# How Special Are Rural Areas? The Economic Implications of Location for Rural Development

Steve Wiggins and Sharon Proctor\*

Despite on-going change, rural areas remain characterised by relative abundance of natural capital, and by distance and the relatively high cost of movement. They are also home to most of the world's poor. Compared with urban areas which enjoy proximity to customers and producers, rural areas may have comparative advantage only in primary activities based on immobile natural resources and closely related activities. There are differences, however, between 'peri-urban', 'middle countryside' and 'remote' areas. In some areas, economic growth, urban expansion, and improved transport and communications create new urban-oriented opportunities for rural services and labour. Remote areas will continue to present special difficulties, however; and, in general, the potential for nonagricultural diversification is less than is sometimes argued.

# Introduction

This article looks at the nature of rurality and draws on location theories to examine possible implications for the economic use of space. Conventional development thinking has made a sharp distinction between urban and rural, but has paid relatively little attention to other spatial dimensions of rural development. Recently the importance of the urban-rural division has been questioned by those observing ever-increasing flows of goods, people, and ideas between city and countryside (see, for example, Tacoli, 1998). Others have also queried the tendency to equate the rural economy with agriculture, noting the apparent increasing diversification of rural economies (Ellis, 2000).

Here we outline the defining characteristics of rural areas and put forward a further sub-division, based on two criteria. Although processes of change may complicate the picture, some general implications for economic options and interventions are proposed. The approach casts some doubt on positions that query the importance of rural areas as a separate category, and on the degree to which we may expect rural economies to diversify – and especially to industrialise – with development.

There is no exact definition of the term 'rural', either conceptually or empirically. It refers to things of the countryside. Notwithstanding those who doubt the theoretical or practical value of adopting the rural as an analytical category (see, for example, Hoggart, 1990), rural areas are clearly recognisable. They constitute the space where

Department of Agricultural and Food Economics, University of Reading. Thanks are due to those attending the ODI Workshop on 16 January 2001 for valuable suggestions on an earlier draft.

<sup>©</sup> Overseas Development Institute, 2001.

Published by Blackwell Publishers, Oxford OX4 1JF, UK and 350 Main Street, Malden, MA 02148, USA.

human settlement and infrastructure occupy only small patches of the landscape, most of which is dominated by fields and pastures, woods and forest, water, mountain, and desert.

Beyond this observation, what features mark the rural areas? Three stand out. The first and most evident is the relative abundance of land (and other natural resources). Land is relatively cheap in the countryside. The second is that significant distances lie between rural settlements and between these and the cities, magnified by obstacles such as rivers and mountains. Moving goods between rural areas and either other parts of the countryside or the cities is costly. The same difficulties impede some flows of information, especially those which are passed from person to person, by word of mouth or by demonstration.

The third stylised fact that describes the countryside is the poverty of so many of the inhabitants. Average incomes are lower in rural areas than in the towns and cities, and the proportions of people living below specified poverty lines are higher. Despite the expectation that increasing urbanisation in the developing world will lead in the medium term to the majority of the world's poor being urban, it remains the case that the great majority – perhaps 75% or more – of the world's poor live in rural areas (IFAD, 2001).

Why are rural areas poorer than the cities? It is certainly not for want of natural resources. The difference lies in the superior access of urban inhabitants to financial, physical, human and perhaps also social capital, compared with their rural counterparts. Consequently many rural enterprises operate at lower rates of labour productivity than urban businesses.

But this begs the question of why the urban sphere is so much better-off in capital than the rural. To see why, we need to understand more about the location of economic activity.

# The location of economic activity: historical considerations

Before the industrial revolution, a rural area was likely to have an economy based on agriculture – assuming suitable climate and soils. Towns and cities were relatively small and few in number, and transport costs between them and the countryside were high. The rural economy was thus diverse at household and village level: if goods and services were not produced locally, then they would simply not be available at all.

