



The Canadian Rural Revitalization Foundation

# Sustainable Regional Development - I


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 Social Sciences and Humanities  
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Japan Course: Sustainable Regional Development  
2-day Intensive Lecture

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## Web Site

- <http://moodle.concordia.ca/moodle>
- select the "Arts & Sciences" link
- search on "Sustainable regional development"
- click on "Sustainable Regional Development"
- Log in a Guest using the enrolment key "ibaraki"

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## Outline

- Day 1:
  - What is Sustainable Regional Development (SRD)?
  - What are the challenges faced by SRD?
  - What are responses to these challenges?
- Day 2:
  - How can we enhance or support SRD?
    - Local responses
    - Regional responses
    - National responses
- Summary and Conclusions



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## Interdependence

- All things are interdependent
- Sustainability requires this recognition

**Our Objectives**

- Discover the nature of interdependence
- Build it into our policies and practices

**Today**

- The structure of interdependence
  - Trade, institutions, environment, identity

**Tomorrow**

- The organization of interdependence
  - Social capital, social cohesion, governance

- The main theme of my presentations will be Interdependence
  - Reinforcing the message that all things are interdependent
  - If we do not recognize this in our social institutions, policies, and practice we will fail to ensure sustainability
- Our challenge, therefore, is:
  - To discover the nature of that interdependence and
  - Build it in to our policies and practices
- Today I will present material on the structure of interdependence
  - How it is manifested in our trading relationships, institutions, the environment, and identity
- Tomorrow I will present material on the organization of interdependence
  - How we can organize human in a co-ordinated fashion to reflect interdependence
    - Social capital and social cohesion
- How we can use this knowledge in facilitating and promoting sustainable regional development
  - governance




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## What is Sustainable Regional Development?

- Economic growth?
  - Productive capacity
  - Comparative advantage
  - Entrepreneurship
  - Increased stocks of capital goods
  - Human capital
  - Historical processes
- Regional development?
  - Urban or rural
  - Urban and rural

- What is Sustainable Regional Development?
- Oxymoron?: Sustainable and Development
  - Development often = economic growth (GDP)
    - Market value of all goods and services produced within a country/year
      - Product/output approach: outputs of enterprises
      - Expenditure approach: total expenses (private consumption + gross investment + gov't spending + (exports-imports))
      - Income approach: sum of all producers incomes (compensation of employees + gross operating surplus + gross mixed income + taxes less subsidies on production and imports)
    - Considerable debate and analysis regarding the source of growth
      - Productive capacity (Hume & Smith)
      - Comparative advantage/trade (Ricardo)
      - Entrepreneurship (Schumpeter, Greenspan)
      - Increased stocks of capital goods / means of production / technological change (Solow-Swan Growth Model)
      - Human capital (Lucas & Barro)
      - Historical processes (Acemoglu, Johnson, & Robinson)
    - Positive effects and negative effects on sustainability
  - Regional development often refers to the provision of aid and other assistance to regions that are less economically developed
    - I will be focusing on a more general interpretation
      - Actions and initiatives that improve the standard of living in particular regions
      - Given my interest, these regions are largely non-urban – but will include urban places in many cases since it is impossible to separate the rural from the urban economy
    - Thus: more inclusive than economic
- Readings: Douglas, Rural Planning and Development, Ch 11
- Apedaile and Tsuboi in Apedaile and Tsuboi, Ch 1
- Apedaile and Tsuboi in Apedaile and Tsuboi, Ch 2

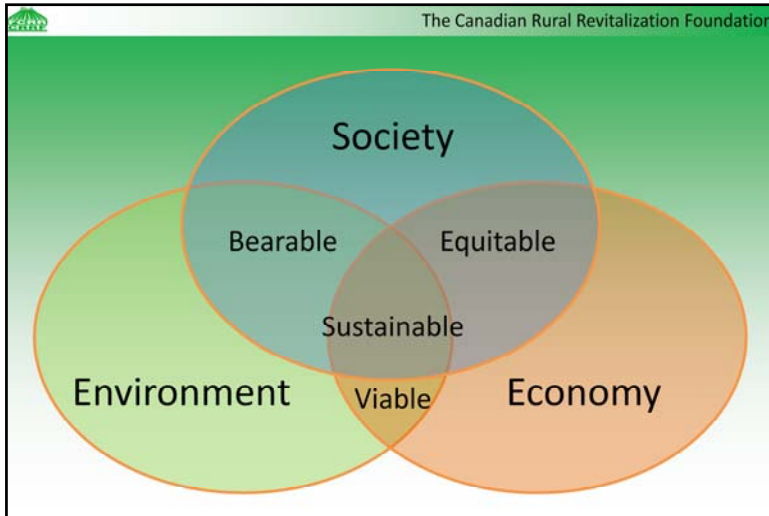


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## Sustainable development

- “Meets the needs of the present without compromising the ability of future generations to meet their own needs.” (Brundtland Commission)
- Includes consideration of:
  - Carrying capacity of natural systems
  - Ecological footprint
  - Limits to growth
  - Steady state economy
- Challenges
  - Need for growth and distribution to alleviate poverty
  - Challenges of environmental degradation

- Sustainable development
  - Introduced extensively by the UN-Brundtland Commission (Our Common Future) [<http://worldinbalance.net/intagreements/1987-brundtland.php>]: “meets the needs of the present without compromising the ability of future generations to meet their own needs.”
  - Has generated new concepts and approaches
    - Carrying capacity of natural systems
    - Ecological footprint
    - Limits to growth
    - Steady state economy
  - Elaborated some fundamental challenges
    - Need for growth and distribution to alleviate poverty and
    - Challenges of environmental (and other forms of ) degradation
- More holistic approach



- Instead of a focus on economics and growth alone – greater recognition for the environment – and society
- Sustainable development, therefore, must consider and integrate practice regarding all three
- Sustainable regional development takes this vision and considers its implications for geographical regions.
  - Sometimes at the level of municipalities, but also regions defined by practice, ecology, policy, or national entities
  - In many cases this is a research question
    - What sized region is sustainable in a particular social or political context?
- In our case I treat this issue in a flexible manner, but assume we are talking about regions that are larger than small communities.
  - May include both rural and urban centres since these are not independent – a clear result of our research and experience
  - In fact, most regions, however we define them, are interdependent with the regions around them and across the world

