

Course Title

Sustainable Development and Integrated Management Approach

October 12, 2004

Tuesday 13:20-14:50

Ishikawadai 4 building - RoomB04-05

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INTRODUCTION:

In main stream theory of development, development measured by “economic growth” was the main theme. The meaning of “development” in the context of international development had evolved during the past 30 years. From the lessons of 1980s, particularly represented by failures and mistakes in development field in Africa and Asia, “sustainable development” has become underlying concept to plan, implement and evaluate the development practices. In 1990, United Nations Development Program (UNDP) produced Human Development Indicators and gained world attention. This is to measure “development” from various aspects centering “human”. In this context, recent development projects require more integration of different fields, such as education, health, industry, economy, engineering, law and others. Given this background, it is increasingly important that young engineers must understand and be able to design sustainable development projects/programs to overcome precedent problems in development. These approaches often require the participants to create effective working relationships with practitioners in other field, governments, and organizations.

This course aims at introducing various approaches to sustainable development. The first half of the course looks at major theories of international development and how they are applied in practical situations. The latter part will take a close look at on-going development projects in selected countries with implication of role of engineering (and engineers). The students are expected to participate in discussion and analyze the project from engineering point of view within the context of “sustainable Development” Then the course will be followed by the field trip to the development project site, possibly for conducting feasibility studies. The students are responsible to prepare, to contribute, and to express own opinions and ideas. This means, the students’ participation in classroom makes a difference.

TEXTBOOKS (Reading Materials): Selected reading materials from a variety of development study readers as well as different UN and Development Bank document and publications. Project document will be provided for the preparation of exercises and field study.

1. Kingsbury, Remenyi, McKay and Hunt (2004), *Key Issues in Development*, Palgrave Macmillan. (ISBN 1-4039-0045-0)
2. OECD-UNDP (2002), *Sustainable Development Strategies: A Resource Book*, Earthscan Publications, Ltd.
<http://www.nssd.net/working/resource/indexa.htm>
Book version is available at <http://www.amazon.co.jp> (ISBN: 1853839477)
3. Report of the World Summit on Sustainable Development (UN document)
<http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm>
4. Global Challenge Global Opportunity: Trends in Sustainable Development (UN document)
http://www.un.org/esa/sustdev/publications/critical_trends_report_2002.pdf
5. Agenda 21 (UN document)
<http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21toc.htm>
6. Capacity 21: Building Capacity for Sustainable Future (UNDP document)
<http://www.undp.org/capacity21/docs/annual-reports/ar2000-en.pdf>

****Basic Readings**

1. “Human development – past, present and future” UNDP Human Development Report 2001, UNDP, Oxford University Press, 2001
<http://hdr.undp.org/reports/global/2001/en/pdf/chapterone.pdf>

GRADING CRITERIA:

Participation:

Students are expected read the assigned materials and answer the questions provided prior to the class. Class discussion will be based on the knowledge of the reading materials as well as your interest and experiences in development field.

Exercise Assignment:

Students are expected to do exercises assigned in class. Exercise assignments include individual exercise, group exercise, and presenting findings. For each component, main questions will be listed. Students are expected to read thoroughly assigned reading materials and analyze the issues according to the questions and prepare to present own ideas.

Feasibility Study:

In this class, on-going development projects will be introduced. You are expected to choose one project to contribute in the development of feasibility study. Questions related to the project in various aspects are provided in advance and students are expected to answer questions with own ideas and to share experiences, if any.

【Elective Additional Component】 for extra ONE CREDIT

Field Study: Students are expected to form small groups according to assigned tasks to prepare for the field study. Students shall cooperate in 1) analyzing the project components by the group, 2) planning feasibility study with specific tools with reference to pros and cons; and 3) conducting situational analysis and other relevant analysis to promote sustainable development. Details should be discussed later.

WEEKLY SCHEDULE

Week 1 :	*****
Week 2: October 12	<p>Introduction to the course</p> <p>In-class reading: FEATURE STORY</p> <p>Sustainable Development Summit Concludes in Johannesburg: UN Secretary-General Kofi Annan Says It's Just the Beginning</p> <p>Exercise 1: Sustainable Development</p>
Week 3: October 19	<p>Lecture/Discussion: <i>Development vs. Sustainable Development</i></p> <p>Reading & Exercise 2: Global Challenge Global Opportunity: Trends in Sustainable Development (UN document)</p> <p>http://www.un.org/esa/sustdev/publications/critical_trends_report_2002.pdf</p>
Week 4: October 26	<p>Lecture/Discussion: <i>Agenda 21, Capacity 21</i></p> <p>Reading & Exercise 2 (Continued)</p>
Week 5: November 2	<p>Lecture/Discussion: <i>Feasibility Study as a Tool of Sustainable development</i></p> <p>Reading & Exercise 3: Sustainable Development after Agenda 21</p>
Week 6: November 9	<p>Introduction to development project (1):</p> <p><i>“UN Human Security Funds (UNHSF) project “Rehabilitation of Boarding Schools and Provision of Refresher Training Course for Headmasters and Teachers in the Dzud affected Gobi Desert Provinces in Mongolia”</i></p>
Week 7: November 16	<p>Video Conference: Project in Mongolia</p> <p>Mongolian University of Science and Technology (MUST), Ulaanbaatar, Mongolia</p>
Week 8: November 23	*****Japanese Holiday*****
Week 9: November 30	<p>Lecture/Discussion:</p> <p>Reading & Exercise 3 (Continued)</p>
Week 10: December 7	<p>Special Guest Lecture/Discussion:</p> <p>Development activities in Lao PDR</p>
Week 11: December 14	<p>Introduction to development project (2):</p> <p><i>“Application of technology to development of the World Heritage site in Lao PDR”</i></p>
Week 12: January 4, 2004	In-class Group Exercises
Week 13: January 11, 2004	Group Presentation: Mongolian Team
Week 14: January 18, 2004	Group Presentation: Lao PDR Team

Sustainable Development Summit Concludes in Johannesburg: UN Secretary-General
Kofi Annan Says It's Just the Beginning

http://www.johannesburgsummit.org/html/whats_new/feature_story39.htm

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Exercise #1

Sustainable Development?

1. What is “Development” in your opinion?	
2. What comes to your mind when you hear “Sustainable Development”	
3. What do you know about policies and activities related to “sustainable development”?	
4. What is (are) the area(s) of development field that interest(s) you the most? (e.g. education, health, infrastructure, environment, energy, population etc.)	