What is rural? What is rural policy? What is rural development policy?

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Introduction

There has been a long-running conversation on the meaning of rural and rurality. Often, observers develop a profile or typology for rural residents, rural enterprises, or rural institutions and then use these characteristics to define rural or rurality. Alternatively, the focus may be on geographical localities (both spaces or places), with the typology developed from the distribution of residents, enterprises, or institutions within and across those localities.

The objective of this chapter is to review this discussion in order to clarify the spatial dimensions that define rurality versus the characteristics of individuals (or enterprises or institutions) along the rural<>urban continuum.

Rurality is a spatial concept. The key dimensions of rurality are the density and distance-to-density of the localities of actors (individuals, enterprises, or institutions. In other words, the dimensions of density and distance-to-density define the rurality of the geographical localities of actors. Many characteristics of rural actors are correlated with rurality. However, these characteristics do not define rurality.

The meaning of rural policy follows directly from the two dimensions of the rurality for localities. Specifically, the consideration of the implications of the two rurality dimensions of any given policy would constitute "rural" policy. For example, the consideration of density and distance-to-density would constitute the "rural" in rural development policy. This attention to rurality has been instituted as "rural proofing" or a "rural lens" in a number of jurisdictions.

There are various ways to delineate the grid or the spatial boundaries of geographical localities and to measure their density, and distance-to-density. This chapter reviews the considerations required to implement these measures. The exact choice of measures will depend upon the analytic objective being pursued.

The preparation of statistical tabulations and the desire to target public policy requires the determination of the spatial grid (i.e. the boundaries of each locality) and the thresholds for density, and for distance-to-density in order to classify localities or regions. These thresholds do not define "rurality". The choice of the threshold simply classifies actors associated with the localities at given points along the continuum of density and distance-to-density

For many purposes, analysts should consider the broader regional milieu within which each community is located. Similarly, for an analysis of regions, analysts should consider the mix of rural versus urban communities that comprise each given region.

These perspectives are discussed in the context of historical and current debates on the interpretations of rurality.

Discussion questions are offered regarding the nature of the operational trade-offs needed to implement a measure of rurality for any given investigation.

Since the empirical implementation of a measure of each dimension of rurality ultimately depends on the issue(s) being considered, it is critical that analysists are skilled at understanding and evaluating the appropriate way to measure each of the conceptual dimensions when addressing a given issue.

What is rural?

Theory vs operational variables

Before discussing the theoretical idea of rurality versus empirical measures of rurality, it is important to distinguish between a theoretical construct and an empirical variable that attempts to measure the theoretical construct. One should start with the theoretical concept and then search for ways to measure (or operationalize) that concept.

A theoretical construct may be considered to be an abstract feature of a phenomena or process. Typically, these constructs are not directly measurable.

Once the theoretical constructs are identified, analysts need to search for empirical measures (or variables) that can best represent the concepts. This process involves two decisions: first, one must assess the appropriateness of alternative empirical variables and chose the one that most closely captures the essence of

the theoretical construct; and second, one must consider the procedure or the methodology that represents the best way to obtain the empirical measure

Two or more variables may be correlated. In other words, they are interconnected at an empirical level. However, correlation does not mean causality. Specifically, a correlation between two variables may not indicate a causal relationship (i.e. if one sees more of "x", then one will see more of "y").

More importantly, these correlated variables should not (or more assertively, must not) be used to define the theoretical concept.

A theoretical construct is a relatively abstract construct (or concept) that describes the essential features of a phenomena. These constructs are (typically) not directly observable.
Operational definitions identify measurable variables that attempt to capture the essence (often partially) of the theoretical concept. This involves two steps:
1. identifying which empirical measure(s) most closely captures the theoretical construct; and
2. identifying which procedure or data collection methodology will be used to generate the empirical measure.
Correlates are variables (usually empirical) which vary together. There may or may not be causal processes driving the correlations.

The theoretical concept of rurality

Rural is a spatial concept (Reimer and Bollman, 2010; World Bank, 2009). Whether it is used for statistical, analytical, personal, or polemical objectives, "rural" implies something about the geographical location of its object. Even where "rural" is used in a metaphorical sense, it implies actors in localities with low density and/or a long(er) distance to higher density localities.

Theoretically speaking, rurality refers to geographical localities with respect to two theoretical dimensions:

- their density; and
- their distance-to-density.

Frequently, density may be indicated by the population size of a locality and distance-to-density may be indicated as the physical distance or the money and /or time expended to travel to a locality of high(er) density. A detailed discussion of measurement issues is provided below.

Thus, localities that are more 'rural' are those with a relatively low(er) population or institutional density and/or with a relatively long(er) distance to high(er) density localities. Urban localities are those with a relatively high(er) density. Variations on these generalizations create a large number of possible propositions regarding the impacts of density and distance-to-density on opportunities and behaviour as suggested below.