• [http://en.wikipedia.org/wiki/File:Sustainable\\_development.svg](http://en.wikipedia.org/wiki/File:Sustainable_development.svg)

- Role of institutions
  - What are their roles?
  - What if they are not doing their roles (Shaver)?
- Perhaps a revision of goal: not growth



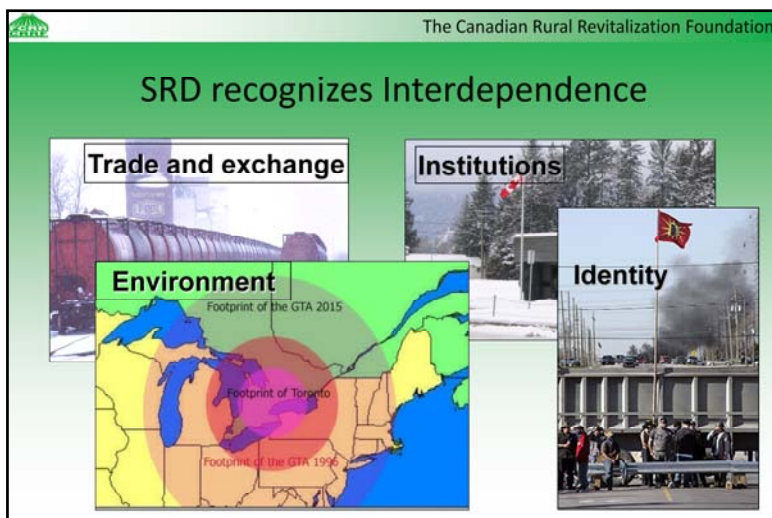
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## Sustainable Regional Development

- Objectives
  - Wealth creation
  - Wealth distribution
  - Increases the capacity for future quality of life
- Strategies
  - Understand interdependence in:
    - Research
    - Planning
    - Action

- Sustainable regional development objectives:
  - Creating sufficient wealth to support a high quality of life for all those living in the region (a large enough pie)
    - Key rural sectors: Food, Housing, Energy, Water
  - Ensure just and equitable access to that wealth
  - Increase the capacity of future generations to a high quality of life
    - This includes ensuring that the creation of that wealth doesn't jeopardize future generations within and outside the region
    - Increasing their resiliency to changing conditions
    - Key rural sectors: Finance, Health, Education/Research
- Sustainable regional development strategies:
  - Requires that we recognize the interdependence of all things
    - In our research
    - In our planning
    - In our action
- Thus, I will consider the nature of this interdependence and examine how we can integrate it into our thinking, policies, and programs

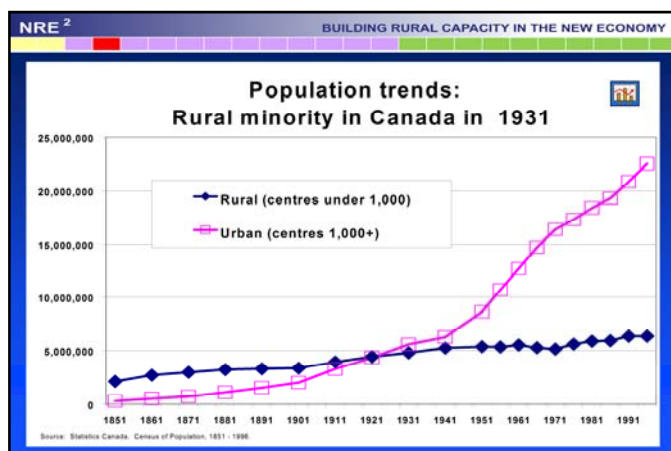




- I find it useful to think of Rural-Urban interdependence with respect to 4 broad features of social organization
- These are 4 ways in which changes in rural or urban settings will have impacts on the other (the meaning of interdependence)
- (S) The first is via trade and exchange
  - Of goods, services, finances, and people
  - Sometimes it is direct as with farmers markets and commuting (labour markets) but often it is indirect via other nations or complex downstream transformations
  - This is to be expected in our commodity dependent economy where 83%+ of our positive balance of trade (goods and services) is due to the export of rural products (agriculture, forestry, energy). (Cansim, 2006)
- (S) The second broad way in which we are interdependent is through the institutions we share
  - This includes national, provincial, regional, and some municipal institutions (formal and informal) that organize activities for both urban and rural people
  - Health, Education, Welfare to Scouts, Religions, Families – where policies developed in and for one context are applied to another context
- (S) The third area is the environment
  - Over the past 50 years we have learned a great deal about the interdependence of all regions with respect to the environment – including the total earth
  - It can also be seen dramatically on a regional scale
    - The environmental footprint for Toronto is 280 times its formal size (about 1/3 the size of Ontario)
    - The footprint is largely on rural areas (food, water, pollution processing, waste management)
- (S) The final area is with respect to identity
  - This refers to both personal and collective forms of identity
  - The social sciences have highlighted the importance of identity and its intimate connection to the social groups in which we operate
    - From the family and community to ethnic and cultural groups
  - In our preoccupation with individual freedom and personal choice we often disregard these attachments as quaint traditions or obstacles to development
  - But they keep coming back to haunt us – in the form of
    - Social strife and suicide when we attempt to remove or undermine the bases for identity – as we did with Aboriginal Peoples or community relocation in Canada
    - Or in the form of civil unrest and war in its most extreme forms
  - The same conditions and dynamics lie at the basis of attachment to place, commitment to community or region, and social cohesion that frustrate the more extreme advocates of free market economies, but in fact, serve as a critical basis for economic development
  - The advertising industry is aware of the power of identity and uses it to generate an \$8 billion industry (Industry Canada, 2004)
  - We need to recognize and work with this power in our exploration of new forms of collaboration in the interest of sustainability



