Systems Thinking in Development - Thomas Grammig

The canonical principles shared by all schools of systems thinking obviously apply to development. Instead of a theoretical introduction, this course will trace and compare different imprints of systems thinking in the development literature. In doing so, parallels between the evolution of systems thinking and of development thinking appear, however, the intention is less to show common influences but rather to enable students to use systems thinking to identify limits of methods such as Logical Framework Analysis and Project-Cycle Management.

1 - Systems Thinking

Hard versus soft systems thinking, the shift from measuring objects to mapping relationships and the principles of systems theory which appear in all the empirical examples used during the course are illustrated. Each student is asked to write up a one-pager on a principle.

2 - Social and Ecological Systems

The interactions between large scale socio-economic and environmental systems are generally too complex to predict effects beyond system boundaries. The emphasis is on activities to create links between social and ecological systems.

Daly, Herman E. and Cobb, John B. Jr. (1989) "From Individualism to Person-in-Community", in
    Daly, H. E. and Cobb, J.B. Jr., *For the Common Good,* Boston: Beacon Press, pp. 159-175.
Lipschutz, R. D. (1999) "Bioregionalism, civil society and global environmental governance", in M.
    V. McGinnis, *Bioregionalism*, London: Routledge, pp. 101-120.

3 - Sustainable Development

The Brundtland Report changed development policies by asserting that the coupling between the ecosphere and the economy is fundamentally different in developed and developing countries and by pointing to the immense potential to harness the Northern economies to change this coupling in the South. The resulting changes in the development agenda in the 1990s are highlighted.

4 - Learning

Learning styles, principles and approaches appearing in the corporate world have unlocked some donor inertia. Learning within, through and beyond organizations is becoming part of the development dialogue.

Alsop R. (1998) "A Donor's Perspective and Experience of Process and Process Monitoring", in D. Mosse, J. Farrington and A. Rew, *Development as Process: Concepts and Methods for Working with Complexity*, London: Routledge, pp. 116-130.

Senge P. (1994) *The Fifth Discipline Fieldbook. Strategies and Tools for Building a Learning Organization*, New York: Doubleday, pp. 87-148.

5 - Process Monitoring and Research

The most promising inroad of systems thinking in development appeared at the intersection between community development, integrated rural development and learning approaches.

Alsop R. and Farrington J. (1998) „Nests, Nodes and Niches: A System for Process Monitoring, Information Exchange and Decision Making for Multiple Stakeholders", *World Development*, 26/2: 249-260.

Mosse D. (1998) "Process documentation research and process monitoring", in D. Mosse, J. Farrington and A. Rew (*op.cit.*) pp. 31-55.

Korten D. (1989) "Social science in the service of social transformation", in C.C. Veneración (eds.) *A Decade of Process Documentation Research: Reflections and Synthesis*, Quezon City: Institute of Phillipine Culture, pp. 5-20.

6 - Logical Frameworks

A long-standing trend to systems thinking in development is the use of Logical Frameworks (LF), at present a widely used tool imperatively required by most large donor organizations. All LFs isolate hypotheses on causal links to predict outcomes and categorize everything connected to the hypotheses as assumptions. LFs are meant to provide rigour and improve awareness to complexity but in practice LFs can become "lock-frames" for causal links, or overburdened through jamming of assumptions. Patterns of LF practices in different donors are observed.

Bell S. (2000) "Logical frameworks, Aristotle and soft systems, *Public Administration and Development*, 20/1: 29-32.

Gosling L. and Edwards M. (1995) *Toolkits*, London: Save the Children Manual no. 5, pp. 178-192.

7 - Project Cycle Management

PCM is intended to overcome the systemic limits of LFs and LF matrixes in particular by specifying how stakeholders are involved at different stages of a cycle. The Global Environmental Facility (GEF) uses a specific form of PCM, partially to reflect its ecological concerns. Other efforts to adapt PCM are presented to discuss the difficulties of aligning PCM to a context.

8 - Knowledge Management

Some donors follow corporations in labelling their information management as knowledge management. "Communities of practice" have been created and positively evaluated. The systemic characteristics of the World Bank's Global Development Gateway (GDG) and Network (GDN) will be compared to KM in corporations.

Cummings J. (2003) *Knowledge Sharing. A Review of the Literature*, Washington DC: WB-OED.
Kawalek J.P. (2004) "Systems Thinking and Knowledge Management: Positional Assertions and Preliminary Observations", *Systems Research and Behavioural Science*, 21: 17-36.