



# Waste Management

REPUBLIC OF MALDIVES

# Challenges



## INCREASE IN GENERATION OF WASTE

- Increase in population
- Increase in amount of non-biodegradable waste
- Expansion of tourism industry



## GEOGRAPHICAL ISOLATION OF ISLANDS

- Difficulty in transportation of waste
- Difficulty in establishment of waste management systems



## INCREASE IN POPULATION DENSITY

- Small size of islands
- Limited land space

# POLICY



- ▶ Individual responsibility
- ▶ Household responsibility
- ▶ Corporate/ Industrial Responsibility
- ▶ Clinics and Hospitals
- ▶ Island Council Responsibility
- ▶ Atoll Council Responsibility
- ▶ Regional/ Nation Responsibility

# Island waste Management System

- ▶ Household level segregation
- ▶ Household Level Collection
- ▶ Segregation at IWMC
- ▶ Plastic Shredding
- ▶ Compacting/ Baling
- ▶ Glass crushing
- ▶ Composting





# Composting

- ▶ Kitchen waste
- ▶ Garden Waste
- ▶ 65-70 % of waste
- ▶ Reduction of waste to be transferred
- ▶ Composting Slab is present in all IWMCs
- ▶ Uses: Gardening; selling to resorts and agricultural islands



# Landfill and Incineration

- ▶ Aerobic landfill
- ▶ Anaerobic landfill
- ▶ Semi-aerobic landfill
- ▶ Leachate collection
- ▶ Direct waste & Incinerated waste

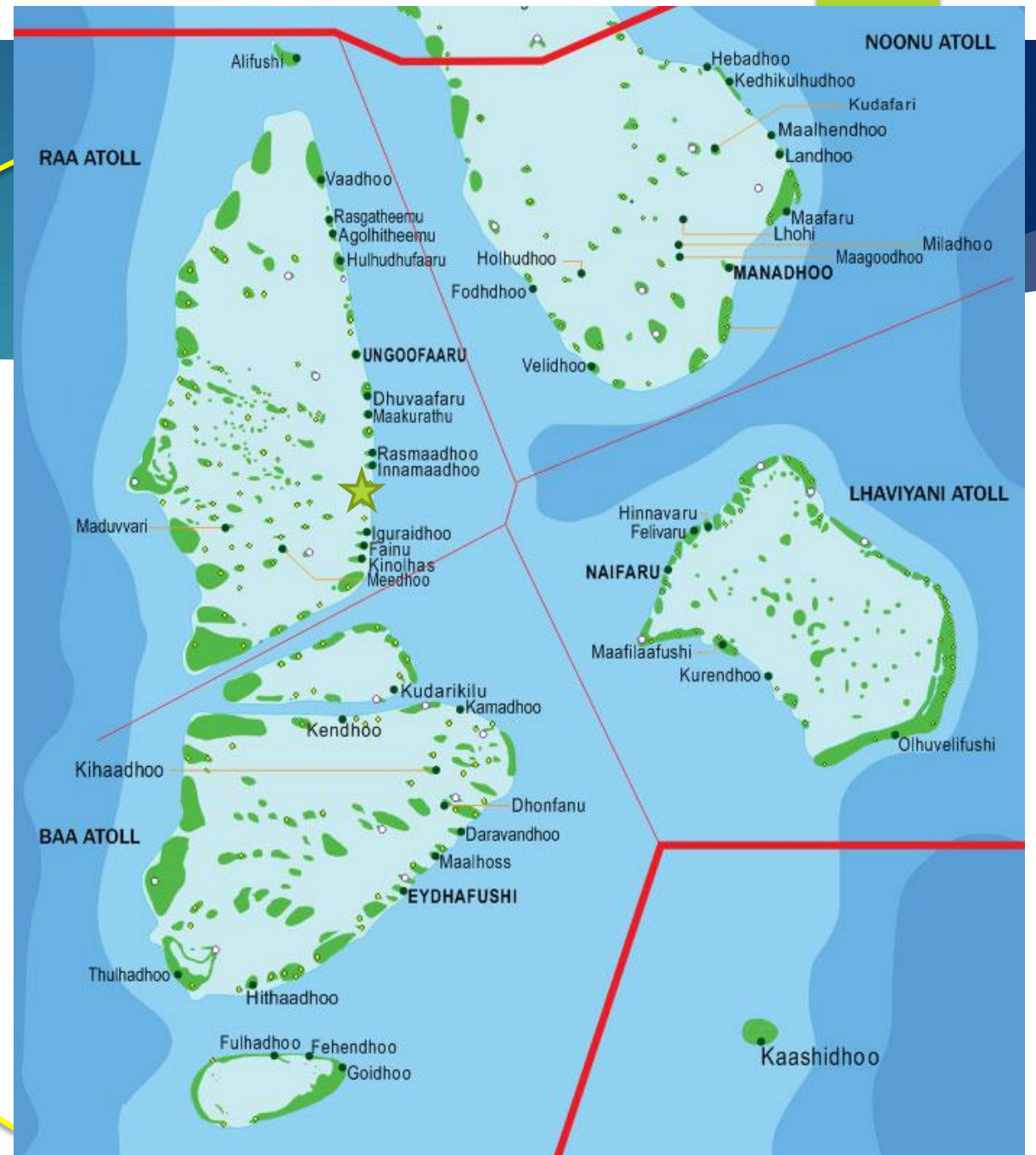
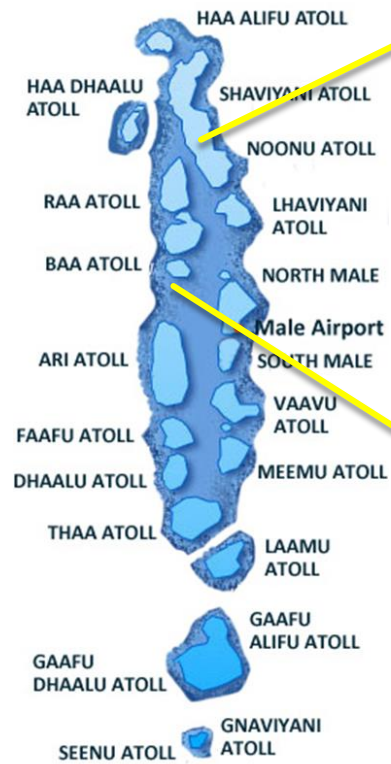


