

36<sup>th</sup> Singapore Economic Roundtable

# SPECIAL SESSION ON SUSTAINABILITY

**ASIF IQBAL SIDDIQUI** *MSS, MBA, PhD*

*Senior Visiting Scholar, Economic Growth Centre  
Nanyang technological University*





# OUTLINE

- ▶ Sustainable development in Singapore
- ▶ Revisiting the concept & measures of sustainability
- ▶ Practical approaches to sustainability: top down and bottom up approaches
- ▶ The UN sustainable development goals and Singapore's response
- ▶ Corporate sustainability and sustainable investment in Singapore
- ▶ **Capacity gap** in public and private sector
- ▶ Q&A and open discussion

# SUSTAINABLE DEVELOPMENT IN SINGAPORE: A HISTORIC REFLECTION

*“Sustainable development has been integral to the Singapore Story .... Since our founding, we have designed policies with long term sustainability in mind.”* PM Lee, VNR 2018



# SUSTAINABLE DEVELOPMENT & SUSTAINABILITY

- ❑ "Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs." (WCED 1987)
- ❑ 100s of definitions of sustainability in literature depicting significant interest as well as ambiguity (Pezzey, 1992)
- ❑ Environmentally sustainable economic development aimed to enhance human welfare (WCED 1992)

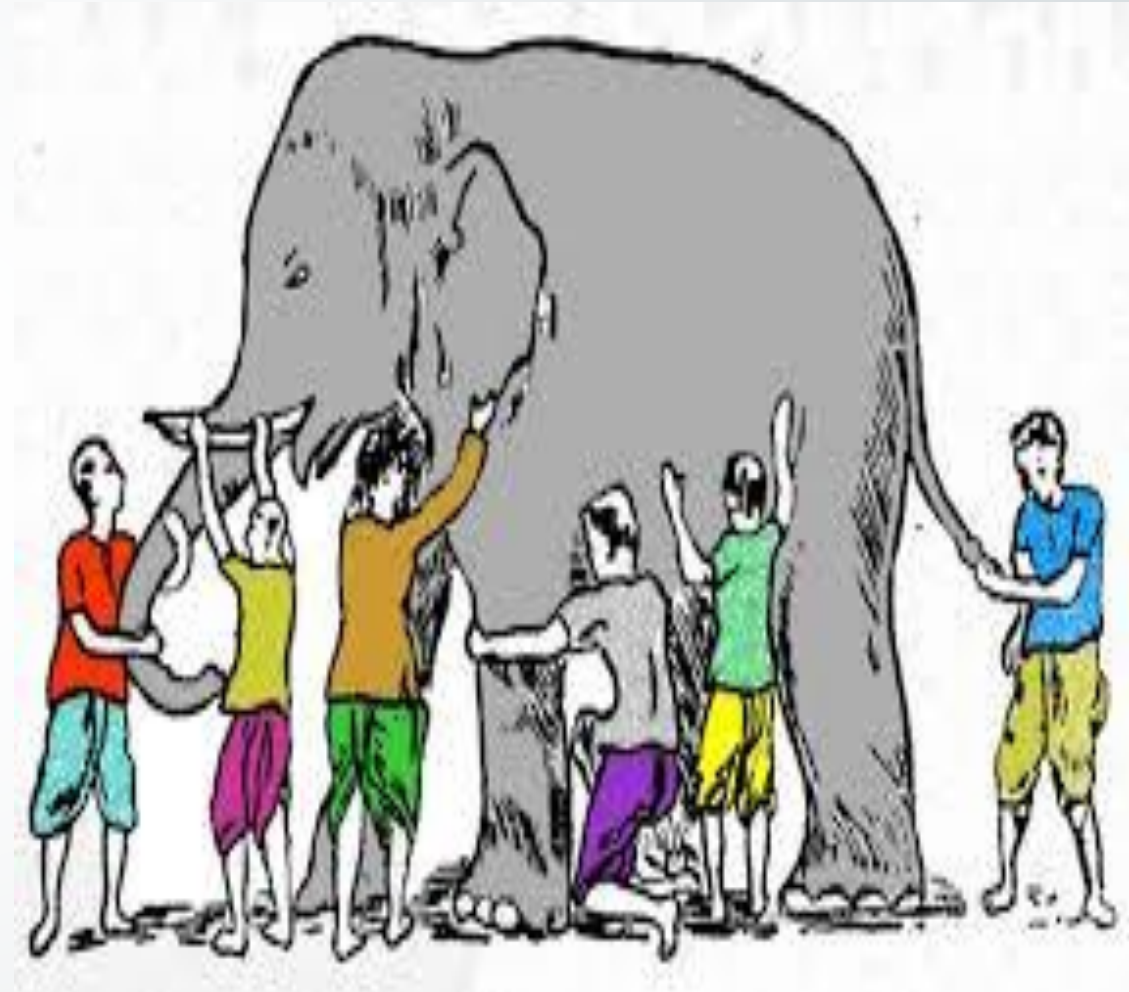


\*Pezzey, J. (1992). *Sustainable development concepts: an economic analysis*.  
World Bank Environment Paper No. 2.

# SUSTAINABLE DEVELOPMENT & SUSTAINABILITY

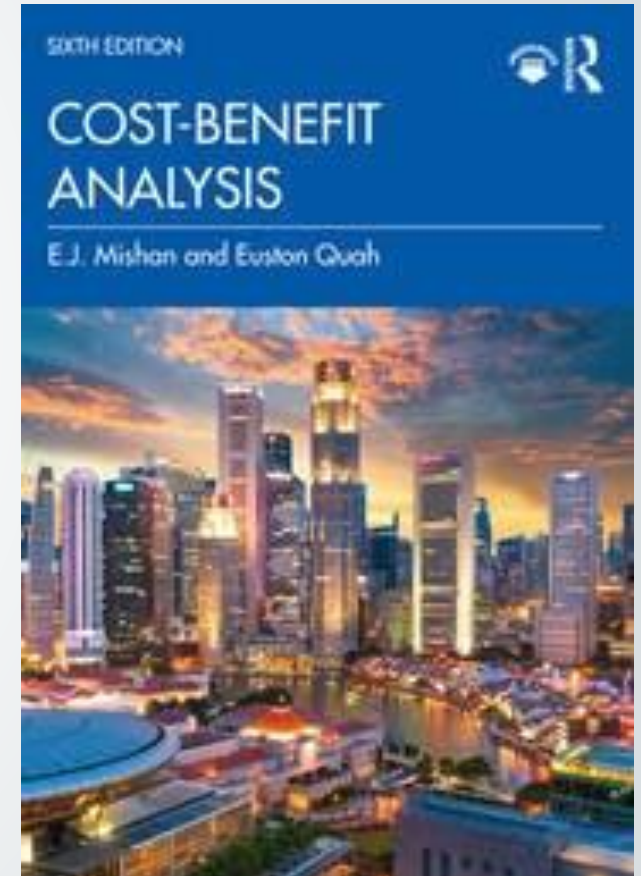
