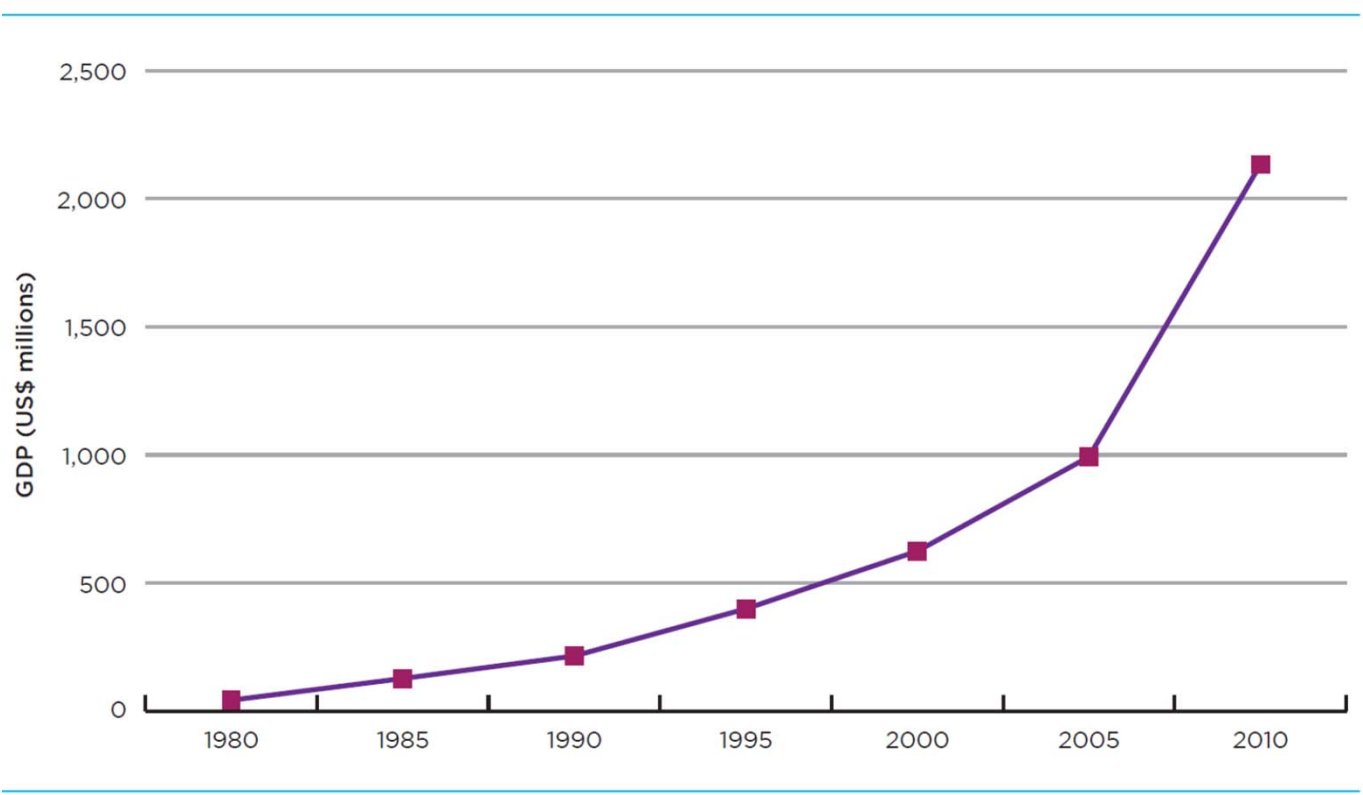


Climate Change Mitigation and Impact on Economy

Ali Shareef
Ministry of Environment & Energy
Maldives

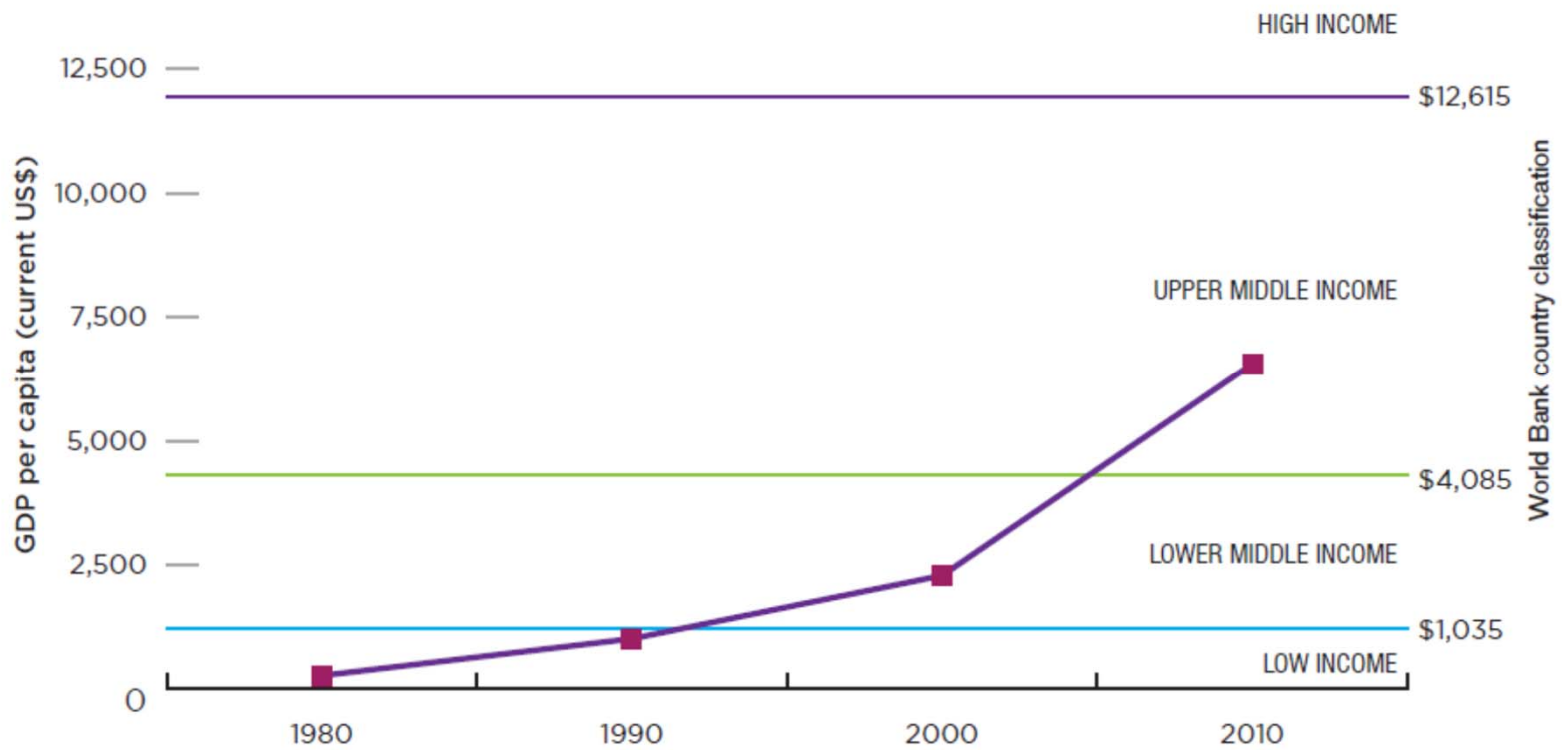


Where do we stand ?