The relationship between density and distance to high(er) density localities is most usefully represented as a continuum—as illustrated in Figure 1.1. Individuals residing in a locality in the upper-right-hand part of this

diagram are residing in a smaller town (i.e. higher rurality in the density dimension) that is adjacent to an urban or metro centre (i.e. lower rurality in the distance-to-density dimension). Metro-adjacent individuals have easier access to urban or metro jobs and services (e.g. hospitals[1]) and a market to sell their goods and services. At the same time, they are living in a small-town locality (i.e. higher rurality in the density dimension). These individuals likely experience a small town "way-of-living" (perhaps less air pollution, less crime, fewer traffic jams, etc.) but are able to access a metro market and metro services. Individuals residing in a locality in the lower-left-hand part of this diagram cannot (easily) access the market or services of an urban or metro centre (i.e. high rurality in the distance dimension) but are residing in a larger town (i.e. lower rurality in the density dimension). These individuals are constrained to "small-town" or "small-city" opportunities (e.g. employment or services) but are living in a locality with a higher population density that would support the availability of many services, such as found in a regional service centre.

The Two Dimensions of the Rurality of Localities (on a scale from 1 to 10): Density and Distance-to-Density

	Index of rurality in the DENSITY dimension (from lower rurality (i.e. higher density) to higher rurality (i.e. lower density))										
Index of rurality in the DISTANCE dimension (from lower rurality (i.e. shorter distance) to higher rurality (i.e. longer distance))	0 {low rurality, high density}	1	2	3	4	5	6	7	8	9	10 {high rurality, low density}
0 {low rurality, short distance}											
1											
2											
3											
4											
5											
6											
7											
8											
9											
10 {high rurality, long distance}											

Figure 1.1

Operational definitions

The specification or choice of empirical measures of density and distance-to-density requires one to answer three questions.

1. What are the options for delineating the geographic boundaries or selecting the geographical units (i.e. a geographical grid such as community, county, region, etc.) that is most suitable to study the issue being studied?
2. What are the options for empirical measures of density and distance-to-density?
3. What are the options for establishing thresholds of the empirical measures for:
    a. The tabulation and publishing of statistical tables; and / or
    b. The designation of "rural" localities for targeting policies and programs.

The choice of geographical units for the empirical measures

The first operational choice required is the geographical unit (e.g. neighbourhood, town, county, regional district) which best represents the "places" or "localities" appropriate for the issue being studied (du Plessis *et al*., 2010)[2]. For example, the choice of spatial unit will depend upon whether one is studying an issue with a neighbourhood focus (e.g. day care), an issue administered at the county level, or an economic development issue to be considered for a functional economic area. This choice will, in turn, represent the "locality" in the grid in Figure 1.

For many community-level issues requiring community-level data, there will also be a need to know the characteristics of the region within which the community is embedded. Similarly, for many regional-level issues, it may be important to know the characteristics or mix of communities within the region (e.g. all are small(er), all are large(r), one large(r)) community, etc.) as well as how the population is distributed within the region.

If the data are not available for the theoretically appropriate geographic grid, there will be a loss of information. For example, if community-level data is the appropriate spatial grid but data are only available at the county level, then one is missing the variation among the communities in the county as the county-level data will only show the (population-weighted) average for all communities in the county. This approach will generate (perhaps very) different empirical relationships between rurality measures (density and distance-to-density) and the behaviour or outcome that is the object of the analysis. In fact, one would expect (very) different estimates of the size of the empirical relationship between each of the independent factors and the behaviour or outcome being analyzed.

Measuring density (as a continuous variable)

The choice of this measure will be determined by the analytic question being considered. Typically, the population size of the locality would be an appropriate choice. In some cases, the population per square kilometre might be more appropriate. However, there may be specific investigations that would call for a density measure such as the density (number) of social networks (perhaps on a per capita basis) or the density (number) of individuals diagnosed with diabetes (again, perhaps on a per capita basis), as two examples. For analytical questions, generally, the chosen measure of density would be entered as a continuous variable in the empirical analysis. Data availability may also constrain the choice of the appropriate geographic grid for the empirical estimate of density.

Measuring distance-to-density[3] (as a continuous variable)

The choice of the measure of distance-to-density would also be determined by the analytic question being measured. For example, the transportation of goods would likely require a different set of measures compared to the transfer of services (such as the transfer of accounting services or travel agent services by the Internet).

The road distance might be suitable for many analytic questions. More likely, the time cost and/or the money cost of making the trip would be a more suitable measure. The question of distance to "where" will depend up the question(s) being investigated. For example, the measure of the distance to daycare versus the distance to a brain surgeon versus the distance to sell your crop of organic peaches would each need to be implemented in different ways. In addition to the money or time cost of distance, for some cases, such as the distance to attend university, the issue of distance may also involve psychological, emotional, cultural, and familial costs (or perhaps benefits) that need to be considered as part of the measure of distance-to-density.

