Strategic Environmental Planning and Management
for the Peri-urban Interface
Research Project

LITERATURE REVIEW

THEORIES AND MODELS OF THE PERI-URBAN INTERFACE: A CHANGING CONCEPTUAL LANDSCAPE

Germán Adell

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For more information, please contact:

Peri-urban Research Project Team
Development Planning Unit
University College London
9 Endsleigh Gardens
London WC1H 0ED
United Kingdom
Tel. +44 (0) 20 7388 7581
Fax: +44 (0) 20 7387 4541
E-mail: *E-mail* project: m.mattingly@ucl.ac.uk
Email paper author: german.adell@etsab.upc.es
PUI website: http://www.ucl.ac.uk/dpu/pui

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1. BACKGROUND

The DFID is currently supporting a Peri-Urban Interface Production System Programme included in the Renewable Natural Resources Research Strategy. The DPU has been appointed to participate in this programme through a research focused on Environmental Planning and Management of the peri-urban interface (PUI), aiming to reduce poverty and mitigate environmental problems in these areas.

Two major literature reviews concerning the PUI have been developed to date as part of the Peri-Urban Interface Production System Programme, both commissioned to assess the importance of the PUI in the scientific literature concerning development and poverty. Both literature reviews constitute important references for some specific parts of the problematic, one dealing extensively with poverty issues (see Rakodi, 1998) and the other the resource implications and management of the peri-urban interface (see Nottingham and Liverpool Universities, 1998).

Both reviews agree that recent literature directly related to peri-urban interface is far from substantial. Nottingham and Liverpool Universities (1998) consider that the definitions of the PUI are "thin and inconsistent", therefore influencing the lack of specific research on these areas. Confronted with the same problem, Rakodi states in her report on the poverty relevance of the PUI that "there is relatively little research on the PUI and what there is does not often and analyse processes in any depth...". As Rakodi puts it:

> [t]he effort to identify research which specifically focuses on poverty in peri-urban areas drew a near-blank. The search was, therefore, broadened to include studies of processes of change which appeared to have some poverty relevance. (...) Most of the analysis which follows will, therefore, consider rural poverty and urban poverty. (Rakodi, 1998)

Facing the lack of literature specifically concerning the PUI, both researchers have taken the same methodological approach: to extensively review what is considered to be "related literature" from urban or rural oriented research and to extrapolate it to the case of the PUI. In both cases there is a "spatial link" that guides the process of driving conclusions or hypothesis to the PUI discussion (Rakodi finishes in that way) from literature that "a priori" does not concern specifically these areas.

The main shared assumption of both works is that several problematic processes like increasing social inequalities or environmental degradation - thoroughly described in these reports - are the result of the complex combination or interaction of both urban and rural aspects of the problems, and thus these processes are occurring more acutely in the peri-urban areas than elsewhere (e.g. poverty, environmental degradation, etc.). [1]

Nevertheless, conceptual issues concerning the peri-urban interface have been somewhat overlooked, mainly because of the fact that the objectives of each of these works allowed (and perhaps demanded) the use of a straightforward "working definition". But aiming to achieve the best possible understanding of what these areas are in order to improve their environmental planning and management, we consider necessary to analyse how they have been conceptualised in recent times and which are the latest theoretical positions on the subject.

Therefore the aim of this literature review is to examine the complexity of the theoretical discussion on concepts and models of regional development, where the PUI finds a theoretical place within the broader literature on rural-urban interactions and linkages. The validity of a rather old concept (first discussions date from the 1950s) will be assessed, and its evolution when confronted with new theoretical contexts such as globalisation will be examined.

Indeed, it seems necessary to assess the conceptual legitimacy of situating the *peri-urban interface* in the broader field of the rural-urban linkages and regional networks, further

[1] They also seem to share some perceptions and conceptualisations of the peri-urban interface, constituting a similar base to their analysis, which will be analysed in point 2.2.

questioning the validity of the term. In the same way, it is important to fully understand the differences between the different regional development models or theories that can be found in the literature, be they growth poles and urban diffusion models; the “urban bias critique”; rural-urban linkages and flows or new integrated concepts like the *networked*, *clustered* and *desakota* models.

The whole theoretical discussion is reconsidered because some key authors are stating that *growth pole* models or *urban diffusion* theories, although having largely failed to achieve the necessary goals, continue in many contexts to underpin planning policies (Douglass, 1998a; Firman, 1996; Doan, 1995). Much of the recent literature tries to achieve differentiation from older paradigms while presenting itself as evolving from the rural-urban linkages and flows model. (Douglass, 1998a and 1998b; Firman, 1996; Friedmann, 1996; Abramovay and Sachs, 1996; Sit and Yang, 1997)

This paper seeks to find out if these different models of regional development share assumptions, viewpoints or values. Which are the policy implications for each of them? Are they only descriptive models or they can be translated into policy recommendations? In fact while all models seem to share at least one broad assumption concerning the evenness and equilibrium of development through the territory, this assumption needs to be challenged in light of new paradigms such as increased mobility, space-time compression and the multi-spatial context of the everyday household life.

This literature review consists basically in a thorough desk-based research of available material linked to the subject. The more recent literature is examined, basically from the 1990s onwards, unless otherwise demanded by cross linked references and the development of the theoretical discussion. All major scientific journals concerning both urban and rural sectors have been systematically reviewed. The under-representation of a specific topic in the material was interpreted - apart from involuntary errors or omissions - as a lack of interest coming from an editorial bias. In this sense, the relative under-representation of urban related topics in the “rural” literature was noted, while the opposite is not the case.

In section 2 the peri-urban discussion is introduced, historically situating the various concepts that have been coined to deal with the fringes where “city and countryside meet” and reviewing the traditional assumptions concerning the peri-urban concept.

Section 3 examines different regional development paradigms where the rural - urban relationship has been central. They constitute the theoretical background against which new conceptual developments, presented in section 4, are differentiated.

Sections 5 reviews some relevant and recent case studies dealing with the changing nature of the rural - urban interaction. Section 5 concludes by presenting the most extreme theoretical positions that mark nowadays the conceptual landscape, using them as epistemological landmarks to reveal the diversity of a still changing field.

2. INTRODUCTION

The perceived link between the city and the countryside is evolving rapidly, shifting away from the assumptions of mainstream paradigms to new conceptual landscapes where rural-urban links are being redefined. In this conceptual field, the *peri-urban interface* is still generally considered as a transitional zone between city and countryside, often described "not [as] a discrete area, but rather [as] a diffuse territory identified by combinations of features and phenomena, generated largely by activities within the urban zone proper" (Nottingham and Liverpool Universities, 1998).

These areas are always difficult to define and, moreover, they are also bound with problems inherent to the conceptualisation of both rural and urban worlds. In that context, policies aiming to alleviate poverty are still considering the existence of either "rural" or "urban" poverty, while the reality of many regions in the developing world suggests that every-day life and livelihood strategies of "multispatial households" are increasingly taking place within an integrated rural-urban space[2] (Tacoli, 1998b, Rigg, 1997).

A sharp distinction between urban and rural settlements generally assumes that the livelihoods or the inhabitants can equally be reduced to two main categories: agriculture based in rural areas and manufacture and services based in the urban centres. Yet recent research suggests that, even where activities can be described as either urban or rural and are spatially separated, there is always a continued and varied exchange of resources between urban and rural areas. The *sectoral interaction* consists of rural activities taking place in urban areas (e.g. urban agriculture) or traditionally "urban" activities as manufacturing[3] and services taking place in rural areas, or even the peri-urban flows to and from rural industries that are spatially concentrated around urban areas (Tacoli, 1998a).

Indeed, it is increasingly accepted that in many regions of the developing world, including its largest countries, the boundaries between urban and rural are getting blurred (Jones and Visaria, 1997), thus affecting the very definition of such an entity as a peri-urban (or rural-urban) interface. Even if the focus has shifted from a spatial definition (assuming a central urban point surrounded by a de-densifying periphery) to a more functional focus on diverse flows between the rural and urban sectors, recent developments both in theory and in real world contexts – such as *space-time compression* and *globalisation* — point to the need of a reassessment of the changing nature of the rural-urban divide. As Douglass puts it:

> While policy initiatives toward rural-urban linkages have remained attached to the simple urban diffusion and industrial growth pole models, the basic parameters of rural-urban relations and, by extension, the prospects for poverty alleviation have been fundamentally transformed by new forms of economic organisation, technological change and globalisation (Douglass, 1998b).

Whereas the historical reasons are very different, processes of urban dispersal into rural areas have also been taking place in industrialised economies, being described within a particular segment of the geographic literature for many decades, basically as a result of the *counterurbanisation* dynamics, that is, the reverse migration from the city to the countryside (see Champion, 1989; Champion and Waters, 1991, among many others).

Some of the concepts originally coined to describe the rural-urban interface in North America or in Europe, as the *peri-urban* concept itself or the more widely used in English literature *urban fringe*, are still in use in the Third World analyses (for a complete discussion of the various terms see Thomas, 1974), whereas in the former areas the debate has shifted to the *edge-cities* or

[2] The difficulty of having to deal conceptually with diversified livelihood strategies of "multispatial households" within an integrated rural-urban space and a changing economic context has contributed to the emergence of new ways of conceptualising poverty, which tends to be seen now as a lack of different kinds of assets and a process of exclusion from development.

[3] Although in fact the first manufacturing factories of the Industrial Revolution were located in the English countryside.

post-suburban landscapes imagery, where not only flows of people, but of capital, labour, commodities and information leave the central urban context for a restless and place-less periphery (Garreau, 1991; Soja, 1992; Beauregard, 1995 among many others).

On the other hand, in the developing countries the social and economic disparities between urban and rural regions have tended to limit the debate to more "traditional" terms, whose main assumptions will be analysed later in this review. These assumptions concerning the *peri-urban interface* are increasingly being criticised as part of a somewhat stereotyped model, as by recent research in the metropolitan fringe of cities as different as Bangkok, Jakarta and Santiago de Chile. In these cities, households surveys have shown the peri-urban fringe as quite socially homogeneous areas populated by middle and lower-middle income sectors, with insignificant informal activity (although that present is gender biased) and being the results of reverse migratory processes rather than the urban migration of the rural poor, while linkages to the rural areas are quite rare (Browder et al., 1995).

The theoretical debate is likely to be enriched with further empirical evidence. The fast growing economies of the Southeast Asian "miracle" or the changes in the organisation and management of certain selected areas of China with special market oriented policies (Pearl River Delta, etc.) are providing indications that fast urbanisation processes featuring a synergetic mix of agricultural and industrial activities is creating economic growth, even if increasing social inequalities and environmental problems need to be addressed and can eventually question the validity of the whole model (Rigg, 1997; Firman and Dharmapatni, 1994; Parnwell and Turner, 1998; Wang, 1997; Xu and Ng, 1998).

To define the limits of this debate, on the one hand, based on the globalisation discourse and logic, some academics have even proposed to apply the same conceptual tools in every context where the accelerated integration into the world economy is taking place. This is to apply mainly USA and Europe *edge-cities* theoretical developments to analyse the contemporary dispersal of the post-fordist city into the periphery in the Southeast Asian context or eventually any other *extended metropolitan region* (see Ginsburg et al., 1991). This position implies the acceptance of a general blurring of frontiers, not only the one marking the rural-urban division but the one between the First World and the Third World as well (Dick and Rimmed, 1998).

On the other hand, other scholars argue that while many regions in Asia have witnessed the emergence of functionally integrated territorial structures where agricultural and non-agricultural activities are increasingly found in complex spatial mixes, evidence from other regions in the Third World (mainly in Africa where the origin of the *peri-urban* concept in development contexts can be found in French literature) may suggest that in physical terms the distinction between rural and urban landscapes is still relevant. Nevertheless in functional terms, the increasing and sustained integration is recognised (Potter and Unwin, 1995).

Whereas spatial differences can still be noticeable or in a process of blurring, it is generally accepted that while the globalisation processes tend to "de-emphasise" place, its effects are most apparent in the largest *mega-urban regions* of the world. One of the environmental and social challenges of the next century will thus be the rapid and sustained increase of population expected in the fringe of these *extended metropolitan regions* of the developing world, where the city is expanding and industrial activity is being relocated (McGee, 1997).

A "paradigm shift" seems ready to emerge, following a movement initiated in the late eighties by the research about interactions and linkages between rural and urban areas. This trend was seen at that time as a response to "the bulk of research [that] has been devoted to the analysis of urban and rural 'development' as separate issues" expressing a "growing awareness of the importance of urban-rural relationships, and a dissatisfaction with urban-based centralised models of development" (Unwin, 1989).

The book edited by Potter and Unwin (1989) appeared, as the authors themselves state elsewhere (Potter and Unwin, 1995), just before the emergence of a “New World Order” and the changes in the global economy became theoretically unavoidable, having added even more complexity into a field that urgently needs a reassessment.

2.1 The Evolution of the Rural-urban Debate and the PUI

In the 1940s changes on the fringe of the cities came under increasing attention from spatial disciplines, notably urban geography, both in the United States and in Western Europe. An important field of urban studies started focusing on the processes that were shaping the peri-urban fringe, considered as the place where urban and rural categories met.