# Current Situation






# Vandhoo RWMF





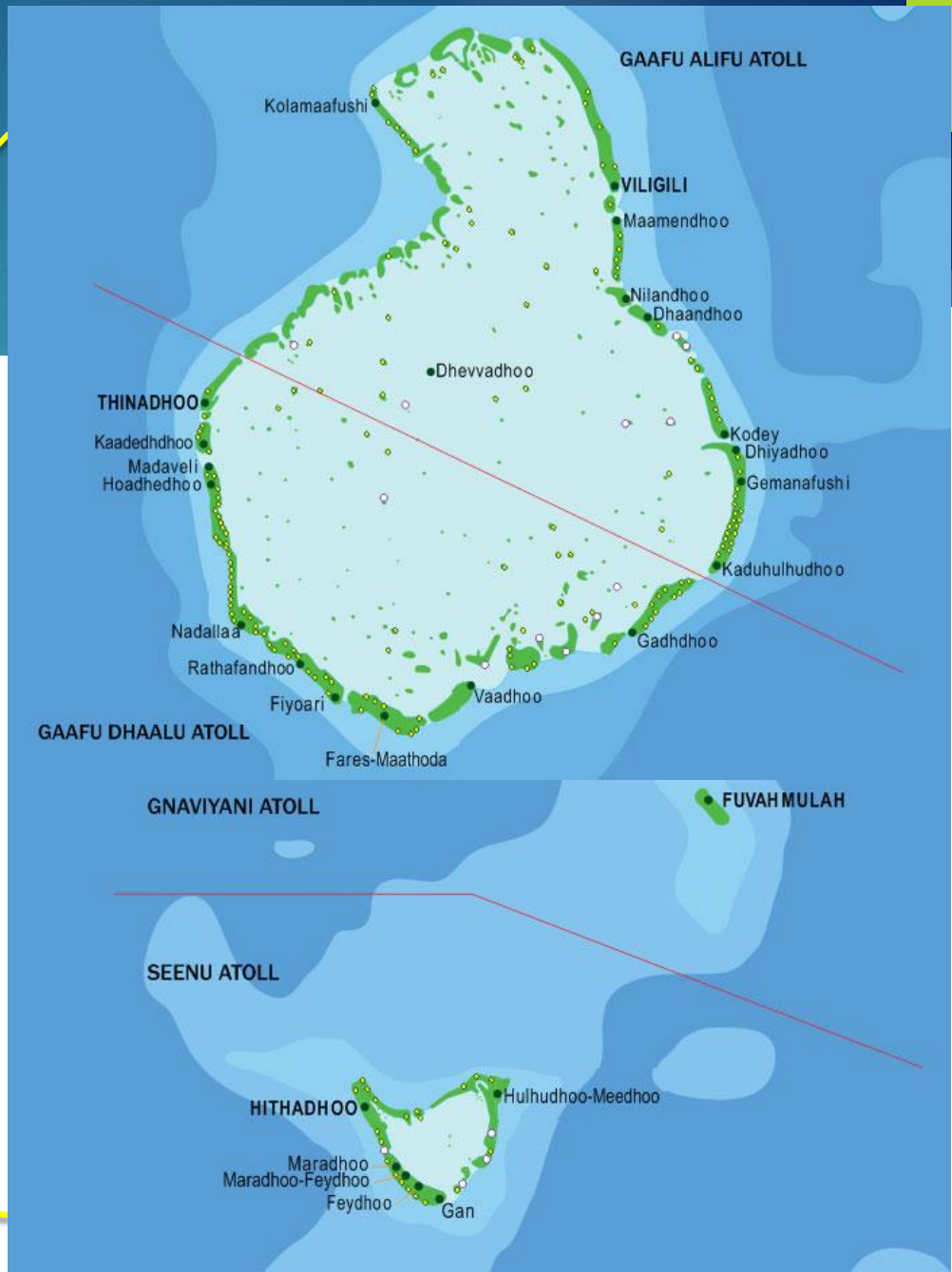
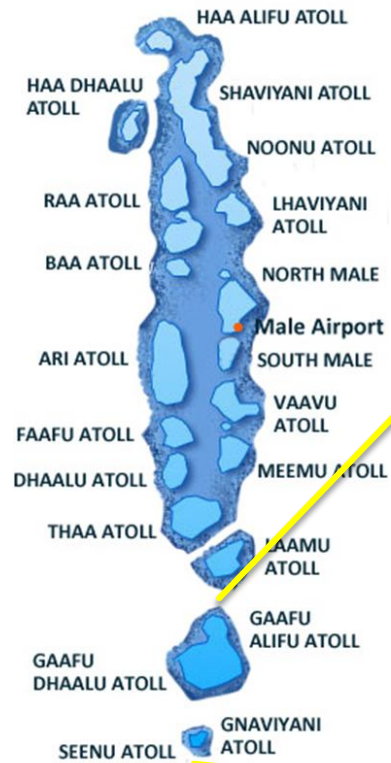
# 1<sup>st</sup> Pilot Regional Project

- ▶ Covers over 40 islands in 4 atolls (15% of the Population)
- ▶ Island waste management center in each island
- ▶ Organic waste managed at island level
  - ▶ Organic waste to Compost
- ▶ Non biodegradable waste transferred to Regional center
  - ▶ Metals and plastic compacted
  - ▶ Glass crushed to fine particles
- ▶ Waste to Energy  Incineration
- ▶ Ash landfilled

