RURAL SUSTAINABILITY

Christopher Bryant and Denis Granjon,

Département de Géographie, Université de Montréal, Montréal, Canada

Keywords: rural sustainability, linkages between rural and urban milieus, multifunctionality of rural milieus, complementarity of urban and rural sustainability, enabling macro-environment for sustainability, role of local action and planning.

Contents

- 1. Introduction
- 2. Rural Sustainability
- 3. Rural Milieus and their Populations in Metropolitan and Urban Regions
- 4. Symbiotic Relationships between Urban and Rural Milieus in Metropolitan and Urban Regions: A Historical Perspective
- 5. The Multi-functionality of Rural Milieus in Metropolitan and Urban Regions: The Crux of Achieving Rural Sustainability and Contributing to Urban Sustainability
- 6. Integrating Rural and Urban Sustainability: Local Action and Planning within an Enabling Macro-Environment

7. Conclusion Glossary Bibliography Biographical Sketches

Summary

Urban and rural milieus are intimately tied together in a synergetic fashion, so that urban sustainability cannot be divorced from rural sustainability. This argument is developed and illustrated by drawing on the concept of the multi-functionality of rural milieus, particularly in relation to rural milieus in metropolitan and urban regions. The argument is made that the key to achieving rural sustainability is through recognising and developing the multi-functionality of rural areas, and that this contributes in a substantial way to urban sustainability. Each of the principal functions of rural areas is reviewed by considering the nature of the function and the demand and need for it, the link between the function and urban and rural sustainability, the problems associated with the function, and the challenges presented to achieving and managing "rural" sustainability. While important macro-level frameworks created by central states and international institutions are important in achieving rural, and urban, sustainability, it is concluded that ultimately it is through appropriate local action and planning, including significant participation from local communities, that rural sustainability can be achieved and contribute towards urban sustainability.

1. Introduction

We argue that ultimately, urban sustainability cannot be divorced from rural sustainability. Urban and rural milieus are intimately tied together in a synergetic fashion, the one depending upon the other. While much urban activity and population

have been decoupled from the rural milieu, in the final analysis it is not possible to conceive of urban sustainability being achieved without being juxtaposed and integrated with the rural milieu. Indeed, the distinction frequently made between rural and urban can often be misleading, and, at the limit, specious. For instance, many small towns and medium-sized urban areas are in reality intimately tied to their surrounding rural environment. This is true both in developed as well as in developing countries. The most important relationships can include the provision of services to surrounding activities (e.g. agricultural service centres) and populations (e.g. to the farming populations in an agricultural region), administrative services, social and medical services, farm produce markets for village, small town and other rural residents, and employment for some people who continue to live in the "rural" milieus and work in the nearby village or small town. These relationships have long contributed to symbiotic linkages between "rural" and "urban", but they are all too easily forgotten in our preoccupations with the imperatives of modern society.

Problems have arisen when we make too much of the distinction between rural and urban. On the one hand, classifying "urban" on the basis of population concentration thresholds and densities and "rural" as the residual creates an erroneous impression of the importance of "rural", basically by underestimating it considerably. In Canada, for example, this approach artificially separates dispersed farm and non-farm populations from rural service centres because nucleated settlements of 1000 or more inhabitants are classified as "urban". Applied over time, this yields the impression of a declining rural population that is more dramatic than it really is, and encourages negative perceptions and thinking about "rural". Developing the Canadian example, if we add together towns of 1000 to 9999 people to the "census rural" population to give another definition of "rural", the share of this rural and small town population still declined from 36% in 1971 to 22% in 1996, but not nearly as dramatically as when the census definition of rural is used. Furthermore, it means that in 1996 there were still over 6 million Canadians who continued to live in rural/small town Canada, a not inconsiderable number of people in a country of about 30 million.