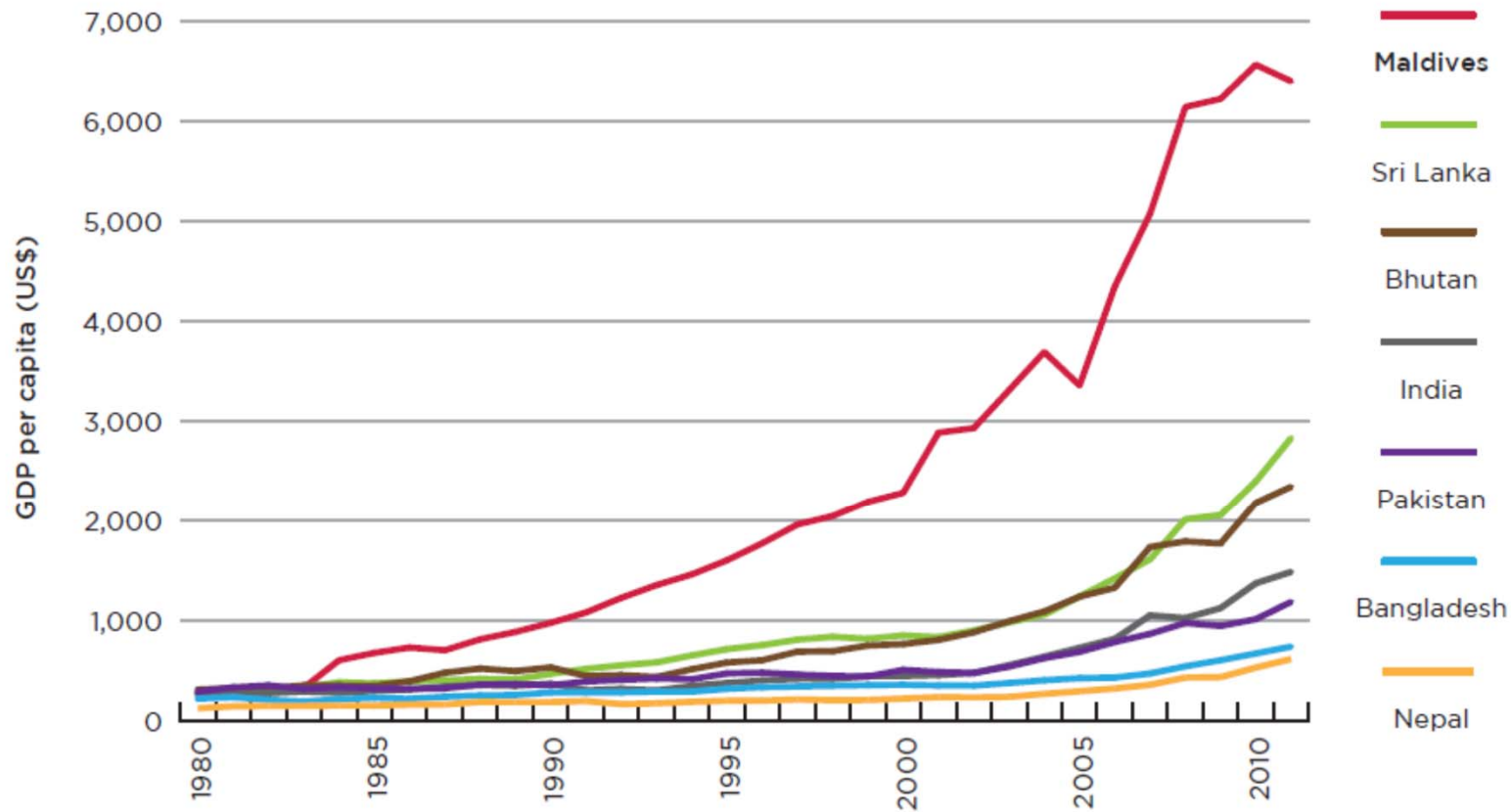
Source: Adapted from World Bank 2013

- GDP U\$ 42 mill., 1980- population 155,100
- 3 decades
- Now a U\$ 2.2 bill. economy with 350,759 population