The term *urban fringe* was used for the first time by American geographers describing changes in the population composition of Louisiana, and during the 1940s and 1950s it was widely adopted in the academic literature, under the meaning of an area where the suburban growth was taking place and where urban and rural uses of the land were mixed, forming together a transition zone between city and countryside. (Johnson, 1974:4)

Soon it became evident that the heterogeneity of land uses, the morphological conditions and densities of the build areas, the complex functional relations and the changing social structure of that *urban fringe* was set to originate intricate discussions about its physical and conceptual boundaries. The first attempts to achieve conceptual precision in the peri-urban phenomenon is due mainly to the American experience, through an ensemble of rather empirical works. A morphological and functional approach of the *urban fringe* was privileged, based on the analysis of features such as density, morphology and land uses changing in an irradiating pattern from the urban side. This was in turn challenged by human and rural geographers arguing that the transitional landscapes between city and countryside were not necessarily the result of urban-driven processes, thus coining terms as *rurban* or *ruralurban*.

Following Thomas (1974), a terminological and conceptual research took place at that time, when various terms were proposed in a rather frantically succession: Kurtz and Eicher (1958) tried to differentiate the *urban fringe* from the *suburbs*, while Wissink (1962) went further, recognising *pseudo-suburbs*, *satellites* and *pseudo-satellites*, and *inner* and *outer urban fringe*. Among many others, Andrews (1942) distinguished between *urban fringe* and *rural-urban fringe*, while Duncan and Reiss (1956) considered the territories surrounding the city as being either *rural non farm areas* or *rural farm areas*.

In the late 1960s, Pryor (1968) challenged the resultant diverse and complex terminology used to define the changes in the peri-urban interface with a new categorisation based on the analysis of different phases according to land use composition, used to differentiate *peri-urban areas* from the *rurban periphery*. The former presented a higher residential, commercial and industrial density than the average for rural and urban areas, as well as higher rates of population growth, more dynamic processes of land conversion and fluid patterns of communications and transport between areas of residence and work.

By contrast, the *rurban periphery* was characterised by a lower population density, a higher proportion of vacant land and farming land. It also featured lower rates of population density and less dynamic processes of land use change and conversion and of daily commuting towards urban areas. (Pryor, 1968)

Moving away from a physical definition of the fringe, Pahl (1965) defined it as being the result of particular social processes, mainly the migration of mobile middle class families oriented to the city and dominated by urban life styles:

> a new population is invading local communities, bringing in national values and class consciousness at the same time that a new type of community, associated with dispersed living is emerging (Pahl, 1965:79).

These two visions have since then been articulated by new definitions, or have directly been

replaced by other kind of concepts that put some distance from the traditional discourses on the peri-urban fringe.

As an example of the first position, and embracing two different terms of reference (the *physical* characteristics of the rural-urban fringe, primarily designated by characteristic densities and land use patterns, and the *social* characteristics of its occupants), Carter (1981) proposed a definition of the *rural-urban fringe* as

> the space into which the town extends as the process of dispersion operates,...an area with distinctive characteristics which is only partly assimilated into the growing urban complex, which is still partly rural and where many of the residents live in the country but are not socially and economically of it (Carter, 1981:316).

The second option comes from the fact that since the 1960s in the Western World, the city has been less and less seen as a discrete local place and the urban experience became, in a sense, universal. The transfer of basic urban functions from a central city, first to suburbs, and then to the still larger decentralised "urban field" having largely been achieved, the *urban-rural dichotomy* could not be maintained against the emergence of the *rural-urban continuum*, where the mobile middle classes have built a highly dispersed pattern of activities developing not on a *place*, but on a *region*.

Following this line of thought, Melvin Webber has introduced the concept of *nonplace urban realm:*

> an urban realm is neither urban settlement nor territory, but heterogeneous groups of people communicating with each other through space (Webber, 1964:116).

More recently and within the framework of current discussions on global transition, a new terminology has emerged, either making reference to a new kind of urban development (a new landscape of employment and other activity concentrations at some distance and independent from old urban centres), or stressing the processes underpinning the new developments (in particular the impact of flexibility in production systems and technology). (Oatley, 1997)

Following Oatley (1997) the discussion can be characterised around the argument that the central transition in urban form, although developed unevenly between countries, involves a shift from the compact/suburban dualistic pattern to the spread metropolitan and from mono-centric cities to multicentred urban areas (Garreau, 1991, Harvey, 1995, Hall, 1996). This process is most evident in America, but has also been observed in European and non European countries (Keil 1994; Freestone and Murphy, 1993; Dick and Rimmed, 1998).

> During the 1980s and 1990s a new lexicon has emerged that attempts to capture contemporary forms of urbanisation: edge city, megalopolis, technoburbs, flexspace, peperoni-pizza cities, a city of realms, superburbia, disurb, perimeter cities, outer cities, technopolis, heteropolis, exopolis, and perimetropolitan bow waves (Oatley, 1997).

The shift to the conceptualisation of rural-urban interaction as a part of a new landscape has also its echo and local development in the rest of Europe. In France, a classic geographical term as *périurbanisation* is nowadays used (when applied to European contexts) to describe every zone external to the city that surrounds it, but is separated by important discontinuities of the urban tissue and is the result of a process of outward dispersal of different activities, but essentially residential ones. The term *rurbanisation*, introduced in the 1970s (Bauer and Roux, 1976), is sometimes used as equivalent to *périurbanisation*, but it has been suggested that it has the added meaning, for French regional planning imagery, of a "dissemination" phenomenon of the urban on the rural, purporting at the same time connotations of middle classes lifestyle and ideology (Adell and Capodano, 1999).

In Western Europe, the debate on the new spaces in the fringes of the city and the spread of urban functions, lifestyles and ideology across a somewhat unified and common territory (e.g. the idea of an *Eurolandschaft*: Wilson, 1996), has been permeated by the topics discussed

above, giving rise to a set of new concepts like in France *métapolis* (Ascher, 1995) *ville éparpillée* (scattered city)*, ville archipel* (archipelago city: Viard, 1994; Veltz, 1996)*, ville à la carte;* or in Spain the idea of a *ciudad dispersa* (dispersed city: Monclús, 1998) and in Germany the *Zwischenstadt* (city-in-between: Sieverts, 1997).

The transition to the conceptualisation of these new landscapes is challenging professional perceptions and knowledge across Europe, raising questions about the necessary adaptation of the urban and regional planning set of conceptual and practical tools to cope with the new territorial reality across the continent. (Adell, 1999)

2.2Traditional Conceptions of the Peri-urban Interface

The literature on the *peri-urban interface* is included in different groups of works dealing with topics such as urban and rural relationships and links, the extension of metropolitan urban growth on the *fringes*, etc. Following Browder et al. (1995), it has been underlined by "traditional conceptions of the metropolitan fringe", terms that are preferred to *peri-urban areas*, considering this as somewhat specific to the French research literature.

The French literature on African cities is seen as constituting "the most robust and thematically unified conception of fringe development" (Browder et al., 1995), that is, the *phénomène périurbain*. This trend of research saw the poor or "informal" fringes of the city as spaces that are the product of the interaction of state intervention and policies (programmed action, specific projects or "laisser faire") and the action and practices of the inhabitants seen as everyday use and appropriation of spaces, land and housing strategies and self-building practices (see Schteingart, 1989; Haumont and Marie, 1987 among many others).

Broadly speaking and following Browder et al. (1995), metropolitan fringe areas have traditionally been seen as:

- featuring a diversity of land uses that vary in relation with their urban and rural linkages;
- "transitional" in nature suggesting from one side "a patterned sequence of uses that become progressively more agrarian in orientation as one recedes from the urban centre";
- and inversely, "agricultural land uses, employment and rural linkages are seen as giving way to urban-oriented activities as distance to the city centre diminishes";
- populated mainly by poor residents recently arrived from rural areas, being engaged in multiple income-generating activities, mostly informal;
- following heterogeneous patterns of growth, such as:
  - metropolitan growth engulfing existing farmlands and villages;
  - rural migrants creating a "transitional social space" or "temporary holding location" in a rural-to-urban migration process;
  - *suburbanisation* processes where urban dwellers move to the fringe searching for advantages in land rent, or to capitalise opportunities for land acquisition, speculation and informal enterprise (Browder et al., 1995).

Considering that in addition to the African experience, both Latin American and Asian research have significantly contributed to the development of the conceptual framework for understanding the expansion of the city into the adjacent rural areas, Browder et al. (1995) summarise the resulting international literature as featuring four key themes:

1? the importance of peri-urban agriculture and rural linkages, such as food brought from the home village of a peri-urban resident, cash income remittance to rural villages, consumer goods and information, all these mainly in African context, while in Latin America rural-urban linkages on the metropolitan fringe are not typically strong, and in Asia the increased mobility between sectors is blurring the economic distinctions;

2? the importance of the informal economy in the peri-urban areas, reflected in the proliferation of petty commodity production, multiple job-holding, self-help housing, informal lending,

unlicensed activities, etc.;

3? conflictive land property ownership issues are typical on the fringe, because of pressures from squatters, private developers or speculators, large tenants, etc. Different land market conditions feature dual systems (informal and formal) and various property and tenancy arrangements such as rental or customary right systems;

4? the demographic processes that underpin fringe development, where they can range from organised land invasion to planned expansion of the fringe subsuming existing rural villages, including the speculative subdivision of farmland near the city, the re-settlement of eradicated down-town slum inhabitants into public housing projects, or even temporary (daily, seasonal or circular) migration "especially in the Asian metro-fringe sites" (Browder et al., 1995).

Within the most recent literature reviews on the PUI, Nottingham and Liverpool Universities (1998) recognise "the complexities of building a spatial framework around what is essentially an amorphous and mobile site for the interaction of various social, economic and cultural processes and interlinkages between the rural and the urban."

While the Renewable Natural Resources Research Strategy of the UK's Department for International Development defines the peri-urban interface as "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" (quoted in Nottingham and Liverpool Universities, 1998), Nottingham and Liverpool Universities' own working definition can be build upon fragments of their discourse:

> Certainly, peri-urban is a concept referring to a zone or area where urban and rural development processes meet, mix and inter-react on the edge of the cities. [It is] often not a discrete area, but rather a diffuse territory identified by combinations of features and phenomena, generated largely by activities within the urban zone proper. [...] the development of a peri-urban area is an inevitable consequence of urbanisation. As cities in developing countries continue to grow, the peri-urban area moves outward in waves." (Nottingham and Liverpool Universities, 1998: 8-9, 1)

Rakodi uses a definition stressing the relationship between urban and the immediate rural areas being the result of a process over time:

> The peri-urban interface is a dynamic zone both spatially and structurally. Spatially it is the transition zone between fully urbanised land in cities and areas in predominantly agricultural use. It is characterised by mixed land uses and indeterminate inner and outer boundaries, and typically is split between a number of administrative areas. The land area which can be characterised as peri-urban shifts over time as cities expand. It is also a zone of rapid economic and social structural change, characterised by pressures on natural resources, changing labour market opportunities and changing patterns of land use. (Rakodi, 1998: 3)

In both William's and Rakodi's definitions, the idea of "shifts" or evolution of the edge of the cities moving "outwards" is clear. In a way a *peri-urban area* is thus considered a *pre-urban area*, as time will put it inside the city proper. This assumption seems to be underpinned by a conception of the city as a central place, dense and growing continuously over a static countryside. The peri-urban interface seems thus to be considered as the result of urban driven processes more than of territorial processes where rural and urban forces interact.

Although Nottingham and Liverpool Universities use Rondinelli's (1983) framework of *rural-urban linkages* (acknowledged to underpin discussions over the whole work), it is not clear, apart from the existence of a "land link" that spatialises these relationships, what the theoretical and practical implications of such a choice are, when considering that Rondinelli's model is partly based on *central place theories* and purports an "urban diffusion" to rural areas in order to ensure an equitable development. Recent theoretical discussions have developed from this literature, so it is necessary to review them more deeply from this point onwards.

3. TERRITORIAL DEVELOPMENT THEORIES: FROM THE 1950s TO THE 1980s

3.1 Growth Pole Theory

The *growth pole* theory is based on the belief that governments of developing countries can induce economic growth and welfare by investing heavily in capital-intensive industries in large urban centres or regional capitals. This growth is supposed to spread to the rural areas in a process of regional development (Rondinelli, 1985; Unwin, 1989). The growth pole theory is underpinned by the belief that "free market forces" provide conditions for development through the existence of the so-called "trickle-down effect" that is meant to put together various economic forces, creating a virtuous cycle that spreads economic growth from urban to rural areas.

The *growth pole* theory has been related to "top-down planning" where a centralised planning system, in response to external demand and innovation impulses, heavily invests in "high technology" urban industrial development (Stöhr and Taylor, 1981).

The centralised and "monolithic" planning system that makes possible this kind of strategy has not only allowed experiences in capitalist countries, but tempted socialist planners as well. But experiences from Latin America and Africa have proved difficult to achieve success, specially because of the failure of the expected "trickle down effects". These have been replaced instead by adverse "backwash effects" that have maintained or even increased inequality between urban and rural areas (Unwin, 1989)[4].

The discussion seems to be of extreme importance today, as some authors are showing evidence demonstrating that in spite of the critics and lack of success, *growth pole* oriented policies are still widely in use in LDCs, contributing to the maintenance of a conceptual division between the city, seen as a pole of modernity, and the countryside.

Following Douglass (1998) one of the consequences of this rural-urban conceptual dichotomy is the very existence of a "curious divide in planning": on one side urban planners that keep considering urbanisation the key to achieve regional integration. Their policies have a decisive "urban bias" (see Lipton, 1977).

On the other side, rural development planners tend to view cities as *parasitic* or alien to rural interests. Their policies have a "rural bias", with "little or no interest in investigating how cities might be better brought into rural planning frameworks." However, for a rural household, daily life includes both rural and urban elements (Douglass, 1998a).