The common statistical practices of treating "rural" as a residual category after the "urban" has been counted as in itself perhaps not that serious -- however, this can colour the way we think about public intervention in development processes, particularly in countries where urban and metropolitan concentration has been substantial. Thus, programmes aimed at agricultural development, for instance, need to be thought of in the context of the urban centres or large villages that provide the agricultural areas with services, and in some countries, actually house the agricultural workforce. In France, the "modern" process of remembrement, that can be traced to the period of the Vichy government during the Second World War, was aimed at transforming the cadastral structure of rural France through field and property consolidation in order to provide a land framework within which farmers could "modernise", mechanise and motorise efficiently. The impact of this (together with other reforms) was dramatic—substantial mechanisation and motorisation led to a decline in farm labour requirements, thus fuelling a farm population exodus. At the same time, this encouraged farm consolidation or farm size expansion, with similar effects. Thus, without necessarily intending to do so, this programme of "improvement" in farm conditions actually contributed to undermining the local markets and thereby the economic base of many a small rural

service centre. Conversely, programmes aimed, for instance, at reinforcing employment opportunities in urban centres will also inevitably have an impact upon the surrounding "rural" structures in the primary sectors such as agriculture. These employment opportunities will encourage the withdrawal of agricultural labour, thus favouring mechanisation and motorisation of farming. It can also attract some of the farmers and, more commonly, their children away from the land, thus freeing up some farmland that characteristically becomes consolidated into larger and larger farms. Logically, it appears necessary to assess the potential impacts of such development in one milieu on the other. Frequently, however, this has not been the case. Today, we find many local efforts and public intervention generally aimed at trying to counteract the negative effects of earlier public intervention by stimulating rural development, trying to reestablish critical rural services and maintaining rural community populations. While these are dominantly concentrated in the remoter rural areas, there are also many examples of rural community decline within the broader reaches of metropolitan regions as well, in situations where the influx of "newcomers" has not yet occurred or yet led to the rejuvenation of the rural service centres.

In a similar vein, urban development on the edge of cities has frequently been planned and managed with little consideration being given to impacts on the adjacent rural and agricultural areas, even when (as we shall argue later) these same areas provide very significant functions for the urban milieus and their citizens. It has long been held in developed countries that uncontrolled non farm residential development in farm areas around cities has led to conflicts between farm and non farm uses, sometimes to the point where it has become very difficult for farming to continue. However, except for the United Kingdom early on and sporadic state efforts in the 1960s in the USA (e.g. California), efforts at attempting to manage urban growth to conserve agricultural land resources and ecologically sensitive areas did not really get under way until the 1970s (e.g. in Canada, the 1973 British Columbia Agricultural Land Reserve Act and the 1978 Loi de Protection du Territoire Agricole in Quebec). Even today in areas with strong agricultural land resource protection measures, conserving agricultural land resources cannot be taken for granted. Efficiency in infrastructure development and the "imperatives" of providing areas for residential and employment development are still powerful forces that can undermine years of efforts of conserving the agricultural land resource. In other countries, conserving the agricultural land resource and ecologically sensitive areas hardly seems part of the public agenda, e.g. even in countries such as Argentina where agriculture is such an important part of the country's economic base. As another example, around Alger, Algeria, a city of more than 2 million inhabitants, uncontrolled urban expansion has occurred onto some of the best agricultural lands in a country which has very limited agricultural land resources.

In terms of urban and rural interactions, the converse is also true. Certain types of agricultural development can be authorised in situations where severe negative impacts are transmitted to the nearby urban or urbanising milieus. This has been a frequent occurrence in relation to the authorisation of intensive animal production such as hog production, beef feedlot production and poultry production. In developed countries, this has given rise to very difficult conflicts or incompatibilities between such intensive farm uses and the nearby urban residential uses. In some contexts, the result has been the development of very restrictive environmental legislation that has effectively restricted

the development of these intensive animal farms (e.g. Quebec in Canada, New South Wales in Australia).

These introductory comments serve to underscore the many-facetted and complex interrelationships between urban and rural milieus. In the context of sustainability, the need to consider the symbiotic relationships between rural and urban milieus is demonstrated in much of this chapter in relation to the most significant dimensions of rural sustainability—economic, socio-cultural, and environmental. Our argument is developed primarily, though not exclusively, in relation to rural milieus in broadly defined metropolitan and urban regions. These are the geographic contexts in which the intensity of the interactions between urban and rural milieus has been the greatest and most intense. At the same time, the potential for conflict and degradation of rural milieus appears higher in these contexts although there is also, as we shall argue below, considerable opportunity for constructing a mutually-supporting life system in an integrated urban and rural space.