- GDP per capita, now > USD 6,000
- Upper middle income country

The Maldives per capita GDP growth compared to South Asian countries 1980 - 2010

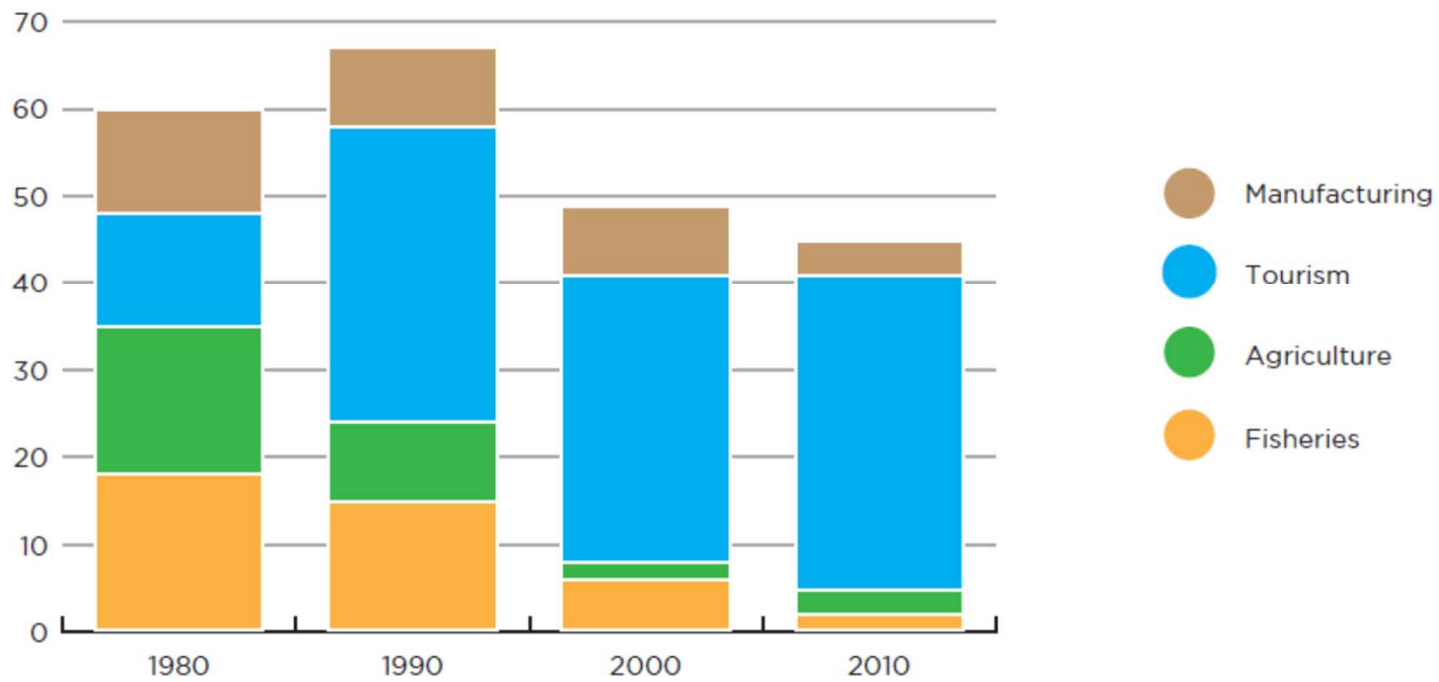


- High compared to the regional
- High disparity



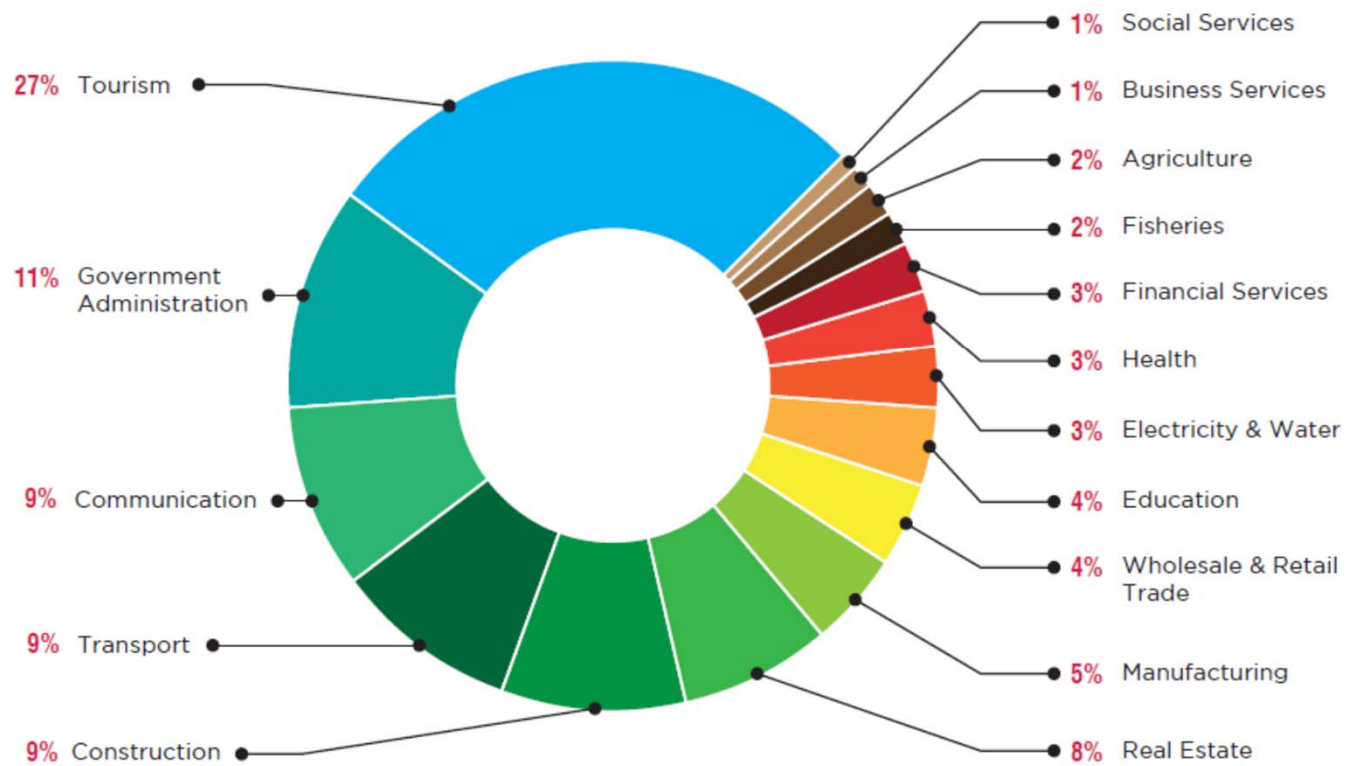
What is driving this?

Change in percentage share of GDP by key sectors 1980-2010



- Narrow economic base
- Tourism dominating
- Over dependent now

Percentage shares of GDP by sectors 2012 (at 2003 constant prices)



- Now 27% of the GDP share

A tropical beach scene featuring a wide expanse of white sand in the foreground, transitioning into shallow turquoise water with visible ripples. In the distance, a row of overwater bungalows with thatched roofs is visible on the right side. The sky is a clear, deep blue. The overall scene is bright and serene.

What are the commodities ?



