Sustainable Livelihoods Concept

- **Livelihoods**
  - **Activities**
  - **Entitlements**
  - **Assets**

- **Sustainability**
  - **Capacity to cope with shocks and stresses**
  - **Economic efficiency**
  - **Social equity**
  - **Ecological integrity**

Assets

- **Human assets**
  - Knowledge
  - Skills
  - Creativity
  - Adaptive strategies

- **Social assets**
  - Governance
  - Decision making power
  - Community
  - Culture

- **Natural assets**
  - Land/soil
  - Water
  - Air
  - Flora and Fauna

- **Physical assets**
  - Buildings
  - Roads
  - Machinery
  - Crops/livestock

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Figure 1: Sustainable Livelihoods Framework

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COMPLEX ADAPTIVE SYSTEM
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Shocks &- Stresses

Economic   Social   Natural

Impact on

PEOPLE'S LIVELIHOODS
Activities, Assets, Entitlements

People's Response

Livelihood Strategies

Interventions

Policy   Governance   Investment   Technology

SUSTAINABLE LIVELIHOODS

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Development Principles

Sustainable Livelihoods	Other Approaches
• **Holistic**	• **Reductionistic**
• **Self-empowering**	• **Welfarist/delivery**
• **Participatory**	• **Top-down**
• **Sustainability consideration inherent**	• **Sustainability consideration externality/add on**
• **Broad based pro-poor growth**	• **Growth and trickle down**
• **Cross-sectoral**	• **Sectoral**
• **Gender Sensitive**	• **Gender blind**

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Sustainable Livelihoods

What is the Systems Thinking

- The discipline which makes visible that our actions are inter-related to other people's actions in patterns of behavior and are not merely isolated events.

  - Open and general systems theory (Von Berthalanffy)

  - Organizational Cybernetics –(Stafford Beer)

- **Soft Systems Approach – Checkland**

- **Critical Systems Thinking – Churchland**

- **Systems Dynamics (fifth discipline) – Senge**

- **Complexity Theory/Complex Adaptive Systems – Holland, Kaufman, Kay and Schneider, Axelrod and Cohen, Marion, others**

From Systems Thinking to Practice

- Seeking absolute mastery as reductionism and science do, misses the point of the human being

- It turns the mystery of magic in our lives into the misery of failed mastery over our lives

- Balancing mystery and mastery means living between inability to understand anything and naivety of thinking we can know everything

- We can know of and learn within the unknowable

Systems Dynamics

- Balancing process with delay (oscillation)
- Eroding goals
- Limits to growth
- Tragedy of the commons
- Growth and under investment
- Treating symptoms not causes
- Fixes that fail
- Escalation\\\   9) Success to the successful

Complex Adaptive Systems

- Details complexity and Dynamical complexity
- Reductionism works well for a complex physical world but not complex adaptive systems such as human societies and ecosystems
- Illusion that the world is made up of separate parts
- Simplification that the world is linear with beginnings and ends
- Reductionism strips wholes of their essence

Complex adaptive Systems contd

- Many inter-acting variables and agents with many inter-relationships and degrees of freedom

- Emergence-where the whole is experienced as greater than the sum of its parts

- Special form of emergence : spontaneous self-organization (endless occurrences)

- Limited capability to know what will happen next – irreducible uncertainty

- Hidden order, simplicity in complexity

SYSTEMS PRACTICE

- **BOUNDARY JUDGEMENTS**

- **DEEPENING SYSTEMIC APPRECIATION**

- **PRISMATIC THOUGHT**

- **ORGANISATIONAL LEARNING & TRANSFORMATION**

- **SYSTEMIC EVALUATION**

BOUNDARY JUDGEMENTS

- Shift from problems, solutions and normal organisational life
- People, purposes and interacting issues emerging in conflict and /or cooperation
- Draw tentative boundaries around stakeholders, focussing on xxx, raising issues and dilemmas
- The boundaries define the action area
- Who is inside and benefits from it
- Who is outside and does not
- What are the consequences?
- How do we feel about that
- Boundaries are temporary and partial

DEEPENING SYSTEMIC APPRECIATION

- **Opening four windows on the action area**
- **Systems of Processes (efficiency and reliability)**
- **Systems of Structures (effectiveness)**
- **Systems of meaning (agreements etc)**
- **Systems of knowledge-power**
- **(emancipating the privileged and unshackling the underprivileged)**
- **Prismatic thought ✟ options for action**

Organisational Learning and Transformation

- (Using learning scenarios and systemic evaluation
- ☦ First scenario learns in the context of the future we might be heading for
- ☦ Second scenario learns about ideal futures
- ☦ Third scenario learns of ways to close the gap i.e. ways to move to ideal system properties or to shift the boundaries

All three scenarios are continually revisited

☦ Systemic evaluation of issues and dilemmas of systems of processes, structures, meaning and knowledge power, indicates performance of projects in these terms

☦ Provides information for reflection on and change where necessary

☦ Seek balance between instrumental action and experimental action.

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WHERE DO WE GO FROM HERE

We understand fairly well the usefulness and Limitation of linear, reductionist and deterministic approaches

We have just begun to develop new insights using complex adapative systems thinking. New tools are becoming available.

At the same time the world has changed in dramatic ways creating new opportunities and new challenges

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Building a CASL at McGill

- Develop a proposal to establish a center or way of working to pursue the principles into practices
- Who might take the lead, who will feel left out etc
- How can it be set up-various options with pros/cons
- What are Mc Gill's strength's , assets ,weaknesses?
- Establish an implementation plan with indicative budget

- CASL should help foster decision making which promote SL for the people of Quebec, Canada and the World

- What are the implication of SL
  -Livelihood means
  -Sustainability implies….
  -Mainstreaming environmental management in people's livelihood decision

U of Mc Gill cannot do this if it works:

- Only through IDS and not for example with CDAS, Environme
  Geography, Engineering, Management sciences (innovation),

- Only by itself and not with other centres of excellence e.g. CBD
secretariat, Montreal protocol,

- Only with Montreal and not linked other townships/regions in
Quebec
- Only within Quebec and not with Canada

- Only within Canada and with the international community

- Only with academia, and not with local people, businesses and
  government

Of course this sounds unmanageable, over ambitious and even impossible.

- But this is exactly what the history of the environment and development lessons tells us to do.

- It is exactly what a globalized world arena requires

- It is precisely how Canada can use its pockets of excellence to maintain and enhance its competitiveness in today's world while enhancing the quality of life, cultural diversity and social conditions which Canada is justly proud of

- And it is exactly what the recent thinking and tools from complex adaptive systems, computer science and knowledge networks allow us to do.

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Sustainable Livelihoods

- To make this a reality we must of course be focussed, pragmatic, start at an appropriate scale, not too large, but not too small where the inherent complexities are not present.

- But the most important step is to begin.

- We propose therefore that Mc Gill University establish a transdiciplinary centre for the promotion of Sustainable Livelihood in Canada and the world, and that the IDS help with this process . Sustainable livelihoods will only come from prosperous business, enlightened public policy and an engaged civil society.