Introduction

This book brings together a range of conceptual and empirical studies representing the state of the art in contemporary analysis of peri-urban areas in several regions of the global South. The origins of this collection lie in a session on this theme that we organized at the annual conference of the Royal Geographical Society (with the Institute of British Geographers) in London from 5–6 September 2003. The response to our call for papers produced lively presentations and discussions, seeking to explore the relationships between local specificities and contingencies, and the generalizability of peri-urban processes of change. These concerns are reflected prominently in Part I of this volume, where we examine definitional and conceptual issues, the approaches adopted by various donor and research-commissioning agencies, and comparative assessments across different situations. Inevitably, a few papers at the original session were unavailable for publication, while a few initially offered but ultimately not presented at the conference have been included as chapters.

In revising the drafts for publication, we encouraged authors to explain the nature of the peri-urban zone or interface (PUI) in their specific contexts, particularly for the case studies, in order to help illuminate the extent of similarities or differences. We pick up these issues both in the definitional discussion below and in Chapter 20; but first we examine the origins and nature of the construct of the peri-urban.

We make no claim for complete geographical coverage and are conscious, for instance, that China, the world’s most populous state and where the rate and dramatic nature of urban and peri-urban change are frequently featured in the news media, is not represented. Peri-urbanization there is also rather different from the contexts covered here, being very large scale and often heavily industrialized (Webster, 2002; Webster and Muller, 2002; Webster et al, 2003). In other respects, elements of the extended metropolitan region (EMR)
phenomenon outlined below apply to parts of China too. We considered commissioning a chapter on China; however, in view of space considerations and the difficulties of integrating such different material, we resolved instead to draw attention here to the importance of the very different peri-urban processes in that country. Central Asia is also not covered; moreover, very little is known about the nature of peri-urbanization there. Some of the discussion and examples from the literature cited below reflect the predominance of African and South Asian case studies in this book; but they nevertheless illustrate wider generic issues.

**Between urban and rural: Distinctiveness or hybridity?**

The terms 'urban' and 'rural' are still often used colloquially in traditional, mutually exclusive terms, and most people have clear mental conceptions of some ideal-type landscape corresponding to each. However, this simple dichotomy has long ceased to have much meaning in practice or for policymaking purposes in many parts of the global South, not least sub-Saharan Africa. This is because rapid urban population growth and expansion of the built-up area, technological change, global economic restructuring and the impact of externally driven macro-economic adjustment policies have combined to alter the interface between 'urban' and 'rural' quite profoundly in many places.

Nowhere is there a neat dividing line where the city meets the savanna, bushveld, forest or desert. In a manner reminiscent of colonial suburbanization under conditions of land speculation, cities have spread rapidly but not uniformly. There has been no circular outward ripple. Instead, the process has been differentiated according to combinations of the following factors:

- the size and structure of the existing city;
- the composition of the urban and migrant populations in terms of age, sex, family and household structure (including multi-local households), ethnic, cultural and religious diversity, educational and income levels, urban experience, and so forth;
- extensive oscillating or circular migration, with multi-local households oftenspanning rural areas and different categories of urban centre;
- physical terrain and environmental barriers beyond the existing built-up area;
- the orientation, accessibility and affordability of transport networks;
- land tenure systems, land values and land uses surrounding the city;
- occasionally substantial differences between administrative/political and *de facto* urban boundaries, which may give rise to contestations over jurisdiction between urban and non-urban local authorities and/or between traditional and state authorities.

As a result, today there are different types of transition zones between city and countryside – between what is unambiguously 'urban' and supposedly typically 'rural'. Some may resemble relatively uniform sprawl, others honeycomb structures or spines of growth along specific corridors. These transition zones – generally known as peri-urban areas in English – vary in width and nature, and are subject to rapid change with increasing urban pressures. Many indigenous villages, previously located in rural areas a considerable distance from the city, have experienced in-migration, growth and changes in population composition, land use and economic base. As a generalization, the closer the city comes, the more pronounced is the transition from 'rural' to 'urban' characteristics. Eventually, these settlements become part of the built-up urban area, which then comprises a complex mixture of formal houses, shanties and rural huts and other dwellings. Although the dwellings may be rebuilt in more urban styles over time, these areas often retain distinct identities and even traditional chieftaincy structures. As indicated earlier, this could bring traditional and state authorities into conflict. Furthermore, these areas may fall within combinations of urban and/or rural local authority boundaries. Subsequent boundary changes to reflect the results of rapid urban growth could then change their administrative status.