Beach Bungulows



Water villas



Under water rooms and restaurants



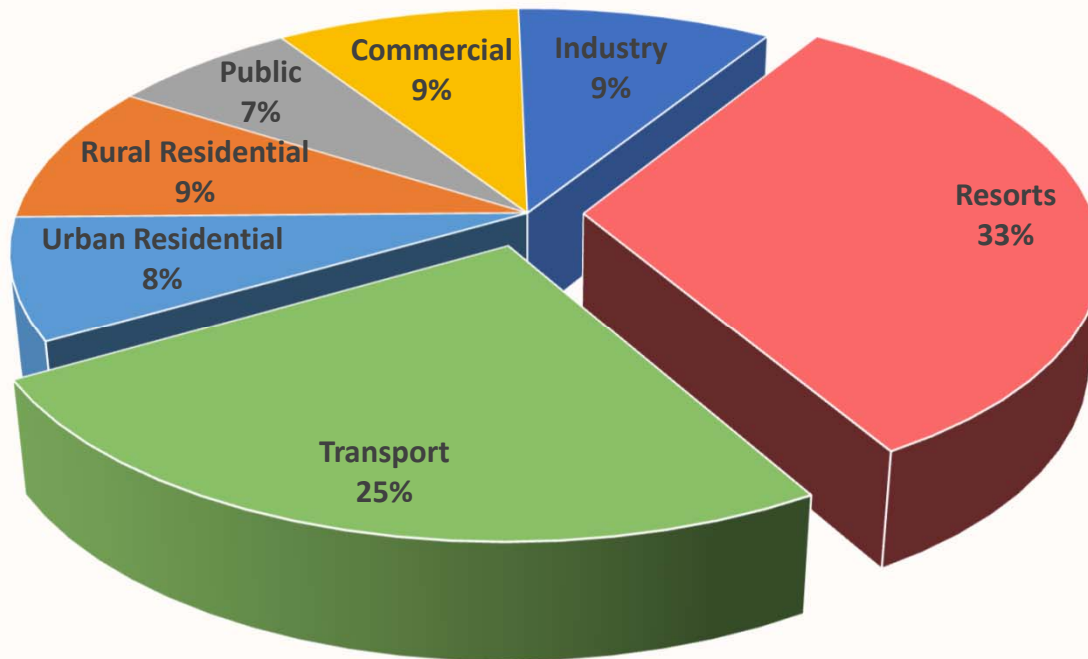
Beaches and crystal
clear waters



A different world

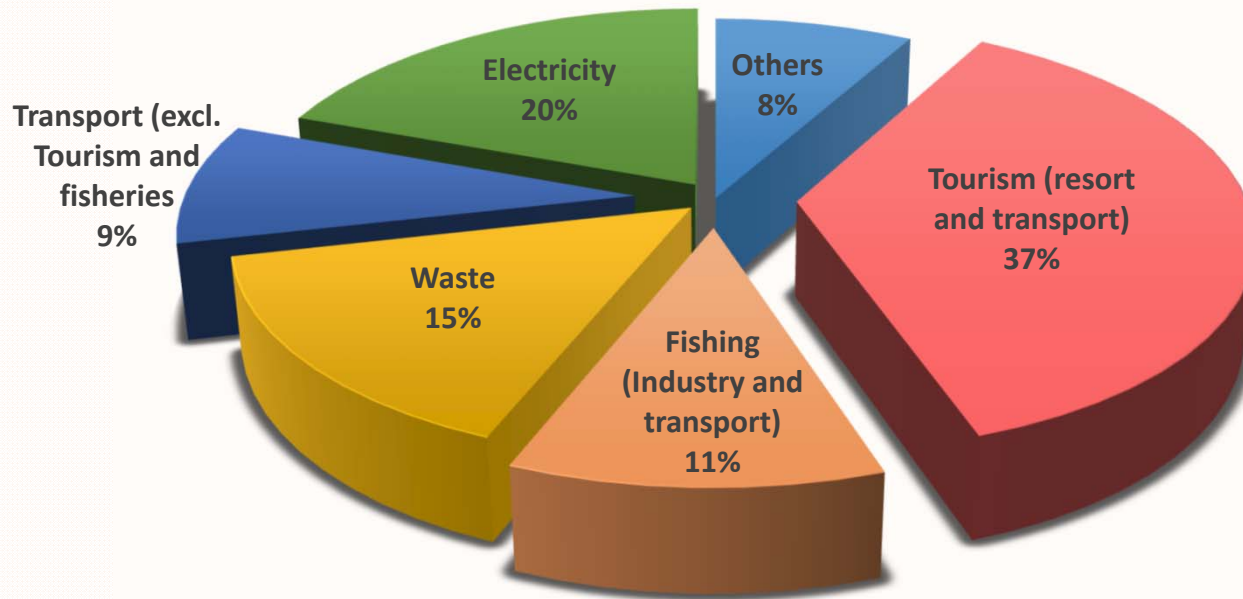
What are the implications