- ❑ Sustainability: The ability to sustain
- ❑ Defined over systems and/or subsystems\*
  - ❑ Life span of systems and system hierarchy
  - ❑ System balance as an indicator of and an instrument for sustainability

\*Costanza, R., Patten, B. C. (1995) *Defining and predicting sustainability*, *Ecological Economics*, 15, 193–196



# SUSTAINABILITY: VALUATION OF ENVIRONMENTAL & SOCIAL CHANGES

- ❑ Valuation of social return on investment (SROI)
  - Jules Dupuit (1948) on social profitability
- ❑ Cost-Benefit Analysis (CBA)
  - Flood Control Act 1939
  - National Environment Policy Act 1969
- ❑ CBA: Methodological development and applications in environmental and social policy



# SUSTAINABILITY: VALUATION OF ENVIRONMENTAL & SOCIAL CHANGES

- ❑ Green accounting: valuation of environmental stocks and flows
- ❑ System of Integrated Environmental and Economic Accounting (SEEA), 2012
- ❑ Primary valuation database and value transfer
- ❑ Corporate environmental impact valuation & carbon accounting
- ❑ Social impact measurement of social enterprises with application to impact investments\*

➤ <https://asvb.com.au/social-impact-value/social-impact-measurement/>

➤ <https://www.environment.nsw.gov.au/resources/about/evri06518.pdf>

# SUSTAINABLE DEVELOPMENT GOALS AND SUSTAINABILITY POLICY

- ❑ Sustainable development movement is driven by the UN
- ❑ Sustainability policy & Sustainable Development Goals (SDGs)