- Let's look more closely at some of the ways in which this interdependence is manifested in Canada
- First of all, through trade and exchange
  - This is the traditional basis of the Canadian economy
  - Since the time of Confederation, Canada has been built on international trade in commodity goods: fish, fur, timber, minerals, petroleum, energy
- Communities were central within this framework since they were the locations for extraction and trade
  - Cities served as residential and support locations for the extraction of those resources as well as transfer points for goods – reflecting both the technology and geography of the country and its natural resources
  - This is an infrastructure and legacy which continues today



- The legacy remains, but it has undergone significant changes that have radically restructured the nature of rural-urban interdependence
- Increased mechanization has meant:
  - Fewer workers are required for the same or increased levels of output
  - In the past, those workers put out of work in our primary industries were easily absorbed by urban labour markets as the economy shifted from primary production to industrial organization
    - We are now reaching saturation points as cities are facing challenges of servicing their populations
  - In the process, urban centres have become politically and economically more powerful
    - Urban centres identified as “drivers of the economy”
    - Political and public discourse has emerged contrasting urban and rural as if they were clearly defined entities in competition
- But these are old visions where rural regions were seen as a resource hinterland to urban economies and societies – with all the accoutrements of sentimentality and marginalization
  - In the more extreme representations rural communities are seen as necessary for resource extraction or national security but are in general considered a drain on the national and provincial economies
- This vision is out of date and needs to be reevaluated in light of the evidence
- What is some of that evidence?...

\*.....

\*Note: graph for Ontario is similar to the one for Canada

\*Canada is Urban

\*About 80% of population is in urban areas – and growing

\*At the Canada level, and in most provinces, the (census) rural population is increasing.

\*In Saskatchewan, the (census) rural population has been decreasing since 1931.

\*Within each province, the rural farm population has been declining for decades and the rural non-farm population is increasing.

\*(Census rural refers to individuals living outside settlements of 1,000 or more)

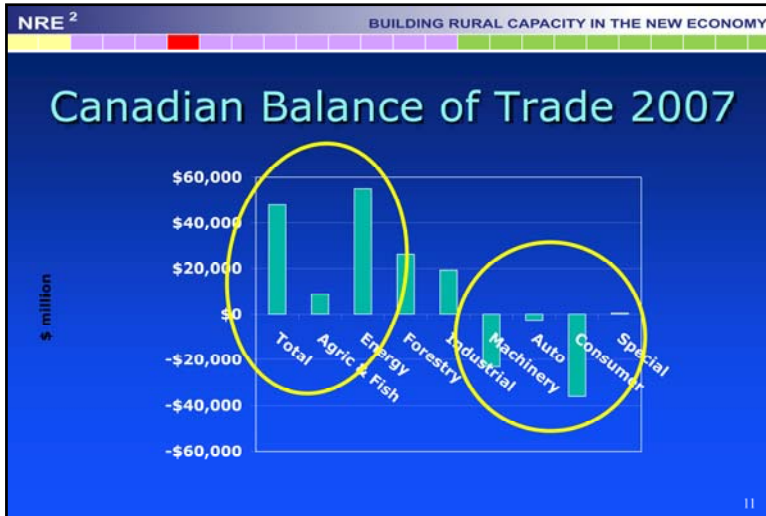
NRE<sup>2</sup> BUILDING RURAL CAPACITY IN THE NEW ECONOMY

## Interdependence through Trade

- Price of transporting goods has dropped, transporting people has increased
- Commodity communities shrinking
- Urban dependent on commodities

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- (S)Our research has shown that the price of transporting goods has dropped while the price of transporting people has increased (Bollman)
- (S)Natural resource-based communities face declining populations
  - Important to note that the driver is not inefficiency – but increased efficiency and the commodity treadmill
  - Our responses to mechanize in the face of global competition have been very successful – producing more with fewer people – but it has been a disaster for the sustainability of our natural-resource dependent communities
  - Fewer people means declining population, fewer services, and diminished capacity to manage those communities
- (S)Urban economies remain dependent on rural natural resources but the flow of goods is not direct via rural communities of production but via international markets



- In this graph of our national balance of trade – we see how the Canadian balance of trade is positive (S) for rural-focused industries like agriculture, fishing, forestry, and energy, but negative (S) for machinery, auto, and consumer items
- It is not obvious to the general public that our ability to purchase our ipods, computers, and clothes is so dependent on selling our forest products, petroleum, and energy resources
- Hence the people and communities required to service these industries become seen as a net drain on our economy
- Revising this ignorance of interdependency will require more pro-active approaches

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### Interdependence through Trade

- Price of transporting goods has dropped, transporting people has increased
- Commodity communities shrinking
- Urban dependent on commodities
- **Rural manufacturing remains strong** >

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- We have also found that (S)Rural manufacturing remains relatively strong – in fact it has been gaining employment relative to Canada as a whole
- Challenge is to find new products and services to export





- Finding niche markets is a community and collaborative exercise [\*\*\*Major point]
  - Requires matching local assets to global opportunities (both goods and services)
- Recognition of local assets is easiest to do locally.
  - (S) In Matawa, it was a local entrepreneur who redefined the waste cores from a plywood mill as valuable inputs for a business manufacturing bowling pins.
  - (S) It was the local citizens in Warner who realized they could turn their unoccupied arena into an international hockey school for girls.
  - (S) In Cap à l'Aigle, it was a municipal councillor who recognized a local lilac club as a basis for an annual festival that now brings in hundreds of people from around the world
- In all these cases, it was the local knowledge about the place, the people, the assets, and the networks in it which lay the basis for success.
- The importance of this local knowledge is one of the reasons why the OECD and many of its member countries have championed 'place-based' policy as an important ingredient for economic and social development
- These cases also illustrate how a place focus avoided the sectoral and departmental separation which so often gets in the way of innovation and flexibility.
  - To the Matawa entrepreneur the distinction between forestry and manufacturing was irrelevant.
  - The citizens of Cap à l'Aigle were not hampered by the government distinctions among municipal issues, tourism, finance, or trade – in fact, they made use of all of them when developing and implementing their strategies.
- The concurrence of assets, skills, networks, and knowledge in the same location necessarily created the conditions for inter-institutional collaboration: a point to which I will return
- But before that I would like to make a final point regarding exchange and trade issues