Douglass summarises the rural-urban divide acting as the backdrop of *growth pole theories* in development planning as coming from:

- 1950s discussions centred on parasitic or generative roles played by towns with their rural hinterlands, arguing that economic growth and modernisation required a surplus transfer from the agricultural sector to industry, thus justifying the appropriation of rural resources, capital and labour by cities;

[4] This process originated mainly two critiques: the critique of *top-down planning* and the *urban bias* theory. Both will be analysed later in this review.

- late 1950s discussions seeing an opposite model based on spatial polarisation and core-periphery relations. Its thesis was that the benefits to the core were at the expense of the periphery, rural-urban linkages being part of a global chain of power that perpetuated rural conditions of poverty and underdevelopment. This trend originated the main policy response to the problem: the creation of growth poles, inducing urbanisation into the periphery;
- the 1970s development policies, based also on the central place theory, which proposed to promote market towns (rural towns) to fill the gap between the "evil city" and the countryside (Douglass, 1998a).

If Douglass' work is mainly based in the South-east Asian context, his critique is backed by recent empirical evidence concerning the policy of growth centres in other continents. Seeking to demonstrate the relation between the adoption of spatial planning policies and other factors often neglected, like the social and economic context, political stability and spatial patterns of urbanisation (urban primacy of the population), Doan (1995) has recently found that *growth pole strategies* where still the second more important development policy in African countries, after the *small urban centres* policy:

> "In spite of the questions raised about this concept's academic merit and in the face of scattered empirical evidence that the resulting policies are not having the desired effects, the concept of growth centre continues to surface in planning documents across the African continent" (Doan, 1995).

In addition, research from Indonesia (Firman, 1996) has confirmed the failure of *growth pole* oriented policy models like the "counter magnet strategy" applied to the Bandung *extended metropolitan region*. This set of policies has been aimed at slowing down the physical development of Bandung City, the core of the region considered too congested by planners, in favour of the small towns surrounding it.

This strategy has also been called "deconcentrating planning" and purports to redistribute development from the urban core to peripheral areas. Although it has been used for almost two decades, Bandung City still remains dominant, with manufacturing services and other important business activities largely agglomerated. In all, "this strategy has thus failed to divert 'higher order functions' from the core of the metropolitan region and to develop a 'secondary centre', with several surrounding towns supposed to become development poles only acting as dormitory cities" (Firman, 1996).

3.2Urban Bias Critique

Perhaps the most influential and strong critique of uneven development generated or maintained by urban-oriented policies in poor countries comes from Michael Lipton (1977). In the introduction of his seminal book, Lipton states from the beginning that:

> the most important class conflict in the poor countries of the world today is not between labour and capital. Nor it is between foreign and national interests. It is between the rural classes and the urban classes. The rural sector contains most of the poverty, and most of the low-cost sources of potential advance; but the urban sector contains most of the articulateness, organisation, and power (Lipton, 1977).

In specifically relating the explanation of "why poor people stay poor" on the rural-urban divide, Lipton provides, if in a somewhat simplified manner that has since been criticised, an analytical tool to evaluate the effectiveness of a model of economic development that posited economic growth and urbanisation as synonyms.

Lipton's basic argument of "urban bias" is that the urban dwellers, having far more power than the rural ones, are able to divert a disproportionate share of resources towards their own interests and against the rural sector. The government being urban based, external credits are received, funds are allocated and development policies are generated by the urban elite that hold class alliances with the rural elite, thus maintaining privileged situations in both sides: the city obtaining cheap food and savings surpluses, while the rural better-off get subsides and all of the rural investment (Unwin, 1989). In this process, the more efficient and labour-intensive small and poor farmers are forced either to sell their produce to the bigger farmers in disadvantageous conditions, to turn out to subsistence production or to finish joining the ranges of rural-urban migrants.

Several critiques have been raised against Lipton's formulation. The most important one concerns the problem of class definition being at the same time too simplistic to be realistic, and too deterministic to be explanatory enough of much more complex social situations. But what Lipton managed to do is to draw attention to the power relationships currently acting in these societies, especially the ones concerning elites with an intermediate distributive role of external aid as they held the government. This interpretation, rather than the one that fixes the attention in the use of the class concept, liberates the power to integrate the "special cases" that, it has been argued, *urban bias* could not explain.

These cases are the "successful countries" of Kenya and Côte d'Ivoire. Unlike the rest of Africa, where food production per capita has been constantly diminishing from the early 1960s at an average rate of 1 per cent per year, agricultural growth has occurred in Kenya and Côte d'Ivoire, avoiding the "squeeze agriculture approach" common elsewhere. Moreover, their development policies have been *rural biased* (Lofchie, 1997). This could be interpreted as backing Lipton's argument that prior to industrial development it is necessary to assure the growth of agriculture. However, it has more often been regarded as a failure in the *urban bias* analysis: in those countries there are no urban elite strategies transferring rural resources to the urban and industrial sector, and this can be explained by the fact that influential elites in both countries, even if established in cities, are predominantly rural landowners and agricultural producers.

A classic work on *urban bias* in Africa by Robert Bates (1981) developed several of Lipton's theses and shared a set of presuppositions with him, mainly concerning the political force of urban pressure groups. They both posit that "governments concerned with political survival must accommodate the economic interests of urban workers, managers and civil servants" (Lofchie, 1997).

Bates' argument was extremely compelling in that the main source of the political power of these groups was the factor of "sheer geography". Being urban, most potent interest groups are in direct physical proximity with the government, where they are effectively or potentially, a threat to stability through strikes, riots, demonstrations or other form of urban political protest. At the same time, rural dwellers are seen as spread across vast expanses of land, unorganised and without direct access to government offices (Lofchie, 1997).

By stressing the importance of *urban bias* in development policies (and moreover, coining the term) Lipton - and later Bates - acknowledge a radical difference between rural and urban, but this is explained under socially reductionist assumptions like the one that would state that urban people are rich and powerful while rural people are poor and powerless. In assuming that the main difference between rural and urban consists in their social "classes", the real problem of Lipton's theory of *urban bias* is evident: the conflation of people and space. People, not places, are responsible for creating the flows between rural and urban areas (Unwin, 1989).

Nevertheless, the *urban bias* critique has the merit of highlighting the problem of a power divide (more than a physical one) between the rural and urban worlds, where a domination relationship is established and has *in most cases* taken the form of an alliance between urban and rural elites. Even though the direction and determinism of the influence of these groups have been strongly criticised and suggested erroneous.

Firstly Grindle (1991) has argued that the direction of causality in the generation of urban biased

policy was opposite to the one suggested by Bates. African leaders, having considerable freedom of choice, imposed urban biased policies even against the interests of powerful export-oriented farmers and African trade-unions of miners, plantation labourers, railroad and dock workers, etc., thus reconfiguring the political and economical array of interests and generating new pressure groups seeking to maintain urban biased policies (Lofchie, 1997). Secondly, Lofchie (1997) has highlighted the importance of development economics ideas and theories in the choice of the "squeeze agriculture" and the import substitution industrialisation strategies that created urban biased policies in the 1950s and 1960s. These can be put together, explaining why urban biased policies were applied for so long (policy origination versus policy persistence), complementing the role of external factors already mentioned by Lipton in urban policy bias: external aid and external expertise or the action of foreign-trained local experts.

All these authors, even critically, have accepted the very existence of something called *urban bias* in development policy, basically related to a preference for import substitution industrialisation policies been maintained, thanks to a transfer of resources from the rural sector through the *squeeze agriculture* approach. But even this "fact" has also been seriously questioned by authors like T.S. Byres (1979) and, following the same line more recently, Karshenas (1996). Their critique challenges the political economy foundations of the *urban bias* thesis, called by Byres "neo-populist pipe-dreams" (Byres, 1979). While arguing in favour of a class-analytical perspective for each case, he proposed to take into account the agrarian structure and transition history of each country, instead of taking for granted the existence of an undifferentiated mass of rural paupers (Karshenas, 1996). Moreover, the central theoretical place that intersectoral surplus transfers from agriculture to industry have in the *urban bias* theory (inspired by neo-classical models of equilibrium) is severely questioned by arguments for an "alternative approach to economic development" where "dynamic economies, externalities, learning, technological complementarities, increasing returns, and so on, which are anathema to the conventional general equilibrium models, take centre stage" (Karshenas, 1996). To demonstrate this affirmation, empirical evidence has been given on several Asian countries (Karshenas, 1996), preceded by a complete critical deconstruction of data collection and interpretation from a classical five volume study commissioned by the World Bank (see Krueger, 1992). This later study, having largely influenced recent work like Lofchie's (1997), is evidently underpinned by a liberal free-market ideology.

3.2.1 Policy Implications

The policy implications of *urban bias* theory and its critique depends on the side from which things are viewed, always taking account of Byres' critics and the like, positing that even the reality of the ever-important "flows", "surpluses" and "classes" can be questioned by a powerful discourse. To start his analysis, Karshenas even drops the use of the terms *urban bias* and *rural bias* and switches to the use of a discourse about "industrial bias" or "agricultural bias". (Karshenas, 1996) This sectoral categorisation based on the dominant economic activity seems to be more adequate because of two main reasons. Firstly, as we have seen in the field of policy implications, it is more accurate in terms of the development policies that have historically been applied or discussed, mainly concerning the supposedly complementary *squeeze agriculture* and import substitution industrialisation approaches. Secondly, it eliminates the ever increasing difficulty of defining urban and rural, considering the fact that they do not seem central to the arguments. Although in Lipton's and Bates' argumentation the power of social groups is related to their physical proximity to the government location, their influence in defining urban biased policies has also been questioned (Lofchie, 1997). We could also add that the physical distance is nowadays, in many cases, less important than ever in the transmission of influence, power and information. Although questioned as an explanatory tool at the level of macro development policies, the original *urban bias* theory, seeing cities as the locus of the most powerful elite distributing external aid and defining policies for the rest of the territory, may be useful at the micro scale of a city and its PUI through a class-power sensitive analysis.

The influence of these views in the *peri-urban interface* problematic could be examined under the following features, that must be considered only as a set of *ad-hoc* hypothesis:

- interests that the urban elite has in developing new urban areas in the PUI, and more generally, the local configuration of social classes and power relationships;
- identification of possible ways of exploitation of rural resources or population by the city, that are likely to be more acute or evident in the PUI;
- identification of agricultural activities and industrial activities taking place in the PUI, and the specific policies that constitute their framework;
- analysis of the spatial link between agricultural activities and rural areas, and industrial activities and urban areas, identifying conflicts, contradictions, overlaps, etc.;
- identification of the role of planning authorities and policy makers in defining the PUI (or the policy framework that affects it), seeking to find possible external influences rather than locally driven ones;
- identification of flows of *surpluses* between the countryside and the towns, even if they are likely to be in most cases immaterial and intangible.

3.3SECONDARY CITIES AND URBAN DIFFUSION

The work of Rondinelli (1983, 1985), although not explicitly, could be seen as trying to conceal two approaches: one based on the central place theory (and thus close to the *growth centre* approach) and one more rural oriented, that could be paralleled with the *agropolitan* approach proposed by Friedmann and Douglass (1975, 1978).

For Rondinelli, what determines the inequitable development is not related – as it is for Lipton – to the *urban population*, but with the *city size system and hierarchy* of the country. A geographically dispersed pattern of investment, based in a network of secondary cities and market towns or rural villages, is seen as important to achieve widespread development (Unwin, 1989). Rondinelli considers that the influence of *urban bias* theory and the increasing poverty in rural areas have played a determinant role in a certain "neglect of cities" in development policy during the 1970s and 1980s. This effect has been reinforced by the evidence of the disparities in living conditions and conditions of development between urban and rural areas, and by the planners' perception of the rapid growth of some metropolitan areas of the biggest cities in the Third World as something pernicious and ultimately uncontrollable. The downfall of capital-intensive, export oriented industrialisation in several countries led also to an emphasis on rural development and different attempts to tackle the disparities in development, like *growth pole* policies (that Rondinelli present as having failed to develop their rural hinterlands) or the reallocation of investments in lagging or depressed regions.

Rondinelli has seen the failure of all these strategies mainly because of the lack of a system of secondary cities that supports economic activities and decentralised administrative functions that are necessary to the correct spreading of development between both urban and rural sectors. At the same time, rural-urban linkages are to be considered as the promoters of this widespread development:

> These linkages are crucial because the major markets for agricultural surpluses are in urban centres, most agricultural inputs come from organisations in cities, workers seek employment in towns as rising agricultural productivity frees rural labour, and many of the social, health, educational, and other services that satisfy basic human needs in rural areas are distributed from urban centres. (Rondinelli, 1983)

At the same time, he argued that it was not only a matter of how these linkages worked, but also how they are conceived and by whom:

> no matter how carefully [development goals are] conceived, [they] cannot be achieved in isolation from the cities or entirely through "bottom-up" stimuli. Economic growth with social equity requires both accelerated agricultural development and expansion of urban industry and commerce. (Rondinelli, 1983)

This argument in favour of the role of the medium sized cities in an equitable development may be better expressed as "Urban Functions in Rural Development" which was the name of a project – where Rondinelli was involved – supported by the United States Agency for International Development in the 1980s in Bolivia, The Philippines and Upper Volta (see Rondinelli, 1983; 1984).

As an orientation for policy makers, and in a broadly capitalist framework, neither the diffusion pole strategy nor the reliance on *small cities* (that are seen in a parasitic role) were considered convenient, because only a decentralised investment in "strategically located settlements" could provide the necessary conditions to a "bottom-up" and autonomous development of rural communities. (Rondinelli, 1984)

Unwin (1989) stresses the importance of Rondinelli's contribution to the consideration of the urban-rural interaction in that it relies heavily on "linkages both between rural areas and small cities, and on those between smaller and larger cities ". He then argues that Rondinelli's approach to development planning can be summarised in two main points: "it is essentially concerned with the implementation of change through the manipulation of the urban settlement hierarchy, and it is implicitly based on a 'free market', capitalist framework of change" (Unwin, 1989).

