
**IDRC: Research Programs:
Sustainable Livelihoods for Youth Exploration**

**A Conceptual and Analytical Research Framework for Youth Enterprise and
Entrepreneurship Development:**

Social Innovation towards Sustainable Livelihoods for Youth

By

**Jamie Schnurr
and
Mike Grant**

1999

jtschnurr@sympatico.ca

I. Introduction

II. Conceptual Overview

Enterprise, Entrepreneurship and Development

A Three Sector Economy

Social Innovation towards an Enterprising Youth Culture

III. A Research Framework

Socio-Economic Framework for Understanding Youth Choices

Enterprising and Entrepreneurial Attributes and Their Manifestations in Youth Livelihoods

Enterprise and Entrepreneurship Program Development Framework

IV. Some Specific Claims to Consider

V. Specific Research Questions

Questions on Enterprise

Questions on Entrepreneurism

Questions on the Implications for Policy and Programs

VI. References

I. Introduction

1. The International Development Research Centre (IDRC), through its Assessment of Social Policy Reform (ASPR) Program Initiative has initiated a research exploration into the potential contribution that enterprise and entrepreneurship can make to improving the livelihoods of youth in developing countries. The purpose of the activity is to make a preliminary determination as to the possible effects of these approaches under a variety of developing country circumstances.
2. The research includes studies in Francophone Africa, Anglophone Africa, and Latin America. These studies will explore the broad socio-economic factors shaping development in each region with particular attention to youth enterprise and entrepreneurship. In addition, each study will focus on specific countries that illustrate regional themes. To date, country studies have been arranged for Kenya, Zambia, the Gambia, South Africa, Senegal and the Ivory Coast.
3. The purpose of this paper is to articulate a framework to assist the developing country researchers in their exploration of entrepreneurship and enterprise. A common framework will enable the research to be consistent and coherent and allow for a high degree of comparability between the regional and country studies. However, it is also expected that this paper will be amended based on initial comments and, ultimately, the outcomes of the research activity. It is intended for researchers to first use this framework and then make suggestions for its improvement.
4. It is expected that these studies will help IDRC make a decision about dedicating further resources to enterprise and entrepreneurship research and programming as a program area. Of importance to this determination will be solid evidence that these approaches have significant scope to address the serious challenges facing developing countries, as well as fitting with IDRC's mission ("Empowerment Through Knowledge") and its current activities in sustainable employment. The longer term vision is for the creation of an international network of researchers to share work and link with policy makers and practitioners in the field through the use of communication technologies.

II. Conceptual Overview

5. This section will provide some basic orientation to the research problem and definition of basic terms.
6. The problem is that increasing numbers of young people in developing countries are faced with sustaining livelihoods under very difficult conditions. We are, first and foremost interested in how enterprise approaches may be used to sustain the livelihoods of youth in these conditions.
7. By "enterprise" we mean that set of skills, attitudes and behaviors, (referred to as attributes), that allow a person to adapt to changing circumstances by taking control and initiative. Examples of enterprise attributes include self determination, focused decision-making, creativity, negotiation, conflict resolution, risk management, initiative, strategic planning and marketing. When these attributes are applied to business formation and expansion we call this

"entrepreneurism" whereas enterprise skills may be applied to a wide variety of other life circumstances including coping with poverty.

8. We are also interested in developing the concept of "livelihoods" (as a broader concept than employment) and to determine how enterprise and entrepreneurship attributes may be used to sustain livelihoods. Traditional notions of "jobs" often do not apply in developing countries that are experiencing either economic transformation from traditional to formalized economies or in situations where poverty is widespread. In these circumstances, it is necessary to understand, in a broader way, how youth cope in a wide variety of formal and informal employment experiences.

9. Finally, we are interested in institutional structures that communities use in developing and promoting enterprise skills, attitudes and behaviors. How do communities mobilize resources and build capacity to develop enterprise skills? What contribution can enterprise make to community economic development?

Enterprise, Entrepreneurship and Development 10. The great challenge of development is to effectively mobilize resources and, in the process, create a self-sustaining and dynamic economy that helps pull people out of poverty. The virtue of enterprise and entrepreneurship is that it works at the individual level of motivations and skills. This can be a powerful way to mobilize individuals to contribute to their own and their communities' development especially given the lack of a sound macro-economic framework that exists in many developing countries. Although there are many other factors that are also important to development, enterprising behavior has repeatedly been shown to be a crucial aspect of socio-economic development.

