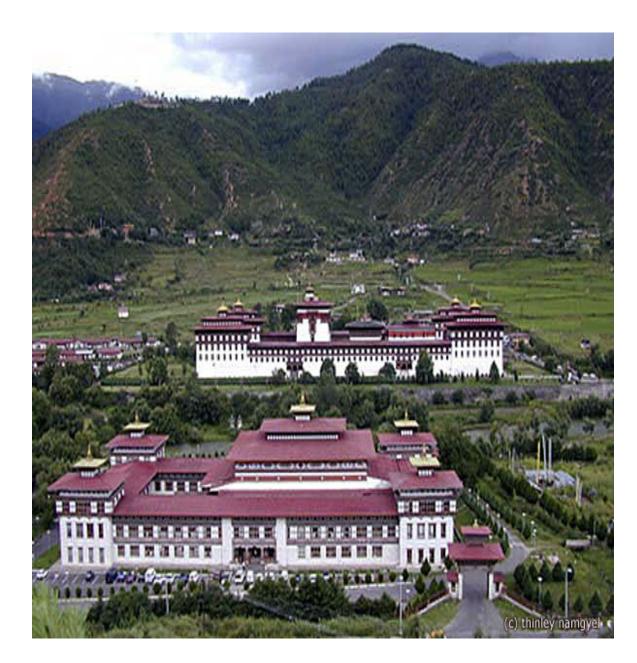
11th Regional EST Forum in Asia 02-05 October 2018 Ulaanbaatar, Mongolia



BHUTAN

Presentation Outline

- (a) Brief country profile
- (b) Implementation status of Bangkok 2020 Declaration
- (c) Critical challenges
- (d) Major plans and other initiatives



Brief Country Profile

- ***Area:** 38,394 sq. km
- Population: 681,720, of which 37.6% urban and 62.4% rural (2017 Census)
- Terrain : Mostly mountainous (591' 24,770' above MSL)
- ***Forest cover**: 72% approximately
- **Arable land**: About 8%
- ***Transport System**: Road transport and Air
- **Total Vehicle Number**: 97,072 (July 2018)
- **♦ Road Length (all types):** 11,177 Km (Jun 2015)
- *Airports: 1 International and 3 Domestic

Implementation status of Bangkok 2020 Declaration -1/3

(1) Avoid unnecessary travel and reduce distances:

- Most urban centers now have local area plans and follow integrated land use and transport planning process
- Established nationwide backbone fiber-optic network covering all 20 Districts and 201 (out of 205) Administrative Blocks (Gewogs) to promote ICT usage
- ✤ Achieved mobile penetration of about 98% and Internet penetration of over 90%
- ✤ G2C services and Mobile Apps are increasingly being availed for public services
- Teleconferencing facilities have been established for communication between local government and central government authorities

Implementation status of Bangkok Declaration - 2/3

- (2) Shift towards sustainable modes :
 - June 5 (coinciding with the World Environment Day) declared as "no vehicles day" in urban centers
 - Have plan for BRT but remains unimplemented due to cost of related infrastructure and buses
 - System of collecting parking fee in place in few bigger towns
 - Tax and duties increased on vehicle imports including green tax
- (3) Improve transport practices and technologies
 - Government is emphasizing on promoting hybrid and electric vehicles zero tax on import of electric vehicles
 - Have plans to install limited number of quick charging stations shortly with government sharing the cost of power consumption

Implementation status of Bangkok Declaration -3/3

(4) Cross-cutting strategies

- Introduced reserved seats for people with special needs in city buses
- Interest subsidy to bus operators providing services to remote areas
- Fuel quality is being monitored regularly
- Emission testing is mandatory for all vehicles [once every year] Emission standards are reviewed and up-graded periodically, and enforced
- Defined life span for passenger transport buses and taxis
- Minimum of third party insurance is mandatory by law
- Eight air quality monitoring stations established
- Zero tolerance on traffic violation has helped in reducing road crashes to e great extent

Critical challenges

- Rapidly growing vehicle ownership leading to congestion and other associated negative impacts (19,463 in 2000 to 97,072 as of July 2018)
- Transport sector responsible for over 45% of all energy-related emissions WHO guideline standards for Particulate Matters are exceeded regularly in Thimphu
- Inadequate and unreliable public transport and low level of non-motorized transport
- Low uptake of hybrid and electric vehicle ownership (about 99) only due to high initial cost, absence of quick charging stations along highways
- Absence of ITS in all forms
- Only parking fees in place in the form of congestion pricing
- PPP projects in the transport sector not feasible due to low user base
- Low institutional capacity and funding constraint to implement capital intensive projects such as cable car system, ropeways, waterways, rail-based transport system and BRT

Future plans

- Surface Transport policy is being revised and will be adopted soon
- Plan for procurement of additional buses for urban transport
- Further follow-up works needed on the pre-feasibility study undertaken by UNCRD in 2016
- Government has set an ambitious vision to promote electric vehicles through fiscal and non-fiscal incentives
- Network of quick charging stations along highways planned for implementation in the next 1-2 years
- Possible piloting of hybrid and electric buses in urban areas and replacement of government vehicles and taxis by electric vehicles in a phased manner
- Vehicle Emission Standards will be revised and vehicle emission control strategy implemented shortly to reduce pollution level
- Massive road network expansion program, especially those providing access to remote areas