Unwin's critique relies on the fact that Rondinelli bases his argument upon the lack of a medium size ranked city system in most development countries and derives all his policy recommendations from that point, while *there is not clear evidence from research* that:

- "there is such a thing as a "balanced" pattern of urbanisation" (Unwin, 1989);
- the size rank of the cities is determinant in its effects on "successful development";
- such a system of secondary cities can be created by "manipulation of the urban hierarchy";
- such a pattern would necessarily benefit the poor and underprivileged;
- the development impact of the secondary cities on rural areas in a "free market" framework implies that urban leaders will be willing to relinquish some of the advantages currently accruing to them for the benefits of the poor. (Unwin, 1989)

Moreover, following Douglass' remarks, the Urban Functions in Rural Development strategy was underlined by the uncritical assumption that all of *urban functions* were positive and beneficial to achieve an equitable development, while, for instance, studies in Thailand have showed that even bank offices established in rural areas continue to have an urban biased strategy of loan attribution (Douglass, 1998 a).

Finally, Tacoli has identified the "underlying conceptual problem" of the Urban Functions in Rural Development approach as being the assumption that the constrictions to development come from the lack of central places, instead of considering rural-urban interaction issues like ecological capacity, land-owning structures, crop types and price control, and access to markets (Tacoli, 1998b).

3.3.1 Policy Implications

Douglass (1998a) states that development programmes aiming to foster urban functions in rural contexts should better evaluate the likely impacts through the analyse of the actual rural-urban linkages. Even when *urban functions* reach the rural household, their impact often contribute to worsen inequality problems, as it is the case in conditions of unequal distribution of land. Institutions set up in rural towns have been found to be biased towards rural elites and large farmers which have been able to increase their tenancy rates through the channelling of loans into further land purchases (see Khan, 1979).

Such undesired effects can widen rural disparities, pointing to a fact that Douglass expresses clearly: "urban functions are not socially neutral" (Douglass, 1998a). This should drive attention concerning the PUI problematic to the social and power distribution significance of urban functions that, by definition, are present in the interface or at least at commuting distances (when it comes to big or certain middle sized cities). Following this argument, any policy intervention making certain urban functions more easily accessible to the rural areas of the PUI should be analysed in function of the impact that it can have on the social fabric and especially on the poor.

3.3.2 Top-Down *versus* Bottom-up *Development*

A critique that can be made to approaches like Rondinelli's is that they are very much *top-down* oriented strategies, and as such their goals of equity are difficult to achieve. Stöhr and Taylor (1981) have strongly argued the case of a "development from below" that, instead of being primarily oriented to economic growth, would aim the satisfaction of the basic needs of the inhabitants of each area concerned. This area's natural, human and institutional resources must be mobilised, motivated and controlled from the bottom, whereas the first policy objective is oriented to alleviate poverty (Stöhr and Taylor, 1981).
Unwin remarks that "a very different type of definition of development" is underlying Stöhr and Taylor's approach when compared with the work of Lipton or Rondinelli:

> It is usually rural-centred, small-scale, and based on the use of appropriate technology [...] determined from within and [...] therefore unique to each society; it is egalitarian and self-reliant and it is communalist (Unwin, 1989).

At the same time, it shares with Lipton's theory the perception of an inequitable flow of resources from rural to urban areas.

4. CHANGING RURAL-URBAN RELATIONSHIPS: NEW THEORETICAL ELEMENTS

4.1 Urban-Rural Linkages and Flows

In the book they edited in 1989, Unwin and Potter analysed the urban-rural relationships in developing countries under the general framework of the theory of dependence. Potter's concluding article is underpinned by an ideological choice that proved of little help in defining anything more than an abstract socialist framework to analyse rural-urban linkages. It is posited that the nature of the settlement pattern of a given country, being the source of the planning problems it faces, is merely the reflection of deeper socio-economic difficulties and inequalities. Thus, rather than trying to solve them through specific urban solutions as growth poles, new towns and the like, one has to turn to "more fundamental socio-political issues [that] are of crucial significance, not least, the mode of production and the development path that have been adopted in particular countries ". (Potter, 1989) In this line, the case of Cuba is taken as a model whereas it should have been considered at that time that the conditions of their socialist experience were, if anything, unrepeatable.

Unwin's (1989) article is focused from the point of view of the interactions, linkages and flows between rural and urban areas. These three terms being generally used in the literature interchangeably, Unwin proposed a framework were they are to be seen as separate but closely linked concepts:

> At the broad theoretical level it suggests that there are economic, social, political and ideological *linkages* between urban and rural places. These find their physical expression in measurable *flows* of, for example, people, money and budgetary allocation. These flows are associated with *interactions* between people, places and objects, but do not in themselves actually embody those interactions (Unwin, 1989).

This system proposes four kinds of linkages (i.e. economic, social, political and ideological) and many more flows that are derived from them. Little is done to test the scheme against reality, and contradictions are evident from the table proposed: while *flows* are defined as physical and measurable, there are among them "power" and "authority ", while "ideas" find its place among the ideological flows (see Unwin, 1989).

Although Unwin criticised Rondinelli because of the "little clear logic" of his classification of flows and linkages, his own is not so much improved. Anyway, this is of little importance but it is significant of a tendency, still present in some of the more recent approaches like Douglass' *networked model* (Douglass, 1998a), of focusing the theoretical attention on rural-urban *linkages*, even if in Unwin's model they are never properly defined.

Douglass' model is more precise and the rural-urban linkages table presented is preceded by several hypothesis and a general theoretical framework (that will be analysed later in this review). Concerning the rural-urban linkages, it is posited that they can follow quite different trajectories, configuring either positive (virtuous) or negative cycles of development. Douglass' template include, instead of Unwin's somewhat sterile division in interactions, linkages and flows, a division of the research components into *structures* and *flows*, suggesting that:

> rural structural change and development are linked to urban functions and roles through a set of flows between rural and urban areas. The task of research is to analyse (1) patterns of flows and (2) their combined impact on fostering rural regional development (i.e. both town and countryside) (Douglass, 1998a).

The five types of flows identified by Douglass are people, production, commodities, capital and information. Each having multiple components and impacts, they also feature different spatial linkages patterns and variable benefits to rural and urban areas. The underlying hypothesis is that, assuming that objectives of a more even pattern of development are to be achieved, the flows must lead towards a virtuous cycle of localised (regional) linkages. Thus, the policy strategy should be oriented towards improving the chances for reciprocal benefits to accrue from the flows (Douglass, 1998a).

The maximisation of these benefits can be achieved through what has been called the "virtuous circle" model of rural-urban development. It is based in an efficient interaction of rural-urban linkages and flows, allowed by the proximity of urban markets to bring the rural production to domestic and external markets. Its phases have been described as follows:

1. rural households earn higher incomes from the production of agricultural goods for non-local markets, and increase their demand for consumer goods;
2. this leads to the creation of non-farm jobs and employment diversification, especially in small towns close to agricultural production areas;
3. which in turn absorbs surplus rural labour, raises demands for agricultural produce and again boosts agricultural productivity and rural incomes (Tacoli, 1998b: from Evans, 1990 and UNDP/UNCHS, 1995).

4.1.1 Policy Implications

The policy challenge for poverty in the PUI is well defined by Douglass elsewhere, after having stated that the prospects for poverty alleviation are radically being transformed by new forms of economic organisation, technological change and globalisation:

> The result of these transformations is that rural-urban linkages are becoming much more multi-faceted, multi-layered and spatially far-reaching than received spatial models can begin to capture. Yet even as globalisation of rural-urban linkages allows for more wide-ranging livelihood strategies to at least marginally enhance the incomes of the rural (and urban) poor, spatial processes of development remain highly uneven and migration is still found to be a more selective than simple "push-pull" models hypothesising a one-way, one-time-only flow of the poor to the city. (Douglass, 1998b)

Douglass remarks that even if rural-urban linkages are changing into more elaborate and complex patterns, large shares of developing countries populations, especially the poor, continue to live in remote regions marked by slow economic growth, unsustainable land uses and resource depletion. In these cases, as in situations of extreme poverty, strengthened rural-urban linkages can even be prejudicial to local cultural, economic and social integrity. Therefore, policy makers should carefully evaluate the impact of reinforced *rural-urban linkages* while acting in milieus of uneven spatial and social development. They should do this by integrating into their policy frameworks not only the emerging global-local realities of rural-urban integration, but a specific concern for the poverty alleviation and the economically sustainable potential of the target rural regions in "every quarter of national space" (Douglass, 1998b).

4.2THE EXPANDING CITY: DISPERSAL AS A WORLD PHENOMENON

The general move towards dispersal and location of growth on the peripheries or fringes of cities is becoming a world-wide phenomenon. Recently, evidence of strong empirical regularities in the patterns of metropolitan development in market-oriented economies of both industrialised and developing countries has been remarked by Ingram (1998), a World Bank expert, who summarised these movement towards the fringes as follows:

- a dispersal process from the centre to the periphery of both population and employment, with the largest metropolitan areas converging to decentralised and multiple sub-centred areas, (cities in developing countries tend to have higher population densities, but the difference is narrowing);
- highly decentralised manufacturing employment and emerging specialisation of the central business district in service employment;
- increased reliance on road-based transport for both passengers and freight (industrial countries have experienced decreases in transit level as automobile ownership rises; developing countries have higher transit-ridership levels and a mix of options in terms of vehicle sizes and levels of services);
- land-markets are strong determinants of this outward movement, land rents being closely related to development densities;
- urban hosing demand patterns are similar across cities in industrial and developing countries, but the supply side varies, as does the efficiency of the public infrastructures provision (Ingram, 1998).

Ingram states that population growth in large cities usually promotes densification of less-developed areas and expansion at the urban fringe, largely following either price constraints or preferences of households acting within the housing market:

> "Population density in the most central zones frequently decline as households are displaced by the expansion of other activities. This is a very robust finding in both industrial and developing countries. [...] Large households typically prefer larger dwelling units. Since housing prices and

> rents are lower at the periphery of cities than at the centre, large households are often more decentralised than small households" (Ingram, 1998)[5].

This kind of process has been analysed in different countries. Indeed, the formation of vast and ever-expanding metropolitan regions seems to be "an inevitable feature of very large populous countries" in the developing world. The potential of growth of such agglomerations is been constantly enhanced by technological development, specially by major improvements in transports and telecommunications (Jones and Visaria, 1997).

In Latin America, with an urbanisation rate of more than 80 %, the rural-urban migration has virtually ended, the poor classes having contributed in the large majority of cases, to the creation of a poor class peri-urban fringe around main cities during the 1950s and 1960s. More recent processes in Brazil have been analysed from the point of view of the changes that took place during the 1980s and 1990s in the urban growth pattern. These changes are seen as having segregated the lower-income populations in the extensive and precarious peripheral areas, where the "capitalistic sector " has allowed them to settle and become "home owners" (Ribeiro and Correa, 1995).

This spread of the poor to the periphery has been favoured by the way in which metropolitan space was produced, the result being "the buffering of social conflicts in Brazilian cities". The three main indicators of the new change are:

- a socio-economic diversification of the peripheral areas, thus reproducing the centre-periphery pattern within themselves;
- the spread of poverty throughout the metropolitan network;
- the emergence of segregation by middle-class segments of society.

These changes have led to the formation of a more complex peri-urban structure than the one described in the 1970s:

> The periphery has ceased to be an open space, and in this sense it ceased to be a frontier, whose growth logic led to the spread of urban land ownership. This trend has thus coexisted with a diametrically opposing one: the production of privileged residential neighbourhoods whose target owners belong to higher-income groups, territorially separated from the rest of the city (Ribeiro and Correa, 1995).

This complex and heterogeneous peri-urban structure is located in a region that has not stopped its expansion, led by industrial decentralisation to the "edges ". Even if Brazil had adopted a set of measures including fiscal incentives to drive industrialisation away from the core region of the Southeast, the meaning of "deconcentration" in that country could be more accurately related to the expansion of the limits of the metropolitan region of Sao Paulo, rather than to the fostering of new industrial poles to achieve a more even pattern of development.

Although firms have in general decided, from the 1980s onwards, to settle in small cities at a convenient distance of Sao Paulo – even if out of the administrative metropolitan area – the consequent "deconcentration" has implied the "extension of the radius of concentrated economic activity and of intensive demographic growth, as well as centralisation of financial control" around the city core (Martine and Diniz, 1997).

In Southeast Asia, while suggesting the formation of an extended metropolitan region, Firman (1997) has described the fast process of land conversion in the Northern Region of West Java, Indonesia, mainly from agricultural to industrial and residential uses. This process has been led by domestic and foreign investment in the manufacturing, finance and service sectors, and has also been encouraged by a series of financial deregulation policies from the 1980s, aiming to stimulate economic growth.

[5] Although Ingram comprehensively uses the term *decentralisation* in this article, we prefer to stick with its more established use, describing the process of institutional transfer of functions from a central and concentrated location to multiple local places.

The development of investment in housing and industrial estates has thus transformed mainly peripheral agricultural areas to large new town and industrial estates. An influx of population into these peripheral areas, mainly middle-income groups, has boosted land speculation and a strong and dynamic activity of developers, not always under the regulation of the state. This process must be interpreted in the light of a general economic and physical restructuring of the region, where Jakarta City, the core, is shifting its former industrial function to a business, finance and services centre. Meanwhile, population growth in peripheral areas is far exceeding the one in the core (Firman, 1997).