For analytical questions, generally, the chosen measure of distance would be entered as a continuous variable in the empirical analysis. Perhaps obviously, a continuous variable would not be appropriate for residents of a small(er) island (e.g., residents who must cross a bridge or cross a mountain pass).

Data availability is always an issue. For example, if the analyst is searching for a measure of distance to a university, perhaps the ideal data would be the longitude and latitude for the exact location of the university. However, the analyst might be constrained to use the distance to the centroid of the municipality (or the boundary of the municipality) where the university is located. The comparison of multiple potential and logical measures of distance-to-density would permit the analyst to test hypotheses about the significance of these various measures of distance-to-density in explaining the behaviour or outcome being studied.

A number of countries have generated remoteness or accessibility measures of the distance to urban centres. For Canada, see Alasia *et al.* (2017).

Establishing thresholds for classification into groups

In order to generate a statistical tabulation of the characteristics of individuals, enterprises, or organizations along the rural<>urban continuum, one needs to select a threshold of density and a threshold of distance-to-density. In addition, some government agencies need rurality thresholds[4] for targeting government programs.

Thresholds for density

Statistical agencies (almost) always classify their population into rural and urban groups by assigning a threshold for the population size of a settlement (built-up area). One participant at the National Academies (2016) workshop had tried to determine the original justification for the threshold of 2,500 inhabitants for the USA classification of rural versus urban but the available files in the government department did not provide any rationale for the choice. Statistics Canada has used a threshold of 1,000 inhabitants for the rural-urban classification for at least 100 years and it is equally unlikely that the original choice of this threshold could be uncovered.

For analysts who are able to assign their own thresholds, the choice of a threshold should be influenced by the research question. In some cases, one will wish to understand the regional context within which each smaller locality is embedded or, in other cases, one will want to understand the mix of communities that constitute a given region (Isserman, 2005; Partridge and Rickman, 2006).

Thresholds for distance-to-density

Statistical agencies in a number of countries assign a distance threshold. For example, in the USA, counties are classified as non-metro based on a density criterion. Then, a distance criterion is applied, to classify non-metro counties into two groups: metro-adjacent and non-adjacent to metro. The rural and small town definition that is used in Canada (du Plessis *et al.,* 2001) is based on a density criterion of 10,000 inhabitants (in a given census sub-division (CSD) (i.e., incorporated towns and incorporated municipalities) plus a distance criterion based on observed commuting flows (specifically, less than 50% of resident workforce commutes to a CSD of 10,000 or more). These density and distance-to-density thresholds are illustrated schematically in Figure 1.2. The regions delineated as predominantly rural regions by the OECD are classified into two groups – predominantly rural regions close to a city and predominantly rural remote regions (see Brezzi *et al*., 2011).

For analysts who are delineating their own thresholds, the choice of the threshold should be driven by the issues being analyzed.

The Two Dimensions of the Rurality of Localities (on a scale from 1 to 10): Density and Distance-to-Density

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	0 {low rurality, high density}	1	2	3	4	5	6	7	8	9	10 {high rurality, low density}
0 {low rurality, short distance}											
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5											
6											
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8											
9											
10 {high rurality, long distance}											

Rural and small town (outside Census Metropolitan Areas (CMAs) and outside Census Agglomerations (CAs))

These thresholds illustrate (in a notional sense) the operational definition of "Rural and Small Town" areas where the vertical line represents a population "density" of 10,000 or more in the population centre and horizontal line represents a "distance" threshold measured by whether 50% or more of the employed residents commute to the population centre (du Plessis et al., 2001).

Figure 1.2

Implications

From an analytical point of view, the most important purpose for defining the dimensions of "rurality" is to understand and measure how one's position of density and distance-to-density in geographic space might affect behaviour or outcomes. This means that these behaviours or outcomes should not be included as elements of the definition of rurality, but as potential correlates of rurality or urbanity. Indicators such as the percent of the labour force in agriculture, levels of education, income, attitudes to hunting, or even the feeling or perception of rural identity should remain independent from the theoretical and operational definitions of rurality so that theories and hypotheses regarding the impacts of each dimension of rurality can be empirically tested (Cloke *et al.*, 2006; Halseth *et al.*, 2010; Woods, 2009; Alasia, 2010; Partridge *et al.*, 2007a, 2007b, 2008, 2011).