But some trading emerged to take advantage of specialisation, initially in goods such as salt and metal that could only be produced in particular locations. Trading had to be face-to-face to allow physical exchange of goods, so market centres emerged as points where traders could converge. As permanent markets were created, so ancillary services became established – in transport, warehousing, accommodation, and catering. Once established, the market centre contained the seeds of its own growth, since it often constituted a point that minimised transport costs for manufacturing. It was also a point that minimised the costs of distribution to customers.

As manufacturing and other businesses were set up in the growing market town, so economies of agglomeration began to apply. Business owners found that the town was the most convenient point to access both private and public services, acquire information on markets and new technologies, hire skilled labour and obtain manufactured inputs. Economies of scale in manufacturing favoured setting up a single plant in the town rather than dispersing production in decentralised rural plants. Thus, market centres became towns, with a broad base of industry and services, both private and public.

In the 1990s Paul Krugman added economic theory to geographical intuitions with his 'New Economic Geography' (Hite, 1997; Krugman, 1993; Fujita and Krugman, 1995). His argument depends on increasing returns to scale and the positive externalities generated by clusters of enterprises. Given such conditions, strong forces lead to the concentration of activity in particular cities. The location of the city may have no particular advantage other than an early start. In a path-dependent model, cities create their own advantages. Thus we can appreciate why it is that cities tend to accumulate disproportionately all forms of capital other than that which is immobile, namely natural resources.

Geographical theories of location tend to conclude that most activities will nucleate in towns, and that these will be evenly spaced across the landscape, with a hierarchy of centrality corresponding to the size and diversity of enterprises.<sup>1</sup> In this schema, farming is exceptional in its need for land. Agriculture, however, produces surpluses for the towns. If the sole market were a given central place, and assuming a homogenous plain with equal transport costs in all directions, von Thünen argued as long ago as 1810 that different farm enterprises would be arranged in concentric circles around the city. Activities with the highest gross margins per hectare would be located close to the city, those with the lowest would be confined to the most distant reaches. Relaxing assumptions about the homogeneity of resources and transport costs allows the model to incorporate features such as areas of farming that take advantage of exceptional soils and micro-climates, as well as the emergence of market centres defined by geographical features such as river crossings, the approach to mountain passes, coastal harbours, and the like.

These speculations all lead to a general point. As population increases, the possibilities for specialisation and interchange in any economy grow, and hence markets grow. Given the economies of agglomeration, this almost inevitably means urbanisation.

# The rural role

#### Simplified scenario

In these models, it is the immobility of natural resources that primarily defines the rural economic role. Farm land, forests, water bodies, mineral deposits and the like are for most practical purposes immobile. We use them on site or not at all. Hence rural areas are usually the location for farming, forestry, quarrying, (inland) fishing and mining.

Beyond this, the development of the rural economy may be limited. In the past, many villages would have been isolated by high transport costs. Given this effective protection, village economies had to be diverse – producing not only food and fibres from agriculture, but also clothing, housing, tools, implements, furniture, energy (at the

<sup>1.</sup> Christaller and Lösch posited that, given an homogenous plain of even settlement density, towns would emerge at the hub of hexagonal service areas – ideas validated when taking those few cases of homogenous plains, such as the US Mid-West (see Haggett, 1965).

very least for cooking), and water, in addition to all manner of services, including all those concerned with household reproduction: cooking, cleaning, child care, etc.

As and when transport costs fall, imports from the urban economy can displace local manufactures and even some services.<sup>2</sup> It also becomes more worthwhile to intensify farming and other activities based on immobile resources, since the cost of reaching urban markets reduces. Village economies are thus likely to become more specialised and less diverse as economic growth and technical advance take place.

Indeed, in villages and small rural market centres, apart from activities based on natural resources, only those activities that are effectively non-tradable such as everyday services are likely to survive. Hence the rural market centre may come to contain little more than a (weekly) market place, shops serving everyday needs, a filling station and repair yard, perhaps a bank, restaurant and bar, place of worship, school, doctor's surgery, etc. Everything else will tend to locate in strictly urban areas. Small wonder, then, that the literature on location cautions against optimism about the growth of the rural non-farm sector (Grabowski, 1995; Hite, 1997; Saith, 1992).