The *mega-urban regions* resulting from processes like those mentioned above are often composed of one or more large urban cores linked by major transportation axes plus the peri-urban zones and an extensive zone of mixed rural-urban land use alongside the main routes. (McGee, 1991) Common features of these rural - urban areas include:

> rapid commercialisation of agriculture; expansion of transport systems; and an employment shift from farming to other activities, accompanied by migration or commutation to cities. Factories and other non-agricultural activities are also developing within the zone but outside the city proper (Jones and Visaria, 1997).

Another characteristic feature of these mega-urban regions is that the distinctions between urban and rural are tending to become increasingly blurred as a result of technological changes and globalisation processes that make available to rural dwellers, goods and services that were the preserve of urban residents only a very short time ago (Jones and Visaria, 1997).

4.3GLOBALISATION AND EXTENDED METROPOLITAN REGIONS

McGee and Watters have recently stated that the evolution mentioned above can be subsumed into two main features that are “changing the face of the world geography”: globalisation, “which assumes the increasing integration of national economies into global systems of production, distribution and consumption” and space-time collapse which is the consequence of the technological improvements in transport, communication and computer technology. (McGee and Watters, 1997) When analysing the complex interactions between the global and the local, it is argued, there is a need to escape from “the idea of the global steamroller” constructing new regions, which is the common ideology underpinning globalisation discourses. A local-global dialectic where local forces in a variety of forms and levels negotiate with the global would thus be a more adequate framework to analyse the territorial changes that are produced by this dialectic interaction. The second way proposed to escape from the idea of globalisation as a steamroller is “to attack it on empirical grounds ”. A confrontation against the different degrees by which countries are affected by globalisation processes can cast light on the extent of these processes:

> Perhaps 80% of the world’s inhabitants, particularly many of the poor in Asia, Africa and Latin America, still exist in localities where networks remain primarily interpersonal and local; indeed, such local networks may be the crucial elements in their battle for survival. [...] Part of this emphasis upon the unevenness of global impact derives from the fact that it is a Eurocentric concept, making the assumption that the global forces emanating from the wealthier countries are so powerful that the local will collapse (McGee and Watters, 1997).

McGee further argues that the globalisation process is followed by an inevitable increase in urbanisation and the emergence of global and sub-global systems of highly linked cities. If current patterns of urban concentration persist, the developing world is expected to experience the emergence of mega-urban regions as major components of their urban systems. Although it has been argued that the current phase of globalisation in developing countries is the second after the one represented by their incorporation into the colonial system, the urban consequences are at least of the same importance.

One of the consequences of the first wave of "globalisation" had been the creation of large primate cities dominating the urban hierarchies of their countries, like Rio de Janeiro, Mexico city, Jakarta or Nairobi which were administrative centres and conduits for the flows of raw materials for the developing world. At the same time, dualistic societies were created, with much of the rural population living in poverty (as the informal sectors of the cities), dominated by a small elite of colonialists, foreign entrepreneurs and indigenous oligarchy (McGee, 1997). Even if differences in the time and processes of decolonisation (earlier in Latin America) have produced different patterns of urbanisation – where Latin America has attained the levels of urbanisation of developed countries, and Asia and Africa have just entered the "accelerated" phase of urban transition from rural to urban population – in each of these continents population from migration and endogenous growth of those large primate cities and industrial location on their fringes are actually expanding the urban areas to form what has been labelled extended metropolitan regions.

McGee's major conclusion from this analysis is that macro-trends do not necessarily indicate a deconcentration of urban settlement or counterurbanisation. In fact, while changing the scale and the definition of the urban agglomeration, these processes are actually occurring in a *larger zone*, where one can find at the same time residential outward movement, changing land use of the inner cores, industrial decentralisation into new industrial states and the creation and amelioration of transportation networks. This larger zone is the Extended Metropolitan Region.

Following Rigg and McGee, the features of Southeast Asian EMRs are:

- large and dense population engaged in wet rice cultivation;
- good transport networks;
- highly mobile population;
- an increase in non-farm (non agricultural) activities;
- a mosaic of interlocking land uses;
- increased female participation in the labour force;
- lack of planning controls" (Rigg, 1997 from McGee, 1991).

Rigg has pointed out that the features cited above for many city-regions of the Southeast Asian countries being the same that one could find at the national level: "it could be said that in functional terms there is no "edge" to the EMR" (Rigg, 1997).
McGee (1991) having argued that these EMR are mainly shaped by the dynamic linkages between agriculture and non-agriculture Rigg further maintains that:

> the formerly distinctive attributes of "rural" and "urban" are becoming increasingly blurred. In terms of physical fabric this can be seen in the expansion of Southeast Asia's metropolitan regions; at a functional level it can be seen in the spatial intrusion of industry into rural areas; and in human and household terms in the diversification of livelihoods and the increasing movement of people between regions and jobs. It is interpreting these changes that the real challenge lies: what is driving the process and what are its implications, particularly for the people who are caught up in the maelstrom of change (Rigg, 1997).

If geographers prefer to answer these questions by identifying the EMR with tangible, physical developments like the transport network or the localisation of rural factories, individuals in a particular region are part of the process whether they live close to the capital city or far from it: "the flow of goods, people, money, ideas, desires and aspirations will transcend any arbitrary boundary delimiting an EMR" (Rigg, 1997).

From the macro-regional point of view, an evolving system of urban linkages between these mega-urban regions is emerging as a phenomenon of growing economic interaction. A further consequence is the emergence of sub-global regions: regional blocs of states (such as the Asia-Pacific region) within the global system (McGee, 1997).
The effects of globalisation tend to concentrate even more the population and economic activity

in these extended metropolitan regions, that are seen by both global and national investment as the ideal areas to locate manufacturing of consumption goods, invest in the built environment and "create the landscape of global consumption" (McGee, 1997).

On the other side, even if the EMRs are in part the result of structural changes in the global economic system, it has been argued using the Thai example that at the same time, they are given shape by local processes at the interface between the global and the local. Both national and international actors (industrialists, investors, planners, politicians, etc.) follow the general international capital trend, but within a plot with "considerable scope […] to be left for the 'local' and 'very local' to influence, cajole and even determine how external forces integrate with localised contexts" (Parnwell and Wongsuphasawat, 1997).

4.4The Desakota Model

Within the Asian context, Ginsburg and McGee have challenged the conventional view accepting that the distinction between rural and urban would persist as the urbanisation process advances:

> Distinctive areas of agricultural and non-agricultural activity are emerging adjacent to and between urban cores, which are a direct response to pre-existing conditions, time-space collapse, economic change, technological developments, and labour force change occurring in a different manner and mix from the operation of these factors in the Western industrialised countries in the nineteenth and early twentieth centuries (McGee, 1991).

Ginsburg's description of these new areas characterised them as:

> complex and compound regional systems consisting of central cities, fringe areas of those cities, exurbs, satellite towns, and extensive intervening areas of dense population and intensive traditional agricultural land uses in which wet paddy tends to dominate (Ginsburg, 1991: xiii).

McGee has proposed a territorial model named *desakota*, and a word to describe the process that lead to the formation of such territorial patterns: *desakotasi*. These terms were coined from the Indonesian words *Desa* (village) and *Kota* (town), to describe the intense mixture of agricultural and non-agricultural activities that characterises these regions. Following Firman, in McGee's model, five main regions are identified:

1. the major cities (in the Asian context this is generally an extremely big city);
2. the *peri-urban regions*: those areas surrounding the cities within a daily commuting distance from the core and characterised by high interaction with it;
3. the *desakota* regions, often lying along the corridors connecting a large city core to smaller town centres (see Wang, 1997 for the example of the Shanyang-Dalan region in China);
4. densely populated rural regions;
5. sparsely populated frontier regions (Firman, 1996).

The *desakota* paradigm has recently being empirically tested in several case studies, and there is a growing literature discussing the applicability of the concept.

Firman (1996) has proposed its application to the Bandung *extended metropolitan region* in Indonesia, while confirming the failure of the "counter magnet strategy" (issuing from the *growth pole* theory). This strategy has been aimed at slowing down the physical development of Bandung City, the core of the region, that was considered too congested by planning authorities. Action was taken in favour of the small towns surrounding it, in a set of policies that has been called "deconcentrating planning" purporting to redistribute development from the urban core to peripheral areas.

Although this strategy has been used for almost two decades, Bandung City still remains dominant, with manufacturing services and other important business activities largely agglomerated. This strategy has thus failed to divert "higher order functions" from the core of the metropolitan region and to develop a "secondary centre", with several surrounding towns supposed to become development poles only acting as dormitory cities (Firman, 1996).

In the same line, Wang (1997) analysis of the Shenyang-Dalian region of China has concluded that McGee's *desakota* paradigm is applicable to the rural-urban convergence resulting from socio-economic and labour changes in the *peri-urban area*. The general tendency of this successful and dynamic e*xtended metropolitan region* has been towards a diversification of rural economic and occupational structures, with high levels of complementarity between the functions of each part of the system. The author suggests that the territorial restructuring of the area make that villages of the region *are simultaneously rural and urban*, thus, calling for a new definition of the rural-urban relationship [6]. (Wang, 1997; see also the South-eastern Coastal China case study later in this review.) Considering management issues, from 1983 all the central cities of the region have been empowered to integrate about half a dozen counties and surrounding suburban districts, therefore allowing a more clear and powerful jurisdictional scheme that has also brought new economic links.

> The new system has facilitated the combination of urban and rural planning, the rational deployment of resources and a general readjustment of the region's industrial structure (Wang, 1997).

However, this development has not been made without a certain environmental cost, thus calling for new policies that check and address both these matters and the social problems coming from the rapidity and scale of peasant's occupational changes from agricultural to non-agricultural activities. Although there is a neat decline in the proportion of the labour force engaged in farming, the volume of agricultural products has increased, suggesting that a better productivity is being achieved (Wang, 1997).

4.4.1 Policy Implications

As far as regional development planning is concerned, the question to address, regarding the hypothesis of *desakota* regions and the cases reviewed is: does this new form of urban transition represent a viable operational compromise between the previous two models (city-biased strategy versus decentralisation guided by the *growth poles* model, see Douglass, 1998a)?
The case of the Shenyang-Dalian region shows that regional management can be effective when eliminating either overlapping or "shadow" zones created by the traditional division between rural and urban planning. This conceptual framework is extremely useful to define the appropriate problematic and the possible solutions. The administrative integration of the rural surrounding areas into the jurisdiction of the urban settlements should not then be regarded as an *urban biased* policy, but rather as a pragmatic way of eliminating unnecessary conflicts in a highly integrated rural-urban territory.

4.5The Networked Model

Douglass has also strongly argued in favour of a new paradigm for rural regional development that integrates the realities and the potential of rural-urban linkages in the process of regional development policy formulation:

> Rather than trying to make a single large city into an omnibus centre for a vast region, the network concept is based on a *clustering* of many settlements, each with its own specialisation and localised hinterland relationships. (Douglass, 1998a)

[6] Three villages with locational differences were selected for the study: a near-suburban village, an outlying village and a remote village between two large urban poles. Although presenting specific social and economic features, comparing the income levels and life-styles of the three of them leads the author to state that they can be considered as *simultaneously* rural *and* urban. (Wang, 1997)

Douglass has taken the option of opposing his paradigm to the still widely applied *growth pole model*. A major difference between the *growth pole* paradigm and the *networked model* is the style of planning each of them encourages.

On one side, for the *growth pole model* the urban node is the "all-important spatial actor"; demarcating its hinterland is not fundamental but is rather a fruitless and unnecessary task. Thus, regional boundaries remain "misty". Development policies are built around incentives to attract industrial investment. Generally public provision of economic infrastructure for urban industry and upgrading communication links are features, especially roads that link the local production with the capital city and therefore with international markets. On the other side, the *multisectoral* nature of the *networked model* needs a localised capacity to co-ordinate a large number of interrelated and complementary activities. Provincial or district level boundaries are very important to co-ordination and application of planning policy.

In a way, a parallel could be established between Rondinelli's *secondary cities* paradigm and Douglass' *networked model*. Rondinelli considered fundamental the fact that the secondary cities, while having an adequate size to perform decentralised activities, had to be a part of a network of similar cities and of smaller ones, in order to produce the desired "diffusion" to the rural areas. Douglass' work is somewhat more realistic in the sense that conceptually it deals with the *network* and *cluster* ideas (which will be developed next).

4.5.1 Policy Implications

The model recognises the need to upgrade infrastructure both at rural and urban level to achieve the necessary connectivity of the network, but it also gives strong emphasis to local roads among major centres, villages and towns within the region. Upgrading local infrastructure services available to households is a key factor, the quality of regional daily life being considered a key for economic growth. (Douglass, 1998a) Even from the point of view of the growth centres (with a "balanced regional development" in mind) an *integrated network of dynamic centres* is more likely to counterbalance a big city than some artificially boosted growth centre. (Douglass, 1998a)

4.5.2 The Agropolitan *Approach to Regional Development*

Both the *networked model* of regional development and a concern with the involvement of civil society in planning decisions that Douglass and Friedmann presented in their last book. (Douglass and Friedmann, 1998) evolved from an earlier concept. The *agropolitan* approach of Friedmann and Douglass (1975, 1978) posited that rural development could be best pursued by linking it to urban development at the local level. The rural town was seen as the principal site for non-agricultural and political-administrative functions rather than as a growth pole; local knowledge should be incorporated into planning processes at the local level, and the district scale was seen as the appropriate unit for development. Thus, decentralisation, democratisation and participation were key factors (Douglass, 1998a).

