Session 5: Potential Use for Policy Applications of the SEEA (Water) in Malaysia

Vishalini Arumugam
Principal Assistant Director
Environment & Natural Resources Economic Section
Economic Planning Unit, Prime Minister’s Department
Malaysia
Background

- Malaysia is rich in water resources, with an average annual rainfall of 2,500 mm for Peninsular Malaysia, 3,800 mm for Sarawak and 2,600 mm for Sabah
- Despite this abundance, Malaysia regularly faces excess water (floods) and water shortage (droughts) issues
- Supply issues: decentralized water services sector, unsustainable tariffs, huge investments required to develop the water supply and sewerage infrastructure, inefficient operation, high non-revenue water (NRW) losses and water quality deterioration
- Demand issues: rapid increase in development and population size, and urbanization
- Currently, Malaysia is transforming from a "Supply" Management to a "Water Demand" Management approach
Malaysia’s Water Policy Objectives

Improving water supply & sanitation services
(SDG targets 6.1, 6.2 and 6.3)

Managing water supply and demand
(SDG targets 6.3, 6.4 and 6.5)

Conservation of the environment & water resources
(SDG targets 6.3 and 6.6)

Adapting to floods and droughts
(SDG targets 6.5 and 6.6)
# Application of Water Accounts to Policy

<table>
<thead>
<tr>
<th>Target</th>
<th>Statistics to inform proposed SDG Indicators</th>
<th>Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>6.3</strong>: Water quality, wastewater treatment &amp; re-use</td>
<td><strong>Volumes of pollution release</strong>: The release of pollutants by different economic activities and the pathway of their release&lt;br&gt;<strong>Volumes of wastewater and re-used water</strong>: Flows of wastewater between economic units and to the environment</td>
<td>Emissions account</td>
</tr>
<tr>
<td><strong>6.4</strong>: Water efficiency and sustainable withdrawals</td>
<td><strong>Water use</strong>: Data on water abstraction and final water use (for the economy as a whole and by industry)&lt;br&gt;<strong>Sustainability of withdrawals</strong>: Data on total renewable water resources and total water withdrawals</td>
<td>PSUT&lt;br&gt;Asset Accounts PSUT</td>
</tr>
<tr>
<td><strong>6.6</strong>: Water ecosystems</td>
<td><strong>Wetlands &amp; forests</strong>: Extent, condition and provision of services&lt;br&gt;Stocks of water at different points in time&lt;br&gt;Time series showing precipitation and evapotranspiration patterns</td>
<td>Ecosystem Accounts&lt;br&gt;Asset Accounts Asset accounts</td>
</tr>
</tbody>
</table>
## Application of Water Accounts to Policy

<table>
<thead>
<tr>
<th>Target</th>
<th>Contextual, policy relevant information on SDG Targets</th>
<th>Accounts</th>
</tr>
</thead>
</table>
| 6.1 & 6.2: Drinking water and sanitation | **Physical information**: Supply of water to households, generation of wastewater by households, water-system characteristics affecting households  
**Monetary information**: Expenditure on household water supply & sanitation, expenditures by the Government and investment in fixed capital for water supply and sanitation | PSUT |
| 6.5: Integrated Water Resource Management (IWRM) | Capital formation for managing water resources | SEEA-Water hybrid accounts |
Potential use of SEEA Water for policy and planning

A few examples relevant to Malaysia:

- To assess current water resource-related policies and ensure that they respond to current and future water challenges
- To identify the causes of available surface water resource depletion (in terms of quantity and quality)
- To identify grey areas and gaps in knowledge with regard to groundwater resources for affirmative decisions and the development of appropriate policies
Terima kasih