NRE <sup>2</sup> BUILDING RURAL CAPACITY IN THE NEW ECONOMY

## Interdependence through Trade

- Price of transporting goods has dropped, transporting people has increased 
- Commodity communities shrinking 
- Urban dependent on commodities 
- Rural manufacturing remains strong 
- Metro-adjacent communities grow 

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- Even while more remote communities are facing significant challenges with declining populations, the urban-adjacent ones are facing the opposite problem: (S) significant population expansion
- Often welcomed as a source of economic growth, but it is a mixed blessing
  - Costs of service quickly outstrip revenues
  - Local lifestyles and values often clash with those of the newcomers
  - Sustainability of local amenities are often reduced – thereby undermining the reasons why people move there in the first place
- Dramatically changes the nature of the interdependencies – as the commuters among you will know
- This movement of people creates a two-way flow that exacerbates municipal governance:
  - Who will bear the burden of the services they require?
  - How to manage the inevitable conflicts that arise?
  - Brings us to the second sphere of interdependence: institutions



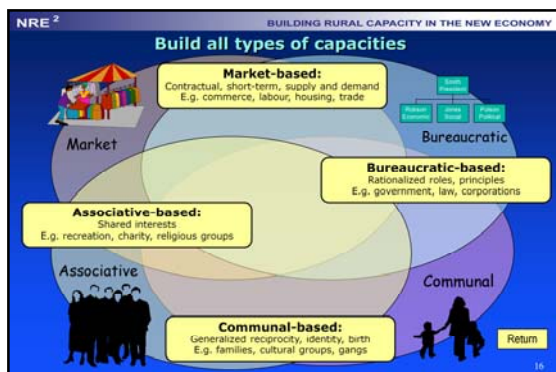
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## Institutional Interdependence

- Services regionalize, specialize, standardize, professionalize
- General policies insensitive to local conditions
- Bureaucratic norms are challenging for rural >

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- Institutions represent structures of rights, responsibilities, and entitlements
  - By virtue of the charters, rules, and roles, they organize both the people who are part of the institution as well as those with whom they interact
  - They not only constrain how we interact, but they largely guide us in the extent to which we have access to resources – both tangible and intangible
- It is no wonder then, that institutions provide a key focus for the consideration of rural and urban interdependencies
- In our research, we focused particularly on the role of institutions in the public and private sectors – both formal and informal
- Asking “How do these institutions structure interdependence among rural and urban centres?” we can identify some of the more important things we have learned
  - (S) Population and fiscal pressures have meant that access to services and governance have become regionally centralized and urbanized
    - This increases transportation costs for gaining access to these services – along with the extra demands on informal relationships to make the time available
      - Especially for the young, elderly, and infirm
  - (S) Since policies (by their nature) must be formulated in general terms (by those who do not have local knowledge), they often remain insensitive to the special characteristics of particular places – especially those which are smaller and more remote from urban centres
    - The potential for social exclusion of particular types of people or groups is, therefore, high
  - (S) Relating to the more formal urban-based institutions also demands unfamiliar skills of those in rural areas
    - To elaborate this I would like to make a brief diversion



- Our research has made clear how important the range of different types of networks are to the revitalization of rural communities
- They play an important role in the institutional linkages between rural and urban as well
  - They reflect different normative structures that guide our interaction – and most important – how we get things done.
- Identified some important lessons:
  - Social relations come in many forms ((S)market, (S)bureaucratic, (S)associative, (S)communal)
  - These forms link people and groups in different ways and to different institutions
  - To access the resources and services of these institutions, it is necessary to develop the capacity to function well in these different types of social relations
  - The new economy favours market and bureaucratic over associative and communal
  - Most rural communities are traditionally stronger in associative and communal than market and bureaucratic
  - But we did find that associative and communal networks can and are used to build market and bureaucratic under certain conditions
- By recognizing these different types of strengths and the complementarities between them, numerous options are opened for business, policy, and local action
  - [Public utilities or transportation companies might contribute their organizational skills or networks to facilitate access to markets for local entrepreneurs or municipalities]
  - Municipal, provincial, or federal governments may invest in communal relations to compensate for policies that undermine associative ones (e.g. greater mobility)
  - Businesses may better recognize the economic benefits of investment in associative or communal relations (directly or indirectly through the sharing of facilities or expertise)
  - Bureaucracies might compensate voluntary organizations to meet the accountability demands that undermine the associative relations]
- Primary thing to note: All forms are necessary in a complex, changing environment - The more agile a group or community is in being able to use all systems, the greater will be their capacity - especially under conditions of change. Each of them forms a basis for people working together.



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  - (S) Relating to the more formal urban-based institutions also demands unfamiliar skills of those in rural areas
    - Traditional norms are not bureaucratic and formal, but more informal ones: associative and communal – those found within volunteer groups and family relationships
    - Bridging the gap is often difficult
      - We have found that those voluntary groups with Boards of Directors and financial structures in place are more likely to receive financial and other forms of support, for example – disadvantaging those with more informal structures as a result of inexperience or volunteer burn-out in small populations
      - As a result, strengths in locally-based governance are not likely to be recognized and supported by more formal (external) institutions
      - To those in the outside institutions, it looks like inability or resistance to follow the basic rules, while
      - To those within the communities it looks like an imposition and insensitivity to local assets and strengths (undermining social cohesion and identity)
  - (S) The good news is that there are considerable opportunities for innovative responses to this mismatch
    - Often emerge as a result of the inadequacy of general policies to recognize and deal with local conditions



- (S)In Nelson, BC: The municipality saw an opportunity when the local hydroelectric dam was being sold
  - They weren't able (by law) to borrow money, so the town counsellors incorporated themselves, financed the purchase of the dam, and used the assets for regional community development (<http://www.city.nelson.bc.ca/html/hydro.html>)
- (S)In Miramichi, the provincial organizational structure was unresponsive to a crisis in the salmon stocks on the Miramichi river.
  - Interdepartmental disagreements made it very difficult to address an issue based on watershed so
  - The local citizens formed a committee of interested parties
    - Fishers, environmentalists, business-people, industries in the watershed, and municipal governments became involved
    - Developed policies and programs to ensure the sustainability of the salmon stocks – and in the process developed economic and social programs which benefitted the whole region
    - The committee became so important, that the provincial government had to collaborate with it on many issues affecting the region
- (S)The municipality of Seguin faced considerable frustration since each time it asked for tax increases to extend services to the rising number of seasonal residents in Parry Sound, it found that these newcomers would resist
  - They decided to revise their institutional practices to make sure that the newcomers would be included on the various committees
  - Soon they discovered that the resistance diminished as these newcomers
    - Came to understand the challenges that small towns faced with respect to service delivery, and
    - Made use of their urban-based personal and professional networks to search for innovative funding initiatives to cover some of the local costs
- Recognizing these opportunities requires input at multiple levels – and across the silos of government organization - something that can be enhanced by ensuring the institutional structures are inclusive of local and regional people and concerns

