**ISRE** International Institute for Sustainable Regional Economies

A OISD Initiative Page 1 of 13

March 30, 2007

## Proposal for Matching Funding

To Canada, through Western Economic Diversification Jointly with the Government of Sweden through the County Administration of Västernorrland

## To participate in and fund IISRE research

## Preface

IISRE originated in Western Canada and in Mid Sweden. Western Economic Diversification Canada's purpose is to strengthen diversification, innovation, entrepreneurship and community economic development in a stronger west and a stronger Canada. The County Administration of Västernorrland broadly has the same purpose. IISRE research addresses the underlying issues that hamper investment, diversification, innovation, entrepreneurship and community economic development and that unsolved, cause social economic and ecological adversity. It is therefore natural that Western Economic Diversification Canada and the County Administration of Västernorrland should be the facilitating funding government organizations in Canada and Sweden. Increased knowledge resources produced by the IISRE research will obviously benefit Canada and Sweden and other economies.

Realizing that lasting social satisfaction, quality of life and political stability entirely depend on sustainable economic production and the distribution of real income in the society that makes up the economy, the key to sustaining these outcomes is increased knowledge. Economic production in national and supranational economies (such as NAFTA and the EU), is produced by the people of the societies that make up regional economies. Hence, the purpose of a political economic system is to satisfy the desire and the ambitions of current and future generations, by allocating scarce resources that have alternative uses into sustainable economic production and the distribution of real income in regional economies - the allocation mechanism.

Consequently, an important role for government in modern economies is to allocate enough resources to innovative research that increases understanding of the faults in the allocation mechanism that hamper sustainable economic production and economic development. Increased knowledge is imperative to 'early enough' spur development of technology and policies that address the faults before the faults, unsolved, are allowed to escalate into social economic and ecological failure.

The fundamental allocation problem for all research is that it is impossible to specifically predict the outcome; hence, it is impossible to specifically predict the outcome of IISRE research. Knowledge resources are invisible for society and can therefore easily be ignored, particularly as it applies to the importance of new ideas and research that may not follow the traditional way of doing things.

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What is possible to predict however is that without government recognizing new ideas and funding research and investigation that may challenge existing ways of doing things, a economy will stagnate and lose its ability to profit from increases in knowledge in the rest of the world. Subsequently, the economy will lose its ability to solve the social economic and ecological issues the society faces. "The problems that exist in the world cannot be solved by the level of thinking that created them" as Albert Einstein put it.

What is also possible to predict is that failure in the allocation mechanism and subsequent market failure in regional economies unsolved, will escalate into degrees of social economic, ecological and political adversity, and affect national economies.

So far, the IISRE Initiative has been a private philanthropic and university in-kind funded initiative. However the issues IISRE addresses are ultimately within government's function and accountability to society and not the private sector's.

IISRE's research therefore depends upon government participation and funding, but it is not possible to predict the exact outcome of the research. It is reasonable to predict that resources allocated to IISRE will deliver increased understanding of issues that hamper investment in sustainable economic production and economic development in democratically-governed mixed-monetary economic systems such as Canada and Sweden.

# Background

Initiated in 2003, IISRE is an interdisciplinary Canadian initiative that emerged out of discussion between representatives of Okanagan University College, OUC, (now University of British Columbia Okanagan, UBCO), Okanagan Institute for Sustainable Development OISD, and Mid Sweden University, MSU, and later in 2005 the University of Northern British Columbia, UNBC.

The rationale for IISRE is formulated in an OISD Discussion Paper of February 2004; "A perfect functioning allocation mechanism in an economy is a utopia. A better functioning allocation mechanism in regional and local economies is not a utopia, but a better functioning society". The rationale for IISRE is further discussed in subsequent papers, and reports from meetings in Sweden and Canada and in communication with Government leading up to this proposal.

The issues and allied interrelated social, economic and ecological problems IISRE addresses are becoming more evident and urgent for society; hence, the rationale for IISRE is becoming more evident.