- Starting such processes of development required at least three factors;
- access to agricultural land and water;
- the devolution of the political authority to the local level (decentralisation);
- a shift in national development policies in favour of a diversified agricultural production (Douglass, 1998 a)

This would constitute a new paradigm for rural regional development that integrates the realities and the potential of rural-urban linkages in a process of policy formulation which integrates ecological and social constraints. Although it has only been partially applied, the *agropolitan approach* has contributed to the promotion of decentralisation and participation on the Asian planning agenda (Douglass, 1998a). It shares with the *bottom-up* strategy a similar ideological approach to planning for rural development that "must be decentralised, participatory, and deeply immersed in the particulars of local settings" (Friedmann and Douglass, 1978).

4.6The Territoriality of the Rural-Urban Interaction

Goodman and Watts (1994) have questioned the utility of the Fordism/post-Fordism debates on capitalist transition when applied to the analysis of the dynamics of change in agrarian production and rural spatial organisation. Attempts to identify a "New" Third post-Fordist food order rooted in the "new internationalisation of agriculture" are at least problematic, and often deeply flawed. As they put it:

> All of these questions – what is new about internationalisation, what represents structural as opposed to contingent change – turn to some degree on the classical questions of structure and agency, reminding us once again of the dangers associated with the big, clumsy categories and indiscriminate use of stable, binary oppositions. What is required, in short, is a theory of dialectics capable of providing analytical purchase into crisis, transition and adjustment (Goodman and Watts, 1994).

A new focus is then proposed: *territoriality* (or lack thereof) of specific agro-food complexes and of the "rural sphere" in general. It has been argued (Sassen, 1998; Castells, 1990) that globalisation entails simultaneous processes of *deterritorialisation* (losing of place specificity) and *territorialisation* (specific practices in specific places) each of them having a different causal structure.

Following this line, Goodman and Watts state that every *filière* [7] of the production or distribution of the global agro-food system has its own *territorialised* and *deterritorialised* processes, while "the overall effect is to produce a constant creation and re-creation of *territorially coherent transaction structures* through waves of investment and restructuring" (Goodman and Watts, 1994). Then, concerning rural-urban relations they add:

> In this sense, some territorially based systems may not be *per se* rural but embrace town and country in specific ways. In any case, the intention is to recognize patterns of convergence and divergence that are derived from global processes and local (especially in our view land – and food – based) specificities (Goodman and Watts, 1994).

Globalisation and industrial mobility provides examples of what could be these *territorially coherent structures* in some cases, as shown by Hart's (1996) arguments (with a somewhat different conceptual framework) in favour of agrarian reform on former "buffer zones" in South Africa.

[7] *Filière* is a French concept suggesting a branch of an activity or a sector of the production (e.g. the informal sector in the production of housing) and, at the same time, the actors involved in this branch.

It is argued that some areas of the country *that are neither clearly metropolitan nor deep rural* have been the object of two key thrusts of apartheid spatial engineering policies: forced removals of black people and industrial decentralisation. Many industries took advantage of important subsidies and moved to these areas, while this policy and the low wage available workforce also attracted external investors, like many Taiwanese firms in the zone of North-western KwaZulu-Natal. These areas that were initially intended to spatially separate races are now densely populated and well serviced peripheral "interstitial places" with all necessary urban infrastructure and transport facilities. Market-based land reform in South Africa (a recommended World Bank strategy) seems to be favouring "gentleman farmers for whom agriculture will at most be a weekend occupation". As they are rather likely to devote their attention to more lucrative non-agricultural and urban-based activities, this particular form of agrarian reform could help the poor to develop alternative and combined income generation strategies. It would support multiple livelihood and be distinguished by:

> [the] proximity to existing non-agricultural resources, and by clustering of agricultural and non-agricultural activities. Spatial clustering is likely to be particularly important for women who, in addition to working for wages and other income, undertake vast amounts of unpaid reproductive labour – bearing and rearing children, housework, and care of the sick and elderly. Spatial proximity constitutes a sort of resource that cuts travel costs and makes possible the combination and sequencing of multiple activities (Hart, 1996).

It is stated that this patterns are not peculiar to South-Africa in respect to the "perpetuation of multiple, diversified, spatially-extended livelihood strategies and efforts to retain a secure base", but are on the contrary, "a defining feature of late twentieth century capitalism, exemplifying the fiscal crisis of the nation state and its retreat from welfare provision, as well as the imperatives of flexible accumulation and global competition". The case of the rural industrialisation in Taiwan or South-east coastal China (that will be analysed in detail later) is seen as another example of spatially-clustered and synergetic linkages between production and the conditions of social reproduction (Hart, 1996).

4.6.1 Policy Implications

Concerning the PUI, several points from the previous discussion could cast light to the policy making problematic:

- the *clustered* situation is a widely present feature of these areas that could be favoured by peri-urban policies. The *peri-urban areas* are often characterised by heterogeneity and proximity of different activities, mainly agricultural and non-agricultural ones. The "clustered" approach takes this feature into account from the spatial point of view and would try to integrate them as a desirable spatial goal. It would certainly favour mobility and choice of different livelihood strategies for the poor, as long as *space-time compression* is not available to everyone;
- the idea of *multiple livelihood strategies* seems more adequate to the reality of the peri-urban poor than the vision of the traditional consideration of formal-informal activities or farm-non farm jobs;
- the *cluster strategy* is propounded ideally for "non clearly metropolitan but not deep rural areas" because this feature seems to avoid struggles against industrial location strategies of entrepreneurs. Nevertheless, taking this problem into consideration could help in a bargaining process with the different actors involved, even in peri-urban areas of metropolitan zones;
- *peri-urban agriculture* development, as one of the productive *filières* spatially located alongside non-agricultural activities, can be considered as a part of this approach to the PUI. As it has been argued by several authors like Baudoin and Margiotta (1997), that, even if the urban and peri-urban agriculture seem to be conflictive in the sense that they are in competition for available urban space, their potential are important in managing land uses, for they can contribute to feeding local poor populations, to controlling pollution, to reducing unemployment, etc. (See also Aldington, 1997; Ciparisse, 1997; Margiotta, 1997);

- the *territorially coherent transaction structure* paradigm from Goodman and Watts (1994) can integrate the analysis into a broader scheme with which the coherence of any PUI policy could be assessed. This would combine several *filières* from the productive side and *multiple livelihood strategies* considerations from the social side.

5. PUI RELEVANT CASE STUDIES

5.1 Bangkok, Jakarta and Santiago Metropolitan Fringes

Browder et al. (1995) have examined the socio-economic composition and structure of settlements on the metropolitan fringe in some cities in developing countries, using three sets of surveys from Bangkok (Thailand), Jakarta (Indonesia) and Santiago (Chile) taken during 1990 (total sample of 299 households). The team selected the samples in peri-urban areas, working with a *definition of the metropolitan fringe* characterised by temporal and locational features. The outer boundary of the urban fringe was defined as the margin of the built-up area of the metropolitan centre. The fringe was defined from that boundary inwards, including all contiguous residential areas no older than 15 years.

In the late 1980s, the Office for Rural and Institutional Development (ORID) of the Agency for International Development (AID) awarded a grant to researchers of the Virginia Polytechnic Institute "to evaluate how well the concept of the peri-urban space, based on African experience, might describe opportunities for linking rural and urban development in prospective Asian and Latin American project sites."

This was part of a new AID strategy viewing the peri-urban metropolitan fringe as dynamic zones linked to both rural and urban areas, where different aid activities would stimulate economic growth for both areas.

Bangkok had approximately 6 millions inhabitants in 1985, while its metropolitan area exceeded 8 millions. Thai authorities have consistently tried to divert urban growth to other cities or poles, adopting economic growth poles policies and encouraging the growth of secondary cities. Despite this efforts, the growth of Bangkok area has continued, albeit at a lower rate (3 % annually).

The city suffers the lack of a systematic and enforced planning, its shape being the result of market forces, which have driven the growth to the urban fringe for the last twenty years. The inner zone of the metropolitan area still features large tracts of undeveloped land, attributed to the lack of infrastructure in between the major transport axes.

Jakarta metropolitan area accounts, with almost 9 million residents, for 17 % of Indonesia urban population, but its growth has been impressive for the last 30 years, during which the metropolitan area expanded in surface more than 40 %. During the 1970s and 1980s, rural-urban migration outpaced governmental efforts to manage urban growth through a "closed city" policy that tried to divert growth to selected areas. The 1983 plan encouraged industrial, commercial and residential development on the eastern and western fringes of the metropolitan area, but they could not prevent most of the recent growth to occur mostly driven by the market into the southern zone.

Santiago metropolis houses near 5.2 million residents with a share of 50 % of Chilean urban population (82 %). Flanked to the east and west by mountains or hills, Santiago has growth to the north incorporating some satellite towns, but the bulk of metropolitan growth has occurred in the southern fringe.

The findings of the survey challenge many of the widespread assumptions about the metropolitan fringe, namely that:

- most fringe residents are recent low-income migrants from rural areas or provincial towns or villages;
- fringe settlements are portrayed as socially and economically homogeneous, with little socio-economic differentiation within the resident population;
- the importance of "informal" income generating activities and strong linkages with agriculture are usually stressed;
- it is widely believed that, being transitional economic and social spaces, the fringes are articulated to both rural and urban economies and as such, present unique opportunities for stimulating growth in both sectors.

The authors state that:

> The findings of our study challenge many of these popular conceptions and, indeed, call into question the usefulness of the "peri-urban" concept as a discrete analytic category (Browder et al., 1995).

The vast majority of residents in the metropolitan fringe of the three cities were found to be not recent low-income rural migrants, but rather lower-middle and middle-income, long term urban dwellers who had relocated from other areas of the metropolitan centre or from other fringe areas (Santiago).

Informal income-generation activities were an exception, as most households workers were formally employed and received regular salaries and wages under legal employment contracts. Only few cases of male informal workers were detected, although women worked largely in the informal sector.

> Contrary to the popular conception of fringe settlements as quasi-rural in orientation, most residents of the survey sites were well integrated into the larger urban economy; rural sector linkages and agricultural activities were virtually non-existent. [...] While the most remotes of these settlements encroached on farmland, there was no evidence of any distance gradient in land use or economic activities from agricultural to urban (Browder et al., 1995).

The authors see as inaccurate to characterise these zones as "transitional" as most households depended on formal jobs outside the immediate neighbourhood, although "a significant but not overwhelming fraction of economic activities was located within the immediate fringe area ". All of the survey sites varied considerably in income generation and savings behaviour, further reinforcing the idea of highly heterogeneous areas, diverse in character, function and form.

The patterns of development found in the three metropolitan areas diverge widely and question the validity of the peri-urban concept:

> While the concept of "peri-urban" has been forwarded as a functional construct defining metropolitan fringe communities for Africa, in other cultures it is unreliable as a basis for identifying and designing development projects. [...] Moreover, as a strictly spatial construct defined by location on the metropolitan perimeter, the peri-urban concept is not particularly useful; in fact it can be misleading. (Browder et al., 1995)

This study let the authors speculate about the causes of outward expansion in Third World metropolitan centres, arguing that while public policies have promoted decentralisation in all three of the countries, it is not principally the poor (as Marxist oriented analysis argue) that are being "pushed" onto the metropolitan fringe, but rather middle income groups well connected with the formal economy.

Nevertheless, the study notes the heterogeneity of social spaces found following a similar-site selection criteria suggesting that poverty is not absent on the metropolitan fringe:

> Our findings should not be construed as suggesting the absence of urban poverty on the metropolitan fringe. Indeed, had we assiduously searched for

> pockets of poverty on the fringe, we undoubtedly would have found them. Nonetheless, popular conceptions of fringe communities as homogeneous agglomerations of the poor should be revised. The metropolitan fringe is much more heterogeneous in social composition and economic structure than conventional stereotypes acknowledge (Browder et al., 1995).

Dedicated city reports of the survey can be found on Bohland (1991): Bangkok; Browder (1991): Jakarta and Scarpaci (1992): Santiago.

5.2Jabotabek or the Jakarta Extended Metropolitan Region

Jabotabek is the acronym for the extended metropolitan region of Jakarta, formed by the first syllables of that city and each one of the three surrounding districts: Bogor, Tangerang and Bekasi. They all conform a unified daily urban field that has been object of several urban studies. Estimates indicate that its population will have increased from 17 million in 1990 to 30 million by 2010 with most of its growth, 10 out of 13 million, located in the Botabek areas outside of the central core of Jakarta DKI (Special Capital District) (Archer, 1994).
In the late 1970s the Government of Indonesia launched a series of planning studies focusing on the environmental deterioration resulting from land use changes in Jabotabek. Among the main environmental problems identified were (Douglass, 1989):

- severe water pollution from both urban and agricultural uses;
- unnecessary loss and degradation of prime agricultural land through urban expansion;
- potentially serious erosion problem developing in the uplands;
- extensive loss of natural habitation;
- severe threats to the remaining areas of natural forest, coastlands and marine ecosystems […];
- existence of mercury poisoning in Jakarta bay […];
- and mounting levels of toxic wastes.

Based on this diagnosis, the development planning strategy has been basically an attempt to drive urban and industrial development out of the central district (Jakarta DKI) and towards selected growth poles and corridors. This strategy has not achieved the expected results, mainly because of the public sector neglect of three main obstacles (Douglass, 1989):

- the absence of coordination between bureaus charged with implementing policies;
- the lack of sufficient incentives to attach private developments to the target areas;
- and the absence of political will to implement existing regulations.