Moreover, in as much as farming economises on labour, agriculture employs fewer people. This may mean rural depopulation and a shrinking market for everyday rural services, so that the countryside becomes a deserted landscape of isolated farmsteads and hamlets, relieved only by small service centres providing only the most basic and everyday services.

#### Qualifications and extensions

The above picture simplifies. It also runs counter to frequent reports of an increasingly diverse rural economy – see, for example, Rigg (1998) on South-east Asia and Bryceson (1999) on Tanzania.

There are some significant exceptions to a simple story that confers almost all advantages on the urban areas. What are they?

- If the initial processing of a crop, animal product, mineral, timber or fish significantly reduces bulk and subsequent transport costs, then this is likely to take place at the point of extraction or production. Thus, mineral ores typically pass through their first stage of refining on site. Timeliness may be another consideration: tea, sugar cane and beet, fruits, tobacco, vegetables, etc. need prompt processing, conservation or packaging. Unless these are produced very close to towns, this gives rise to corresponding rural industries.
- Rural areas sometimes have an advantage over urban areas in manufacturing, that of the low opportunity cost of farm labour in the off seasons. That in itself may not lead to rural industry, but rather to temporary migration of labour to the towns and other rural areas. But it may lead to 'by-employment' of rural labour in off-season industry. Grabowski (1995) reports that, during the eighteenth and early nineteenth centuries in Japan, the abundant rural population became the basis for lively rural industrialisation. Similarly in the

<sup>2.</sup> Otsuka and Reardon (1998) comment on the decline of rural industry that uses traditional techniques to produce a wide range of simple commodities for local consumption, such as spun yarn, processed food and drinks, and wood products.

British Isles before the industrial revolution conferred decisive advantage on factory production, the 'putting-out' system was common for textiles, so that most of this industry was both domestic and rural.

The key point here seems to be the fraction of production costs accounted for by labour, and this appears to lie behind some of the alleged successes of rural industrialisation in East Asia. Otsuka and Reardon (1998) examine the case of Taiwan. Until the 1970s, rural industry was restricted to food and beverages, wood products, and textiles. Rural industry grew slowly and its share of total industrial output fell. Since 1970, however, there has been much more growth of rural industry, with the main sector being metals and machinery. Industry was attracted into the rural areas by lower wages (80% of urban), taking advantage of the lower costs of living and seasonal slacks in farm labouring. Labour-intensive techniques were used, and labour productivity was below that in urban areas. Rural industrialisation was supported by public investment: Taiwan built good roads into its rural areas, connecting small towns to the main cities.

Many of these rural plants sub-contract to factories in the cities. Subcontracting in turn depends on well-developed relations between rural entrepreneurs and their urban customers, relations made easier since many rural entrepreneurs seem to be former urban employees or traders. Subcontracts from urban business to rural factories allow rural operators to obtain information on markets and design, as well as to benefit from supplies of raw materials on credit that reduces the need to raise additional working capital.<sup>3</sup>

To some extent there has been similar success with rural industry in China and Japan, where again agricultural by-employment and sub-contracts from urban corporations have been key factors (Saith, 1992).

- A further consideration is the possibility of the rural labour force having special industrial skills not found in towns. Such cases may be few and far between, but some craft production may fall into this category. Indeed, there may be some craft products that owe their attraction for urban consumers to their being produced in remote (and exotic) rural locations.
- As economies grow, some immobile resources come to be valued, most notably beauty and amenities. New activities based on tourism and recreation come into being.
- For those rural people living close to towns and cities, it may be possible to combine rural residence with jobs in towns. Similarly, for those already working and living in the cities, there may be advantages in quality of life (above all, from having more spacious housing and gardens, less noise and cleaner air) from moving out of the urban area into the surrounding countryside. Both trends lead to a pattern of rural residence with urban workplace, the two linked by commuting. Throughout the world this pattern