For that reason IISRE herewith submits its proposal and attached budget with notes to Canada for initial and further co-funding with Sweden (copy also submitted to Sweden) for the following research.

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## Comparative research of the allocation mechanism in regional economies

#### Purpose

National and supranational economies are obviously made up of regional economies; hence the natural rationale for the IISRE initiative's interdisciplinary and community focus on the allocation mechanism in regional economies is documented in the Discussion Paper of February 2004 and allied papers, and also touched on below under the rationale.

By the allocation mechanism we are referring to the means by which, either through markets or governments or both, regional resources are allocated to production and distribution of economic, social and political goods and services, with the attendant economic, social, political and ecological consequences of such allocations.

(<u>K+M+P+B+N+H+C=PS=S</u> K knowledge + M money + P politics + B bureaucracy + N natural resources + H human resources + C capital resources = Product and Services = Social satisfaction.)

The purpose of the research is to increase understanding of the allocation mechanism and its failures that hamper sustainable economic production, issues that unsolved, cause social, economic and ecological adversity.

This understanding is imperative for society and its government; to 'early enough' develop more efficient polices that address the issues that hamper sustainable economic production, "not a perfect utopia, but a more efficient allocation mechanism" and subsequently a better functioning society.

## Rationale

The fundamental characteristic of humanity is unlimited human aspirations but limited resources that have alternative uses. The exception is knowledge resources, which has no opportunity cost attached, hence the significance in a knowledge and technology driven economy. Then there is the time problem; the time each generation has available to achieve their ambitions is short. Therefore, the present generation may achieve their ambitions without, knowingly or unintentionally, allowing future generations to achieve theirs. Hence, apart from natural disasters, while it is unlimited human aspirations that cause problems in the world, it is also only human's unlimited aspirations for acquiring new understanding produced by research that can solve the problems facing humanity. This is the human behavioural paradox, and the underlying driving concern that unites social and natural science. The reality is that social satisfaction, quality of life, a sound ecology, and political stability, entirely depends on economic production and the distribution of real income in society. The former are all elements that can be traced in any social, economic and political shift.

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Logically, therefore, the purpose of a political economic system is to allocate resources (the allocation mechanism) that secure sustainable economic production and the distribution of real income in order to satisfy the desire and the ambitions of current and future generations (the sustainability concerns). Also logically, unsolved failures in the allocation mechanism cause adversity. IISRE's research addresses issues in the allocation mechanism that hamper sustainable economic production, hence the rationale for IISRE is valid.

Canada and Sweden are two versions of democratically-governed mixed-monetary economic systems where regional economies generate economic production. Broadly, the characteristics of a democratically-governed mixed-monetary economic system are (1) a private sector with the task to invest in economic production in businesses in regional economies in pursuit of profit, and in that pursuit distribute wealth via employment. (2) a government sector with the task to provide such products and services that the private sector fails to provide, and such goods and services that can never be the private sectors task to provide, such as accountability to society for the allocation mechanism and its failures that hamper sustainable economic production, which unsolved causes social economic and ecological adversity.

What is significant in democratically-governed mixed-monetary economies such as Canada and Sweden is that government not only has the accountability to society for the private sector's and society's behavior as a whole, but it also has accountability for the governments own behavior and policies.

Society elects the government; hence, the behavior of government reflects the level of understanding in society of the government's function in society and also society's own moral and ethical values.

Knowledge resources and understanding are the keys to the combination and allocation of all other resources into products and services in order to secure social satisfaction and political stability. Knowledge resources and understanding are the keys to detect, recognize and solve failures in the allocation mechanism, before the issues unsolved are allowed to escalate into adversity.

Consequently, democracy in democratically-governed mixed-monetary economies such as Canada and Sweden depends on research that produces understanding; understanding that emerges in society via the free flow of information vigorously discussed.