NRE<sup>2</sup> BUILDING RURAL CAPACITY IN THE NEW ECONOMY

## Interdependence through Environments

- Water, food, footprints, global warming restructure interdependence understanding



<http://cwconline.org/> <http://www.fraserbasin.bc.ca>

- The watershed committee provides a good segue into the third basis for rural-urban interdependence which I would like to discuss: our shared environments
- (S) Water, air, food, amenities, and global warming restructure our sense of inter-dependence
- In many cases there is a co-incidence with economic opportunities. For example
  - Community-based forests allow local capture of value and control
  - Natural amenities provide tourism and recreational opportunities
- But we have few mechanisms by which the **interdependence** is addressed and integrated into our economic and social organization
- A few examples illustrate the potential, however
  - (S)NY city began to worry about its water supply – recognizing that stressing the rural communities jeopardizes the quality of that resource
    - The Walkerton tragedy is a dramatic illustration of the potential danger in this regard
    - So they worked out an agreement with the communities in the Catskill mountains from which they receive their water
    - In exchange for maintaining the water supply in good shape, they provide the region with community development funds and expertise
  - Japan has recognized the importance of its rural communities for water quality – charging a surtax on water that is used for such development
  - France has recognized this interdependence through a surtax on food that goes to regional development
  - (S) The BC government has recognized the importance of watersheds as a uniting force and has established both the Fraser Basin Trust and the Columbia Basin Trust – the latter crossing international boundaries
  - (S) NGOs such as Ducks Unlimited and the Nature Conservancy are other ways in which these interdependencies are recognized and the efforts of rural people compensated rather than indirectly taxed through the imposition of environmental regulations.
- Our national survey showed that rural people share the urban concern with environmental stewardship
  - However, the existence of available services condition the manifestations of this concern
- These examples show how strategic alliances can be formed around shared recognition of environmental inter-dependence to the benefit of all



NRE <sup>2</sup> BUILDING RURAL CAPACITY IN THE NEW ECONOMY

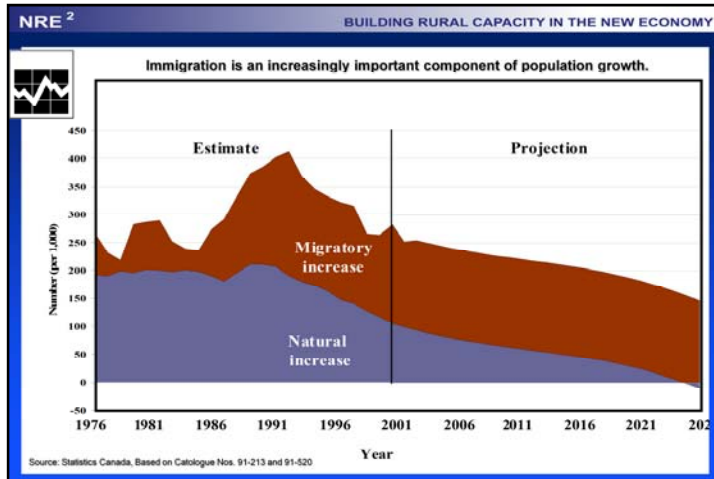
## Interdependence through Identity



- New interdependence challenges local identities
- Immigration reinforces urban hegemony >

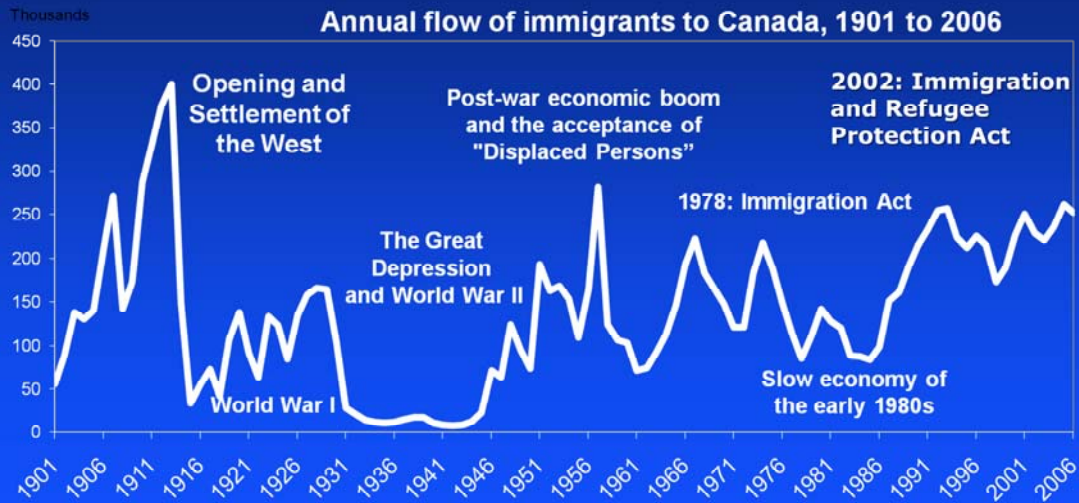
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- The fourth basis for interdependence is not usually on the agenda
  - But our research has made clear how it remains a powerful unifying and dividing feature of our social relations – and one that is particularly tied to the rural-urban distinction
- Identity recognizes explicitly two important features of that distinction
  - First, no matter how we formally define the difference, people develop a sense or vision of rural and urban that guides their behaviour in many ways
  - Second, it recognizes that people form attachments to place
    - Enough to create strong reactions when they are challenged
- Globalization and mass culture have not eliminated the importance of family, ethnic, cultural, and local ties for people's understanding of the world and their place in it
- The tragic failures of Canadian Aboriginal integration and community relocation programs and the tenacity of many rural communities in the face of economic decline provide strong testament to the strength of these identity-based processes
- (S) Policies that fail to recognize how places and people-in-places form an important basis for our sense of self, view of the world, and our capacity to act in it, are liable to undermine the social and human capital on which those policies rely
- (S) This will become increasingly important with our future prospects regarding immigration
  - Just as urban places have had to learn how to deal with the cultural diversity implicated, so do rural places
  - Our immigrants are largely uninformed about the Canadian rural experience
  - Rural areas have not been particularly welcoming to newcomers – except for some remarkable exceptions
- Require attention to appropriate representations of rural and urban