<sup>3.</sup> Somewhat unexpectedly, the Taiwanese metal industries produce components and products for export. Through the sub-contracts they know what to produce for export and suffer little disadvantage compared with urban plants. Manufacturing for the domestic market, however, remains largely based in the cities since this confers easy access to market information and low marketing costs This appears to confirm Elizondo and Krugman's (1996) hypothesis reported in Otsuka and Reardon (1998).

can be seen for any rural area within one to two hours travel of a substantial city.  $\!\!\!^4$ 

# Locational issues in developing countries

How, then, can we approach locational issues in developing countries? At this point in the argument, there are enough potentially applicable arguments to explain almost any configuration of rural activity. One way to resolve apparent contradictions and to draw out usable generalisations, is to note the distinctions between different rural areas.

Rural areas may be differentiated in many ways, but here two are picked out since they relate to the two potentially causal factors that characterise rural areas identified earlier in this article, namely, costs of movement and the relative abundance of land and other natural resources:

- Proximity and access to cities. Around most cities lies a peri-urban zone of intense interaction with the city, an area that might be defined as that where people may commute daily from village to city for work. Beyond lies a countryside where distance prevents daily commuting, and the cost of movement to and from the city is significantly greater. Further away still, there are rural areas that are remote, cut off by lack of infrastructure, great distance, and physical obstacles. Here, the costs of movement of goods and people to and from urban areas are unusually high. Note that density of settlement will usually correlate positively with closeness to the cities (and the natural wealth of the area). But this does not always apply.
- The amount and quality of natural resources. Some areas are well endowed with such capital: they enjoy Ricardian rents on their natural advantages. Others may be areas of low agricultural potential.

In what follows, these categories are used to create the matrix shown in Table 1.<sup>5</sup> The matrix produces in effect five distinct rural areas, since the quality of natural resources matters little in peri-urban zones. What do we know of their characteristics and their implications for development policy?

• Peri-urban zones. Marked by intense interactions between the rural and the urban, the distinction between the two is sometimes hard to make. As the city grows, the peri-urban zone expands outwards with the inner edge becoming clearly an urban area. Thus the peri-urban zone may be seen as essentially 'pre-urban' (see Adell, 1999). The main issues arising are those applying in urban areas: creation of jobs in industry and services, provision of adequate transport

<sup>4.</sup> Although commuting can take place to and from any urban area, for commuting on a large scale the city has to be large enough to offer many jobs while being congested enough to have high costs of living space. In practice, this means cities of above 250,000, with pronounced effects being clear above 500,000.

<sup>5.</sup> This is similar to that proposed by Evans (2001). Evans divides space into: cities and large towns; medium and small towns; 'urban extreme' (presumably the urban periphery made up of informal shanties and the like); rural areas with high agro-ecological potential; rural areas with low agro-ecological potential; and rural extreme or remote areas. The main difference is that she does not explicitly include the peri-urban zone, even if some of the 'urban extreme' may be recognisably 'peri-urban'.

	Peri-urban zones	The (middle) countryside	Remote rural areas
Good natural resources	Market gardening & dairying	Arable farming & livestock production, specialised, with capital investment, producing surpluses for the market [Same for forestry, fishing, mining, quarrying]	Subsistence farming, with only the production of surpluses of high- value items that can bear transport costs Crafts & services for local markets
	Daily commuting to the city		
	Weekend recreation		
	activities Manufacturing industry may 'deconcentrate' from city proper into this space		
			Tourism & recreation
		Tourism & recreation	Migration
		Some crafts	
		By-employment in rural industry? Migration	
Poor natural resources	As above: NB: Quality of natural resources not so important since capital can be used to augment poor land – e.g. by irrigation, fertiliser – when needed for intensive farming	Probably lightly settled	Subsistence farming, low productivity. Surpluses very small or nil Crafts & services for local markets
		Extensive farming, probably livestock. Few jobs	
		Tourism & recreation	
		Some crafts	Tourism & recreation
		Migration	Migration

# Table 1: Rural diversity: a characterisation, with most likely activities

and housing, and environmental quality. Agriculturally, there is the question of how to promote micro-scale high-value farming, such as market gardening and intensive dairying, that can provide fresh produce, create jobs, and avoid pollution.