The role of universities in the economy is to provide the knowledge resources that are critical to society, by providing higher learning and by educating citizens for life. The result can be measured by the role universities and academically-educated citizens play by their social activism and involvement in pursuing solutions for the issues facing society. This reflects the ethical values of universities. The University's role in society and allied issues is a vital part of IISRE.

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In a rapidly and radically changing and increasingly complex economy and world, IISRE prompts a discussion and investigation about a new roles for universities and the need to assist society with new disciplines, utilizing new combinations of social and natural sciences.

## The Regions

"National economies are made up of regional economies"

The region is becoming the critical political unit for analysis of socio-economic and ecological issues. This stems from the so-called globalization paradox – as economic and social interactions are increasingly global, the determinants of our regional society's place in the globalized economy are increasingly local. Regions that are peripheral to the major growth poles in the global economy require unique analysis and solutions.

As the national structure of more closed economies opens up, as when a dam bursts, the now unrestricted flow of investment and knowledge finds new ways and create new regions across old borders. This is illustrated in the IISRE PowerPoint attached to the discussion paper.

Heartland regions such as Mid Sweden and the North and Interior of British Columbia create value for metropolises outside of their region, such as Vancouver and Stockholm. New ways must be found to sustain these heartland regions in order to sustain prosperity for both themselves and their metropolises.

Moreover, new ways must be found to add more value in these regional economies using fewer non-renewable and irreplaceable resources. The renewable and creatable resources of these regions, such as knowledge, must be augmented.

The comparative approach of IISRE will do much to advance thinking in this area by each region being able to learn from the research and problems of each other; this will lead to more creative respective solutions.

What is needed is socially-relevant research on identifying and addressing problems in the allocation mechanism that hamper sustainable regional prosperity and quality of life in these respective regions. This research must engage the colleges and universities and their communities, and both the natural and social sciences. In this way IISRE research can assist these local regions, and other regions in the global economy, in improving resource development and allocation, from which stems regional prosperity, health and welfare.

## Interdisciplinary and community involvement

The general rationale for IISRE's interdisciplinary approach, involving as it does both the natural and social sciences, is that just as it is inappropriate to attach value to science and technology outside of its social and economic context, it is also inappropriate to discuss economic development without understanding the scientific and technological context upon which it depends. Social science and economics address issues and formulate solutions to the socio-economic and ecological issues facing society.

The problem is that social sciences and economics cannot develop the technological solutions without the use of the natural sciences. It is only through cooperation and collaboration between the natural and social sciences and society in general whereby research can support the development of solutions to the sustainable economic problems society faces.

## Comparative research

Comparative research allow us to increase understanding by investigating and isolating the reasons or causes for success or failure in the allocation mechanisms in two regional economic and political systems, allowing lessons to be learned in and between each region. For example, by comparing the Swedish and the Canadian municipal models, or the education models, or the social and healthcare models, etc., we can isolate the systemic factors that either hamper or facilitate sustainable economic production and hence the social and ecological sustainability of each region. We must increase the understanding needed to develop more sustainable policies, methods and systems that 'early enough' address issues facing society in Canada, Sweden and elsewhere.

## Examples of research areas

<u>Information, finance, liquidity and transaction systems;</u> in which failures hamper investment and the monitoring of that investment in small and medium-sized business in regional economies and the lessons to be learned from each; to identify potential technological solutions in the natural and computational sciences to overcome these failures, at home and globally.

<u>Economic development</u>; analysis of regional economic development strategies and initiatives from social and natural sciences perspectives within the universities in the two regions; to analyze existing models and systems and the lessons to be learned from each.

<u>Innovation</u>; compare the regional innovation systems in both regions, involving the dialogue between universities and firms and local governance in innovation, and the lessons to be learned from each.

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<u>Governance</u>; compare the nature of the economic governance systems, in particular the structure of government from municipal to central level, and expenditure and taxation systems in both regions and the lessons to be learned from each with respect to their compatibility with encouraging social well-being. This could later be expanded to involve other regions of the world. These are areas of particular importance as to urbanization of regions and municipal taxation systems and finance of services to growing urban areas.