It is interesting to note how the term 'peri-urban' – now well-established in the English lexicon – is expressed in different languages and cultural contexts. For instance, the nearest equivalent in Dutch is *bijlengde* (semi-urban), in German *urban-ländlichen Zonen* (urban–rural zones), and in Afrikaans *buitestedelik* (outer city or beyond the city). Yet, these differences are modest in comparison to the fact that, in many indigenous languages in the global South, the concept is entirely unknown. Naturally, this presents substantial problems for researching a concept or construct that local people frequently do not recognize, and a salutary warning against assuming the universal relevance of academic or planning constructs. Even where the term does have an equivalent, as in the examples above, the linguistic differences may play a significant role in framing ideas, research and analysis. Definitional issues are no less important and are discussed later in this chapter.

In East Asia and parts of South-East Asia, a new form of EMR has emerged as a process labelled *desakota* (city village) (Ginsberg et al, 1991). While various factors contribute in each case, in general this process primarily reflects the phenomenal economic buoyancy of the Pacific Asian region – apart from the relatively short interruption of the ‘Asian crisis’ from mid 1997 – and the rise of newly industrialized countries, with often 'hi-tech' production now spilling out of the heavily congested metropolitan cores to cheaper, more accessible areas beyond. Hence, many previously rural areas now have farmland interspersed with small factory units and larger enterprises; all are essentially parts of the urban economy. However, this process has very different characteristics from conventional metropolization in that many villages and small urban centres retain much of their previous distinctiveness and some rural activities, while simultaneously being integrally 'plugged in' to manufacturing or processing for the new industries and world economy. Land-extensive tourist and leisure facilities (for example, golf courses and theme parks) catering to urban and international clienteles are also concentrated in such zones (not only in East Asia). The *desakota* phenomenon is thus helping to force a redefinition of
traditional conceptions of urban–rural distinctions and relations (Ginsberg et al., 1991; Parmwell and Wongsuphasawat, 1997; Wang, 1997; Douglass, 1998; Kelly, 1998). As Dávila explains in Chapter 4, a similar phenomenon characterizes Latin America's large metropolises, which – because of the particular forms of their close integration with the world economy as identified 20 years ago by Armstrong and McGee (1985) – have also evolved into 'urban archipelagos' with diffuse boundaries and weakened official planning controls.

However, to date, nothing directly comparable has emerged in the very different geo-economic and socio-cultural conditions pertaining in Africa. Although probably more akin to the US beltway and 'edge city' phenomenon (Garreau, 1991), the extended metropolitanization occurring in the Johannesburg–Pretoria region of South Africa's Gauteng Province warrants study in this context. Nevertheless, with the possible exception of parts of South Africa, the African continent remains very largely in the periphery of the increasingly globalized world system, except as a source of natural resources. There are still relatively few export-orientated industrialization or producer services geared towards regional or global markets, although Africa's role as an international 'pleasure periphery' has grown. Indeed, Briggs and Mwamfupe (2000) found little evidence of outer suburban retail malls, office parks or hi-tech industrial nodes in Dar es Salaam, and also suggest that metropolitan polycentricity may have less relevance to Africa than to other regions on account of its global economic peripherality. Polycentricity is itself usually a feature of relatively advanced physical, functional and/or administrative decentralization, something that is occurring more widely in Africa as a result of urban size and congestion (Jaglin and Dubrissen, 1993; Briggs and Mwamfupe, 1999). Briggs and Mwamfupe's (1999) conclusion, with which we concur, provides further circumstantial evidence that Asian-style EMRs are not a feature of African megapoles at present (with the possible South African exception mentioned above) since EMRs are quintessentially polycentric and tend to arise through peri-urban and rural transformation beyond the outskirts of already large and polycentric conurbations. Of course, the question as to whether EMRs might arise in future is difficult to answer; but any such development would almost certainly depend on a significant prior change in the continent's present geo-economic peripherality.

The situation in South Asia is diverse, with increasing export industrial production in Sri Lanka and parts of India, for example; but no literature yet exists on whether Mumbai or other major metropolises fit the EMR model. This book includes a case study of part of Colombo's PUI; but the city as a whole does not constitute an EMR. Even in the very different context of west-central Nepal, on South Asia's outer periphery, Biaiek et al.'s (2002, p1257) re-study some 23 years after their initial research reveals the often profound nature of peri-urban development which has transformed a small village (with a weekly market and six tea stalls under three large banyan trees), into a town (with 60 shops and five banks).