# Upper North RWMF

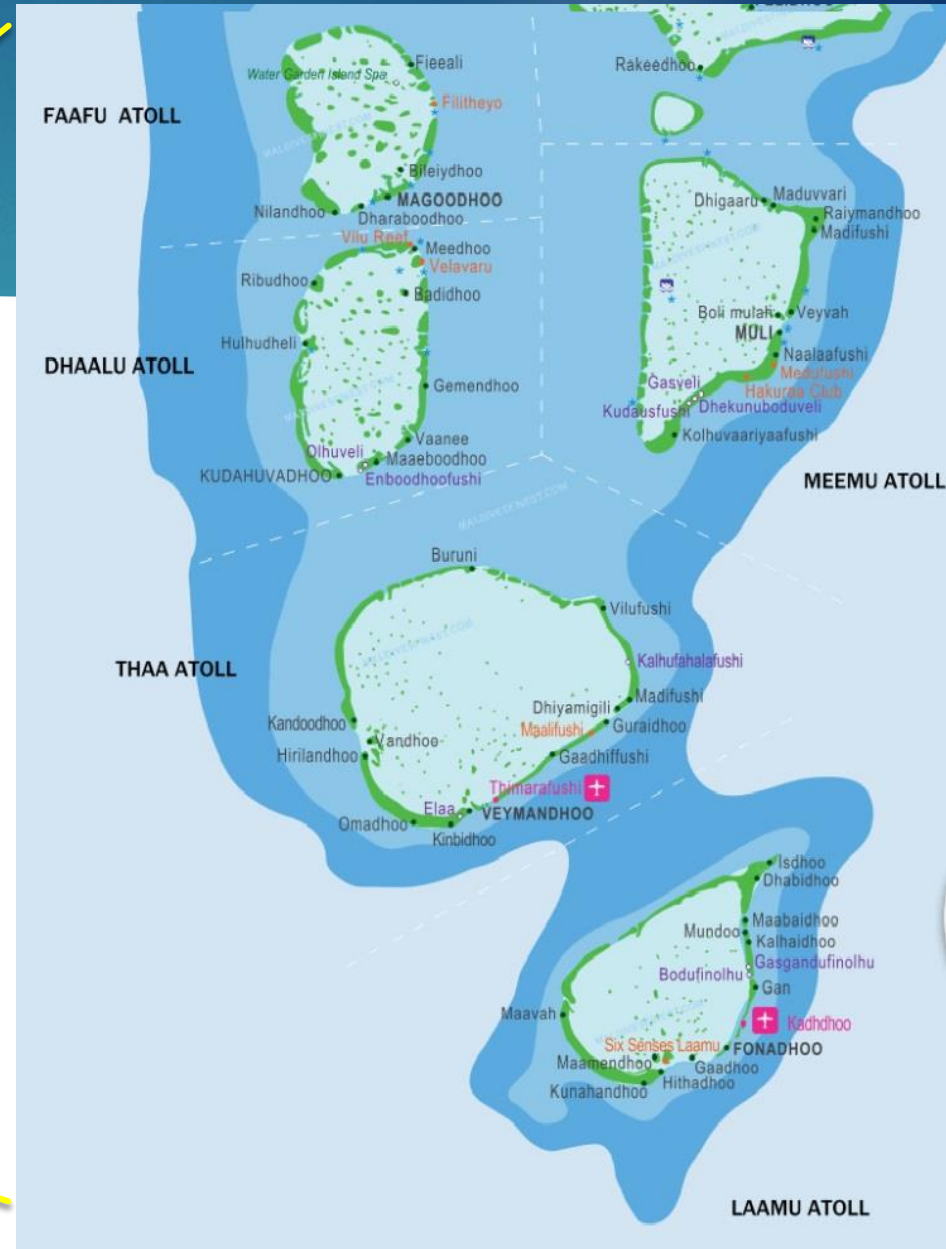
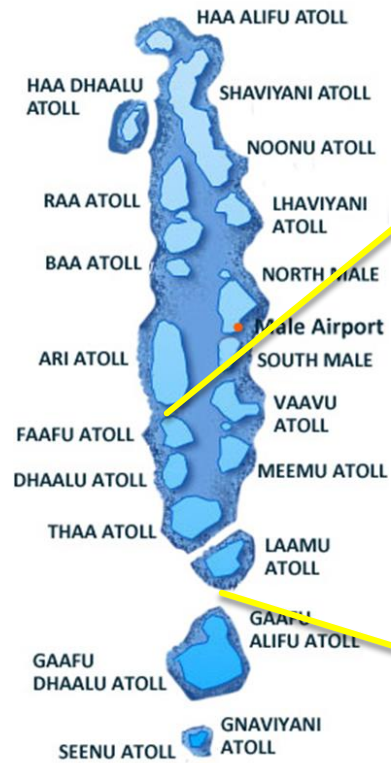


# Upper South RWMF





# South RWMF



# FUTURE PLANS

- ▶ Establish 7 Regional waste management facilities
  - ▶ Waste to Energy Option
- ▶ Establish Fee structure –Polluter Pay Principles
- ▶ Introduce Extended Producer Responsibility
- ▶ Public Awareness and WM Training
- ▶ New technologies and solutions for Medical and Hazardous Waste



Thank You