- Immigration is an increasingly important component of population growth.
- In 1976, natural increase (births minus deaths) represented over 80% of the demographic growth in Canada. Today, the situation is almost reversed as immigration represents close to 70% of the growth.
- If current trends continue, in less than 25 years, immigration will be the only growth factor, as natural increase will be negative.

## Canada has welcomed over 1 million immigrants during the first five years of the millennium



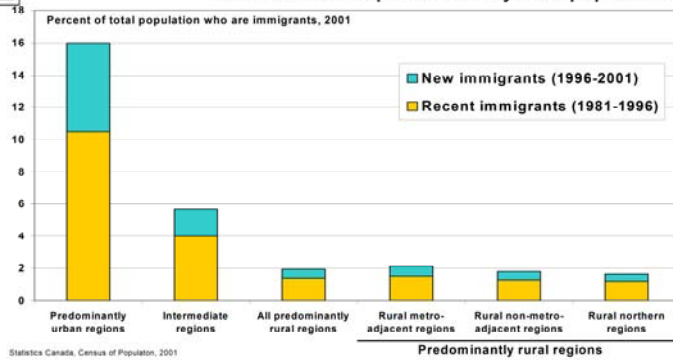
Source: Citizenship and Immigration Canada.

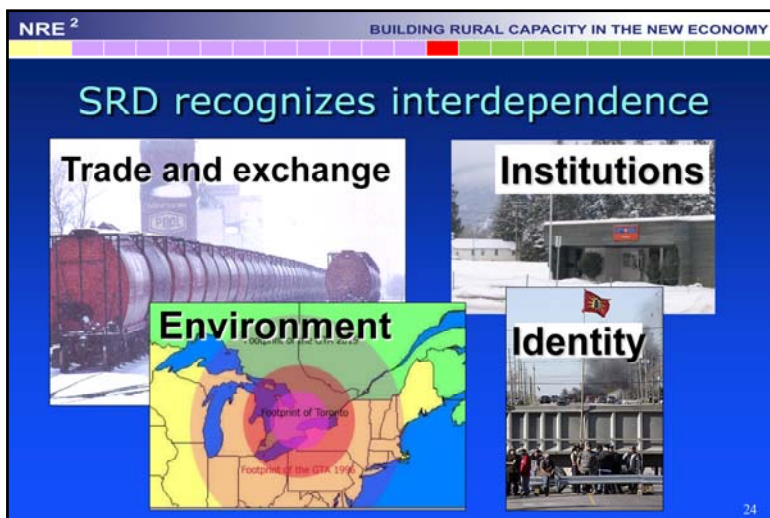
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Recent and new immigrants represented a  
low share of the predominantly rural population



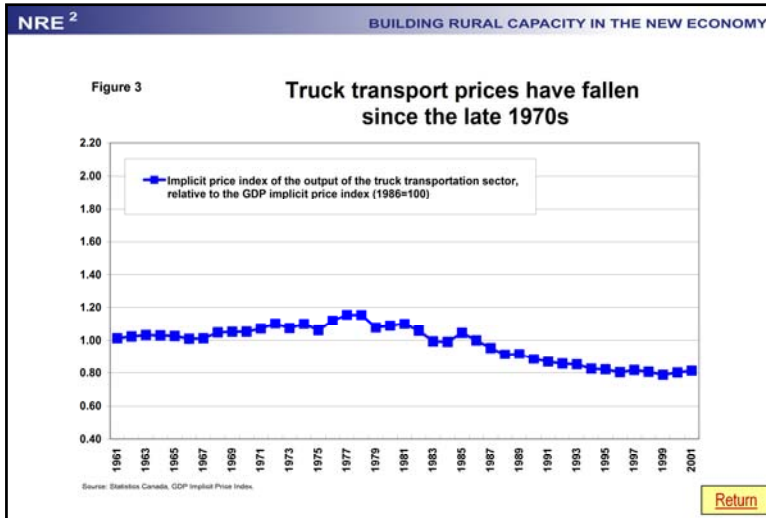


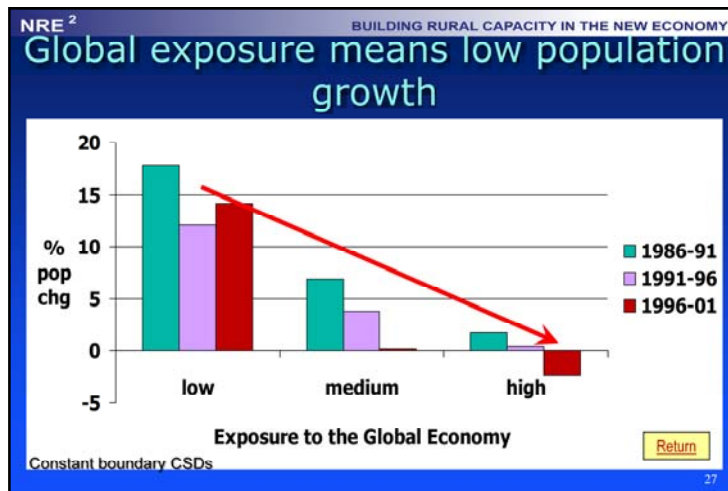
- In summary, I have tried to outline some of the ways in which requires we recognize the interdependence of all things: Economic, Environmental, Social.
- This is operationally reflected in Trade, Institutions, Environment, and Identity
- Sustainable Regional Development requires that we recognize this interdependence
  - Find ways to create wealth that do not undermine one element of that interdependence at the expense of another
  - Must work with all aspects in our search for sustainability
- I would now like to turn to the question of the **challenges** to this recognition and action
  - Those things that direct our attention away from that interdependence
  - Seduce us into thinking we can conduct our affairs without taking into account the ways in which they affect others and are affected by them