This separation of rurality dimensions and potential correlates includes the interpretation of "rural" as a social representation or construct (Halfacree, 1993 and his comments in the report by the National Academies (2016, p. 38)). This approach suggests that how people perceive or imagine "rural" geographic space will influence

behaviour. “Rural” as a social representation should be considered as a potential hypothesis independent of the spatial aspects of density and distance-to-density, rather than a defining characteristic. By separating the definition of rurality using the dimensions of density and distance-to-density from its social construct characteristics, it becomes possible to explore potential empirical relationships between these two elements rather than confound them within the same definition.

The same approach should be used when rurality dimensions are treated as a proxy for indicating the “needs” for targeting a policy or program. If the target is unemployment, health services, or capacity to initiate development programs, then a direct assessment of the “need” would seem to be a more efficient approach than using the dimensions of rurality to target a policy or program. Need and capacity will likely differ across the two rurality dimensions of density and distance-to-density but the correlation or linkage of rurality and need or capacity should not be expected to be a one-to-one relationship. In other words, considerable variability of need and capacity would be expected within each cell of Figure 1.1. A program targeted at need and capacity should use an independent index of need and capacity rather than an index of rurality in order to implement its initiatives.

This approach means that the characteristics of people in any locality do not define their rurality. The effort to define “rurality” is not an effort to generate a socio-economic classification but to ascertain whether or not their location in geographic space has an independent influence on their behaviour or outcomes. Thus, the effort to define “rurality” is not to generate a grouping which minimizes within-group variability relative to “urban.” Rather, the effort to define “rurality” is to situate individuals in a spatial locality in order to examine how the locality dimensions of density and distance-to-density might affect their behaviour, modify their perceptions, constrain or enhance their options, or require special programs for the management of resources or services.

The close association of “place” and “distance” with human intervention reinforces another challenge associated with the dimensions of rurality: its ideological implications. This is especially important for analysts with an interest in social or political change. The thresholds adopted for “place” and “distance” inadvertently (and unfortunately) give preference to certain objectives, infrastructure, and institutions over others. The choice of any given threshold will tend to provide the impression that every locality in the group is the same. They are certainly the “same” with respect to the classification variable but they would be expected to be (and empirically are) very different in many other respects. This will (or will appear to) diminish important diversity of social, institutional, and political factors within the delineated spatial grouping.

Perhaps obviously, the schematic in Figure 1.1 represents the situation at a given point of time. Over time, there are changes in both the advantages and the disadvantages associated with both density and distance-to-density. Notably, the price[5] of distance has been declining over time (Bollman and Prud'homme, 2006). In addition, Lichter and Brown (2011) speak of "changing spatial boundaries" and Lichter and Ziliak (2017) speak of "new patterns of spatial interdependence".

In summary, the conceptual definition for the rurality of localities is density and distance-to-density. Operational decisions regarding the way to measure density and distance-to-density should be specified on the basis of the objectives of the specific issue being considered.

Finally, the analyst should take care to ensure that the behaviour or outcomes of individuals, enterprises, or institutions are clearly defined (theoretically and operationally) in a way which keeps them separate from the theoretical and operational definitions of rurality. Only in this way can analysts learn from the empirical analysis instead of suffering the tautological error of finding that the relationships are true by how they are defined.

Discussion

Early analysis of rural qualities and places occurred as a contrast to urban ones. Analysts used the distinction to describe a wide range of contrasting characteristics: economic, productive, social, and political (Engels & Marx, 2005; Simmel, 1950; Weber, 1966). These analyses rarely included empirical studies of specific places, so the challenges of operationalization seldom emerged. Rural regions were often identified with agricultural production, particularly in the European context. The contrast of conditions in urban and rural places was sufficiently strong (at least in its conceptualization) to inspire its use as explanations for differences such as economic growth, social integration, health, political action, values, and attitudes. This type of analysis was also reflected in the institutional organization of governments, often in the form of agriculture or regional-focused departments.

It was only in the latter part of the 20th Century, that a simple contrast of rural and urban regions and the strong identification of agricultural production with rural places faced challenges on empirical and analytical grounds. The reframing of agricultural organization and community characteristics (e.g., Goldschmidt, 1947) and the proliferation of detailed case studies in the North American context (e.g., Hughes, 1963) raised concerns, both conceptual and operational, about the simple contrast between urban and rural places. One of the strongest challenges emerged as international comparisons were made in the search for common indicators of rural and urban places. Driven by the desire for international comparisons, analysts were faced with many different meanings and indicators of "rural" in places as diverse as Greece, Norway, Germany, the USA, or Canada (Eurostat, 2015; OECD, 1994). This was reinforced by debates among researchers

regarding the explanatory significance of spatial conditions themselves in the face of diverse social, cultural, and power dynamics within rural regions (Alasia, 2010; Cloke, 2006; Halfacree, 1993; Halseth *et al.*, 2010; Partridge *et al.,*2007a, 2008; Partridge, 2017; Woods, 2009).