11. Development is necessarily a long term proposition. Developing countries tend to have a bottom-heavy demographic structure. Both these facts make a development focus on young people desirable and necessary. This is particularly true given the energy and creativity of young people which makes their unemployment or underemployment hold a relatively high cost in terms of lost potential.

12. A major objective of the developing country studies is to determine which aspects of the framework are of greatest importance and therefore worthy of further investigation. There are a number of crucial development issues that are particularly relevant to the model that require attention at this time. It will be key to elaborate on these issues in order to understand the potential contribution that can be made through enterprise and entrepreneurship development.

A Three Sector Economy 13. The issue of livelihoods may be understood within the context of a three sector economy where movements take place between the traditional, informal and formal sectors. The traditional sector is usually rural and focused on resource or agrarian-based activities that exhibit relatively low levels of productivity. This contrasts with the formal sector, which is often urban and relatively sophisticated in its use of technologies and management systems. Formal manufacturing enterprises, public administration, finance, and transportation are all part of the formal sector. The informal sector typically operates on the fringes of the formal sector and usually materializes because of the formal sector's inability to absorb labour from the countryside. It will operate outside of the existing regulatory and tax system for businesses and often focuses on small scale services such as distribution and personal services. Although some

people have looked to the informal sector from a public finance view (i.e. formalizing it will improve tax revenue), our concern is how the informal sector can be used to improve livelihoods of young people.

14. Development economists will often refer to the dualistic nature of developing country markets in comparing the traditional and formal sectors. This dualism is often a function of an initial unequal allocation of resources that is exacerbated by public policies (and political system) that constrain the growth of the formal sector and therefore its capacity to absorb labour from the traditional sector. Resource misallocation also can occur from policy biases against the traditional sector. The social, economic and political systems will often re-enforce one another in locking a country into a dualistic structure as the formal sector remains relatively small and the traditional sector remains impoverished.

15. When one speaks of "underemployment" or "unemployment" it is usually with reference to individual's position vis-a-vis these two sectors. Unemployment is more appropriately thought of as being a lack of employment in the formal sector. This differs from underemployment which usually arises from either low productivity employment in the traditional sector or the informal sector. It is not that the traditional sector or informal sector cannot provide productive work but rather is constrained from developing and accessing resources that would allow it to compete more effectively with the formal sector. Ideally, these sectors should also be modernized in terms of their access to capital, adoption of technology and use of current management strategies. Modernize, (i.e., more productive), is distinguished here from formalized i.e, registered businesses.

16. This dualistic structure permeates a wide variety of different economic and social structures. It limits the mobilization of resources to their best use. The business sector, for instance, is often characterized by large inefficient state run businesses, a small and closely held formal private sector and a burgeoning informal sector. A weak and biased financial system further re-enforces this structure as limited credit is typically allocated to the state first and the modern private sector second with little left for small enterprises, thereby preserving the status quo.

17. A similar dualism explains migration patterns. Migration to the cities from the countryside is primarily a youth phenomenon. Youth are attracted to large cities, yes, for social reasons, but equally importantly because of an expectation that they can achieve a better life in the urban centres. The formal sector has never been able to absorb the massive numbers of young workers that have sought work in the cities. Yet the earnings differences between the formal sector and traditional sector persist and encourage young people to hang on as long as possible for a "good" job in the formal sector. The same forces are at play in explaining the relatively highly developed post-secondary education system of many developing countries in the face of poor primary and secondary education systems. Indeed this misallocation has produced another form of underemployment as recent graduates have difficulty finding suitable work in an already-bloated state sector that is faced with significant downsizing through structural adjustment measures.

18. The growth of the informal sector is a direct result of the dynamics between the traditional and formal sectors. Informal employment as a share of urban employment is significant in Latin America, parts of Asia, the Middle East and sub-Sahara Africa where it varies from 30-60 per

cent. In low income Africa, the informal sector constitutes 60 per cent of urban employment and 20 per cent of GDP. These people tend to be employed in micro-enterprises and small firms usually in non-tradable services. Initially it was thought that many of those in the informal sector were actually under-employed, but recent work has shown (for Peru, at any rate) that the informal sector is actually a rational and best choice given the available options. Other studies have pointed to the tremendous creativity of the informal sector that needs to be harnessed to its greatest effect.