• The (middle) countryside with good natural resources. Here the agenda consists of agricultural development, with concerns about how that translates into jobs and welfare. Following the Washington Consensus, current policy tends to focus on making markets work by correcting for failures, including promoting effective institutions (see Kydd and Dorward in this volume). Slightly less well understood is how the farm sector links to other rural

activities, and how such linkages might be stimulated (or at the very least, how blockages might be removed). In some cases – where labour costs less than in the cities and where there are good social links to urban industries – there may be the possibility for rural industry. Even less well understood is the nature of secondary urban hierarchies and what they may imply for the development of their rural surroundings.<sup>6</sup>

- The (middle) countryside with poor natural resources. The possibilities for agricultural development are fewer in such areas. They are likely to have low populations, thus raising the cost per capita of providing services. The network of rural market centres is likely to be sparse and the towns small. All this suggests that the rural non-farm economy is likely to be small, unless the area has tourist potential. Development options in such areas are few.
- The remote areas. There are few cases of proven strategies to develop remote rural areas, other than outright subsidy to reduce the costs of isolation or to raise local incomes directly. Remote areas with good natural resources, however, may in future become more attractive, as and when investments in transport and the spread of the urban network reduce their remoteness. For those with poor natural resources, their main option may be to exploit their very remoteness as an attraction to adventurous tourists.

Are these classifications robust? Yes, but there will be changes. Patterns of activity are affected by changing technologies, market liberalisation, improved communications, and rising population. Three dimensions of change are especially important for the spatial pattern of development.

- (i) Although national economies may specialise with increased spatial demarcation of activities, the aggregate volume of goods and services produced is likely to rise. This may allow an increase in the absolute amount of non-farm activity in rural areas even as rural economies become less diverse.
- (ii) As urban economies grow and stimulate demand for novel services, rural areas will increasingly provide these services (rather than goods) from immobile factors of production. These include leisure, tourism, recreation and amenity, as well as environmental services to the maintenance of the biosphere (climate, biodiversity, waste absorption, etc.). This will allow some additional diversity in rural occupations.
- (iii) Increasing flows of information and falling transport costs make migration increasingly possible. This will make it easier for households with their primary location in the village also to have one or more members temporarily resident in cities or another (usually higher potential) rural area. Hence reports on an increasing incidence of the multi-location household in the countryside of the developing world. The impact of remittances from migrants back to rural

<sup>6.</sup> The potential development role of urban centres in regional development is a longstanding interest, marked by ideas such as 'growth poles' and 'agropolitan' district centres (see Adell, 1999; Tacoli, 1998; Douglass, 1998). Douglass has argued, intriguingly, for regional networks that link specialised and diverse towns and villages. It is interesting to note that the grounding for his vibrant regional economy is a flourishing agriculture (or other primary activity).

areas, especially to the more remote and lower potential areas, can be strong in sustaining livelihoods and permitting new investments.

# Reducing rural poverty: some implications for policy and research

Conclusions from this review include some doubts about frequent arguments, some implications about which there is little debate, and a further implication that, whilst uncontroversial, requires further work.

First, the doubts. One, is the urban-rural divide redundant? Yes, almost certainly in the peri-urban zones. Elsewhere, however, it is not clear that increasing flows of people, goods and information between city and countryside constitute a change in kind to the characteristics proposed to define rural areas; they reflect changes in degree. If this were not the case, there would be no areas to call 'rural' left in the United States or much of the European Union. Hence, the first warning: we need to take care not to confuse the peri-urban with the rest of the rural. And we need to map peri-urban areas in accordance with the criteria usually cited for this zone – those of 'intense' interactions with the city, most notably the possibility of daily commuting. When the peri-urban is so (tightly) defined, we shall probably find that large areas of developing countries and substantial fractions of the population remain in rural areas, areas that face recognisably different conditions – in costs of movement, relative cost of land – from those that apply in cities.