As a result of these debates and analyses we are now in a much better position to address both the theoretical and operational challenges of understanding rural issues. Analysts now pay more attention to the way in which they define "rural" and "rurality" – often with a distinction between their definition and the characteristics associated with it. At the same time, we have a plethora of empirical studies which examine those characteristics – using a variety of rural classifications.

For example, from 1998 to 2012, Statistics Canada published a series of "Rural and Small Town Canada Analysis Bulletins"[6] that provided a profile of the rural and urban population in Canada. As in other countries, rural residents tended to be older on average, have fewer years of formal education, and have higher unemployment rates due to the intensity of seasonal industries. The OECD rural policy reviews between 2007 and 2014 provide additional examples of both theoretical discussions and empirical analysis of predominantly rural regions. Most recently, Del Real and Clement (2017) reported on a rural survey (The Washington Post and the Kaiser Family Foundation, 2017) that showed the usual socio-economic differences between individuals classified as "rural" versus those classified as "urban" based on a set of thresholds of density and distance-to-density.

The interpretation of these studies still requires careful attention to the dimensions of rurality that have been used. For example, is the unit of analysis appropriate for the issues of concern? Are the measures of density and distance-to-density independent from the characteristics considered? Fortunately, authors of both theoretical and empirical studies are now more likely to make their concepts and procedures more explicit.

What is policy?

Policies are principles or guidelines used to specify or frame decisions within social groups as priorities are considered and choices are made to achieve desired outcomes. Even the decision not to decide would be included as a policy. Policies are often abstract in nature, with a focus on long-term objectives, but the term "policy" is sometimes used to refer to short-term expectations or requirements related to an organization (e.g. policy on dress code or maternity leave).

For some, the meaning of policy is limited to the role of public institutions with their more formal regulations, principles of decision-making or action, and the patterns of decisions they represent. Other actors include non-public organizations such as corporations and plus more informal groups that research and generate policy proposals. Since policies require mechanisms for their formulation, communication, and

enforcement, policy discussions often include the activities, constraints, and incentives which structure their application.

Policies are often codified in constitutions, by-laws, regulations, and contracts with powers to monitor, adjudicate, and impose sanctions or benefits accordingly. In more informal contexts, equivalent functions may be served by mission statements, codes of practice, and traditions of engagement. Because of their relatively general and abstract formulation, there are often multiple options for their implementation. A policy advocating improved health services for remote localities, for example, may be addressed by programs supporting more doctors in those localities, improved medical facilities, more home care, extended tele-medicine, improvements in emergency transport, or various combinations of these or similar initiatives. Policy discussions and analysis, therefore, often involve debates and decisions about both the policy and its implementation.

Under the best conditions, policies are based on clearly articulated objectives and rationales for specific implementations, but this is not always the case. Therefore, the identification of policies often requires the analyst to infer the principles of an implicit policy from the cases to which it is applied. Implicit policies are typically driven by political, social, environmental, or ideological objectives. Policy domains are also made complex by the fact that multiple organizations and objectives may be involved. For example, within the public sector, departmental and jurisdictional differences often generate such policy "inconsistencies". Each organization is operating within a given context or set of parameters. Perhaps not surprisingly, the policy objectives and programs of one department may not be consistent with the policy objectives and programs of another department.

Policy analysts provide several taxonomies of policies, usually based on their sphere of concern (e.g. health, agriculture, environmental), the processes by which policies are formulated and applied, and the analysis of the broader context in which policies are developed (Bührs & Bartlett, 1994). There is also considerable discussion regarding various methodologies for the analysis of policy – including both descriptive and evaluation objectives (Coase (1991), Salamon (2002), Simon (1997), Conteh (2013)). Some of the most useful approaches focus on the evaluation of policies, including Salamon's (2002) analysis of the long-term durability of policies using the following six questions:

- What effects does the policy have on the targeted problem?
- What are the unintended effects of this policy?
- What are the effects of the policy on different population groups?
- What is the financial cost of this policy (including tax credits)?
- Is the policy technically feasible?
- Do the relevant policy stakeholders view the policy as acceptable? ("Policy analysis - Wikipedia," 2017)

What is rural policy?

Although there may be policies which are directed specifically at or to rural places or actors, few, if any, of them have outcomes which are exclusive to those places or actors. As a result, analysts have typically focused on the **analysis** of policy rather than its division into rural vs. non-rural types. At most, they differentiate "narrow" rural policies (those which are targeted specifically to rural localities, actors, or issues) from "broad" policies (those which might have an impact on such localities, actors, or issues, but are not specifically targeted to them (OECD, 2008). In keeping with this approach, this section will focus on rural policy analysis.