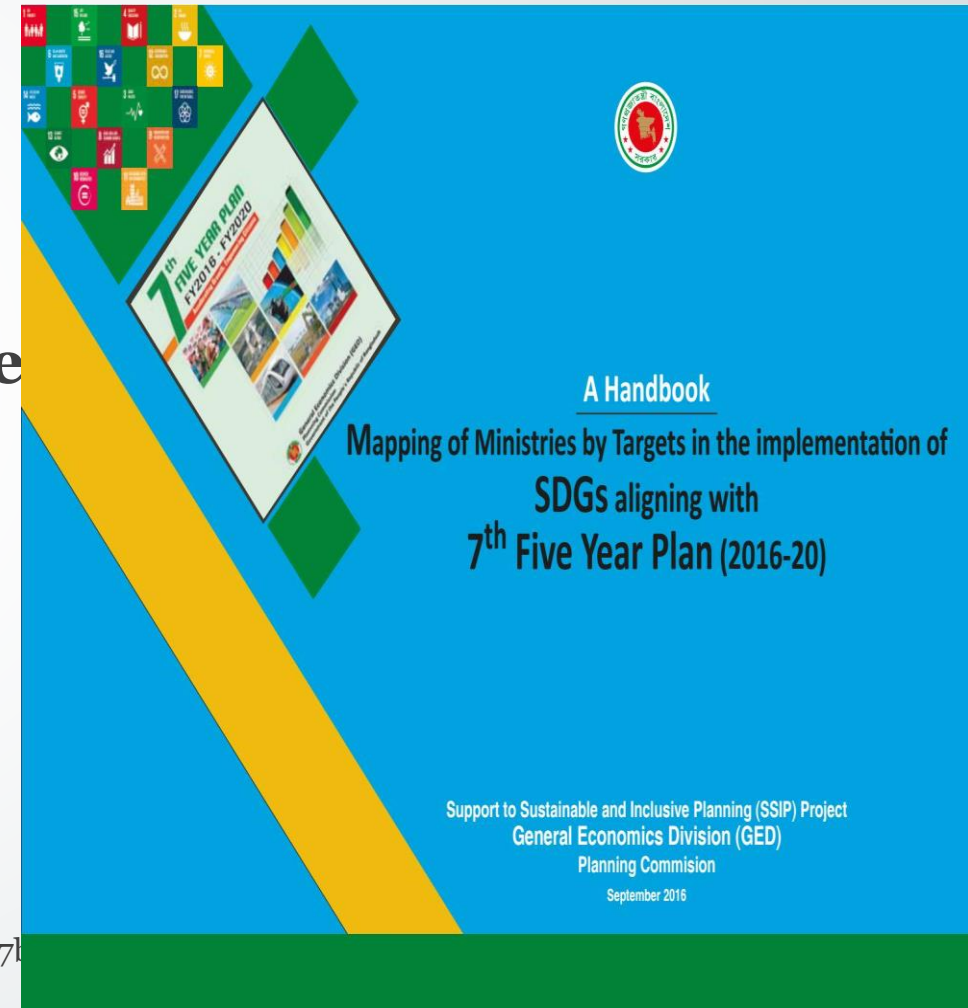
# SINGAPORE & SUSTAINABLE DEVELOPMENT GOALS

- ❑ Voluntary National Report 2018
- ❑ Singapore Green Plan 2030 & SDG localization with a multi-ministry taskforce
- ❑ The priority areas
  - City in nature
  - Energy rest
  - Green economy
  - Resilient future
  - Sustainable living
- ❑ Social sustainability
  - Work life balance & mental wellbeing
  - Socio-cultural space & harmony
  - Modesty in consumption



# SDG MAPPING & CAPACITY GAP IN PUBLIC SECTOR

- ❑ All of society approach
- ❑ Thematic and geographic **mapping\***
- ❑ **Capacity of public sector/servants in aligning development initiatives with the SDGs**



\*[http://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/3acbc97e\\_6ba3\\_4671db2\\_cfb3cbbf059f/A-Handbook-Mapping-of-Ministries\\_-targets\\_-SDG\\_-7-FYP\\_2016.pdf](http://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/3acbc97e_6ba3_4671db2_cfb3cbbf059f/A-Handbook-Mapping-of-Ministries_-targets_-SDG_-7-FYP_2016.pdf)