19. Not everyone who migrates to the city has the motivations and means to be successful in the informal sector, let alone the formal sector. The significant growth in urban poverty is testament to this fact. For many young people, the informal sector is no better than the life they left behind in the country and holds the potential to be more socially destructive as they interact with other young people with equally dim employment prospects. There is a great need to provide these people with the tools to cope with the challenges presented by large scale urban poverty in socially positive ways.

Social Innovation towards an Enterprising Youth Culture 20. In the early 1990's, in both developed and developing countries, innovative partnerships among government, private enterprise, non-government organizations and educators were formed to design and implement youth entrepreneurship programs as a means to generate youth employment and livelihood opportunities. An initial analysis of this program experience has resulted in some interesting insights which help to frame the boundaries of the research activity.

21. First, while youth entrepreneurship programs have fostered a variety of youth run businesses, these businesses often lack access to credit, need better business management skills and less constraining regulation. Second, in some cases policy provided an enabling context for programs to operate. However, in most cases programs existed primarily because of a lack of policy. Third, in Canada and some developing countries successful programs are beginning to have a backwash effect on the education system, resulting in innovative curricula and pedagogy. Fourth, entrepreneurial skills, attitudes and behaviors are intrinsic to the coping and adaptive strategies of young people responding to poverty. The challenge is for institutions to respond to young peoples' "real need" to recognize and build on these existing aptitudes. Fifth, the informal sector provides increasing opportunities for youth to seek out livelihoods. It is also a fertile environment for the development and application of enterprising and entrepreneurial attitudes, skills and behaviors. The application of these attributes can contribute to the modernization of the informal sector making it more productive. Sixth, despite its historical importance to socio-economic development, entrepreneurship through business start-up, is currently a viable option for no more than 10-15% of young adults. Nonetheless, evidence indicates that entrepreneurial attitudes, behaviors and skills enable an individual to be more enterprising and consequently better equipped to identify and exploit opportunities as an enterprising individual in the traditional, informal or formal sectors.

III. A Research Framework

22. The research framework is developed in series of three inter-related diagrams. Exhibit 1 provides a broad socio-economic framework for understanding youth choices and outcomes. Exhibit 2 juxtaposes the youth choices and outcomes at the bottom of Exhibit 1 with a range of enterprise and entrepreneurship skills, attitudes and behaviors that are seen as necessary to achieve these outcomes. Exhibit 3 then considers how the institutional system responds in developing programs to assist young people in acquiring these skills, attitudes and behaviors.

Socio-Economic Framework for Understanding Youth Choices 23. Exhibit 1 includes a number of broad factors that set the parameters for youth choices. These factors include:

the social setting that shapes individual and societal attitudes toward employment choices and social mobility;

the economic setting that determines the demand for various skills;

the institutional setting which speaks to the role of various institutions in both equipping young people with skills but also in providing them with resources;

the policy setting which seeks to incrementally shape and regulate the other three settings over time.

24. Exhibit 1 emphasizes youth choices and outcomes in a world where economic and social circumstances are given. It stresses a range of choices and circumstances that young people face as they make decisions about employment and livelihoods. In terms of their employment situation, the most important decisions pertain to educational choices and labour market entry choices. Many of the problems that young people face in the labour market have to do with their position as "outsiders". Young people tend to be the first fired and the last hired making their employment highly dependent on the economic cycle.

25. Of course, before a young person is old enough to make choices, they go through a period of socialization that shapes many attitudes toward enterprising behavior and entrepreneurship. There is a considerable amount of literature (much of it directly applicable to developing countries) that speaks to the importance of early socialization in establishing these attitudes. Depending on the society in question, the notion of "training" entrepreneurs may be nonsensical, especially if one takes the view that the number of entrepreneur is pre-established by social conditions.

26. In many developing countries there is a great dependence on family and individual savvy to sustain livelihoods. In some countries there is a higher degree of fluidity in the socio-economic setting, particularly as it applies to institutions and economic systems. In other countries there are strong barriers to mobility, for example, artisans keep their apprentices as apprentices for longer than needed, because they are cheap labour; some sectors of the informal economy are heavily regulated by informal networks limiting opportunities for "outsiders".