Two, beware any general expectation that rural economies will move from specialised farming (or other primary activity) to a much more broadly based economy. To be sure, a growing agriculture will probably generate secondary activity upstream and downstream. Increasing development of rural services based on natural resources can be expected. A more prosperous economy is likely to lead to more spending on public goods and services in the countryside. The rural economy may thus become more diverse, but it may still be narrowly based compared with its urban counterpart. In particular, the prospects for manufacturing industry in rural areas are much less promising.

Issues on which there is less debate include: (i) despite several decades of honest and honourable attempts to foster development in the remote countryside, there are few lessons that promise widespread improvement; and (ii) with the increasing importance of the multi-location household, policy that supports and facilitates migration (see McDowell and de Haan, 1997) deserves consideration.

Finally, for some rural areas the agenda is well marked: that of agricultural development within a market system, with the challenge of correcting for market failures. But there is much to be understood about linkages from farming to activities upstream and downstream, and even more to understand about the (probably) limited opportunities for rural industrialisation. There is also the need to understand the emergence of rural services based on natural resources, and how these link with other rural activities.

#### References

- Adell, Germán (1999) Literature Review: Theories and Models of the Peri-urban Interface – A Changing Conceptual Landscape. London: Development Planning Unit, University College.
- Bryceson, Deborah Fahy (1999) 'African Rural Labour, Income Diversification and Livelihood Approaches: A Long-term Development Perspective', *Review of African Political Economy* 80: 171-89.
- Douglass, Mike (1998) 'A Regional Network Strategy for Reciprocal Rural-urban Linkages', *Third World Planning Review* 20 (1): 1–33.
- Ellis, Frank (2000) *Rural Livelihoods and Diversity in Developing Countries*. Oxford: Oxford University Press.
- Evans, Alison (2001) 'Spatial Considerations in National Poverty Reduction Strategy Processes – Working Paper' (mimeo).
- Fujita, Masahisa and Krugman, Paul (1995) 'When is the Economy Monocentric?: Von Thünen and Chamberlin Unified, *Regional Science and Urban Economics* 25: 505-28.
- Grabowski, Richard (1995) 'Commercialization, Nonagricultural Production, Agricultural Innovation, and Economic Development', *Journal of Developing Areas* 30: 41-62.
- Hite, James (1997) 'The von Thunen Model and the New Economic Geography as a Paradigm for Rural Development Policy', *Review of Agricultural Economics* 19 (2): 230-40.
- Haggett, Peter (1965) Locational Analysis in Human Geography. London: Edward Arnold.
- Hoggart, Keith (1990) 'Let's Do Away with Rural', *Journal of Rural Studies* 6 (3): 245–57.
- IFAD (2001) *Rural Poverty Report 2001: The Challenge of Ending Rural Poverty*. Oxford: Oxford University Press for IFAD.
- Krugman, Paul (1993) 'First Nature, Second Nature, and Metropolitan Location', Journal of Regional Science 33 (2): 129-44.
- McDowell, Christopher and de Haan, Arjan (1997) 'Migration and Sustainable Livelihoods'. Working Paper No. 65. Brighton: Institute of Development Studies at the University of Sussex.
- Otsuka, Keijiro and Reardon, Thomas (1998) 'Lessons from Rural Industrialization in East Asia: Are They Applicable to Africa?'. Paper Number 13, IFPRI Conference on 'Strategies for Stimulating Growth of the Rural Nonfarm Economy in Developing Countries', Airlie Ho, VA, May.
- Rigg, Jonathan (1998) 'Rural-urban Interactions, Agriculture and Wealth: A Southeast Asian Perspective', *Progress in Human Geography* 22 (4): 497–522.
- Saith, Ashwani (1992) The Rural Non-farm Economy. Geneva: International Labour Office.
- Tacoli, Cecilia (1998) 'Rural-urban Interactions: A Guide to the Literature', *Environment and Urbanization* 10 (1): 147–66.
- Wiggins, Steve and Proctor, Sharon (1999) 'Literature Review: Migration and the Rural Non-Farm Sector'. Department of Agricultural and Food Economics, University of Reading (mimeo).