# SINGAPORE'S CLIMATE COMMITMENTS

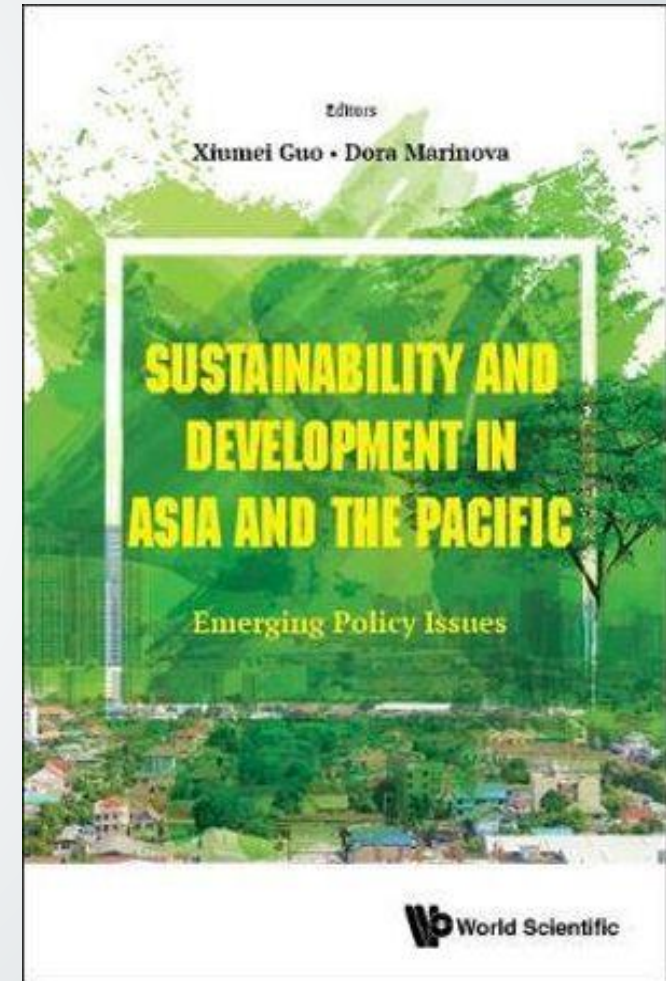
- ❑ Inter-Ministerial Committee on Climate Change 2007
- ❑ Reducing Emissions Intensity by 36 per cent from 2005 levels by 2030
- ❑ Singapore is first to introduce **carbon tax** in ASEAN
  - Incentive for necessary energy transition
  - Basis for the development of market instrument
  - Voluntary carbon market & market based carbon pricing
- ❑ **Food security**
- ❑ Circular economy and **waste management** (especially plastic and e-waste)



# SUSTAINABLE INVESTMENT & CORPORATE SUSTAINABILITY

- ❑ Ethical & socially responsible investment
- ❑ Sustainable investment movement 1970s & 80s
  - Civil right movement and consumer mobilization
  - Sullivan principles and investor mobilization
  - Trillium Asset Management
  - Exxon Valdez accident & Valdez Principles
- ❑ ESG risk/ opportunities & long term value investing\*

\*[https://www.unepfi.org/fileadmin/documents/Demystifying\\_Responsible\\_Investment\\_Performance\\_01.pdf](https://www.unepfi.org/fileadmin/documents/Demystifying_Responsible_Investment_Performance_01.pdf)



# CORPORATE SUSTAINABILITY & SUSTAINABLE INVESTMENTS

- ❑ The growth of sustainable investment funds\*
- ❑ Sustainable investment strategies
  - Core (screening, **thematic** & impact investing)
  - **Broad** (Shareholder engagement & ESG integration)
- ❑ **Identification, valuation and prioritization of assets, projects and processes for sustainability**
- ❑ ESG risk, long term value investing & **performance of ESG funds**
- ❑ Financing for sustainability

\*<http://www.gsi-alliance.org/wp-content/uploads/2021/08/GSIR-20201.pdf>

# CORPORATE SUSTAINABILITY & ESG DUE DILIGENCE

- ❑ Sustainability accounting and reporting
  - GRI, TCFD & GHG protocol
  - The issues in **synchronization & standardization**
  - The valuation of environmental and social impacts **for companies**
- ❑ ESG matrix development
  - Common set of variables
  - **Industry based variables**
- ❑ ESG risk and opportunities for SMEs
- ❑ Corporate sustainability, strategies & **capacity gap**
  - Regulators to monitor
  - Companies to communicate
  - Investors to assess



# Thank you

## Q&A

[ai.siddiqui@ntu.edu.au](mailto:ai.siddiqui@ntu.edu.au)