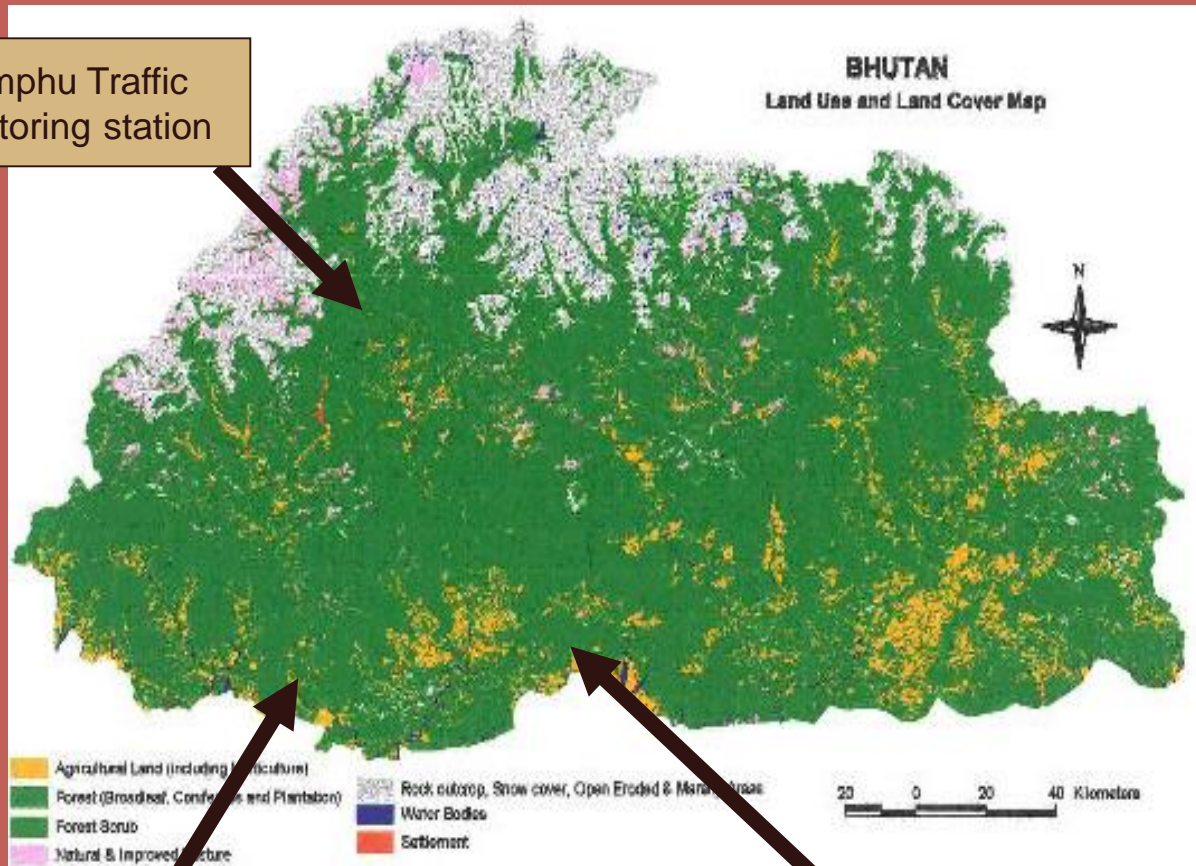


Institutional Arrangements



Monitoring activities

Thimphu Traffic Monitoring station



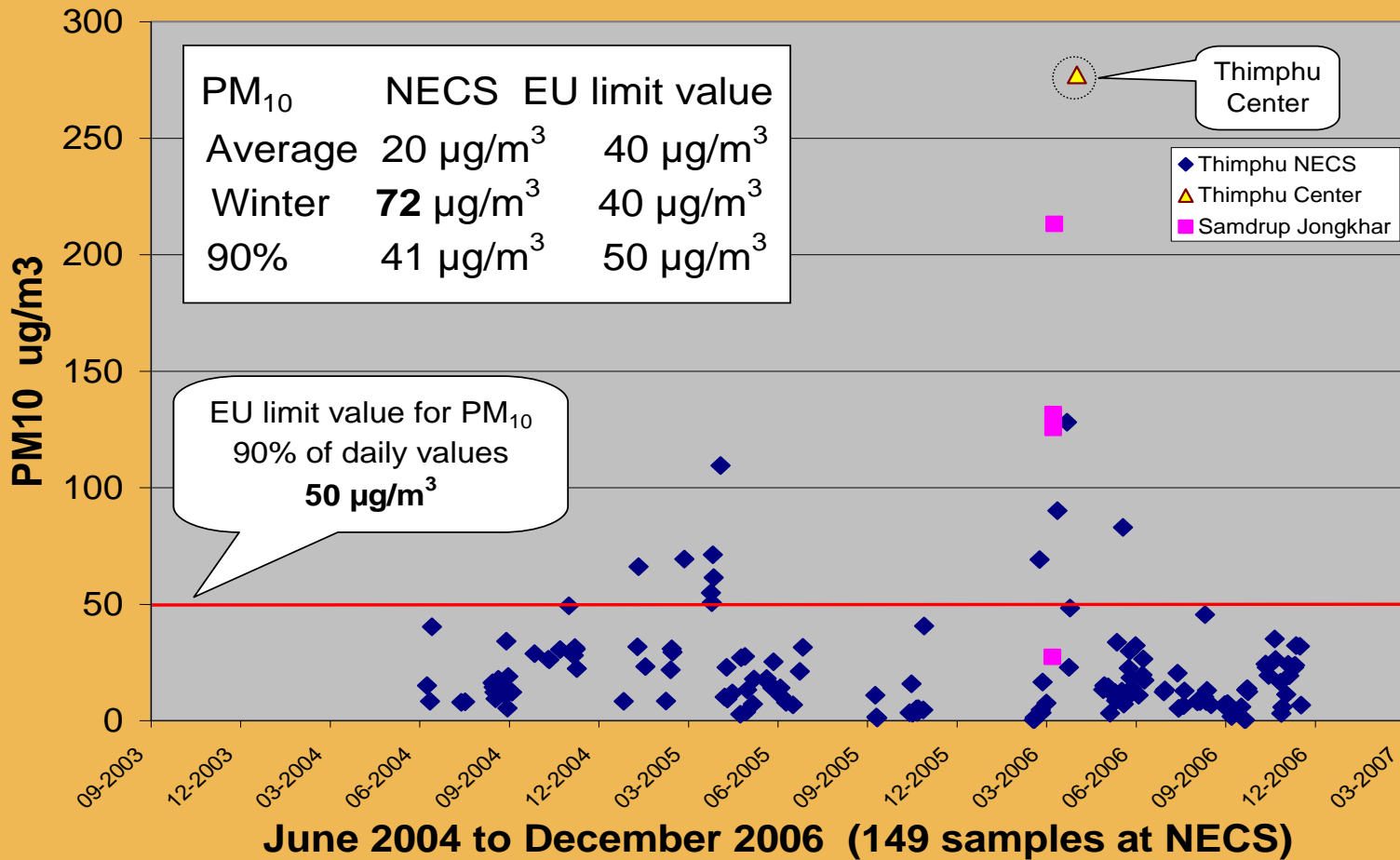
Pasakha Industrial Monitoring Station

Bhur Male Monitoring Station



Results (PM10)

Daily Particulate Matter Concentrations (PM₁₀) in Thimphu



Vehicular Emission

Location	Type	Pass	Fail	Total	%Fail
Phuentsholing USD	Light	1102	46	1148	4.0%
	Medium	135	8	143	5.6%
	Heavy	347	7	354	2.0%
	Two wheeler	226	3	229	1.3%
Thimphu USD	Light	2925	185	3110	5.9%
	Medium	116	7	123	5.7%
	Heavy	171	1	172	0.6%
	Two wheeler	644	9	653	1.4%
Both Centers	Total	5666	266	5932	4.5%

EMIS

- Most important is to house these data in one place. NEC is developing a Hub for environmental management information system (EMIS). The project is yet to be launched.



Impact Assessment Activities

- So far no impact assessment study has been implemented







Plans for next 3 years

- Institutional Arrangement (not known)
- Passive samplers for ground level O₃ in two locations will be established
 - Thimphu (Kabisa area)
 - Punakha (Kuruthang area)
- Crop impacts, Corrosion impacts and health Impact.



Measures to control emission

Recent measures introduced:

-  Ambient Air Quality Standards is being implemented
-  Upgraded Vehicular Emission Standards
-  Euro 2 Type Approval
-  Awareness Program on Air pollution and its impact