27. The relatively large numbers of youth in developing countries and the fluidity of the situation does open up the possibility for youth (and approaches through youth) to be a major force for positive change and development. The outcomes in the framework have to do with both specific outcomes for young people but also for society and communities. In the specific case of enterprise, favorable outcomes depend not only on the amount of enterprising activity but, equally important, on the direction of activity. This is why the system of incentives is important. Enterprising behavior may be targeted toward any number of different ventures, some that have positive implications for socio-economic development and others that do not.

28. The current range of institutions and policies of a country will play a key role in determining the direction of enterprising and entrepreneurial behavior, particularly those that focus on young people, such as the education system. The role of policy is both to contribute to enterprise and entrepreneurship development and to establish the appropriate parameters to steer enterprising behavior toward the best socio-economic purpose. If one is skeptical about the ability to affect the number of entrepreneurs, the role of policy would appear to be to assist those that make the choice to obtain adequate skills and provide them with an incentive structure that rewards enterprising behavior.

29. We are also interested in the range of institutions (e.g. public organizations, private business, communities and the family) that contribute to enterprising behaviors. For instance there may be a need to draw on personal, family and community resources for livelihood, particularly for recent arrivals to the city. Other dimensions of Exhibit 1 that might be explored are those of time (short, medium or long term) and levels (macro, intermediate and micro). These are not included here for reasons of brevity and simplicity but may, none the less, be necessary levels of analysis, depending on the country in question.

Enterprising and Entrepreneurial Attributes and Their Manifestations in Youth Livelihoods 30. Exhibit 2 seeks to juxtapose the various livelihoods at the bottom of Exhibit 1 with a range of skills, attitudes and behaviors (attributes) that are necessary to achieve these outcomes. The attributes identified on the vertical axis of the framework are not meant to be definitive or comprehensive, but to give a general indication of what is meant by enterprise and entrepreneurship. The first objective of this part of the research will be to define enterprising and entrepreneurial attitudes, skills and behaviors in the given cultural context. A second objective is to map out a continuum of outcomes of enterprising and entrepreneurial behavior ranging from the highly informal activities of street youth to more formal micro-enterprises and small businesses. A complementary objective will be to determine which skills are required at each stage of the continuum. These would be considered essential enterprise attributes. For instance, in an early stage of development, enterprise skills may be applied more generally to coping with poverty. However, with enhanced individual and community development, these skills may find expression in more formal enterprises either through entrepreneurship or through enterprising employment with larger organizations.

31. There are two key issues here. One issue is that there is a need to provide people skills to cope with current circumstances. A second issue is about equipping people with a range of skills, attitudes and behaviors that will improve their socio-economic mobility over time. There is a constant balancing act between these two competing demands. This is the challenge facing the

institutional structure as it seeks to respond to the communities' demands. A further objective in the research will be to identify the current range of skills and how these will have to change in the future depending on the socio-economic context.

Enterprise and Entrepreneurship Program Development Framework 32. Exhibit 3 considers the programming response to developing enterprising and entrepreneurial attitudes, skills and behaviors to achieve sustainable livelihoods. Programs are effectively the way the institutional structure responds the needs for enterprise skills. Programs will tend to have different target groups, pedagogical approaches and ultimately applications.

33. The framework in exhibit 3 outlines three levels of programming and corresponding outcomes and applications. These levels are not definitive or comprehensive. They provide basic categories within which programs can be located in order to assess what types of outcomes and applications the overall matrix of programs is achieving.

34. Level one Basic Enterprise and Technical Skills Development would include, for example, programs focused on street kids, that attempt to build on enterprising poverty coping behaviors. It could also include pre-apprentice programs that attempt to develop basic technical skills, complemented with enterprise skills development that may lead to the development of a small micro-enterprise. Target groups might include, younger age groups and individuals with little formal education. Applications and outcomes would manifest in the traditional and informal sectors.

35. Level two, Enterprise and Technical Skills Development through Experiential Learning would involve more advanced and applied enterprise and technical skills development coupled with experiential learning. This could involve the formation of informal sector micro-enterprises which utilize more modern types of technology and management strategies and have the potential to become formalized micro-enterprises and small businesses. Target groups for level two programming might include high school, college and university educated youth who have some technical training but are weak in enterprise attributes. This level of training might also be suited for the unemployed Masters students emerging from Africa's University system. Individuals coming out of programs at levels one and two are also suited to becoming enterprising employees for micro-enterprises and small businesses -- the outcomes of level three programs.