Energy consumption by sectors



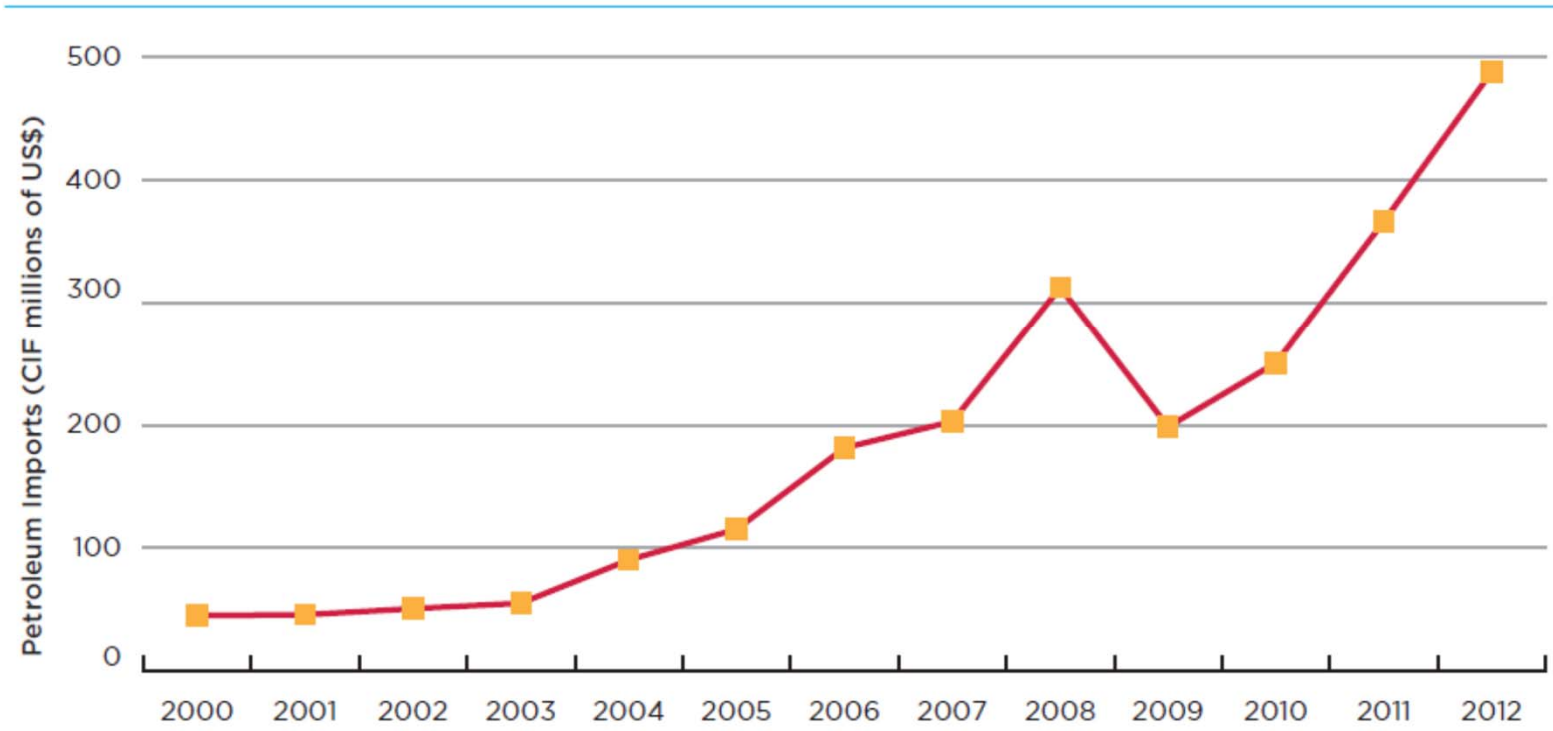
- Energy consumption by tourism sector is high
- Power use, transportation, leisure activities
- Increase in number of airports
- Worlds largest sea plane fleet

