Sustainable Development and International Development Cooperation No. 2

1. Development and Environment: Environmental Kuznets Curve Hypothesis

• EKC

Economic Growth (income increase) \rightarrow pollution increase \rightarrow Turning Point \rightarrow Environmental Quality Improvement \rightarrow Sustainable Development

· Pollution heaven, Industrial flight Hypothesis

• Porter Hypothesis (M. Porter 1991) : Cost Offset, Innovation Offset

図 1.5 日本における SO2 濃度推移と大気汚染対策(東京都)







図序-1 環境クズネッツ曲線とトンネルカット (出所) 森 (2008)。

2. Definitions of SD

2.1 Question \rightarrow Idea \rightarrow Concept \rightarrow Model

2.2 Steady State Economics, Stationary Economics

John Stuart Mill (1848), *Principles of Political Economy* Herman E. Daly (1977), *Steady-State Economics*

2.3 Ecological/ carrying capacity root: MSY, MAC, MEY

Rome Club (1972), *the Limits to Growth* Herman E. Daly (1977), *Steady-State Economics*

2.4 Economics: VWS, WS, SS, VSS

2.5 International Discussion on SD

UN Conference on the Human Environment, 1972 (Stockholm, Sweden)

Declaration of the United Nations Conference on the Human Environment

"The United Nations Conference on the Human Environment, having met at Stockholm from 5 to 16 June 1972, having considered the need for a common outlook and for common principles to inspire and guide the peoples of the world in the preservation and enhancement of the human environment" (http://www.un-documents.net/unchedec.htm)

- Establishment of UNEP, 1972
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), 1973
- Mediterranean Action Plan (Med Plan): first of thirteen regional action plans under the UNEP Regional Seas programme, 1975
- · Convention on Long-range Trans-boundary Air Pollution (LRTAP), 1979

IUCN (International Union for Conservation Union) (1980), World Conservation Strategy

World Conservation Strategy: Living Resource Conservation for Sustainable Development IUCN, UNEP and WWF (1980): World Conservation Strategy: Living Resource Conservation for Sustainable Development. International Union for Conservation of Nature and Natural Resources, Gland.

The World Conservation Strategy (WCS) was commissioned by the United Nations Environment Programme (UNEP) which together with the World Wildlife Fund (WWF) provided the financial support for its preparation and contributed to the evolution of its basic themes and structure. This document presents the aim of the WCS. It explains the contribution of living resource conservation to human survival and to sustainable development, identifies the priority conservation issues and the main requirements for dealing with them and proposes ways for effectively achieving the Strategy's aim. (http://www.nssd.net/references/KeyDocs/IIEDa24.htm)

<u>1987 Brundtland Commission</u>, WCED (the World Commission on Environment and Development), (1987), *Our Common Future*, Oxford UP

In 1983, the U.N. General Assembly created the World Commission on Environment and Development, an independent committee of twenty-two members, headed by Gro Harlem Brundtland, the Prime Minister of Norway. Designed to examine global environment and development to the year 2000 and beyond, the commission seeks to reassess critical problems, to formulate realistic proposals for solving them, and to raise the level of understanding and commitment to the issues of environment and development.

"Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

The concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and

The idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs" (WCED 1987, p.43) World's poor: Essential needs: food, clothing, shelter, and jobs

Environment's ability: carrying capacity, environmental capacity

1992 UN Environmental Summit in Rio de Janeiro, UNCED

2.6 Sustainability Science; 2000 Friibergh Workshop on Sustainability Science

(Friibergh, Sweden, October 11-12, 2000)

Core 7 Questions of Sustainability Science

1. How can the dynamic interactions between nature and society --including lags and inertia--be better incorporated into emerging models and conceptualizations that integrate the Earth system, human development, and sustainability?

2. How are long-term trends in environment and development, including consumption and population, reshaping nature--society interactions in ways relevant to sustainability?

3. What determines the vulnerability or resilience of the nature-society system in particular kinds of places and for particular types of ecosystems and human livelihoods?

4. Can scientifically meaningful "limits" or "boundaries" be defined that would provide effective warning of conditions beyond which the nature-society systems incur a significantly increased risk of serious degradation?

5. What systems of incentive structures -- including markets, rules, norms, and scientific information -- can most effectively improve social capacity to guide interactions between nature and society toward more sustainable trajectories?

6. How can today's operational systems for monitoring and reporting on environmental and social conditions be integrated or extended to provide more useful guidance for efforts to navigate a transition toward sustainability?

7. How can today's relatively independent activities of research planning, monitoring, assessment, and decision support be better integrated into systems for adaptive management and societal learning?

3. References

Sustainability

World Commission on Environment and Development (1987), *Our Common Future*, Oxford UP Bell, S. and Morse, S. (2008), *Sustainability Indicators*, Earthscan

4. Schedule of Course Work

1. Introduction 9/27

Part 1: History, Concept, and Theory of Sustainable Development (SD)

- 2. History and concept of SD 10/6
- 3. Theory of SD: Carrying Capacity and MSY 10/13
- 4. Measuring and Indicators of SD 10/20
- 5. * Students have to make short report and presentation about your definition and measuring of SD. 10/27

Part 2: Development and Environment in Developing Countries

- 6. Development issues: Poverty Trap and big push
- 7. Economy and society of developing countries: Dual society and two sector development model
- 8. Development strategy: import substitution and export oriented
- 9. Development strategy and environment
- <u>10. * Students have to make a short report and presentation about development issues in selected</u> <u>countries.</u>

Part 3: Theory and Practice of International Cooperation

- 11. History and theory of international development cooperation
- 12. PRSP, MDGs, and Paris Declaration
- 13. Assessing Aid and environment
- 14. * Students have to make a short report and presentation about aid and development in selected cases.

Part 4: Toward a Sustainable Global Society (governance)

15. Sustainable global society, global governance and concluding remarks