# Seventh Regional EST Forum in Asia and

# Global Consultation on Sustainable Transport in the post 2015 Development Agenda

23-25 April 2013, Bali, Indonesia



# Environmentally Sustainable Transport in Maldives



Government
Of Republic
of Maldives

Represented by

Ministry of Transport and Communication,
Ministry of Environment and Energy,
Ministry of Housing and Infrastructure

### **Maldives**

- An archipelago of 26 atolls sparsely spread in the India Ocean in the North-South direction
- Territory about 90,000 sq.km with distance from the tip at north to south about 800km and width as 80km
- About 1% of the country is land
- Islands are smaller in size, primary modes of transport within islands are walking and cycling
- Population about 328,536 (2012) inhabits 192 of its 1,192 islands.
- The average height of land above MSL is 1.5m
- 193 islands inhabited, 93 islands are resorts, 55 are industrial
- 4 International Airports and 8 Domestic airports
- Maldivian speaks in "Dhivehi", and English is widely spoken



# Modes of Transport in Maldives

#### Sea transport

- Passenger ferries, 10knots, 60~100pax, scheduled in atolls
- Cargo passenger boats/Shuttles from Capital island to Atolls
- Passenger ferries 50~100 pax, 20knots, from Airport to Resorts
- Cargo boats from Airport/Port to Resorts
- Hired speed boats, 24pax, 30knots, direct service from island to island

#### Land transport

Walking, Cycling, Motor cycles, Cars, logistic vehicles

#### Air transport

- Scheduled service from Male International Airport to domestic airports
- Seaplanes from Male International Airport to Resorts, about 80% of tourist prefer seaplane for their transfer



# Integration of EST initiatives into Transport Policies

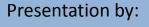
- More accessibility and mobility through integrated Public Transport Network
- Carbon neutral goals for 2020
- Controlled vehicle speeds to less than 30 km/h on all roads except few.
- Since islands are small, 90% of transport is walking
- Work to promote bio fuel in the vehicles/vessels
- Projects to reduce carbon emission and promote walking and cycling
- Projects to research and develop boats which use sustainable fuel
- Electronic information system, to reduce unwanted travel and make trips more useful
- No vehicle days and controlled vehicle islands to encourage walking and cycling



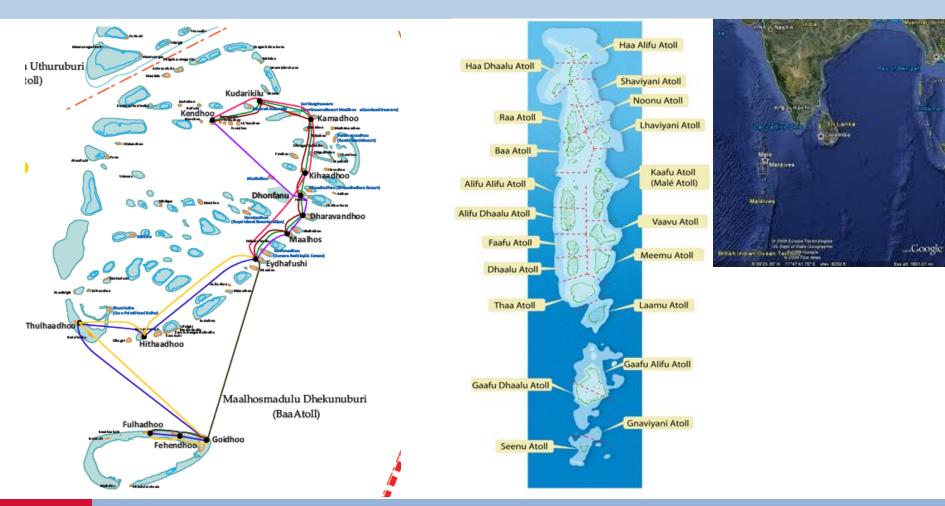
# Specific projects/Policies: Integrated Public Transport Network

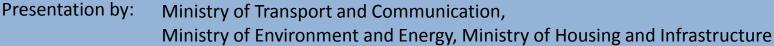
- The model was based on three components
  - Ferry, Terminal, Real estate (resort)
  - Divided into 7 regions
  - Started with temporary service in 2009
- Part of project failed, service quality different in different regions, need improvements in general.
- Now new model has been sought,
  - Options of public transport fund is being explored
  - Service provider to be provided subsidy based on trip length or time





# Baa Atoll (Typical Atoll)





# Specific projects... Maritime Master Plan

- Started in 2011
- Carried by ADB with assistance from AusAID in collaboration with Maldives government
- Consultation with City Councils and Atoll councils
- Economically, environmentally most effective routes of connectivity will be identified
- Locations for most expected international ports as well as local ports will be identified
- Completion by Mid 2013



#### Specific projects...

## **Environmentally Sustainable Vessels**

- An Endeavor in collaboration with UNOPS and Ministry of Transport is being made.
- Boats which use bio fuel, more environmentally friendly, less emission
- Solar power boats, with a battery pack, and motor to run, explored by private sector.
- Boat shows have been organized, every year/or every two years by collaborative efforts of government and private sector







#### Specific Policies...

## No Vehicle Days

- Vehicle ownership is increasing rapidly in Capital cities
- Male City is already congested with private cars, motor cycles, logistic vehicles
- Already regulations in force to limit number of cars in each island, however needs a regulation to establish the control mechanism.
- Public holidays, based on occasions, have been organized, not drive any vehicles on the road.
- Public comes out on the road walking and cycling,

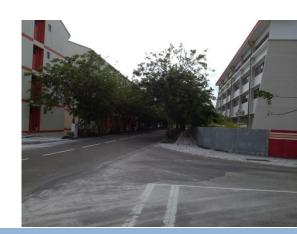


#### Specific Projects...

#### A new reclaimed island -Hulhumaale

- About 2km from Male City
- Developed based on a master plan
- Wider pedestrian pathways and cycle lanes are integrated in the planning
- Connectivity between Male City and Hulhumaale is by ferry and traffic demand is increasing due provision of more housing
- Government planning to connect islands by a fixed link







# Regulations and Standards

- Roadworthiness standard regulations
- Regulations for limiting number of land based vehicles in each island
- Regulations for vehicular emission control, currently for land based vehicles

# Thank you