GHG contributions

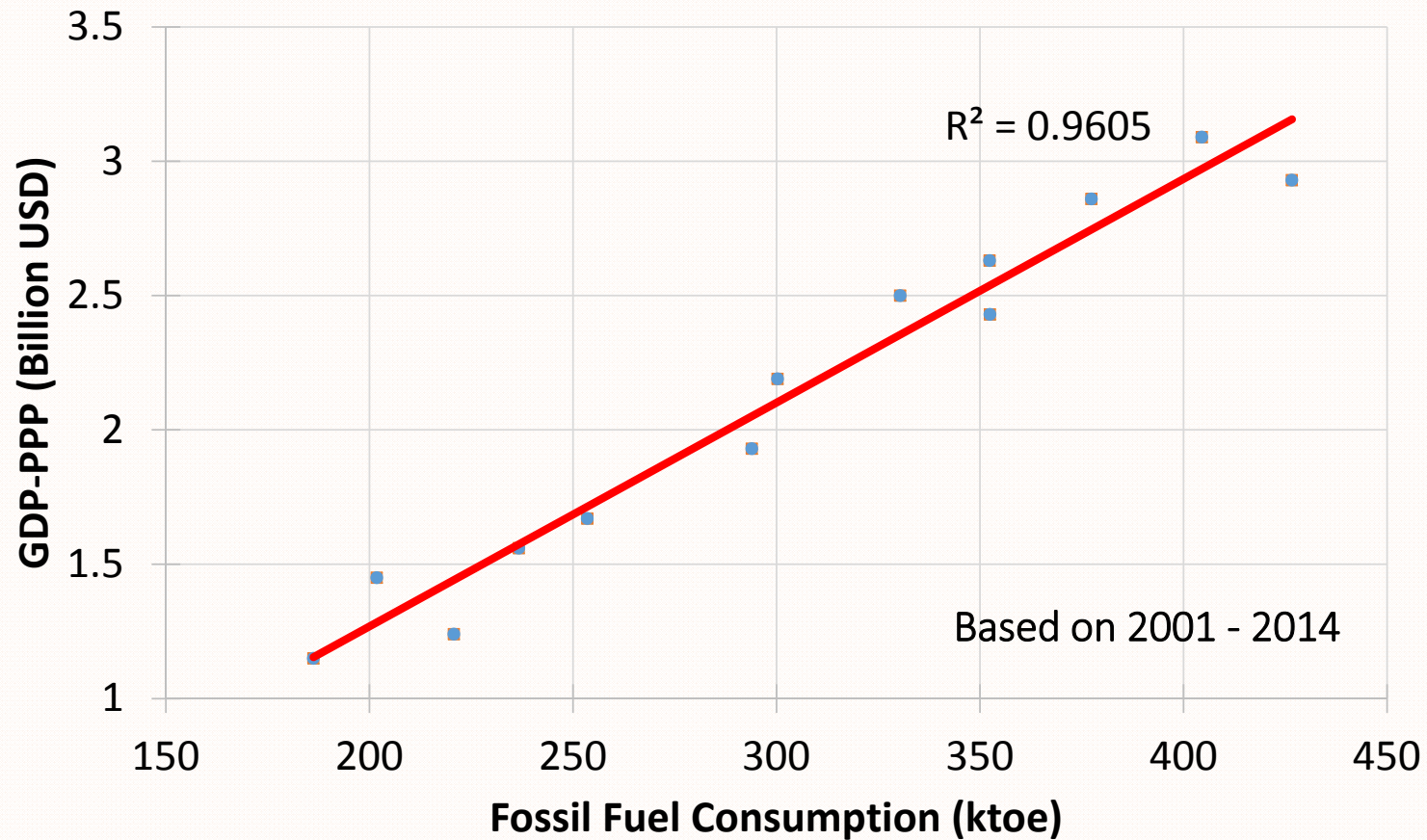


- 1.1 million tonnes of CO₂ – 2009
- 2 million tonnes by 2020
- Tourism and transport – Main
- Solely fossil fuel based
- 0.003% of the global share