<u>Education</u>; identify new education and training needs, and lessons to be learned from each education and training system.

<u>Higher Education</u>; identify new needs for management education, particularly in relationship to entrepreneurship and the management of knowledge and technology in small and medium-sized business in regional economies that, for example, produce for the international market.

<u>Sustainable regional and urban planning</u>; develop metrics of sustainability and examine the region in relation to these metrics. Is regional growth adding or subtracting value, that is, is it sustainable? It is sustainable if it adds more value than it takes away from the regional economy, with the evaluation of subtractions from and additions to that economy placed within a full environmental context.

First Nations in Canada and the Sami Community and Sami Parliament in Sweden; examine paths and institutional structures for sustainable economic development on First Nations lands. Also, how First Nations and Sami initiatives and perspectives can generate sustainable development in their regions, and how First Nations can become full and equal partners, along with regional governments, universities and colleges, and the private sector, in the sustainable development in their regions.

<u>Forestry:</u> in cooperation with private forest sector research, involving climate change and allied issues including entomology and pest management, in relation to the forest and other economic and social activities allied to the forest sector.

<u>Social welfare</u>; compare the health care and social welfare systems in the two regions involving issues such as excess consumption, privatization, and the lessons to be learned from each in their compatibility with demographics and the encouragement of preventive care and social well-being.

<u>Healthcare</u>; interdisciplinary research programs involving neuroendocrine and economics might be examined, to better understand how economic-socio-psychology, government policies and biology interact. There is a social and economic need to more comprehensively understand how behavior in government and the private sector involving the healthcare system impacts public health, the environment, work, personal relationships and the community. Indeed, inefficiencies and excess spending and consumption of healthcare, if at the expense of investment in economic production, education, research, and other socio-economic and ecological needs, might paradoxically undermine the maintenance of good public health in a community.

<u>Ageing Population: in short, an aging population is a pressing social and economic issue in Canada and Sweden that ties in with the two forgoing areas of Social welfare and Healthcare.</u>

<u>Agriculture, food, biotechnology, and water ecology</u>; identify needs for development in these areas including the need for increased value-added using fewer non-renewable natural resources. Special interest could be attached to the increased centralization and distribution of the food supply, and to the issue of community food systems.

<u>Digital communities, information technology and electronics;</u> identify issues in the allocation mechanism related to information and transaction shortcomings that hamper, for example, investment and development of economic production in small and mid-size enterprises in the regions. Also, to examine the potential economic impacts of information technology in healthcare, elderly care, e-business, e-government, and e-democracy for community involvement in their respective political systems.

This research is imperative to increase the understanding required to develop advanced information methods and systems that can efficiently and 'early enough' address issues in the allocation mechanism.

## Research structure

The research will be structured in a series of steps consisting of a series of phases. A review and evaluation procedure will at each step assure relevance, and then a decision will be made whether to proceed, change or terminate the research.

The evaluation procedure will include peer review and a panel of members from faculty, government and private sector.

## Phase one

Phase one is an overall unbiased exploratory phase of the two responding regions, with the purpose to:

- 1. Identify issues in each region that hamper or promote sustainable economic production;
- 2. Identify and determine the need for more detailed research that could be called for, for example, into SME finance/market/innovation systems, foresty sectors, healthcare systems or municipal governance systems.

The initial overall investigation will include, but not be limited to, such areas/sectors as:

- a) Demographics
- b) Government
- c) Education
- d) Industry
- e) Finance

## The areas of specific focus on phase 1 will be:

1. <u>Economic development</u>; analysis of regional economic development strategies and initiatives from social and natural sciences perspectives in the two regions, to analyze existing models and systems and the lessons to be learned from each;

2. <u>Innovation</u>; comparing the regional innovation systems in both regions, involving the dialogue between universities and firms and local governance in innovation, and the lessons to be learned from each, and

3. <u>Information, finance, liquidity and transaction systems;</u> in which failures hamper investment and the monitoring of that investment in small and medium-sized business in regional economies and the lessons to be learned from each; to identify potential technological solutions in the natural and computational sciences to overcome these failures, at home and globally.