36. Level three, Entrepreneurship Development and Continuous Learning, would focus more on formal sector business start-ups and include credit mechanisms, mentoring. It would support businesses which, theoretically, have the potential to become employers, looking to hire "enterprising employees". Targets for level three programs might be those who have a high degree of technical skill and education and are highly motivated. This level of programming would be most likely best suited for unemployed Masters students with an entrepreneurial flare.

37. Upon identifying the range of programs that exist one can determine, at a broader policy level, whether there is an appropriate balance of programs; that the program mix corresponds to opportunities that have been identified in the traditional, formal or informal sectors; and whether

the program mix meets the development needs of the country, and the real needs of young people and communities.

38. From a research perspective we are interested in an assessment of the current institutional programming responses in relation to the assessment of the contribution that enterprise can make to overall development. For instance, there may be some target groups who might benefit from enterprise training but who, for whatever reason, are being under-served. These individuals might be best served by program levels one and two. Similarly, there may be inadequacies in program approaches or their connection to actual livelihoods.

39. The role of policy is to incrementally shape the social, institutional and economic settings to facilitate development. For a developing country, the major challenge is to address the basic needs of the population while also making structural reforms that improve the effectiveness of markets to pull people out of poverty. Official development assistance (ODA) and programs also have a role to extend the resources available to a developing country and/or to focus on those aspects of institutional reforms that are beyond the reach of the host government.

40. The important question here is: to what extent it is worthwhile, as a matter of either domestic or ODA policy to focus on enterprise and entrepreneurial skills development? There are no clear cut, a priori answers. These answers will depend very much on the context of development, and the current social, economic, institutional and policy settings. However, there has emerged a sort of consensus that micro-economic measures to improve the efficiency of markets are essential to long term growth. Enterprise and entrepreneurship development are certainly consistent with this approach. However, given the resource constraints, the important questions are what skills to develop, who should develop them and where are they likely to be applied given the social and economic context of a given country.

IV. Some Specific Claims to Consider

41. There are a number of specific claims that researchers make as to the role of entrepreneurship in socio-economic development. These include:

Enterprise and entrepreneurship can help people deal with poverty by taking initiative; It can help make the transition from the traditional society to the informal sector;

It can improve the modernization and efficiency of all sectors (traditional, informal and formal);
It raises productivity through innovation;

It creates jobs and reduces underemployment by expanding the informal and formal private sector;

It facilitates the transfer of technology through imitation;

It facilitates the commercialization of local technical competencies;

It reduces the ossification of established social institutions and the concentration of economic power;

It helps transform larger organizations and improve their productivity;

Enterprise and entrepreneurship improves the dynamic market efficiency; It improves the redistribution of wealth, income and political power; It creates new markets and facilitates the development of international trade;

Enterprising behavior in the informal sector can challenge existing regulatory structure leading to its ultimate reform.

42. Some of these claims are purely economic and are about developing the private sector and improving its productivity. However, for developing countries, entrepreneurship may also play an important role in the evolution of society, its institutions and public policies. Often the black or gray market activities of the informal sector inspire reforms. An example was the 1970's agricultural reforms in China that formally recognized and legitimized the practices of trading agricultural surplus. In this sense, entrepreneurial behavior may be seen as a powerful force for institutional development and social change.

43. A major contribution that will be made by the current research activity will be to test the validity of the above claims in a variety of developing country circumstances. In particular, the interaction of entrepreneurship and institutions will be important to understanding how entrepreneurship encourages change. In this regard, an examination of the informal sectors role in total enterprises will be important particularly as this contributes to sustainable livelihoods.

V. Specific Research Questions

44. There are a number of specific research questions to which the researchers in the IDRC research activity might address themselves. Reflecting on the framework presented here, it might be helpful for researchers to consider validating the claims made by other researchers as to the potential contribution of entrepreneurship to development.

45. In addition, researchers may wish to consider the following research questions that have been segmented into those on enterprise, entrepreneurship and policy and programs.

Questions on Enterprise

What does the "continuum" of enterprise skills look like and how does this relate to the labour market?

To what extent can enterprise skills find expression in either coping with poverty or in formal employment?

Is there such a thing as an enterprising culture and can this be developed through explicit measures?

How do regions and communities support the development of enterprise skills?

