Enhancing Management and Cooperation in Forestry Research and Development

Nisakorn Ngewwijit
Director of Forest Research and Development Office, Royal Forest Department, Thailand

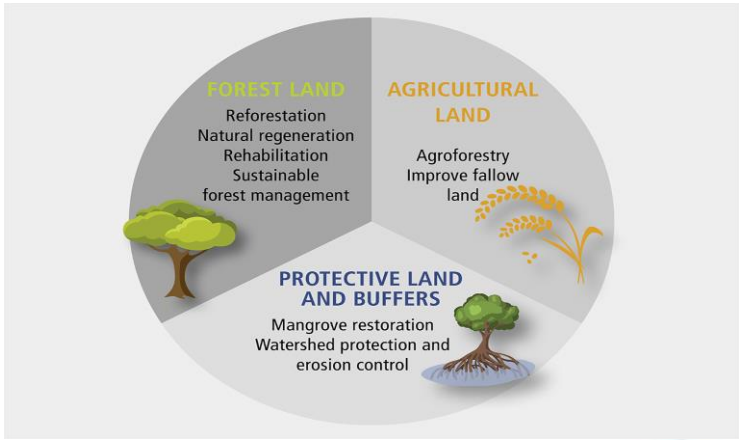
In Asian Forest Forum: Research, capacity development and good governance in Asia
30 April 2022 COEX Center, Seoul, Republic of Korea

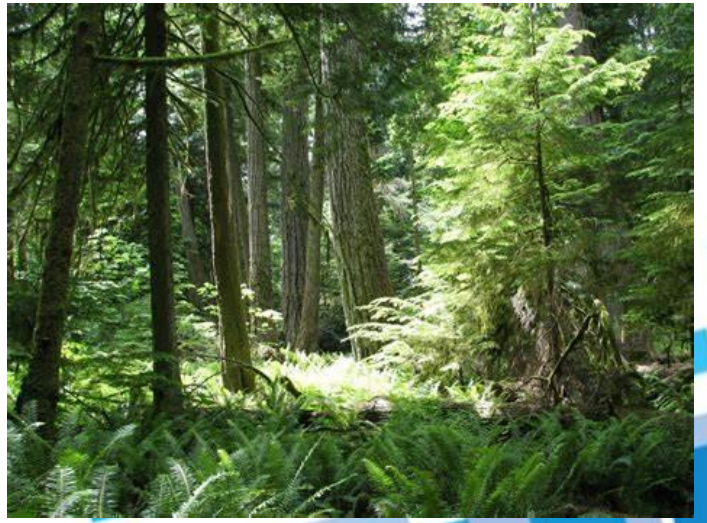
outlines

- What are required in forest research matters under the Royal Forest Department’s mission?
- How to cooperate for responding?
- How to establish the research cooperative governance/system?

What are required in forest research matters?

- **Participatory action researches through forest landscape restoration (FLR) approach**
- **BCG model (Bio-Circular-Green Economy)**





Participatory action researches through FLR

To halt deforestation and forest degradation

- ❑ monitoring technology and innovation
  - ✓ carbon (maintained and enhanced)
  - ✓ Biodiversity (maintained and enriched)
- ❑ Protection
  - ✓ Seed bank/Genetic conservation
  - ✓ Wood forensic
  - ✓ Forest fire fuel management

Participatory action researches through FLR

To enhancement of forest-based economic, social, and environmental benefits

- ❑ genetic improvement
- ❑ NTFPs value added action research
- ❑ carbon credit/PES, SFM
- ❑ Silviculture
- ❑ Forest-based enterprise development

Participatory action researches through FLR

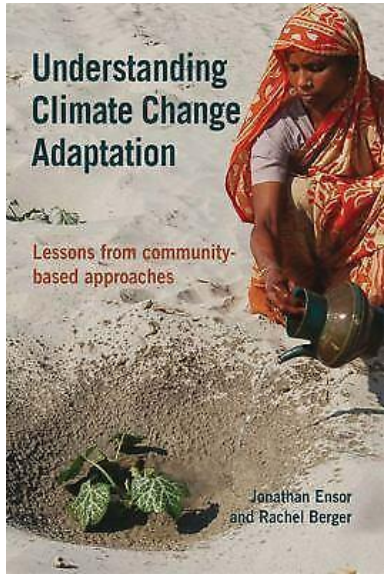
To halt deforestation and forest degradation

