Mauritius’ Ocean Economy: assessing the potential for sustainable expansion

Mauritius, September 1-2, 2016
Key messages

1. Ocean related activities are a more important component of the Mauritius economy than generally thought

2. The Ocean Economy (OE) holds an untapped potential in several sectors other than the traditional tourism activities, and can generate important benefits:
   - GDP Growth
   - Employment, poverty reduction
   - Carbon emission reduction, energy security

3. Tapping into the OE potential requires:
   - Sizeable investments
   - Careful management of environmental resources
   - Integrating climate change in project planning and design
The role of the Ocean Economy: possibly larger than what national accounts indicate.

Significance of the Ocean Economy in percent of 2015 GDP

- Base: 9.64%
- Indirect effects: demand: 12.25%
- Indirect effects: supply: 19.15%
OE expansion potential: largely untapped so far

Value added (current Rs million)

Source: Statistics Mauritius
Key study questions on the OE

1. Making the best of the OE
   - **Top-down goal seeking:** Investments needed to achieve defined growth targets (e.g. GDP, Jobs)
   - **Bottom-up:** growth achievable for a given investment level

2. Making it happen
   - Overall enabling context (e.g. international demand, global energy prices, etc.)
   - Key policy/institutional reforms

3. Making it last
   - Environmental sustainability
   - Resilience to climate change
## Scope of expansion analysis

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Overall economic analysis</th>
<th>Deep dive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fishing, Seafood Processing and Aquaculture</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Energy</td>
<td></td>
<td></td>
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<tr>
<td>Deep Ocean Water Applications (DOWA)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Marine Renewable Energies</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Marine ICT</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Seaport-related Activities</td>
<td>✓</td>
<td></td>
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<tr>
<td>Marine Tourism and Leisure</td>
<td>✓</td>
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<tr>
<td>Other Ocean economy activities</td>
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<tr>
<td>Ocean Knowledge</td>
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<tr>
<td>Seabed Exploration for Hydrocarbon &amp; Minerals</td>
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<tr>
<td>Marine Finance</td>
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<tr>
<td>Marine Biotechnology</td>
<td>✓</td>
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<tr>
<td>Ship Registration</td>
<td>✓</td>
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ASSESSING THE OE POTENTIAL
Top-down assessment: doubling the size of the OE has important benefits for the rest of the economy...

![Bar chart showing total value added, Billion MRs. The categories are Base, OE Doubling, and OE Doubling + indirect effect. The values are B 38.9 MRs for OE Doubling + indirect effect, B 40.7 MRs for OE Doubling, and B 38.9 MRs for Base.](#)
..but it also entails higher investment needs to conserve natural capital
## Bottom-up assessment of the investment potential in the OE

<table>
<thead>
<tr>
<th>Sector</th>
<th>Investment areas</th>
<th>US$ Million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fishery, Aquaculture</td>
<td>pristine lagoons, banks, aquaculture, seafood hubs (both institutional reforms and infrastructure).</td>
<td>265</td>
</tr>
<tr>
<td>Port</td>
<td>Container terminal gate complex, MCT Breakwater 2nd oil jetty at Fort George, Quay 1 Reconstruction, Quay A-D redevelopment, Cruise Terminal, Caudan Breakwater, Fort William breakwater and Fishing Quay</td>
<td>203</td>
</tr>
<tr>
<td>Energy</td>
<td>Offshore wind, wave energy, DOWA.</td>
<td>235</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>703</td>
</tr>
</tbody>
</table>
Such a program of OE investment may boost growth by an additional 2.3% per year.
...and can have important benefits for lower income groups…
...for employment..

Employment associated to Ocean Economy investment program
(nr of workers, annual average)
…for carbon emissions…

Carbon emissions from power sector (Tons CO2_e/ year)

21% Carbon emission reduction

- Business as usual
- 17.5% Offshore Wind
- 3.5% Wave
Reduction in import of electricity feedstock achievable through expansion of wind generation (up to 17.5% of total) and wave (up to 4% of the total)
MAKING IT HAPPEN, MAKING IT LAST
A large boost of investment is needed
Adding climate resilience to project design is key.
..and so is investing in the conservation of natural capital

Marine Spatial Planning: Global Examples of zoning design approach

Annex slides
The Ocean Economy already plays an important role.
OE depends crucially on investment in natural capital conservation.