The influence of land use conversion in this process of deterioration and in the formation of Jabotabek has been recently highlighted by Firman (1997). The accelerated process of development in the Northern Region of West Java (Jabotabek plus two contiguous districts that have experienced high levels of economic growth) has been triggered by domestic and foreign investment in the manufacturing, finance and service sectors. In turn, this has caused high population growth and induced the development of industrial areas, new towns and large-scale housing provision, followed by infrastructure and commercial equipment (Firman and Dharmapatni, 1994).

The surplus capital from the industry has also sought opportunities to diversify investment in speculative developments in housing targeted to the emerging middle-income groups (see Dick and Rimmed, 1998; and Browder et al., 1995) and industrial estates in the urban periphery. The extent of the consequent land conversion process is seriously threatening the environment and the sustainability of the whole region's development (Firman, 1997, see also Firman and Dharmapatni, 1994).

It has been argued that a planned and regulated management process of "land consolidation"

could help to improve the negative effects of the land conversion by organising rural landowners in temporary and compulsory partnerships for the unified planning, servicing and subdivision of their land, with the costs and benefits of the operation being shared by the landowners (Archer, 1994).

However, in the most recent analysis it is reported that the land conversion process still reflects predominantly the large developers' interests, favoured by the current permissive planning system that uncontrollably grants developing permits and virtually forces small landowners to sell their land at almost "monopolistically" fixed prices (Firman, 1997).

5.3South-eastern Coastal China

The South-eastern coastal cities in China are part of a region which, due to special location historical and geographical factors (historical functions as ports and commercial cities in the pre-revolution period, proximity linkages with Taiwan and Hong Kong, strategic position as part of the emerging Asia-Pacific sub-global region, etc.) was chosen by the Socialist government to be "opened" to the market economy from the late 1970s. This region has now an advanced economy and a high degree of urban concentration. At the same time, two distinct trends in development patterns of urbanisation have been identified, where the tendency to economic concentration is balanced with a complementary pattern of dispersal growth towards new towns or newly created districts (Yao and Liu, 1995).

Problems and solutions of the Chinese planning systems in the 1980s have been thoroughly analysed. The most obvious has been the conflict and contradiction between the coexistent pre-reform and reform development policies. While the former restricted the growth of large cities or favoured the growth of small ones (i.e. Urban Policy, 1980), the latter encouraged the growth of large cities (i.e. urban reform in the commercial and communications sectors and the Open Policy). Although economic demand in larger cities prevailed over reform policies and growth did occur, in rural areas the rural urbanisation policies "promoted the growth of rural enterprises that absorbed rural surplus labour in small towns" (Han and Wong, 1994).

For the Pearl River Delta area, Sit and Yang (1997) have described its urban growth as a process of exo(genous)-urbanisation, originating from the flow of foreign capital to small-scale manufacturing industries located in small cities and villages. This process has produced a rapid transformation of an agrarian economy to an export-oriented industrial economy, closely integrated with the world economy.

Administrative and economic reforms of the socialist system in certain areas opened to the free market influence have necessitated modifications in land use planning, generally by means of a decentralisation and more comprehensive local development:

> Planning goals and objectives seem to have become more realistic and increasingly reflect local concerns as the responsibility for planning the use of land has been decentralised to local governments. However, they are still limited visions, as very little change has been made to the government-dominated plan-making process [… that] is confined to government planners and "experts". […] The perceived need for better planning is constantly challenged by the immense development pressures arising from economic reforms (Xu and Ng, 1998).

Specific studies have demonstrated that the influence of the still inefficient and underdeveloped framework for land development is by illegal land uses, such as land black markets trading administratively-allocated land in the urban periphery and the consequent uncontrolled urban sprawl (Yeh and Wu, 1996).

The overall regional primacy of the core city of the area, Guangzhou, one of the firsts Chinese cities to benefit from the economic reforms since 1978, is declining, whereas growth in the small centres and rural areas, specially those along the border with Hong Kong and Macao, is seen as unrelated to the dispersal or spread effect of the core. This is argued to be a substantial difference with McGee's *desakota* model (Sit and Yang, 1997).

There have been important flows of in-migration into the area reflecting changes in labour demand, even though there has been a 70 to 80 % of reconversion from agrarian to industrial activities, specially low-skill, labour-intensive manufacturing. This has led to a "large-scale, rural-urban population immigration of largely unskilled female workers, and the expansion of the built-up area for industrial and urban uses at the expense of agricultural uses." This process raises doubts on social and environmental fronts, as well as the processes' sustainability and durability, because of its strong dependency on the inconstant behaviour of world markets (Sit and Yang, 1997).

Future development in South China is seen as symbiotic to Hong Kong's evolution, a city that is actually competing with Guangzhou for regional primacy. Nevertheless it is expected that both cities will further complement each other in a synergetic process. The Pearl River Delta has been recently described as an "evolving concept" which apart from industrial relocation, is increasingly hosting the service divisions of many Hong Kong companies.

> The success of the Delta Region is attributed to its ability to nurture a vital economic cycle. It is able to attract both domestic and foreign capital and to absorb surplus rural labour from other provinces. A Third reason relates to the exploration of the domestic and export-oriented markets. […]
>
> To keep the Delta region abreast of its competitors, perfection of the investment environment is essential. The 1990s will see the completion of a transport system, port facilities and telecommunications networks which are better, rapid and more efficient […] Travel time along the eastern side of the Delta region will be greatly reduced, with the movement of people, resources and capital being correspondingly enhanced. In Guangzhou city, ring road systems are under active construction and a mass transit system has been proposed. […] The railway service is also improving steadily (Chan, 1996).

However, infrastructural facilities in Hong Kong and the Delta Region have not yet been able to fully cope with the escalating demand. As the whole country is experiencing the perennial problems of traffic congestion and a poorly managed road network. The upgrading of the system in order to carry these enhanced flows of goods and resources through this networked model of regional development will have undesired environmental impacts:

> To tackle the bottlenecks of poor transport and infrastructures, more and more farmland would have to be acquired from the rural areas. […] The Pearl River delta was once a celebrated example for its abundant "mulberries and fish ponds" and its ecologically sound system. These have all given way to urban development. […] The summer flood of 1994 clearly illustrates the problems arising from rapid urban development with inadequate attention been paid to soil conservation and maintenance and improvement of the drainage systems (Chan, 1996).

Rural-urban migration to this dynamic zone is also a problem, as the former stringent controls over population residence has been loosened since 1984. Peasants are currently entering the consumer market and represent "an army of surplus labour moving from the poor counties of the inland provinces to the coastal cities and the Special Economic Zones in search for job opportunities" (Chan, 1996). To the cities' governments, this constitutes a threat to social security and order, as well as additional burdens to the provision of such municipal social services as health, shelter and transportation (ibid.)

In order to tackle this process of undesired migration, a series of policies and programs have been set up to encourage rural surplus labour to stay in the villages or to move to small cities. Diversifying rural labour is considered essential, while both farming and non-farming jobs are considered of equal importance. The motto is “leaving the land but not the village”, but in the long term the policy is proving insufficient to cope with labour changes. As modernisation of farming methods needs less labour and specialisation is required to perform non-farming jobs, people are still forced to move to cities to acquire a specialisation by working in the more modern urban job market (Wei, 1994).
In spatial structure terms, Guangzhou is an example of a city in transition from the traditional socialist Chinese model towards a more open capitalist one. The city Master Plan can be seen as a “locally adapted” socialist policy framework, which still features strong growth control, a productive agricultural base to sustain the city and a balanced rural and urban development with emphasis on rural industrialisation and small town development. Guangzhou, has finally developed into an elliptical city, aligned west-east along the river and formed by three functionally and socially distinct but interlinked “linear clusters” (Lo, 1994):

- the Old City District that focuses on commercial, service, financial and informational activities;
- the Tianhe district with emphasis on education, sports, culture and scientific research;
- the Huangpu District that includes the port, and an Economic and Technological Development Zone intended to attract foreign investment in industries.

> These three clusters are separated from each other by extensive green belts of cropland and vegetable plots. To facilitate the movement of goods and people between these clusters, they are linked by modernized west-east running highways in addition to the waterway (Zhu-Jiang: the Pearl River) and the railway (Lo, 1994).

The social pattern of the city mirrors this spatial clustering because of workplace-related residence. The typical four social groups of the Chinese socialist city are distributed as follows:

- the cadres occupying a belt in the suburb immediately adjacent to the Old City District;
- the intellectuals (including professors and students) live in two zones, located north and south of the river, that coincide with the location of the universities;
- the factory workers are more “widely scattered throughout the city, with a concentration in the Huangpu cluster”;
- the farmers occupy the greenbelt areas in between clusters and the outer edge of the city (Lo, 1994; for the complete analysis of the population survey see Yeh et al., 1995).

A new social group related with emerging tertiary activities (virtually non-existent in Socialist China) is expected to further modify the social map of the city.

6. CONCLUSIONS

In the precedent sections, the way that different conceptualisations of the rural-urban interface problematic have emerged in the development planning discourse has been analysed, having considered that the *peri-urban interface*, under its most accepted definition is a “transitional area” between urban and rural zones, being thus a special case of urban-rural relations.

Up to this point, the most extreme positions within the debate have been consciously avoided, but the field can be better defined by considering all its span. Moreover, these extreme positions represent two possible evolutions both in the conceptualisation of the problematic and in its reality, and to discuss them in this closing section can help to summarise the implications of the whole debate and to explain the diversity of many of the other positions evoked here.

On one extreme, Dick and Rimmed (1998) have recently proposed to use a single urban discourse to analyse the contemporary dispersal of the post-fordist city to the periphery, be it in the USA and Europe or in the Southeast Asian context. Globalisation, it is argued, has made the Third World paradigm obsolete in this area, whereas recent models like *desakota* are just attempts to update the paradigm that see Southeast Asia as a "discrete category" within the Third World. While "seeking to rediscover Asia's urban geography" the seminal book by Ginsburg et al. (1991) attacks the persistence of the rural-urban divide but, the argument goes, only confronts it with debates on rural-urban transitions of the 1950s and 1960s.

The base of the Dick and Rimmed argument is a long term historical interpretation which sees the late colonial period as a first globalisation process that made Southeast Asian cities start to become like Western cities. After a "transitional phase" of de-colonisation from the 1940s to the 1970s, globalisation is a new "convergence" process where "the restructuring of urban land use is (…) reinterpreted in terms of a rebuilding of urban elements, driven by rising middle-class demand for comfort and security" (Dick and Rimmed, 1998). Intensive foreign capitalistic investment in the periphery of main Southeast Asian cities has created a new landscape:

> What has emerged is a pattern of new town developments integrated with industrial estates, toll roads, ports and airports. Although new to Southeast Asia, the situation is familiar enough. Notwithstanding the very different settlement pattern on which is being imposed, the new arrangement matches very closely with what Garreau (1991) described in *Edge City*. It is now timely to reintegrate debates over south-east Asian cities with mainstream First World and global debates (Dick and Rimmed, 1998).

If Ginsburg et al. (1991) assured that this pattern of settlement differs significantly from those of the western world, "an equally valid case could be made that there is much in common" (Dick and Rimmed, 1998). Finally, what is highlighted is not the possibility of specific points of similarity or difference, but how these processes can be better understood; in this case, it is argued, certainly not through "local" studies but within the wider debate of the mainstream urban literature.

Attuned with the *edge city* literature, new elements of analysis are proposed, based on the existence of "elements of the Southeast Asian cities [that] are not only familiar, but are also common to the Western city" such as "the home, which may be taken as the trip origin, and the destination of office, shops, restaurants, schools, hospitals, sports centre, hotel and cinema" that are "linked by the same technologies of the motor car and public transport" but "may, however, be arranged or bundled in different ways".

> In other words, the city may be viewed in abstract as a set of elements which over time can be bundled, unbundled and reassembled in new urban forms. This process is restructuring, but in a specifically urban context (Dick and Rimmed, 1998).

Driven by a rising market force coming from the aspirations of emerging Southeast Asian middle classes, new large scale integrated speculative developments in the peri-urban area can be seen as private "*semi-bundled towns*" (closed communities featuring all the elements mentioned above[8]) that parallel Californian gated communities, or even the latest "*bundled towns*" which go a step further due to their massive scale and the inclusion of business districts.

The description of the elements of this new configuration of the landscape does not include poverty, the emphasis being placed on the emergence of middle classes and the persistence of historic social and racial differences that find a new representation in spatial terms. The colonial differentiation of neighbourhoods is replicated today in the closed and socially homogeneous gated communities of the new "edge" developments.

Maybe the opposite pole of this debate is represented by ecology coined concepts such as the *urban bio-region paradigm* (Atkinson, 1992) and the analysis of the *ecological footprint* of cities

[8] They can be found in the extended metropolitan areas of Bangkok, Jakarta, Kuala Lumpur or Manila. (Dick & Rimmed, 1998)

(Rees, 1992). It purports a unified vision of the natural environment and the urban settlements, in which rural and urban "worlds" are considered not only together but within an appropriate size of settlements in order to achieve sustainability. If self-sufficient regions are considered as virtually unknown to civilisation, "self-reliance" is strongly advocated as "constituting a state of day-to-day self-sufficiency with trade as margins" (ibid.). This points to the fact that cities are seen as obtaining in increasing proportions their supporting material through commerce with other regions of the world. Rees (1992) has analysed this process that allow western cities to sustain themselves through the utilisation (and mainly exploitation and depletion of their natural resources) of other regions of the Third world as cities imposing their "ecological footprints" elsewhere.