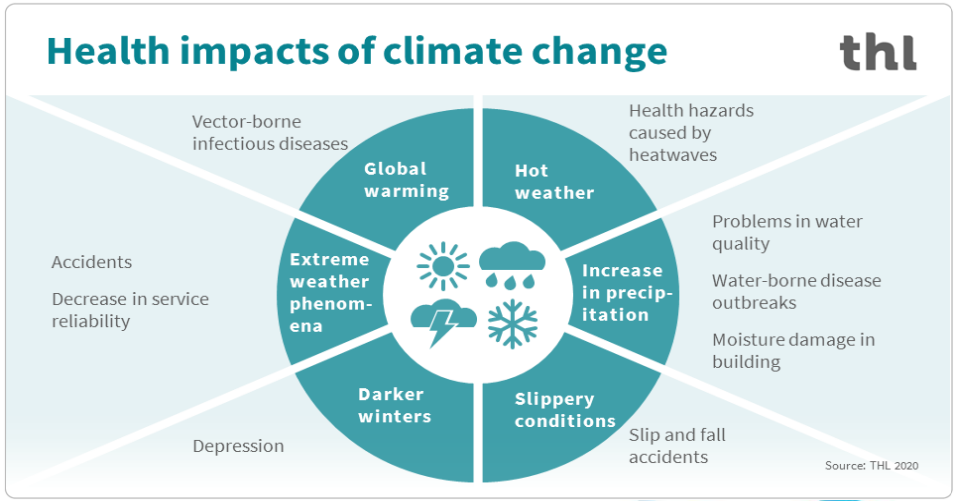
- ❑ increases in afforestation and reforestation
  - ✓ Genetic improvement
  - ✓ Quality seed sources development
  - ✓ Enabling policy and regulatory conditions

Participatory action researches through FLR

Climate change adaptation

- ❑ impacts of livelihood and ecosystem changed
- ❑ strengthened resilience and adaptive capacity to climate change