Beyond the built-up city: The peri-urban interface (PUI) and urban footprints

Many fast-growing large cities across the global South are surrounded by dense and generally impoverished shanty towns or other forms of informal and/or irregular housing, characterized by inadequate infrastructure, service provision and security of shelter. These often spread into previously rural and peri-urban land, commonly enveloping or merging with existing villages of varying age, size, and physical and functional structure. This process creates complex zones in terms of land tenure, security of tenure, land use, access to services, and other measures of social, economic and political integration. These complexities – and the associated tensions and conflicts – therefore pose formidable challenges to planners, governments, non-governmental organizations (NGOs) and the residents alike in terms of enhancing security of tenure, upgrading settlements, service provision, integration with the urban areas and associated governance issues, and forward planning. This explains the recent increase in internationally funded research into, and concern with, peri-urban areas.

On the other hand, changing international divisions of labour are producing new areas of rapid industrialization and economic development within or beyond existing metropolitan boundaries (for example, the EMR phenomenon cited earlier) in some parts of the world. These are accompanied by rising incomes and improved quality of life for some groups of inhabitants, but often at the expense of the immobilization of others in both these new cores and peripheries. However, new local styles, resistances and hybrid forms are emerging to give new forms of diversity at different levels. Hence, significant forces of divergence are also at work; the notion of progressive unidirectional convergence is too simplistic (Armstrong and McGee, 1985; Simon, 1992; Potter, 1993). Nevertheless, despite the vast literature on individual city growth and development and management in various parts of the global South, remarkably little attention has been devoted to the urban fringe or peri-urban areas; indeed, the term is absent from the indexes of many books.

The Peri-Urban Interface: A Tale of Two Cities (Brook and Dávila, 2000), a publication arising directly from the UK government's Department for International Development's (DFID's) peri-urban interface research programme in Kumasi and Hubli-Dharwad, India, represents probably the only book-length treatment of peri-urban dynamics. Similarly, little if any attention is devoted to peri-urban zones in the many journal articles and individual chapters on African cities within more general edited books.
Interestingly, a major research programme at the Nordic Africa Institute in Uppsala, Sweden, on the nature and role of small towns in Africa did focus explicitly on aspects of rural–urban interaction (Baker, 1990; Pedersen, 1991; Baker and Pedersen, 1992); but the issue of peri-urban areas and their dynamics received little attention, perhaps because the rate and scale of growth and change has been more limited than in large conurbations.

Following much discussion and definitional debate in both the global North and South during the 1970s (Mortimore, 1973), intellectual interest in peri-urban areas declined. They then received little explicit attention in the literature as a whole, except for limited mention of their rapid transformation by urban sprawl, some rethinking of their position within the rural–urban dichotomy referred to earlier, and the value for integrated urban planning of considering urban regions rather than merely the built-up or administrative areas of individual cities.

However, since the 1980s, the importance of peri-urban areas as a source of urban food supply has been underlined by the growing body of research on urban agriculture (especially in Africa, from which the following examples are drawn), even though much of this literature concentrates largely on urban areas themselves and the ‘peri-urban’ has been treated in different ways (Guyer, 1987; Sanyal, 1987; Rakodi, 1988; Freeman, 1991; Gru, 1992; Smit and Nass, 1992; Memon and Lee-Smith, 1993). A notable exception in Africa is Marshall and Roech’s (1993) study of land tenure and food production in the zones verdies (green zones) surrounding Nampula in Mozambique, which examines how many predominantly female producer co-operatives gained access to high-quality land to supply the urban market successfully before the wave of land privatization during the 1990s. Briggs and Mawampe (1999, pp.269–272; 2000) argue that research into expanding urban agriculture and its promotion, and research into subsistence versus commercial production priorities there, have been largely responsible for the resurgence of interest in peri-urban areas across Africa since the early 1990s. More recently, attention has also embraced the emergence of formal and informal land markets and the related land-use changes in peri-urban areas.

Maxwell et al. (1999) highlight the differences in processes between four peri-urban sites around the Ghanaian capital, Accra. Depending on specific combinations of circumstances, these areas have variously experienced one or more of the following processes: land loss to housing; economic transformation away from agriculture; agricultural intensification and commercialization; environmental degradation; and agricultural decline without replacement by alternative economic activities.