Japan Course: Sustainable Regional Development  
2-day Intensive Lecture

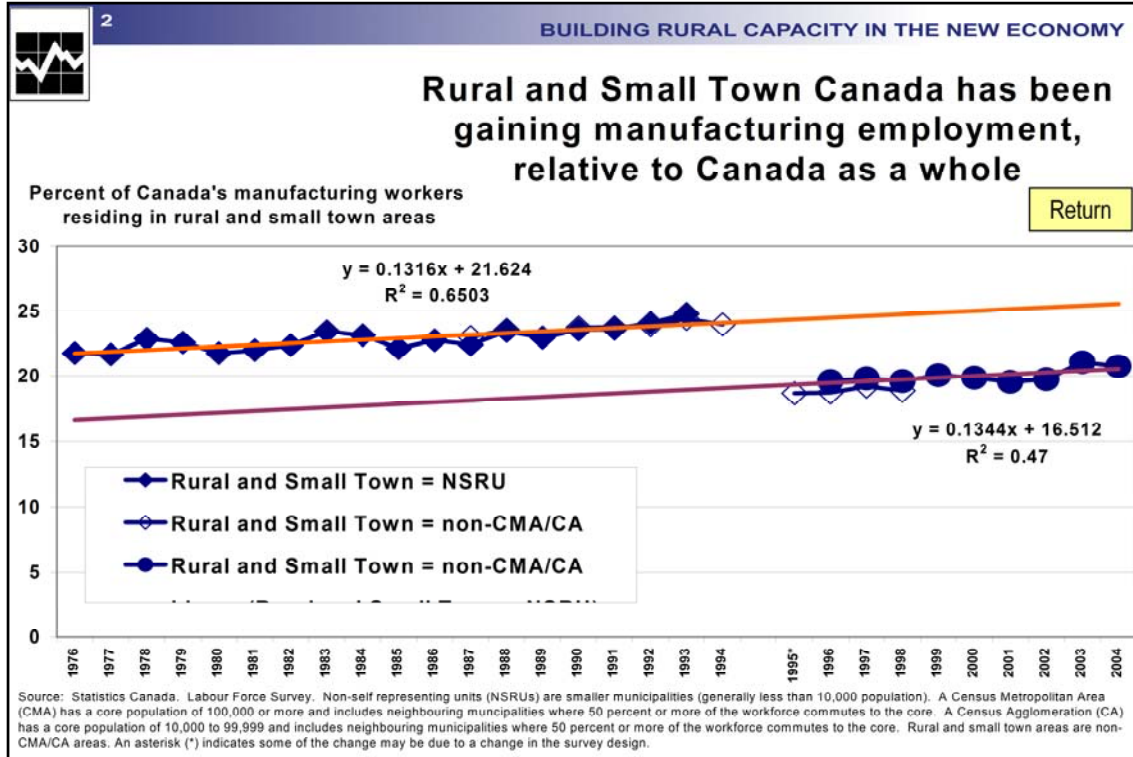
- UN: Our Common Future “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:
  - the concept of 'needs', in particular the essential needs of the world's poor, 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.”
- We would like to ask you to have two days intensive lecture on “Sustainable Regional Development” for graduate students. Each day you will teach us for three hours with 10 minutes break. The students are Master course graduate students and its number will be less than ten.
- If you can teach us new theories, study methods and useful examples related to the regional development, we would appreciate it. In particular, we are interesting in Canadian regional policies concerning sustainable development.
- Thank you for your cooperation.
- Best regards,
- Mitsuhiro,
- Consider:
  - What the students wish to learn
    - To understand what SRD means
    - To see what it implies about policy
    - To see what it implies about action

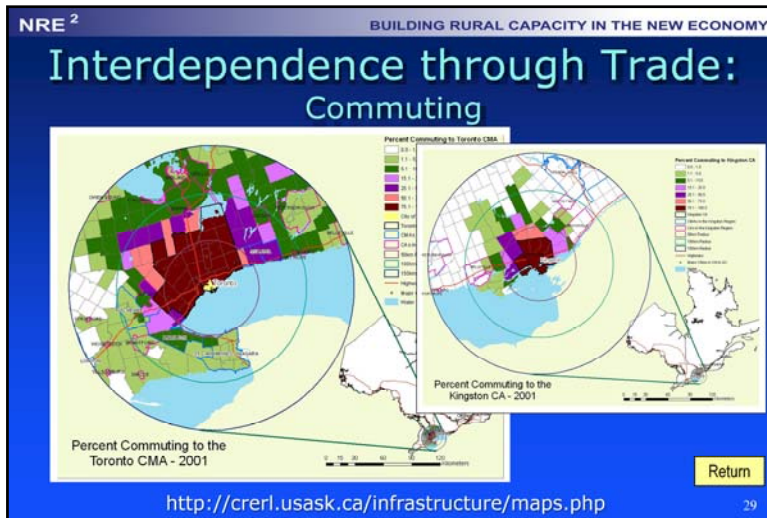




#### Trade impacts on population – basis of **institutions**

- Increased linkages to the global economy can create significant challenges
- (Ss) Graph showing the relationship between integration into the global economy and population change for small rural locations
- (S) The linkages of commodity trade have been very beneficial for our balance of payments (80% of trade surplus contributed by primary products) but it has undermined the population of rural communities
- This decline in population has been exacerbated by the centralization of services and inflexible governance structures
- Cost-cutting actions have decimated social infrastructure as well as threatened physical infrastructure.
- This may be shortsighted.