Rural policy analysis is the application of a rural lens (also known as rural proofing) to policy proposals

Rural policy analysis is a consideration of the density and distance-to-density implications of (almost) every policy proposal. Since the assessment of policies for more intensive rural analysis will vary over time as knowledge, institutional priorities, and ideological perspectives change, it behooves analysts to consider all policy as potential candidates for further exploration. Typically, this involves a triage type of process in which all policies are considered, with some of them selected for further, more detailed analysis. Each policy of a government, enterprise, or institution would be considered for their potential outcomes, benefits, and/or costs along the continuums of the rurality dimensions. Policies selected for more intensive analysis would then undergo more thorough analysis of their implications for individuals, enterprises, and institutions.

Typically, a rural policy analyst would ask if the objectives of the policy proposal could be enhanced or made more effective by adjusting the policy or its implementation for citizens, businesses, or institutions in various combinations of low(er) density and high(er) distance-to-density locations. These considerations have been constituted as rural proofing or as a rural lens in a number of jurisdictions. For a number of years, this was one task of the former federal Rural Secretariat in Canada (Clemenson, 1994; Agriculture Canada, 2001; OECD, 2001, 2006a (p. 112), 2010; Hall and Gibson, 2016). Other examples include the initiatives of the U.K. Department of the Environment, Food and Rural Affairs (2013), the Rural Ontario Municipal Association (2015a, 2015b) and in Huron County (2014a, 2014b) in Ontario, Canada.

Although (virtually) all public policies are "rural-related" (i.e. have density and distance-to-density implications), many policies are only indirectly related to the geographical characteristics of rurality (Halseth *et al*., 2010; Young, 2006). Even agricultural policy, for example, is not solely a rural policy issue (Bollman, 2006b) due to urban-based and metro-adjacent farming. Similarly, policies explicitly formulated as "rural policy"—like "Québec's Politique nationale de la ruralité"—create important issues of an urban nature such

as the allocation of financial resources for urban concerns. Broad policies such as those of finance, economic development, labour, health, education, transportation, and social welfare require specific consideration of their implications for different density and distance-to-density conditions.

Even where "rural lens" considerations for rural people, enterprises or organizations are taken into account, there is often little reference to evidence provided by the analytic studies of the differential impacts (or different elasticities of response) along each rurality dimension and/or little input from rural people. Thus, decisions may be driven by the perceptions of urban-based decision-makers.

What is development policy?

There are various foci of "development policy". Examples include community development policy, social development policy, economic development policy, and regional development policy.

As with all policy, development policy focusses, generally, on improving the well-being of individuals, communities, or groups. "Development" has been considered as both an outcome of well-being and a process to improve well-being.

What is rural development policy?

Rural development policy is an explicit consideration of density and distance-to-density implications in the design and implementation of (community, social, or economic) development policy. In other words, the application of a rural lens or rural proofing would constitute the "rural" in any development policy.

There has been a long history of development policies and programs targeted to rural areas. The discussion of rural development emerged from a focus on regional or sub-national economic development which started in the mid-1900s in Canada and in other OECD countries. This approach has undergone important changes (Harriss, 1982). The OECD has represented these changes in three major paradigms: the Old Rural Paradigm, the New Rural Paradigm (2006a, 2006b) and now as Rural Policy 3.0 (OECD, 2017a, 2017b) (Table 1.1).

The old traditional paradigm focused on one or two sectors (e.g. agriculture, forestry, mining, energy) as strategic for rural development. Policies were developed by central governments to increase the efficiency of primary production, including the building of a transportation infrastructure for trade. Rural communities competed for large firms in their search for solutions to community decline—without realizing that success often meant on-going decline since increasing efficiency meant that fewer workers were required to produce more[7]. The subsidies provided by communities to firms meant that the communities had fewer remaining

funds for other community development initiatives and the centres of control became more distant from community-level influence.

Table 1.1

Changing paradigms of rural development policy since the mid-1900s			
	Old Paradigm	**New Rural Paradigm - 2006**	**Rural Policy 3.0 –Implementing the New Rural Paradigm**
Objectives	Equalisation	Competitiveness	Well-being considering multiple dimensions of: i) the economy; ii) society; and iii) the environment
Policy focus	Support for a single dominant resource sector	Support for multiple sectors based on their competitiveness	Low-density economies differentiated by type of rural area
Key actors & stakeholders	Farm organisations and national governments	All levels of government and all relevant departments plus local stakeholders	Involvement of: i) public sector – multi-level governance; ii) private sector – for-profit firms and social enterprise; and iii) third sector – non-governmental organisations and civil society
Policy approach	Uniformly applied top down policy	Bottom-up policy, local strategies	Integrated approach with multiple policy domains
Rural definition	Not urban	Rural as a variety of distinct types of place	Three types of rural: i) within a functional urban area; ii) close to a functional urban area; and iii) far from a functional urban area

Source: OECD (2017a, 2017b).