Although the terminology and approach of livelihoods strategies, including diversification and risk spreading rather than merely survival strategies, have rarely been applied to such published work on peri-urban areas, they have been adopted within some ongoing donor-sponsored research (see Brook and Dávila, 2000; Mbaba and Huchzemeyer, 2002; while Rakodi’s 2002 edited book demonstrates applications of the approach to urban areas on behalf of the DFID). As the livelihoods framework recognizes, many people’s livelihoods strategies embrace urban, peri-urban and/or rural areas (Diyamett et al, 2001).

This provides another reminder of the contextual meanings and significance of these terms.

More generally, the growing debate during the early 1990s about urban sustainability helped to concentrate attention on the impacts of cities beyond their boundaries. William Rees introduced the now-popular term the ‘urban ecological footprint’ to capture these relationships in terms of the importance of thinking about sustainable cities as parts of wider sustainable systems (Rees, 1992). This concept refers to the impact of an urban area on the environment, ecology and natural resources often well beyond its boundaries in terms of ‘appropriated carrying capacity’. This involves both source and sink functions regarding which resources (including people as migrants and commuters; construction materials; fuelwood and other energy sources; food and water) are supplied to cities while urban manufactured products, services, effluents and wastes from them are sold, dumped or diffused elsewhere. The precise balances of positive and negative impacts, and their spatial extent, vary over time and between locations (Drakakis-Smith, 1993; Mitlin and Satterthwaite, 1996; Pugh, 1996; Satterthwaite, 1997; Simon, 1999; Yankson and Gough, 1999). However, by virtue of their spatial contiguity, peri-urban zones commonly (but not invariably) experience some of the most substantial impacts.

In turn, these issues have now been linked to the stated objectives of several multilateral and bilateral donor organizations, including DFID, to reduce or eliminate poverty (Burnell, 1998; Brook and Dávila, 2000; Mbaba and Huchzemeyer, 2002; Rakodi with Lloyd-Jones, 2002), although the peri-urban has been defined or conceptualized in very diverse ways, if at all. Since the majority of rural-urban migrants in most parts of the global South nowadays are relatively and/or absolutely poor, they have a great impact upon overall levels and intensities of urban poverty, although often exacerbated by structural adjustment and liberalization policies. Moreover, the difficulties of finding and/or affording accommodation within the existing city means that for some considerable time already, a substantial proportion of predominantly poor urban dwellers have resorted to the urban fringe or peri-urban areas to buy, rent or construct their own shelter. All of these factors have combined to create a very dynamic and important peri-urban transitional or interface zone between city and countryside, between the urban and rural. This raises obvious definitional difficulties, to which we now turn.

Defining the peri-urban

The DFID has funded a research programme on the PUI as one of the ‘production systems’ within its multimillion pound Natural Resources Systems Programme (NRSP), 1995–2005. The natural resource focus gave the NRSP a strong rural orientation; but the PUI programme represented a conscious strategy to generate new knowledge on the dynamics of change and to ascertain what may be distinctive with regard to urbanization’s implications for natural resource use and the environment. The NRSP defined the PUI as follows:
The peri-urban interface is characterised by strong urban influences, easy access to markets, services and other inputs, ready supplies of labour, but relative shortages of land and risks from pollution and urban growth. (Phillips et al., 1999, p3)

It can be divided into two zones, to paraphrase Phillips et al., 1999, pp5-6:

- a zone of direct impact - which experiences the immediate impacts of land demands from urban growth, pollution and the like;
- a wider market-related zone of influence - recognizable in terms of the bundling of agricultural and natural resource products.

There has been some divergence of view and even duplication of research and review effort in terms of the PUI between different arms of the DFID and other agencies (Mhiba and Huchzermeier, 2002, pp118-119). However, the above definition forms a useful starting point for the main section of this chapter, although we do not make such a clean-cut subdivision within the peri-urban area, preferring instead the notion of an approximate continuum. It is also worth pointing out that even within the NRSP's PUI programme, different definitions have been adopted by the parallel streams of research on Hubli-Dharwad in India and Kumasi in Ghana. For the former, the definition used has been loosely 'the area comprised within the Hubli-Dharwad city region, but outside the core urban area and encompassing the villages connected to Hubli and Dharwad by city bus services' (Brook and Dávila, 2000, pp25-26). Phillips et al. (1999) suggest a radius of about 40km around Kumasi as approximating the PUI. In contrast, the original baseline study for Kumasi differed significantly and avoided setting such spatial limits on account of their brief value in a situation of rapid growth and because various activities and processes would straddle any such arbitrary boundary. Instead, the villages selected for study were included by virtue of having bush/fallow agriculture, but which are also experiencing competition for land with non-agricultural uses (Brook and Dávila, 2000, pp13, 25-26). Our own approach is broadly compatible with this latter, but goes rather further. Accordingly, it appears that no single definition will fit all circumstances and situations unless couched in broad and functional terms, rather than attempting to set discrete spatial limits.