In regions further removed from the major urban concentrations, we can also find areas where the "rural" milieu has been subjected to significant pressures from urban-based sources. Examples include areas in which there is a significant tourism development. In developed countries, these include the rural areas in the south of France, Prince Edward Island in Canada, the Rocky Mountains and their various resort and ski areas. In developing countries, some rural areas have also attracted tourism development, such as in the sub-Saharan countries of West Africa or the small island states of the Caribbean. Here, the issues are not so much related to the intensity of the urban presence (though it can sometimes be great) but rather the impacts arising from the contact between different cultures and values.

In many other rural areas, the relationship between urban and rural milieus is quite different. Here, the result of the interaction is stagnating or even declining levels of socio-economic development. Such areas, which are often, though not exclusively, very far removed from the main urban concentrations, suffer from cumulative processes of decline and stagnation. In developed countries, they are areas characterised more often than not by out-migration, particularly of young people who leave to take advantage of greater educational and employment opportunities in the cities. This can erode entrepreneurial spirit and generally create dependency in relation to government support and subsidies, sapping the creative energies of the communities. Such regions are widespread, and can be found in most developed countries (e.g. the Massif Central in France, Atlantic Canada, many parts of the Middle West in the USA, much of interior Australia) as well as developing countries (e.g. the homelands in South Africa, vast areas of Brazil, many parts of rural India). A significant difference that has often been noted is that, while in developed countries the rural to urban migration has generally responded to real differences in living standards, educational and employment opportunities (migration d'appel), in many developing countries the same rural to urban migration has been based more on perceived differences in living standards and opportunities between rural and urban milieus leading many migrants to end up in situations of more abject poverty, living in unorganised and under-serviced shanty towns on the edges of urban agglomerations (e.g. Mexico City, Sao Paulo) (migration de refoulement).

Of course, not every part of these remoter rural regions facing difficulty suffers from decline and stagnation. Oftentimes, the general impression of decline is the result of a statistical abstraction, masking a large variety of heterogeneous local situations. Thus, in the Massif Central in France, a region long characterized as a zone of extreme socioeconomic difficulty, there are sub-areas with a relatively dynamic entrepreneurial base and a stabilising and even growing population. A good example is the town of Laguiole and its surrounding area. This area now boasts a flourishing knife-making industry based on a traditional activity, which had shrunk to practically nothing by the end of the 1970s. The same area also supports a growing cheese industry, also an activity that had shrunk to a shadow of its former self by the 1950s. These pockets of success in local development are characteristically based on rejuvenating or developing the economic base of the areas concerned, usually in relation to the urban population market, and focussing on specialised products and services (e.g. tourist services). While these success stories inevitably depend upon dynamic local leadership and commitment, they also demonstrate the essential complementarity between urban and rural development even in the remoter rural areas.

In developing our argument to emphasise this essential complementarity between urban and rural milieus, we draw upon the concept of the multi-functionality of rural milieus. First, we consider the underpinnings of the concept of rural sustainability followed by some comments on the nature of the populations in rural milieus in metropolitan and urban regions. We then place the symbiotic relationships between urban and rural milieus in metropolitan and urban regions in a historical perspective. In the main body of the chapter, we consider in detail the multi-functionality of rural milieus in proximity to urban concentrations. In particular, we argue that the key to achieving rural sustainability here is through recognising and developing the multi-functionality of rural areas. At the same time, we argue that this allows them to contribute in no small fashion to urban sustainability. In relation to each of the principal functions of rural areas, we consider the nature of the function and the demand and need for it, the link between the function and urban and rural sustainability, the problems associated with the function, and the challenges presented to achieving and managing "rural" sustainability. In the final major section, we look at the challenges of integrating rural and urban sustainability through appropriate intervention and planning by government at different levels. Finally, some conclusions are offered.

2. Rural Sustainability

Rural sustainability can be defined as a continuous search for development strategies (aimed at a general improvement in the human condition) to maintain and produce "healthy" rural communities in which economic, socio-cultural, political and environmental values are compatible and which respond to any imperatives in these dimensions, at least in the long run. It is thus fundamentally the same as "urban sustainability", only the differences in type of environments present, population densities and activity bases yield differences in the way in which the issues are posed and solutions constructed.