- (S) The influence of urban labour markets extend well beyond municipal boundaries – as shown by these figures provided by Mark Partridge and his research centre
  - They show the percent of people commuting to urban centres
  - The commuter-shield for Toronto extends 150 km
  - (S) the shield for Kingston extends 100 km
  - Both of these are well into other governance jurisdictions
- Create two-way flows that exacerbate municipal governance: who will bear the burden of the services they require?
- How to manage the inevitable conflicts that arise?
- Brings us to the second sphere of interdependence: institutions

NRE<sup>2</sup>

BUILDING RURAL CAPACITY IN THE NEW ECONOMY

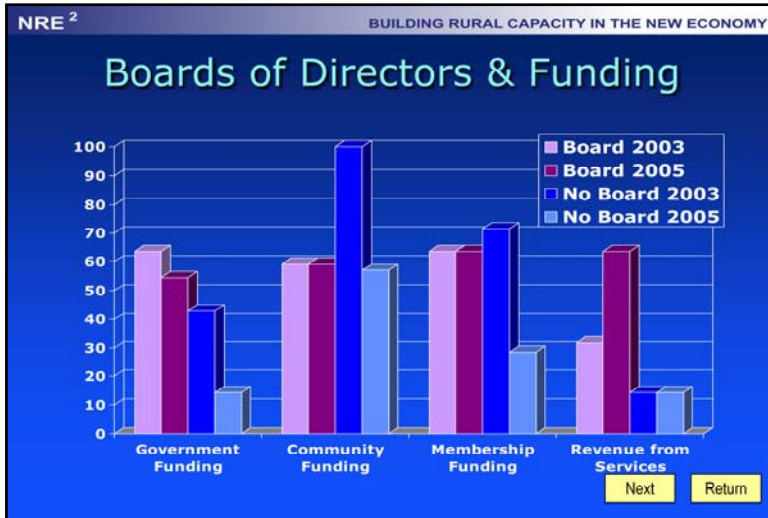
Health Professionals - Local

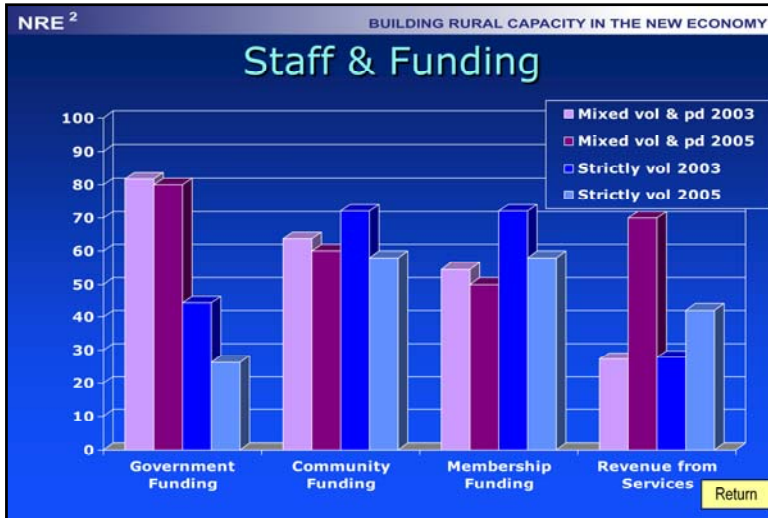
Services – All Sites (% yes)	1998	2005
Doctors	47.4	42.1
Nurses	52.6	36.8
Dentists	36.8	31.6
Optometrist	15.8	21.1
Dental surgeon	15.8	10.5
Home care visits	47.4	68.4
Social workers	42.1	26.3

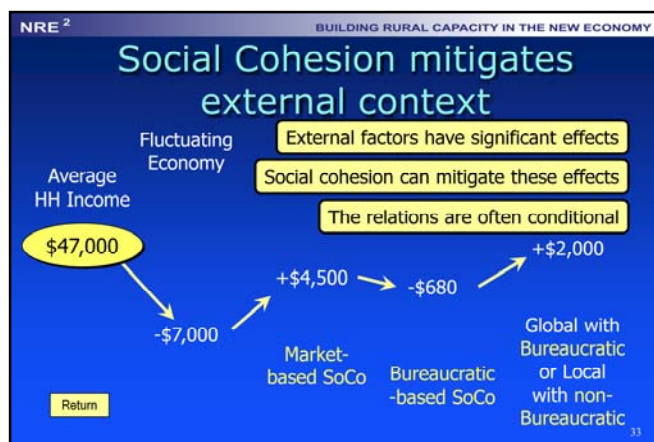
Return

- Reduction of access to health professionals in our sites









### SoCo -> Income

- One of the major advantages of a systematic study such as the NRE
  - Allows us to estimate interactions among variables: Relative, Additive, Conditional effects
- What happens to a rural community that faces a fluctuating economy?
- (S) Focus on household income for simplicity
- Multiple regression analysis
- (S) If household is located in a site with a fluctuating economy -> Decrease of \$7,000
- (S) If they rely on market-based social cohesion -> Increase of \$4,500
- (S) If they rely on bureaucratic-based social cohesion -> Decrease of \$700
- (S) However: important interaction effect between Globalization and reliance on bureaucratic-based SoCo
  - Bureaucratic-based in Global or Non-bureaucratic-based in Local economy: higher incomes (+\$2000)
  - Bureaucratic-based in Local economies or Non-bureaucratic based in Global: lower incomes (-\$2000)
  - Perhaps:
    - In Global economies -> best strategy is to build bureaucratic-based social cohesion
    - In Local economies -> best strategy is to build other types of social capital
- Summary
  - (S) Many factors beyond the control of local people: Global, Fluctuating, Location
  - (S) Still some ways in which local action can mitigate those exogenous factors
  - (S) Beware of generally applied policies – many conditional effects
- Included education in the equation:
  - Not as large an impact (standard error) as Market-based SoCo
  - Not as large an impact as Stability in the economy
  - Increased income by about \$3200

•  $R^2$  Adjusted = .281

Constant	\$10,346		Associative	\$573	.077
Market	\$445	.517	Bureaucratic	-\$680	-.074
Stability	\$7167	.129	Cap x Ause30	-\$876	-.059
Communal	-\$1097	-.110	High Cap	\$2667	.051
Glo x Buse30	\$1917	.105	Stb x Cuse30	-\$868	-.042