The old paradigm approach began to face criticism as the result of research stimulated by the Goldschmidt thesis that linked the style of agricultural production with community characteristics (Goldschmidt, 1947), and the critiques of the first "Green Revolution" export-oriented policies of the World Bank for their inadequate impacts on persistent poverty, gender, and the environment (Pingali, 2012). In 2006, the OECD published *The New Rural Paradigm* that challenged this old view and proposed an approach which was more bottom-up, multi-sectoral, and focused on investments rather than a strategy of subsidies (OECD, 2006a, 2006b). Through a series of extensive national and comparative studies, this new approach was illustrated and documented in a valuable array of both qualitative and quantitative analyses of rural development and the policies that contribute or inhibit it (See the OECD Rural Policy Reviews for Mexico (2007), Finland (2008), Scotland (2008), Netherlands (2008), Italy (2009), Germany (2009), China (2009), Spain (2009), Quebec (2010), England (2011), and Chile (2014)).

The work of the OECD has continued over the last 10 years and contributed to several critiques and refinements of the *New Rural Paradigm* which provide more details regarding the economic and social mechanisms supporting effective policies. These proposals are identified as "*Rural Policy 3.0*" in Table 1. Key elements include the reaffirmation of multi-sector collaboration among the public, private, and third sectors for strong rural policy, the explicit identification of the economy, society, and the environment as multiple objectives for the policy, and the role of distance-to-density by recognizing "functional urban areas" as a point of reference for rural localities.

As with any policy discussion, the focus of attention will depend on the issues being considered. For example, if economic development is the focus, Partridge and Olfert (2011) argue that one should not talk

about rural development—rather the focus should be on regional development (i.e. the development options for a functional economic area) . In this case, the options and the expected outcomes will differ based the degree of rurality (i.e. density and distance-to-density) of the functional economic area (Stabler and Rounds (1997), Stabler and Olfert (2002), Munro *et al.* (2011), Ashton *et al.* (2013)).

Statistics for rural residents / enterprises / institutions

Statistical tables often present a profile of data for observations classified as "rural" using given thresholds for density and for distance-to-density. It is important to identify the theoretical and empirical validity of these thresholds in order to appropriately interpret the data.

First, to emphasize, these thresholds do not define rural – rather, density and distance-to-density define rurality.

However, any given set of thresholds will generate a portrait of the average statistics for observations in the group – and the characteristics revealed in the tabulated data would be different for each alternative set of thresholds for density and distance-to-density.

Given a set of statistics for a group of observations classified as "rural", the next (and arguably most important) step would be to apply a "rural lens" to the tabulated data in order to query:

- What is the role played by low(er) density in the observed data?
- What is the role played by long(er) distance-to-density in the data?

and then to query whether there is an opportunity for policy to improve the well-being of "rural" actors.

For example, statistical tabulations typically show that the population in a rural area has a lower level of educational attainment. What is the role of the selected grid (selected boundaries) and the density and distance-to-density in this finding? Are the designated geographical units so large that they are insensitive to pockets of higher education within the region – or so small that they overlook the role of broader regional collaboration? Did low(er) density or long(er) distance-to-density mean that people with higher levels of educational attainment moved away to find jobs (or those who left for education were not able to return due to the lack of jobs)? Did low(er) density or long(er) distance-to-density mean that the availability and quality of the schools or colleges in the locality caused a lower level of educational attainment? Was the lower level of educational attainment observed because many retired people (with lower than average levels of education) have chosen to move to the locality after their retirement? These questions will help to determine the role of rurality in understanding the reasons for the observed data of lower levels of educational attainment in rural areas.

Summary

Rurality is a spatial concept. As noted by Shucksmith and Brown (2016b) "people still solve the challenges of everyday life in geographically bounded communities." (p. 664)

Density and distance-to-density are the spatial dimensions of localities that define their rurality. All other factors that may be associated with rurality are characteristics that are found within specific locations. They are characteristics of rural people, enterprises, or institutions. However, it is the density and distance-to-density dimensions that define rurality.

These concepts are not changing. However, the prices, costs, advantages, and disadvantages of each of the two rurality dimensions are changing. Thus, for example, the measure of distance-to-density may be physical distance (e.g. kilometres) or the price of distance (e.g. dollars to move a person, good, or service over a given number of kilometres). For the discussion of some issues, such as rural youth who move to the city to pursue further education, there are social, psychological, cultural, or familial advantages and disadvantages of making this move. Distance remains "a powerful shaper of human interaction, influence, and exchange" (Young, 2006, p. 262) but the dynamics of this influence are complex as the meaning (or "price") of distance itself is different for different issues being discussed and for the changes over time for any given issue being discussed.