Rural sustainability, like urban sustainability, is a social construction. This perspective stresses the point that the search for rural sustainability is therefore a dynamic one, as

information, understanding and values concerning the different dimensions evolve over time. Furthermore, as socio-economic development proceeds, we can anticipate that the needs of the populations concerned will also evolve. This also means that constructing strategies for rural sustainability must take account of the fact that what is appropriate at one time and place may become inappropriate in the same place as other changes occur (e.g. as people become more sensitised to their lot in life, as they are able to fulfil certain of their needs, and as they change their view of their world and that of others). It also means that what is appropriate in one place at a given time may be quite inappropriate in another place at the same time. Of course, in the domain of international development, we have long been used to hearing about the dangers of transferring development strategies and institutional arrangements for one milieu into another. Agricultural reform and modernisation have provided some of the worst examples of the transfer of inappropriate technology into developing countries.

This dynamic and ever-changing quality of (rural) sustainability is in contrast to earlier conceptualisations of sustainable development in which the ecological imperative was paramount. Social, cultural and political considerations were of much less significance. The view of sustainability espoused in this chapter has gained ground rapidly during the 1990s. This perspective emphasises that sustainable development strategies must be socially and culturally acceptable, and, certainly in the short term, politically palatable. This does not mean that no changes in political culture and the political system are contemplated – on the contrary, substantial changes are frequently required to achieve greater social equity, both in developed and in developing countries. However, it does recognise that achieving sustainability can proceed faster in most situations if it is appropriated by the existing power structure, at local, regional and national levels.

Our perspective on rural sustainability is also one in which technological fixes are rarely seen as the key to "progress". What would be the point of placing a computer with Internet access in the hands of every child in developing countries, when there are far more pressing issues to be resolved? Why spend resources on trying to measure "appropriate" distance separation between residential uses and intensive animal farming operations for use in land use planning and management without trying to sort out the values of the people concerned? "Problems" are culturally (including economically and politically) determined and require much more than a technical approach. This is not to deny the significant role that technology can play in providing solutions or modifying the way in which we perceive "problems", particularly when integrated with the economic, political and cultural perspectives.

A significant aspect of sustainability that was present in the early days (the "think global, act local" leitmotiv) but which has become more and more developed is the "community". Today, we are concerned not just with a healthy biophysical environment, but also with a healthy social, cultural and political environment. The point of contact with many of these issues for many people is at the local or community level. Communities, whether we are talking of the community which is bound together by sets of social relationships or the modern community to which many look for their services, are where we spend much of our lives.

This "community" can be highly localised or more regional in nature. Both are

important for our argument. On the one hand, the local community is our point of contact for many daily activities - schools, shops, leisure activities. What happens in that locality very much affects our "quality of life". Hence, the notion of "sustainable communities" and "sustainable community development" has gained in popularity so much so that it is now not uncommon to hear of communities (in many developed countries) labelling community development positions as "sustainable community development" positions for "sustainable development officers". This localised community provides potential opportunities (because of its greater accessibility) for people to become involved in the process of searching for sustainable development paths, hence its great interest to us in this chapter.

On the other hand, the broader regional community is also critical to our argument, particularly in the context of the broad metropolitan or urban regions. Peoples' needs are not only satisfied from services and other opportunities available in their own local community. The more developed the country, the greater the spatial arena which urban populations are able to access in order to satisfy some of their needs for a healthy lifestyle. This is particularly the case for recreational and leisure activities but also encompasses educational and scientific functions, acquisition of certain goods and services as well as other functions. And for some people, their "community", the one with which they identify, is indeed their regional community, as they live in one part of the region, work in another and play in yet another.