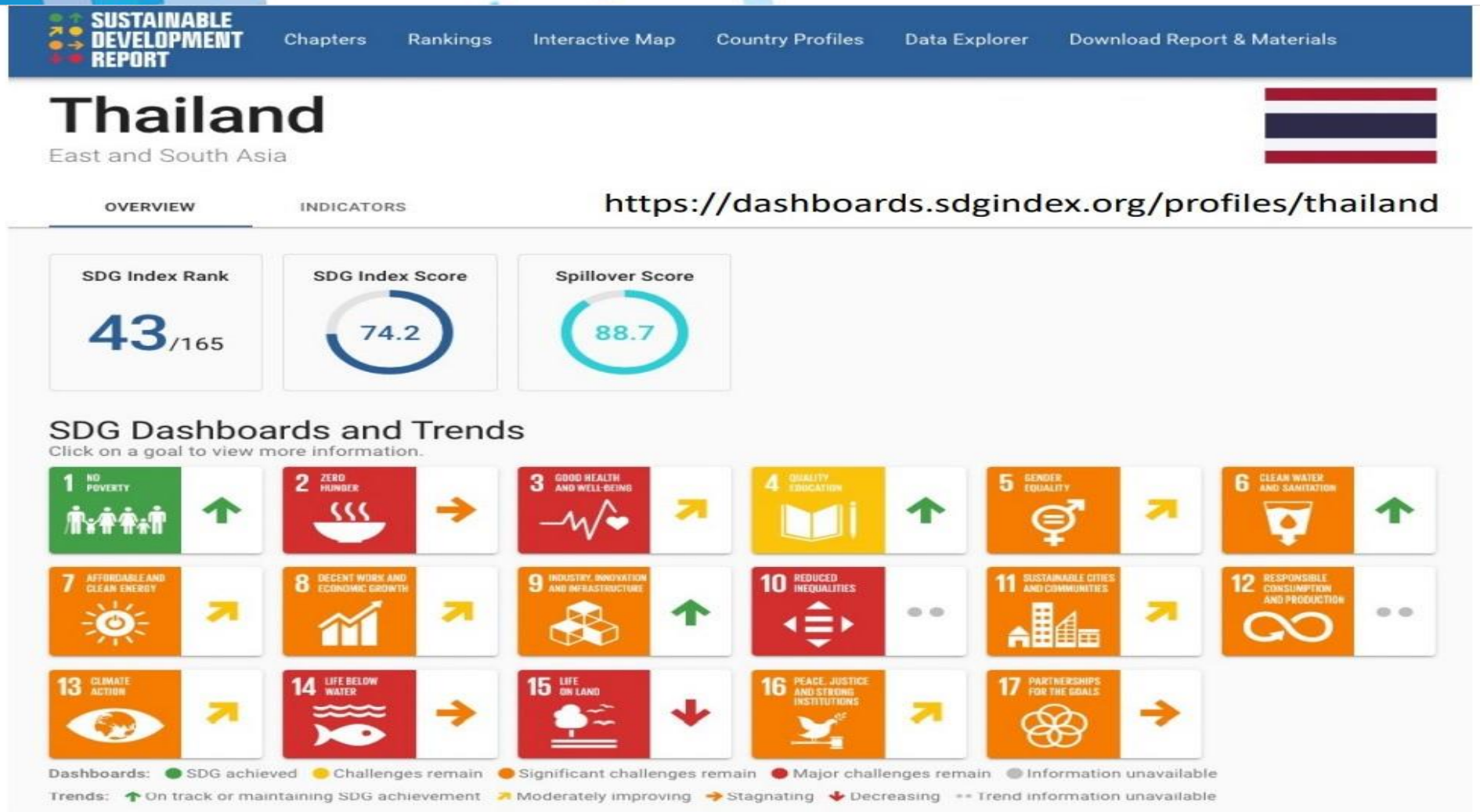




BCG Concept

A new model called BCG has been conceptualized to underpin Thailand 4.0 policy as a strategy to drive the economic and social development.
BCG is an integration of bioeconomy, circular economy and green economy

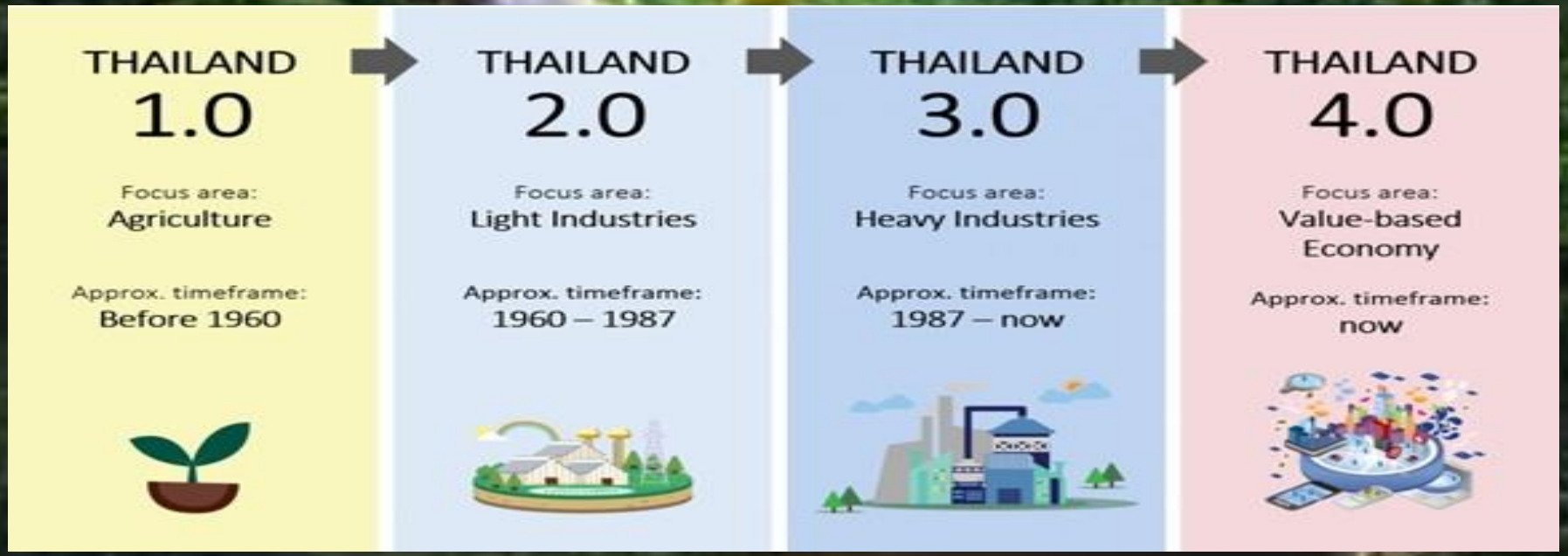

Bioeconomy involves the production of renewable biological resources and the conversion of these resources into value added products
Circular economy aims at reusing and recycling resources
•**Green economy** determines to keep economy, society and the environment in balance, leading to sustainable development.
BCG Model



