Overview
11,240 km Coastline
Supporting 400 million people

Fish production (2011)

Tourism scope

<table>
<thead>
<tr>
<th>Country</th>
<th>Earnings in billion US$</th>
<th>Coastline (in km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maldives</td>
<td>1.0</td>
<td>644</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>0.07153</td>
<td>710</td>
</tr>
<tr>
<td>India</td>
<td>10.9</td>
<td>7,300</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>0.4436</td>
<td>1,340</td>
</tr>
<tr>
<td>Pakistan</td>
<td>-</td>
<td>1,046</td>
</tr>
</tbody>
</table>
Livelihoods

Fisheries

- Approx. 5 million tonnes of fish production annually; 3.3 million tonnes in India

- About 6 lakh people in Sri Lanka employed directly or indirectly in fisheries;

- 70% of the coastal population in Bangladesh are artisan fishers and small farmers
Livelihoods

Tourism

- Coastal tourism approx. $15 billion industry.
- 58% of the workforce dependent on the tourism in Maldives
- About one million tourists visited Maldives in 2013; targets a tourist footfall of 1.6 million by 2017
- About half a million people employed by tourism sector in Sri Lanka.
- In 2012, more than one million tourists visited Sri Lanka. Targeted tourist footfall by 2016 is 2.5 million
Coastal Threats

- Population growth and urbanisation
- Industrial/developmental activity
- Tourism
- Habitat destruction
- Climate change and natural hazards
Population

Population along coasts increasing across the world; increasing in South Asia as well, but in a different trend.
Urbanisation and sewage pollution

• Every day over 5 billion litres of untreated sewage enters South Asian waters

• Of 4,067 million litres of domestic sewage generated per day along coastal districts in India 80% enters the sea untreated
Industries along Coasts

- 28 thermal power plants with 20,000 MW capacity already installed along the Indian coast
- 59 more in the pipeline with a capacity of about 100,000 MW
- 50% of the proposed power plants along coasts of Tamil Nadu and Andhra Pradesh
Since 1992, 102 ports and related projects have been granted environmental clearance.

Another 76 are in the pipeline.
Shipbreaking

- About 68% of global ship breaking activities are concentrated in Bangladesh, India and Pakistan.
- Bangladesh alone accounts for 34% of all shipbreaking in South Asia.
- Claims suggest close to 200,000 people dependent on shipbreaking directly or otherwise.
- Pollution and labour concerns.
Pollution Burden of Shipbreaking

<table>
<thead>
<tr>
<th>Hazardous Material</th>
<th>Accumulation amount (tons)</th>
<th>Remain at yard/beach (tons)</th>
<th>Sold/ Reused (tons)</th>
<th>Formal waste disposal (tons)</th>
<th>Unknown/informal waste disposal (tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbestos</td>
<td>79,000</td>
<td>37,525</td>
<td>0</td>
<td>3,950</td>
<td>37,525</td>
</tr>
<tr>
<td>PCBs</td>
<td>240,000</td>
<td>24,000</td>
<td>216,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ODS</td>
<td>210,000</td>
<td>42,000</td>
<td>2,100</td>
<td>0</td>
<td>165,900</td>
</tr>
<tr>
<td>Paints</td>
<td>69,200</td>
<td>3,460</td>
<td>62,280</td>
<td>0</td>
<td>3,460</td>
</tr>
<tr>
<td>Heavy Metals</td>
<td>678</td>
<td>169.5</td>
<td>508.5</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

World Bank 2010 estimates for Bangladesh
Habitat Destruction

- Supports 6.8% of global mangroves and 6% of coral habitat

- 16% of the mangrove cover in South Asia has been lost/degraded in the last 25 years; 11% mangroves destroyed in Bangladesh for shrimp farming

- One third to half of the coral reefs of South Asia are now effectively dead, 30% more are threatened; By 2100, about 90 percent of the coral reefs could disappear
Climate change and Coasts

- During 1901 to 2010, global mean sea level rose 0.19 m; mean rate of global averaged sea level rise was 3.2 mm/year

- High population density in low lying areas

- Vulnerability to cyclones and flooding

- Erosion and salinity increase

- Limited options for relocating populations
How are we trying to manage Coasts?

• Different countries following different methods of defining, demarcating and regulating their coastal zones

• India and Sri Lanka has a distance-based definition of coastal zone; Bangladesh follows a multi-criteria vulnerability based definition
How are we trying to manage Coasts?

India has a prohibitive list for coastal development; Sri Lanka follows a case-by-case prohibitive approach; Bangladesh and Pakistan has no specific regulation for coastal projects – EA based regulatory regime in all

India has provision to make State Coastal Zone Management Plans; in Bangladesh District Development Plans; in Sri Lanka Special Area Management Plans – very few have been made
What are the Challenges?

- Regulating and managing coastal development? (definition, demarcation, mapping, EA, SIA etc.)

- How do we ensure that the livelihoods dependent on the coasts are enhanced and not compromised?

- How do we integrate and manage climate change in coastal development?

- What and how can South Asia learn from each other?