Petroleum product imports 2000-2012



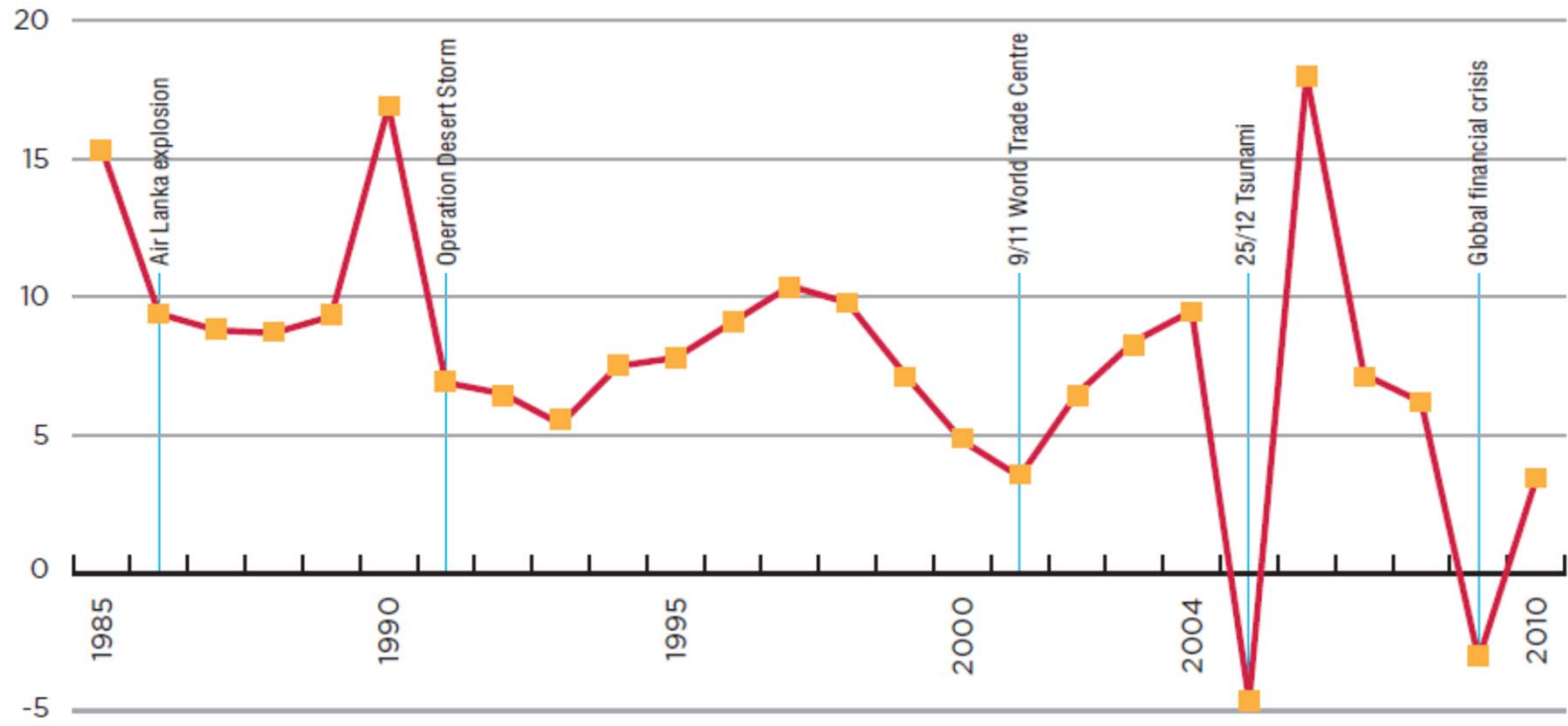
Strong bond !!!





How vulnerable ?