In both approaches, that must be seen as complementary, it is pointed out (more clearly in Atkinson's work) that Third World regions should be in a way "de-linked" from Western economies in order to achieve sustainability through a "selective regional closure", a concept already present in Friedman and Douglass model of *agropolitan* development. In the new scheme, the concept of *urban hinterland* is recovered from German geography as a process where a close connection between the city and its surrounding rural areas allows a rational production and transformation of local resources within the limits of a discrete territory and its carrying capacity (Atkinson, 1992).

Although Atkinson (ibid.) states that "bioregionalism is really an anti-paradigm and so cannot be generalised", its radical critique of the historical direction our societies are taking makes it strongly political, aiming at a change in the "organisation of life". In this approach, poverty is seen as an effect of these unequal global processes that "export" social and environmental unsustainability towards the weakest regions (in terms of global power) of the world. This creates and maintains dependencies as these regions are left to follow a path to development by selling their "carrying capacity" to the richer nations in the form of their food production or to a de-localised global industry in the form of their cheap workforce.

This debate about models of development puts causality not in a bad or inefficient management of resources but in a global inequality in the distribution of wealth and power. In this political economy of the global environment, poverty reduction is then a question of empowerment and access to natural resources and other forms of capital. (see Douglass, 1992)

The middle-classes aspirations and actions which Dick and Rimmed (1998) consider to be the driving force underpinning the new "bundled cities" in the edge of Southeast Asian extended metropolitan regions, are seen by Atkinson and bioregionalists as one of the main problems of the unsustainable processes that are shaping the global landscape:

> Megacity regions are not merely accumulations of things that can be moved by rational decisions. They are the centres of the global capitalist system of power relations, of accumulation, processing and consumption; and they are driven by the overwhelming aspiration of their inhabitants to participate in the international middle-class lifestyle which expresses itself through the substance of the modern city (Atkinson, 1992).

While Dick and Rimmed (1998) do not see poverty (arguably because it is not under consideration) in what they label the Southeast Asian *edge cities*, the essential part of the literature on rural-urban interactions and links deals with poverty as a main concern. At the same time, Browder et al. (1995) have also emphasised the presence of middle-classes in the metropolitan fringe. Clearly, they have argued that the social heterogeneity of the peri-urban fringe does not allow generalisation in any sense: neither it is composed solely by the poor, nor it is the exclusive space of the emerging middle classes, although they are predominant in the case studies[9].

This points not to the well-known heterogeneity of the peri-urban fringe, but to the less acknowledged relationship between the selection of one fact and the theoretical edifice that is subsequently built upon it. Although Dick and Rimmed (1998) statements may appear as

[9] Bangkok, Jakarta and Santiago de Chile, see point 5.1.

reductive and certainly do not completely explain the peri-urban fringe, their theoretical construct *explains a part of the reality* of the peri-urban interface, in certain extended metropolitan regions, just as *urban bias*, for instance, can explain other aspects of it.

This problem of localised and partial knowledge and theories dealing with parts of reality is typical of a post-modern approach that considers objects, concepts and models as embedded in discourses that have internal legitimacy and deal in each context and case with a "regional" truth, as opposed to a universal one, commonly underpinning "modern" scientific statements. This epistemological position, nowadays widely approved in social sciences, can be useful to deal with the heterogeneity and multiple forms that take the *peri-urban interface*, once it is accepted first as a theoretical construct.

In this sense, it is useful to bear in mind all the theories and models presented up till now in this paper, as they can be used to explain certain parts of the problem of the PUI. Thus, once their internal coherence has been established, no one of them will be right or wrong in absolute terms, but more or less adequate to conceptualise and explain *fragments* of the reality of these areas.

Even the *peri-urban concept* itself should be considered as a provisional definition that can be useful in certain cases but not in others. Where the PUI seems to be "a special case" in the broader problematic of the territoriality of rural-urban linkages, the question of its validity will depend on specific conditions and contexts. It has been suggested, for instance, that the peri-urban fringe is a more useful concept in certain African cities where there is a clear centre and periphery, where density diminishes in direct relation to the distance from the centre, where functions are not mixed or spread across the territory and follow a radial pattern.

Expressed in this way, the case seems rather like a laboratory experience than a real-life situation. Even in African cities things seem to be more complicated and do not well fit this scheme, and thus they challenge common perceptions that underlie approaches to the peri-urban problematic. As an example, considering the peri-urban villages scattered around Kumasi, Ghana, a NRI case study report stated that

> there is a strong effect of proximity to the city on urban characteristics, but the definition becomes less clear when the peri-urban / rural distinction is considered. Neither a pattern of peri-urban settlements following the main roads nor one related to radial distance from Kumasi can be distinguished readily (NRI, 1997).

The authors conclude that some findings "appear anomalous on the map" and were influenced by factors like the size of the settlements, where the "peri-urban" tend to be larger, more dense and more economically developed than the "rural" ones, and even by cultural differences between the inhabitants of the east and south (more "rural" livelihoods) and those who live to the north and west (more "urban").

The "anomalous" circumstances on the map need to be addressed in the light of the previous discussion. In this study, the character of "peri-urban" seems to define more a "pre-urban" status than something dealing with spatial notions (e.g. distance to the centre). While the "peri" prefix has always been associated with the periphery and the fringes of the city in the urban and geography literature, in fact, the so-called "peri-urban villages" are scattered across the region without apparent direct relationship through accessibility or communications features to Kumasi [10]. The centripetal logic underpinning traditional definitions of the peri-urban interface is not very useful to deal with cases like this, not to mention others in different contexts [11].

[10] Considering the local land allocation system (customary rights and market in the end controlled by the chiefs) the necessary ad hoc hypothesis would state that there is more flexibility in some villages than in others to develop the land and to produce the upgradings that in the end change the status from "rural" to "peri-urban". This may be related to the social (tribal) and familiar behaviour of the inhabitants, underpinned by different perceptions and expectations towards modernity, urban employment, education, etc.

[11] As we have reported previously, the patterns of peri-urban development found in Bangkok, Jakarta and

This failure of certain concepts to deal with different problematics in different contexts must not lead to the abandonment of them in favour of a frantic search for new explanatory tools that would embrace every case in every place, but rather to a pragmatic use of *ad hoc* theories and models to deal with what is a complex reality in often dissimilar circumstances.

One of the classic divisions that sometimes plays against the understanding of the real situations in the PUI is the *rural-urban dichotomy*. If sometimes there is a clear division in terms of landscape, use of the land, and activities, in the vast majority of cases examined in the latest literature, the limits of both categories are often blurred. Whether much of the territory is within an extended metropolitan region or the *desakota* form of development, the geographical borders of rural and urban are so mixed that it is very difficult to precisely define which is which.

The problem gets worse when considering activities taking place in these areas and people living within them. For the latter Tacoli (1998b) or Riggs (1997) have strongly argued that *multispatial households* do live in scattered spaces (that are at the same time or alternately urban and rural) and develop complex and varied activities that often elude rigid classifications:

> In many cases it is more useful to understand households as "multispatial" rather than "rural" or "urban", and to encourage the positive linkages between spatially distant members… (Tacoli, 1998b).

In the same line and considering the classic division between "urban activities" or "rural activities", Tacoli has also suggested the idea of *sectoral interaction* to define either rural activities taking place in urban areas (e.g. "urban agriculture") or traditionally "urban" activities as manufacturing and services taking place in rural areas, or even the peri-urban flows to and from rural industries that are spatially concentrated around urban areas. This opposes the widely accepted assumption that has conceptually reduced livelihoods into two main categories: agriculture based in rural areas and manufacture and services in the urban centres (Tacoli, 1998a).

But again, this *sectoral interaction* tries to conceptually solve a rather artificial problem, because even if it recognises the real-life exchanges and mix between activities, it still assumes that agriculture is something constituting the "rural" in the same way that manufacturing or services would characterise something being "urban". There seem to be the same kind of conflation between activities and places that has already been criticised in the *urban bias* debate, where the use of concepts like "industrial bias" or "agricultural bias" would reflect more accurately what really is under discussion (Karshenas, 1996).

This kind of precision can be made central to the consideration of policies aiming to help *sustainable livelihoods* through the diversification of activities. It is nowadays accepted and empirically demonstrated that most poor rural households in developing countries have tended to diversify and multiply income generating activities other than the common off-farm wage work.

> This may indeed include off-farm wage work in agriculture, but it is also likely to involve wage work in non-farm activities, rural-non farm self-employment (e.g. trading), and remittances from urban areas and from abroad (Ellis, 1998).

Considering that different types of migration (seasonal, circular, permanent, etc.) are also involved in the diversification strategies, the question of the spatial span or territoriality of the household is then posed: some members can be "rural" while others are "urban", whereas some others can be "urban" for a seasonal period of the year, and even they can just be living in the city while still considering themselves as "rural" because of common aspirations of "coming back home" to their villages of origin (Rigg, 1997). In these changing and contradictory conditions, it

Santiago metropolitan areas have even led Browder et al. (1995) to question the validity of the peri-urban concept "as a discrete analytic category" and to state that in some cases "it is unreliable" and that "as a strictly spatial construct defined by location on the metropolitan perimeter, the peri-urban concept is not particularly useful ; in fact it can be misleading." (Browder et al., 1995)

may be better when seeking to define effective anti-poverty policies to consider other aspects of the household livelihoods than if they are “urban” or “rural” in order to accurately define the target population.

Moreover, considering rural and urban definitions, Tacoli (1998b) has pertinently remarked that sectoral policies are generally defined under the assumption that “the physical distinction between the two areas is self explanatory and uncontroversial.” Indeed, she has identified three problems related with this issue: the set of demographic and economic criteria used to define what is rural or urban; the difficult definition of urban boundaries in the extended metropolitan regions; and the confusing effect for urban-rural boundaries of the dependency of the cities on larger (and often invisible) areas to assure their resources and to perform their ecological functions (their “ecological footprint”: see Rees, 1992) (Tacoli, 1998b).

Challenged by the same kind of classification pitfalls, an assessment of the legitimacy of the *peri-urban interface* as a particular case of the rural-urban interaction starts by recognising its spatial character in opposition against the “flows” and “linkages” that are often immaterial, but that have acquired much more attention in the geographic and planning literature over the recent decades. The explanation of this fact is maybe that the *peri-urban fringe* is a rather old concept - dating from the discussions of the 1950s onwards - and its limits are particular and specific to its spatial status. Being a spatially oriented concept dealing with a set of social and economic evolutions that tend to be virtual and de-localised, its effectiveness is more and more reduced or at least limited to certain aspects of the more general problematic of urban-rural relations.

At the end of the day, the *peri-urban concept* is always used provisionally and is often presented with a "working definition" involving in general those areas surrounding the cities within a daily commuting distance from the centre and characterised by a set of interactions and flows with it. The specificity of the PUI resides perhaps in that certain flows are bound to distance relationships because they fall into the direct influence of the city core, as for instance, the flows of wastes or of daily commuting workers. It is also assumed but generally not recognised that there can be some geographical or even landscape perception paradigms that may underpin these “working definitions”, especially on a field work basis: low built-environment density, agricultural uses and green spaces mixed with industrial uses, etc., what constitutes the particular “image” of territorial heterogeneity and complexity.

Attempts to achieve more precision in this definition, considering its inherently spatial character, have produced the profusion of neologisms that characterised the geographic literature on the fringes of the 1950s and 1960s. If this path has been abandoned in favour of the consideration of more virtual but nevertheless equally real processes, it is perhaps that other disciplines purporting weaker professional interests in the material aspects of space have in turn invested the field – such as economics and sociology — and finally all the regional development specialists that have, over the years, given birth to the literature on models of rural and urban development looked at here.

Incorporating into this debate all the recent conceptualisations about new social, cultural and economic processes that are often characterised as the “paradigm shift” of globalisation can be interpreted as the integration of diverse and heterotopical concepts into the spatial debate. Planning disciplines dealing with globalisation in the western world thus have some ideological, moral and conceptual imperatives to justify renewed attention towards the *peri-urban fringes* of the developing world cities, as a mirror attitude to the *edge cities* debate. This is because it is widely accepted that these spaces are the “new places” where globalisation processes act more effectively and more acutely, therefore creating more development opportunities through economic growth, but at the risk of increasing social inequalities. As has been shown in the paper with the very recent work of Dick and Rimmed (1998), one debate is pervading the other, questioning the legitimacy of some well established divisions such as the dichotomy of Western World - Third World.

This conceptual landscape of theoretical uncertainty, added to a legitimate concern about the negative effects of these processes on development and their incidence in terms of poverty and

environmental problems, may explain the renewal of attention for the *peri-urban concept*. At the same time new theoretical developments are emerging, often underpinned by *networking* or *clustering* ideas that better express the reality of contemporary spaces and places in the global scheme.

It is suggested that these ideas of *networks* or *clusters* must be analysed, bearing in mind the cultural context and background upon which they have emerged. This is one that is itself networked and clustered. The downfall of unifying and unidirectional discourses has given room to a more open attitude towards theory that can allow itself to be "clustered" as the polymorph geographies it describes.

The validity of the *peri-urban concept*, without being radically questioned by the new concepts that have been analysed here, must be judged in terms of the context of its use and the function it is expected to perform. In particular conditions and aiming at specific operational functions, it can still be a useful descriptive and analytical tool. Nevertheless, it may be advantageously complemented, if not replaced, by more recent concepts regarding research or policy-making conditions, as long as the final coherence of the discourse is assured by internal rules as well as adequate challenge from real-world situations.

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