## Deliverables in phase one

The purpose of phase one is to increase understanding of the allocation mechanism as it relates to economic development strategy, innovation systems and regional finance and liquidity by;

Identifying issues that hamper sustainable economic production and economic development in the two regions in Canada and Sweden, and

Practises in each region, in particular, methods and systems related to the innovation, financing, and economic development in each region, and

Produce quantifiable understanding of the practises in each region, and, best practises, and

(Note: the best practise of using the best practise concept is to investigate and compare the outcome of an action, not to uncritically adapt the outcome as a standard.)

Establish an information and discussion platform for discussion between stakeholders of the two regions' universities, governments, municipalities and private sectors, of identified issue and best practises. This information can then be used to refine methods and systems in each region, and

Provide analysis and recommendations to the stakeholders for evaluation in each region.

Continuing research in Phase II will depend on the evaluation of Phase I and the stakeholders' decisions.

#### Delivery

The research will be conducted by faculty from the Canadian and Swedish universities, primarily UBCO, UNBC and MSU, and will also include participation of expertise and experience from other universities and from the government and private sectors.

#### Dynamic research

The research will be dynamic, the aim being the ongoing delivery of analysis and information, hence value, to the stakeholders, with the research interacting with and involving the stakeholders all along the way.

#### Specific research

The decision to pursue specific research (for example, on the healthcare system) will be determined by IISRE's board after input and consultation with stakeholders.

## Control and Reporting

IISRE will establish a segregated account, specific for the comparable research, with a financial institution in Canada.

Progress reports and financial statements will be issued quarterly or as to be determined.

#### Dissemination

The intention is to disseminate information via a conference on sustainable economic development in open economic conditions, and an IISRE website that facilitates distance participation and input. Stakeholders will be given a password to access information and a discussion forum will facilitate discussion in small and large groups.

#### Business and Cultural exchange

The IISRE Initiative will facilitate business and cultural connections between Canada and Sweden.

# Funding

Under IISRE's Board, IISRE is seeking funding on the following conditions:

- Funding of the comparative research <u>Phase I</u>; attached budget of <u>CA\$288,932.00</u> (two hundred eighty eight thousand, nine hundred thirty two) to be shared between Canada and Sweden. Consequently Canada and Sweden will each fund <u>CA\$144,465.00.</u>
- 2. Reserved funding of <u>Phase II</u>; budget of <u>CA\$247,733.00</u> conditional upon the positive evaluation of Phase I.
- 3. Continuing funding based on positive evaluation of Phase II and ongoing.

## Disbursements

Disbursement from Canada via WED to IISRE by cheque deposited in the IISRE segregate account for the Canadian Swedish comparable research with a Financial Institution in Kelowna, under escrow that that funds cannot be used unless both Canada and Sweden have each disbursed their share of funding for the research.

Kelowna March 30, 2007

IISRE Initiative on behalf of the Board;

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Ray Strafehl Canadian IISRE Liaison Phone 1.250.860.3960

Sundsvall March 30, 2007

(on file)

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## Budget

Note to Budget: IISRE Initiative Regional Comparative Research.

Naturally and in real life it is seldom possible or productive for a researcher to put ongoing work aside and work fulltime with new research. Therefore, the budget model is a "unit" model. One research unit may, or rather will in reality, be shared by two or more researchers working part-time with the research.

Line 23: is the cost for one Research unit, which may consist of two or more researchers.

Line 25: is the Research unit II, it is estimated to carry out the research will require two research units, which likely will accommodate four or more researchers from Canada and Sweden.