Hence, our emphasis now is on conceptual distinctions and a process or orientation. This is more appropriate for examining the continuum between the poles of urban and rural, and understanding the dynamics of change as they affect particular parts of the peri-urban zone, as well as shifts in the position of the zone as a whole. Theoretically, a peri-urban zone may change in width and the steepness of what we might call its rural-urban gradient over quite short periods of time, depending on the nature of pressures within the growing metropolis and of migration towards it. Similarly, there is little conceptual value in seeking to discern empirical regularities - for example, whether particular city size classes have similar peri-urban features - because of the divergent rates of change around cities of similar size, but located in regions of different degrees of economic dynamism, and the likely influence of socio-cultural and environmental differences in creating diverse situations in cities of comparable size.

In other words, it is unhelpful to expect or to search for uniform processes in different circumstances. Similarity of urban structure (including size) at one point in time is not a good predictor of similarity in underlying processes and the dynamics of change.

The effect of desakota and other emerging forms of metropolitanization is to enable some profoundly urban and post-industrial features and activities within rural areas where other conditions are conducive. Conversely, increasing poverty, widespread urban agriculture and livestock rearing are increasing the 'ruralization' of many towns and cities. Therefore, it is increasingly difficult to think of the extremes of the continuum as truly 'urban' and 'rural' in the traditional sense. We need greater flexibility of concept. In practice, the extent of peri-urban zones varies for the reasons just indicated, although 30-50km beyond the urban edge is a reasonable generalization for large cities; major metropolises may have even wider zones (Webster, 2002; Webster and Muller, 2002, Webster et al., 2003).

As a generalization, there is commonly a gradient between more 'urban' and more 'rural' segments within a peri-urban zone. This gradient slopes away from the city but is not of uniform steepness either across the entire zone or in all directions. Indeed, there may well be islands of 'urbanity' in the outer (more rural) segment if pre-existing settlements of considerable size and distinctive economic mix have recently come to be within the zone. In time, these may be absorbed into the expanding city, as has already happened to many proximate villages and other settlements. Conversely, but more unusually, zones or pockets of more rural character may persist within the growing urban area on account of particular environmental, political, institutional or social and cultural factors.

For many purposes, it is important to consider the peri-urban zone as an extension of the city rather than as an entirely separate area. This is because the city region functions in a more or less integrated way in terms not only of its ecological footprint but also of its economic and demographic processes. For instance, agricultural markets provided by rapidly growing urban populations may stimulate commercial production in peri-urban and closer rural areas (see the Nampula, Mozambique, example cited earlier), while recreational landscapes in the PUI may cater to urban and international clientele. In practice, there are often obstacles to adopting such an integrated functional perspective, let alone to implementing integrated policies. Several reasons for this can be distinguished:

- Urban and previously rural peri-urban areas commonly fall under separate administrative jurisdictions, with different resources, capacities and political leanings. In many metropolises, the municipal or metropolitan council boundaries have been expanded to take account of rapid urban growth - for example, Greater Harare and Nairobi during the 1970s.
However, this has often divided the peri-urban zone, either immediately or after a further period of urban growth, with the inner segment falling within the town and townlands, and the outer segment then falling within one or more peri-urban or rural jurisdictions. Sometimes, however, as in China, the expanded metropolitan boundaries may still encompass the entire peri-urban zone.