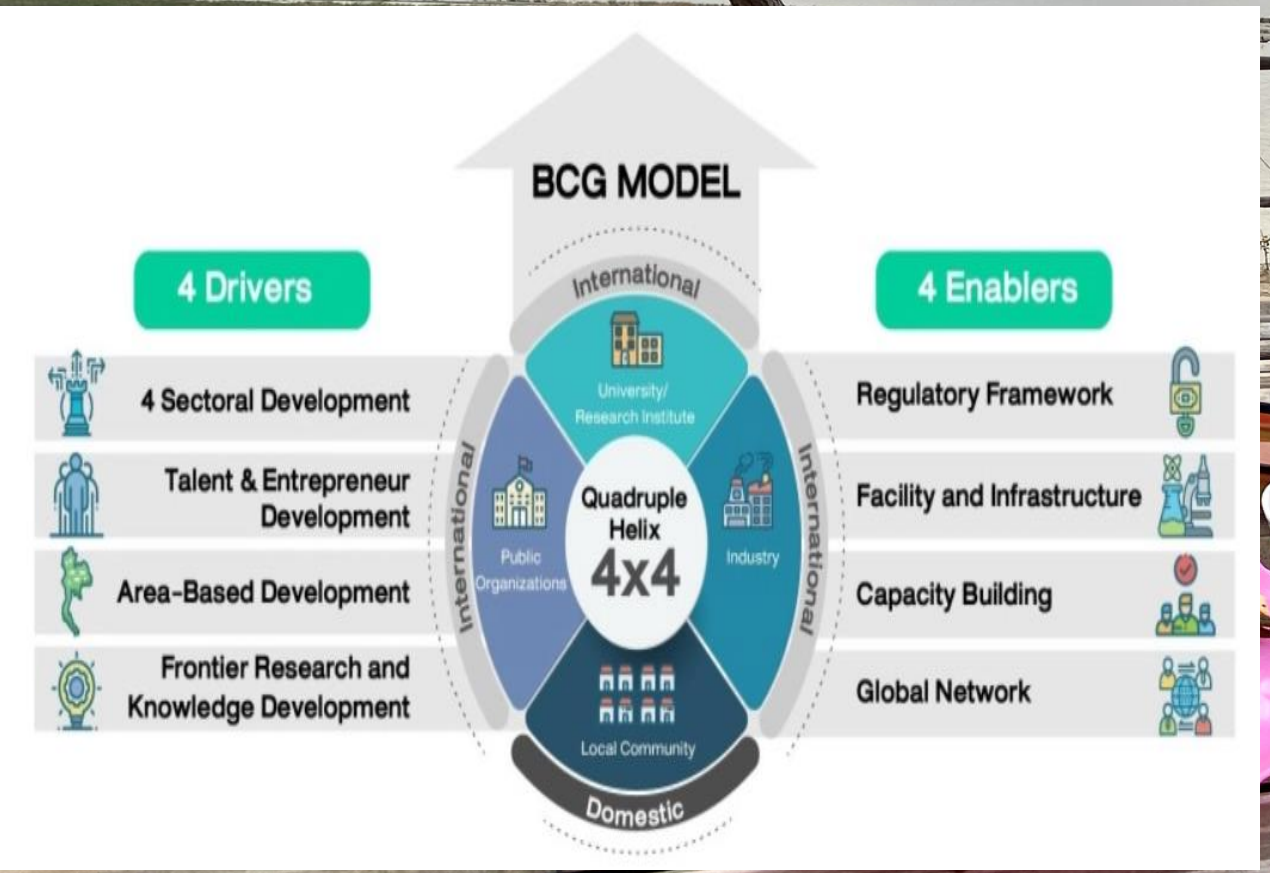
It is believed that BCG model will **enable Sustainable Development Goals (SCGs)** through the promotion of sustainable agriculture, clean energy and responsible consumption and production, ensuring the conservation and sustainable utilization of biodiversity, and protecting environment and ecosystem.

Why Bioeconomy?

Over several decades, Thailand has progressed through three economic development phases. In the first phase, **Thailand 1.0** emphasis was placed on the agricultural sector. Then came **Thailand 2.0** with the focus on light industries, enabling the nation to upgrade from a low-income to middle-income economy. In the third phase, **Thailand 3.0**, the focus was shifted to heavy industries to sustain economic growth. During this period, however, Thailand's economic growth became stagnant, facing the situation of "middle-income-trap" syndrome, while the country was also confronted with disparities and imbalanced development.



Innovative technology can be applied to add value to resources and agricultural products, and thereby enhancing the competitiveness of downstream industries. High-value products for the agriculture and food industry could be, for examples, functional food ingredients; for health and medicine industry are biopharmaceuticals and precision medicine treatment; for energy and chemicals industry are valorized fuels and chemicals, and for tourism industry a medical or knowledge-based tourism.



Blessed with rich natural resources and strong agricultural activities, Thailand will apply the BCG model to focus on four s-curve industries - namely agriculture and food; bioenergy, biomaterial and biochemical; medical and wellness; and tourism and creative economy. Science, technology and innovation have enormous roles to play in this BCG movement. Innovations can be employed to enhance the capacity and competitiveness of players across the value chain, both upstream and downstream, in all four s-curve industries.

How to establish the research cooperative governance/system?

- Promoting cooperation in all levels by improving national and local coordination mechanisms to streamline action research
- Strengthening all forms of international cooperation
- Benefits sharing of transboundary cooperation


Thank you!!!