Line 14: total Common Research Resources, are <u>indirect</u> resources cost to organize and carry out the research. Hence, the indirect cost and expense may not rise as the direct resource and cost should a research unit III or more need to be added.

Line 24: is the total indirect and direct cost for the operation of one Research unit.

Line 28: is the total budgeted cost for getting the research organized and to carry out the discovery/investigative part phase I.

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IISRE RESEARCH BUDGET	3/20/07														
								Report	Phase II Research Determined i				Report		
Research: Regional Comparative Research	Data	Phase I Initial/Discovery Research					Phase I	Phase I			Phase II	%			
Common Research Resources	Month	1	2	3	4	5	6	7	8	9	10	11	12	13	
1 Coordination Common Research Resources and Administration		4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	54,000	10.1%
2 Benefit and Insurance	51.42%	2,314	2,314	2,314	2,314	2,314	2,314	2,314	2,314	2,314	2,314	2,314	2,314	27,767	5.2%
3 IT Computer Programming Math Modelling	15,000.00	500	500	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	15,000	2.8%
4 Surveys and Compiling	20,000.00	1,000	1,000	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	1,800	20,000	3.7%
5 Conference	10,000.00	0	0	833	833	833	833	833	833	833	833	833	833	8,333	1.6%
6 Office Phone etc.		300	300	300	300	300	300	300	300	300	300	300	300	3,600	0.7%
7 Travel	2,000	0	2,000	0	0	2,000	0	0	2,000	0	2,000	0	0	8,000	1.5%
9 Field and Transportation		0	200	500	500	500	500	500	500	500	500	500	500	5,200	1.0%
10 Field Accommodation		0	0	800	800	800	800	800	800	800	800	800	800	8,000	1.5%
11 Miscellaneous		200	200	200	200	200	200	200	200	200	200	200	200	2,400	0.4%
12 Facility Cost	5,758	0	0	5,758	5,758	5,758	5,758	5,758	5,758	5,758	5,758	5,758	5,758	57,580	10.7%
13															
14 Total Common Research Resource		8,814	11,014	18,405	18,405	20,405	18,405	18,405	20,405	18,405	20,405	18,405	18,405	209,880	39.1%
15 Direct Cost															
16 Researcher Unit	8,500	3,000	3,000	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	8,500	91,000	17.0%
17 Benefit and Insurance (Swedish cost base)	51.42%	1,543	1,543	4,371	4,371	4,371	4,371	4,371	4,371	4,371	4,371	4,371	4,371	46,792	8.7%
18 Office Phone etc.		300	300	300	300	300	300	300	300	300	300	300	300	3,600	0.7%
19 Travel	2,000	0	2,000	0	0	2,000	0	0	2,000	0	2,000	0	0	8,000	1.5%
20 Local Transportation		0	400	400	400	400	400	400	400	400	400	400	400	4,400	0.8%
21 Accommodation		600	600	600	600	600	600	600	600	600	600	600	600	7,200	1.3%
22 Miscellaneous		200	200	200	200	200	200	200	200	200	200	200	200	2,400	0.4%
23 Total Direct Cost		5,643	8,043	14,371	14,371	16,371	14,371	14,371	16,371	14,371	16,371	14,371	14,371	163,392	30.4%
24 Total Common Research Resources and Direct Cost: Research Unit I		14,457	19,057	32,776	32,776	36,776	32,776	32,776	36,776	32,776	36,776	32,776	32,776	373,273	69.6%
25 Add Direct Cost: Research Unit II		5,643	8,043	14,371	14,371	16,371	14,371	14,371	16,371	14,371	16,371	14,371	14,371	163,392	30.4%
26 Total Research Units I and II including Common Resources:		20,099	27,099	47,147	47,147	53,147	47,147	47,147	53,147	47,147	53,147	47,147	47,147	536,665	100.0%
27 Total Budgeted Cost for each phase.								288,932						247,733	536,665
28 Canada and Sweden each funds:								144,466							

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