- Responsibility for the provision and maintenance of infrastructure and services may lie with different government departments or agencies at central, regional and local government levels.
- Following from the above, census or other urban statistical databases seldom cover the entire area. Compiling inclusive data sets is therefore time consuming and difficult, especially if they have different base years or geographical extents and accuracy of coverage.
- There is no tradition of holistic planning so that most officials adhere to narrow conceptual and procedural guidelines. Traditional bureaucratic procedures invariably discouraged integration across sectors, agencies and areas; this is beginning to change only slowly and unevenly in the face of demonstrable failures of existing practices and the examples being demonstrated by externally funded initiatives.
- In terms of ecological footprints, it is often in the interests of urban officials and planners not to have to engage with, and bear responsibility for, waste disposal and environmental quality 'downstream' beyond the jurisdiction of the local authority. They may therefore seek to avoid such integrated city-region initiatives.
- Villages and rural areas becoming more closely associated with, and enveloped by, the city's sphere of influence in its peri-urban zone often have distinct histories and identities which the inhabitants are keen to safeguard, even if their lives become more integrated within the urban economy and society over time. An analytical concept used in geography and planning, the term 'peri-urban' or 'urban fringe' is also alien to the vast majority of local people. Instead, village membership is often retained as the main source of community identity, even long after settlements have been enveloped by the expanding city.

Conversely, the peri-urban zone should also be considered as part of the adjacent rural area for purposes of a holistic approach to rural research and development since there are two-way influences and interactions.

### Overview of the book's contents

For the sake of coherence, this book is divided into four complementary sections. Part 1, 'The search for peri-urban resource sustainability', comprises four chapters, of which this is the first. Chapters 2 to 4 comprise broad overviews that set the scene for subsequent sections. In Chapter 2, Ian Douglas reviews the approach and work of SCiOPE, one of the largest and longest running international research programmes on environmental problems with regard to the PUI. This programme has been responsible for much awareness-raising on relevant issues, including the relationship between environment and society. In Chapter 3, drawing on recently completed comparative research projects, Adriana Allen assesses the most common and pressing environmental problems in the PUIs of large metropolises in different regions of the South. Finally, in Chapter 4, Julio Dávila adopts a similar approach, but with the emphasis on policies adopted to address such problems. He distinguishes policies with explicit spatial elements from those where the spatial impact, if at all discernible, is indirect.

Part 2, 'Production systems at the peri-urban interface', is devoted to studies of particular peri-urban production systems, most of which reflect opportunities presented by growing urban demand. In Chapter 5, Frances Harris, Margaret Pasquini, Jasper Dung and Alhaji Adepetu examine the social and environmental impacts of irrigated dry season vegetable cultivation in the PUI of Jos, Nigeria. Despite concerns about soil fertility, water resource management and disease control, agriculture in Jos's PUI is thriving and now supplies markets countrywide. This is followed, in Chapter 6, by Kenneth Lynch and Nigel Poole's assessment of the use and impact of horticultural marketing information around Tanzania's capital, Dar es Salaam, during the period of market liberalization. This encompasses the nature and dissemination of market information, and the potential impact of information and communications technologies (ICT) in reducing and mediating farmers' total risk and honing their marketing strategies. The chapter is informed by a case study of the wonderfully named Atomic Speed Group, the members of which produce well together but lack a collective marketing strategy or even appropriate skills and information. In Chapter 7, Robert Brook, Prakash Bhat and Anil Nitturkar report on the rapid growth and profitability of stall-fed (that is, zero-grazing) dairying in the PUI of Hubli-Dharwad in India's Karnataka state. This study and that reported in Chapter 13 report on research undertaken as part of the DFID NRSP's PUI programme, in which Hubli-Dharwad formed the South Asian focus in parallel with Kumasi, Ghana, in sub-Saharan Africa (see Chapters 16 and 19). Although the distribution of gains from dairying around Hubli-Dharwad is uneven, this development has enabled even poor people to improve the sustainability of their livelihoods and quality of life. Similarly, Madhumita Mukherjee's study of peri-urban fish culture using urban waste in Chapter 8 reflects the scope to help meet urban protein requirements through exploiting a non-traditional adaptation of a traditional livelihood activity. Careful design of fish ponds and systematic use of the associated banks and dykes points the way to holistic and sustainable land use, and to augmented livelihood and leisure opportunities. As Edlam Aberra demonstrates in Chapter 9, the harsh realities in southern Ethiopia are driving livestock-destitute pastoralists to settle increasingly permanently in the PUI of Yabello, where they are forced to adopt diverse livelihoods strategies that hitherto proven unsustainable. Finally, Chapter 10 by Michelle Mycock comprises an overview of livelihoods strategies in the settlement of Anse La Raye on the small Caribbean island of St Lucia. This highlights that 'peri-urbanness' exists at very different geographical scales, from EMRs to centres...