Rural policy analysis "is" the attention to the implications of density and distance-to-density for (almost) every policy proposal. In the specific case of development policy, the "rural" aspect of a development policy is the explicit consideration of density and distance-to-density in the design and the implementation of the policy. This approach means a rural lens or rural proofing needs to be applied to each development policy proposal.

The categorization of people, enterprises, or organizations into spatial geographic groups labelled "rural" does not define rurality. Density and distance-to-density define rurality. The classification of observations into spatial groups should consider two factors. First, the nature of the issue (e.g. day-care versus regional economic development) will determine the geographic grid (e.g. neighbourhood versus functional economic area) that is chosen to make the classification. Second, the nature of the issue will also drive the consideration of the appropriate level of the thresholds of density and distance-to-density when implementing the classification.

Policy preferences and priorities are complex and changing. Thus, there is seldom a common agreement on interpretations and indicators among analysts and researchers, let alone policy-makers and citizens. It behoves us, therefore, to critically analyse the objectives and analytic approaches to an issue and the choice of measures or indicators that are adopted to quantify the rurality dimensions of density and distance-to-density.

This chapter concludes with the closing remark at the National Academies (2016) workshop regarding the desirability of determining "the extent to which place, size of population and distance constrain and permit economic activity, access to services, resilience to problems and so on." (p. 127)

Considerations for moving forward

Readers are invited to consider the following questions when discussing "rural", "rural policy" and the rurality aspects of "regional economic development policy".

- What are the policy objectives and issues being considered?
- What are the implications, advantages, and disadvantages for people, enterprises, and organizations located in lower density localities and in places with a long(er) distance-to-density?
- What processes are being used to formulate, discuss, and adjust any policy proposal?
- How might the processes be improved to improve the consideration of density and distance-to-density?
- What is the appropriate geographic unit of analysis (e.g. neighbourhood, community, county, tourism region, etc.) to use for categorizing and presenting descriptive characteristics of the people, enterprises, or organizations that will be impacted by the policy proposal?
- What data are available for the appropriate geographic grid?
- What compromises must be made? Are the data published for the geographic grid appropriate for your analysis? If not, can you afford the price of a special tabulation to generate the appropriate data?
- What are the social and political contexts within which proposed policies are formulated and chosen?
- Where should such decisions be made for the given objectives or issues being considered?
- Who controls or influences the discourse surrounding the issue, related selection of thresholds, and measures associated with the issues you have selected? What are their interests and how do they conflict with others?
- What are the appropriate indicators for the policy issues selected?
- Are the dimensions of distance and distance-to-density being considered?
- How do they relate to conflicting policies and indicators?

Consider these questions as you proceed through the following chapters. The variety of approaches represented will not only demonstrate the possibilities, but hopefully inspire you to reflect on the implications for your own research and analysis.

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[1] Careful readers will recall the earlier statement that the characteristics of a locality do not define the rurality of a locality. Here, examples are used to illustrate the point. Although larger hospitals may be associated with larger localities, one would not expect a one-to-one relationship between a larger hospital and a larger locality. To repeat, the examples in this chapter are simply illustrative examples.

[2] Note that du Plessis *et al*. (2001) provide operational definitions of "rural", not theoretical ones.

[3] The 2009 World Development Report of the World Bank acknowledged a third "D", namely "division" (World Bank, 2009, Chapter 3) which includes:

- the thickness of borders (e.g. tariffs, non-tariff barriers) for the transfer of goods, services and people from one jurisdiction to another; and
- ethnic / cultural / language differences ("divisions") that sometimes constrain the transfer of goods, services and people from one jurisdiction to another. For example, one might imagine a person standing outside a health centre in any cell of Figure 1.1 and being unable to access the health centre due to issues of skin colour or ethnicity.

Thus, access to services (or access to a market for one's goods or services) is often determined by more than density and distance-to-density. However, the dimensions of density and distance-to-density remain as the key rurality dimensions.

[4] Some government programs adjust the size of the subsidy based on the degree of rurality of the locality. For example, one participant at the National Academies (2016, p. 83) workshop noted that the U.S. Rural Development water program used priority points to allow a region to get extra points if it is far below the population threshold.
[5] One might think of the "price" of distance as the component of the price of a loaf of bread or an automobile, etc. that is attributable to the component of the retail price that is typically called the expenditure for "freight". For transporting services (such as an accountant providing accountancy services to a business in another locality), technology has changed the "delivery price" from the money and time expenditure to transport a paper copy of the documents to the Internet expenditure to transport an electronic copy of the business accounts.
[6] Available at http://www5.statcan.gc.ca/olc-cel/olc.action?objId=21-006-X&objType=2&lang=en&limit=0.
[7] Schultz (1972) has noted the pervasiveness of the "increasing value of human time". This has driven the substitution of machines for workers meaning more output can be produced with fewer workers.