But what about "rural" sustainability? Are there particular characteristics of rural milieus that set rural sustainability apart from urban sustainability, even though we recognise the essential complementarity of the two milieus? A number of points can be made regarding the sustainability of rural milieus:

- 1. The biophysical environment is still of considerable importance for many aspects of rural areas and populations. The biophysical environment lies at the base of what many consider to be "rural" green (in the developed world and where climate permits!) and certainly open spaces. This provides the frame in which rural communities have evolved and is a central part of the urban population's perception of what constitutes "rural".
- 2. A number of natural resources embedded in the biophysical environment still provide an important base for many livelihoods in rural communities. This is most obvious in relation to farming activities that still characterize much of the rural space around cities in many countries. But it is also true of some forms of mining such as sand and gravel extraction as well as forestry and woodland management. Such activities emphasise the intimate ties between human activity and the resource base.
- 3. In many rural milieus close to cities, resources are present which are critical to the well-being of urban milieus. This notion is developed below in relation to farmland resources, water resources, mineral resources, landscape and wildlife habitat. Some of these functions relate to economic activities, producing goods for exchange in the market economy, while others enter only partially or not at all into the market economy. But they are all deeply associated with our perceptions of what constitutes "rural", and they are all functions that provide "goods" or "services" to the broader urban population.

4. Rural milieus, practically by definition, are characterized by small communities, either concentrated into villages or dispersed, or both.

Political processes involving, for example, democratisation, participation and representation, are generally considered to be fundamental to achieving sustainability. In rural communities, because of the smallness of the communities, it could be argued that it should be easier to foster institutions favourable to achieving equity and social justice in the rural community than in urban milieus in the same metropolitan and urban regions. Thus, it may be that the rural milieus in such geographic contexts present opportunities for leadership in sustainability that may be capable of being modified and transferred to urban milieus. It would not be the first time that these rural areas in close proximity to urban environments have been considered areas with a high propensity for social and economic innovation and change—"socio-economic laboratories of innovation and experimentation". These rural communities in close proximity to cities also face significant challenges; they are often dynamic, with the population composition changing, bringing in different population segments, sometimes with different values and needs. How to integrate these new population segments or newcomers generally is not always obvious or easy. Furthermore, it is easy for "local" management to fall into "exclusion" in order to maintain a "quality" environment for the almost exclusive use and benefit of those there already.

On the other hand, low density and widely dispersed populations characterize many remoter rural regions. While their smallness can encourage participation and involvement, isolation and lack of leadership in a stagnating socio-economic environment present their own set of very difficult challenges for rural sustainable community development.

-

TO ACCESS ALL THE **33 PAGES** OF THIS CHAPTER,

Visit: http://www.eolss.net/Eolss-sampleAllChapter.aspx

Bibliography

Bauer G. and Roux J.-M. (1976). La rurbanisation ou la ville éparpillée, 176 pp. Paris: Éditions du Seuil. [This book explores the urbanisation of the countryside around major cities, and the various processes that have given rise to the settlement systems in the Western World. It provides a very interesting series of interpretations comparing and contrasting settlement patterns in North America and Western Europe.]

Brook R. and Dávila J. (eds.) (2000). *The Peri-Urban Interface: A Tale of Two Cities*, 251 pp. Bangor: University of Wales, and London: The Development Planning Unit University College London. [In this book, research on two city-regions in India is described, focussing on the characteristics of the agricultural systems, issues relating to land, water and waste management, and poor households in the peri-urban interfaces of these two cities, Hubli-Dharwad and Kumasi.]

Bryant C.R., Coppack P.M. and Mitchell C. (2000). The city's countryside. The Canadian City in Transition

(2nd edition): The Twenty-First Century (ed. T. Bunting and P. Filion), pp. 333-354. London: Oxford University Press. [This chapter presents a number of conceptual frameworks for analysing the dynamics of the areas and communities around cities. Focussed on Canadian experience, the conceptual frameworks are developed in relation to experience in the western world generally.]

Bryant C.R., Russwurm L. and McLellan A. (1982). *The City's Countryside*, 249 pp. Harlow, Essex: Longman. [This is one of the first books written on the countryside around cities from a holistic and integrative perspective. The book contains both a series of overviews as well as different chapters devoted to each of the major activities that have developed in these rural milieus. Planning and management issues and approaches are also discussed.]

Bryant C.R. and Johnston T.R.R. (1992). *Agriculture in the City"s Countryside*, 226 pp. London: Pinter Press; and Toronto: University of Toronto Press. [This a major synthesis of urbanisation impacts on agricultural structures and production around the world, set in the context of the whole set of pressures affecting agricultural production. It also reviews and analyses the different types of planning and programme responses to the issues.]