Real GDP growth at 1995 constant prices 1985-2010

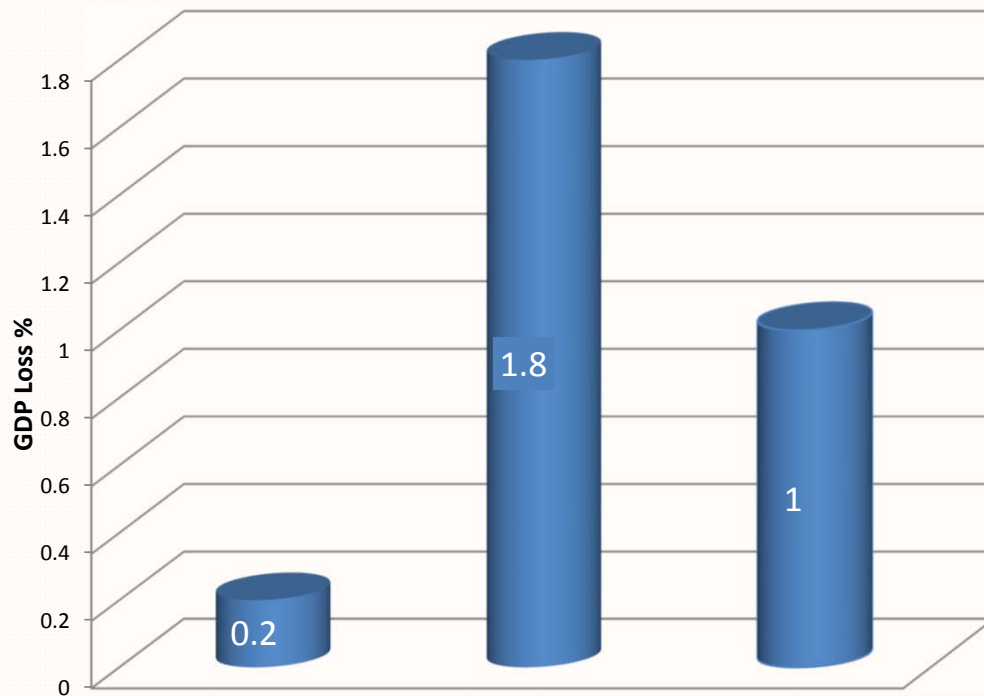


- Vulnerable to external shocks and natural disasters

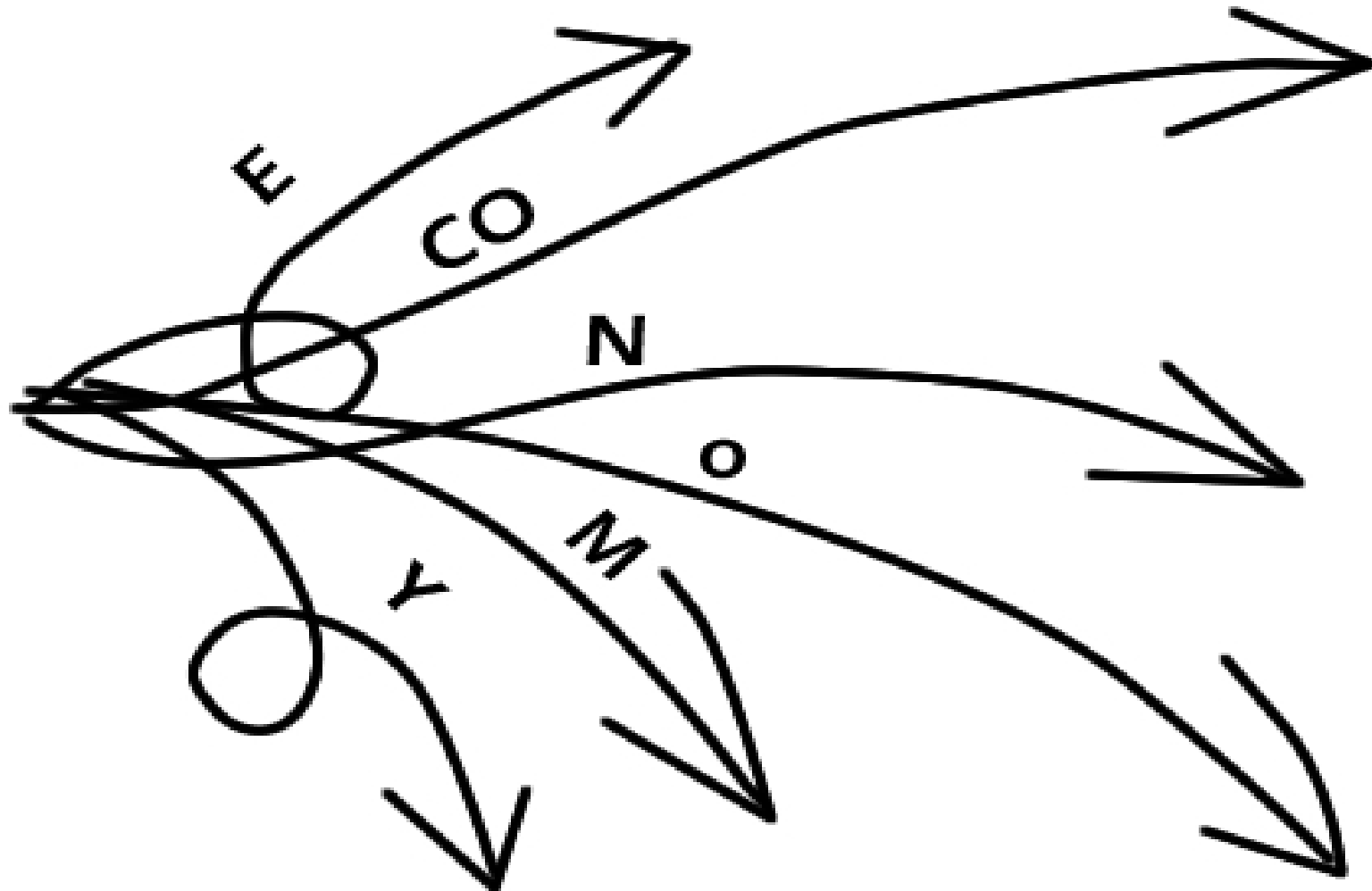
What are the drawbacks

- The main contribution to the economy is still tourism
- Heavy dependence on fossil fuel
 - Energy consumption
 - Transportation – sea and aviation
- Sensitive to international aviation taxes or carbon taxes
 - Will impact the travelers
 - All the services are dependent on fuel
- Need to maintain the world class quality of standard
 - Some RE technology compromise the aesthetics
 - Small islands with limited space
- No proven and feasible technology on the bench yet
 - Technology still in R&D
 - Some available technologies not applicable to the environment
 - Aviation – still no proven solution

GDP Losses



- The International center for Trade and Sustainable Development (ICTSD) 2010
- Study on trade implications of regulating emissions from international transport
- A levy of US\$ 15-30 per ton of CO₂ on international maritime causes GDP losses in the range 0.2-1.8 percent for Small Islands Developing states (SIDs) due to reduction of maritime trade between these countries and EU alone.
- Response measures by non-EU, GDP losses will be tremendous
- CEPS 2015, in Maldives, summing up maritime and aviation will lead to a GDP loss of 0.182%



A possible remedy!!!

Economic diversification



- Maximize export value from sustainable fisheries
 - Ensure ecological sustainability of tuna fishery
 - Invest in targeted mariculture



Economic diversification



- Increase value added tuna exports
- Incentivize fisheries business
- Greater utilization of the EEZ



Economic diversification



- Extended port facilities
 - Unique location in the Indian Ocean
 - Transshipment port

What are the gaps that need to be addressed

- Assessment and quantifying of the impacts on the Maldives
 - Assessments over the sectors, agriculture, fisheries, tourism, import export etc...
 - Linkages with what is being undertaken in various other foras such as WTO, IMO, ICAO,
 - Assessment over the 3 dimensions of sustainable development
- Establishment of methodologies and tools for impact assessments
- Proper use of economic modelling for further tune the policies and strategies
- Capacity building, knowledge and technology transfer



Thank you !!!