What current institutions support the creation of enterprise skills?

How does the development and manifestation of enterprise and entrepreneurship attributes differ with gender?

Questions on Entrepreneurism What are the social and cultural factors that pre-determine the number of entrepreneurs per capita?

What are the interactions between the entrepreneurial class and other institutions in society?

What institutional and economic factors either inhibit or encourage entrepreneurial development?
What potential spin-off benefits are there from developing entrepreneurs?

Is the entrepreneurial class a positive force for change?

Questions on the Implications for Policy and Programs

What are the respective roles of the private sector, non-government organizations, the education system and government in developing enterprise skills and entrepreneurs?

Can policy affect the number of entrepreneurs or are these more or less pre-determined by other factors?

What type of programs are appropriate in developing enterprise skills and entrepreneurship in each stage of development? To what extent are models that have been developed for other countries applicable?

How can enterprise skill development dovetail with macro and micro initiatives to improve the efficiency of markets?

How can enterprise and entrepreneurship development be promoted without over-regulation?

What role should official development assistance play in facilitating the development of enterprise skills and entrepreneurship?

VI. References

Agénor, Pierre-Richard. "The Labour Market and Economic Adjustment", IMF Staff Papers, Vol. 43, No. 2. (June 1996), pp. 261-335.

Baumol, William. "Is Entrepreneurship Always Productive?", Journal of Development Planning, No. 18 (1988), pp.85-93.

Clapham, Ronald. Small and Medium Entrepreneurs in Southeast Asia (Singapore: Institute of Southeast Asian Studies), 1985.

Krueger, Anne O. Economic Policy Reform in Developing Countries (Oxford: Blackwell Publishers) 1992.

De Soto, Hernando. The Other Path: The Invisible Revolution in the Third World (New York: Harper and Row) 1989.

Echtner, Charlotte. "Entrepreneurial Training in Developing Countries" Annals of Tourism Research, Vol. 22, No.1, pp.119-34.

Fields, Gary S. "Rural-Urban Migration, Urban Unemployment and Underemployment and Job-Search Activity in LDC's", Journal of Development Economics, Vol. 2. (1975), pp.165-187.

Grant, Michael, David Newing and Gareth Spanglett, Alleviating Youth Unemployment in Canada: Exploring Enterprise and Entrepreneurial Approaches: Draft Report. Unpublished Manuscript. April 1997.

Morrison, Christian ,Henri-Bernard Solignac Lecomte and Xavier Oudin, Micro-Enterprises and the Institutional Framework in Developing Countries (Paris: OECD Development Centre), 1994.

Mulenga Leonard. Livelihoods of Youth and Local Responses: Implications for Poverty Alleviation on the Copperbelt of Zambia. Unpublished Proposal to the Assessment of Social Policy Reforms Program Initiative of the International Development Research Centre (IDRC), February 1997.

Ray, Dennis. " Introductory Essay: The Role of Entrepreneurship in Economic Development", Journal of Development Planning, No. 18 (1988), pp.3-18.

Romer, Paul. "Endogenous Technological Change", Journal of Political Economy, Vol. 98, Number 5, Part 2 (1990).

Rostow, W.W. Theories of Economic Growth from David Hume to the Present (New York: Oxford University Press), 1990.

Schnurr, Jamie, Sustainable Livelihoods for Youth: Exploring an IDRC Niche. Unpublished. March 1997.

Schulz, Michael. "Employment Promotion Through Community Driven Education and Training", Small Enterprise Development: An International Journal, Vol. 7, No. 4, (December 1996).pp. 4-12

United Nations Development Programme, Bureau for Policy and Programme Support, "Productive Employment and Poverty Eradication: How Can Livelihoods be More Sustainable", Unpublished UNDP document. February 25, 1997.

United Nations, Office of the Special Co-ordinator for Africa and the Least Developed Countries, Expanding and Integrating the Informal Sector into African National Economies, (New York: UN, 1996).

Yamada, Gustavo. "Urban Informal Employment and Self-employment in Developing Countries: Theory and Evidence," Economic Development and Cultural Change, Vol. 44. No. 2 (January 1996), pp 289-315.

This is a working site

Copyright 1998 © International Development Research Centre, Ottawa, Canada
jschnurr@idrc.ca | Sept 15, 1998

Resources | Research Programs | The Institution | CRDI en français