Dahms F.A. (1998). Settlement evolution in the Arena Society in the urban field. *Journal of Rural Studies*, Vol. 14, pp. 299-320. [This article introduces a different perspective on the evolving settlement patterns around cities by focusing on particular patterns of social interaction.]

Dale A. and Pierce J. (eds.) (1999). *Communities, Development, and Sustainability across Canada*. Sustainable Development Series, Vol. 2, 320 pp. Vancouver: Sustainable Development Research Institute, University of British Columbia. [The contributions in this book deal with many issues of importance to those interested in rural sustainability. The community is the focus of attention, and several contributions deal with sustainability of the rural community and its resource base.]

Epps R. (ed.) (1998). Sustainable Rural Systems in the Context of Global Change (Proceedings of the Joint Conference of the IGU Commission on the Sustainability of Rural Systems and Land Use/Cover Change Study Group, Armidale, Australia, July 1997), 424 pp. Armidale, Australia: University of New England. [This is a collection of articles devoted to the issues of rural sustainability. The impacts of urbanisation on rural, and particularly agricultural, land use are a major theme of many papers. Sustainable community development of rural communities is also a well-developed theme in this collection of articles. The authors come from a range of developing as well as developed country contexts.]

Furuseth O.J. and Lapping M.B. (eds.) (1999). *Contested Countryside: The Rural-Urban Fringe in North America*, 284 pp. Aldershot, U.K.: Ashgate. [This collection of articles focuses on the issues of managing the dynamic of the countryside in urban-centred regions in North America. It deals with various approaches to managing land use, including land trusts, agricultural land preservation programmes and governance.]

Pierce J.T., Prager S.D. and Smith R.A. (eds.) (2000). *Reshaping of Rural Ecologies, Economies and Communities* (Proceedings of the IGU Commission on the Sustainability of Rural Systems, Vancouver, British Columbia, July 1999), 300 pp. Vancouver, British Columbia: Department of Geography, Simon Fraser University. (Also available as a PDF file at: Web site: www.sfu.ca/~csrs.) [This collection of papers deals with a wide variety of issues in achieving and maintaining rural sustainability. Rural-urban interactions and sustainable rural communities are two of the major themes developed in this collection of articles. Practical issues are also tackled.]

Vojnovic I. and Poel D. (eds.) (2000). Provincial and municipal restructuring in Canada: Assessing expectations and outcomes. *Canadian Journal of Regional Science*, Vol. 23 (1), Special Issue, 186 pp. [This special issue of the CJRS contains ten articles which explore for different metropolitan regions the rationales and the experiences of municipal re-organisation and restructuring in those regions. In metropolitan regions, including both their urban and rural milieus, there are considerable challenges in relation to the equitable and efficient management of services to the population. As key issues in sustainable development, this collection of papers is interesting in that the conclusions are that large size (achieved through municipal amalgamation) is not synonymous with cost savings nor with a necessarily more equitable distribution of services and costs. There are also concerns regarding accessibility of populations to local government.]

Biographical Sketches

Christopher Bryant received his PhD from the London School of Economics, University of London, in 1970. He was on faculty in the Geography Department at the University of Waterloo from 1970 to 1990,

and in the Département de Géographie, Université de Montréal from 1990 to the present. He has published widely in the field of the dynamics of urban fringe areas, especially agricultural areas, the management and planning of rural land use, local and community development, and sustainable development. He was Vice-chair of the International Geographical Union Commission on the Sustainability of Rural Systems from 1996 to 2000, and is currently its Chair; it is a group that has close to 400 members from over 50 countries.

Denis Granjon is a doctoral candidate at the Université de Montréal. He gained his M.A. from the Université de Lyons III in 1997, while undertaking field work in the Montreal region. He is working in the field of the dynamics of urban fringe rural areas, with a particular emphasis on agricultural, tourism and agri-tourism development. He has presented several papers at conferences on these subjects, several of which have been published in the Colloquium Proceedings of the International Geographical Union Commission on the Sustainability of Rural Systems.

