PLUREL

THE CITY-REGION IN TIME AND SPACE:

Analysis of regional spatial planning and decision-making strategies, and their impact on land use in the urban fringe.

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Colophon

We would like to acknowledge the contributions made by all the stakeholders who have given their time generously for the research programme.

All the members of the research team have contributed ideas and materials:

> Joe Ravetz (lead author)
> Jeremy Carter
> Sally Randles
> Duncan Thomas
> John Handley, as strategic advisor

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Partners

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Abstract

This report is a baseline description of the 'rural –urban region', or extended city-region hinterland, around Greater Manchester, one of the world's first industrial cities. It covers the main features of history and geography, and looks at the perspectives of economy, society and environment. There is a special focus on the spatial development and spatial governance systems, which include economic and community development. Some new directions in analysis of governance and spatial strategy are demonstrated.

Two particular initiatives are selected for close examination: the Pennine Prospects initiative working in the South Pennine area: and the Community Forest initiative working on green infrastructure around the conurbation. These examples demonstrate at least three alternative perspectives, which combine and provide new insights in the analysis of the case studies.

- A *'spatial ecology'* framework, which explores the core theme of Plurel – seen as a set of inter-dependent relationships, of the physical components of a rural-urban-regional system.
- A *'metropolitism'* framework, which looks at the systemic transformation of rural to urban type economies and spatial structures.
- A *'cognitive capitalism'* framework, which focuses on the global dynamics and driving forces of this transition, and its implications for governance and institutions.

1.   Summary

Background

Urbanization and development in peri-urban areas is one of the most critical issues facing the UK and EU.

In the UK there is the challenge of where to build 3 million houses in the next 12 years – green belts, flood plains, contaminated brownfield sites, or simply further into the countryside? And in the EU, there are faster growing cities than in the UK – from the tourist-driven sprawl of the Mediterranean coastal cities, to the rapid restructuring of Central and Eastern EU countries.

IN the UK there is a relatively strong planning system and established urban structure. So here we focus on the less visible part of peri-urban change, driven by 'metropolitism' – the rapid conversion of small towns and rural areas to urban-based economies, social patterns, physical infrastructure and global networks.

In all areas there are compound challenges – climate change impacts, growth in road traffic, ageing population, landscape stress, urban-rural migration, farm decline, tourism impacts, and general pressure for urban development. There are also many examples of how to respond to such issues, through local partnerships, community forests, diversification and so on.

Case study method

We aim to provide a unique perspective on the peri-urban-rural areas surrounding the Manchester city-region. The basic approach looks at the trends and dynamics, alternative future scenarios, and the risks and opportunities in the city-region. This needs both technical analysis, and engagement with stakeholders: we are also running a multi-media 'evocative project' to provide more lateral and creative insights.

The underlying research questions focus on the trends and dynamics, in terms of three kinds of 'transition' in the city-region:

- Metropol-ization: an 'urban transition' which is diffused and networked across wider peri-urban and rural areas;
- Cultural capitalism: a 'global transition' – new patterns of globalizing economic and social activities and divisions;
- Spatial ecology: a 'green infrastructure' transition, which reflects the changing patterns of activities and functions across the city-region.

Running through this is the scenario approach, drawing on other parts of the PLUREL research. This starts by asking 'what if' questions, such as -

- Will the urban fringe become a playground for the rich or a working environment?
- How can peripheral areas develop opportunities which meet economic, social and environmental goals?
- What if the Green belt was used for growing bio-mass energy crops for the city?

There are three main reports coming out of this process in the next 18 months:

- This first report on 'governance and land-use strategies' focuses on the main issues in spatial development, and the institutions and policies to respond to them.
- The next report will explore the appraisal and evaluation of the policies, existing and potential.
- The final report will explore in detail the alternative scenarios for the peri-urban area over the next 40 years.

Stakeholders

We are working closely with the organizations who are directly concerned with peri-urban issues. These represent some the most significant area types and economic drivers in the Manchester city-region:

- The South Pennine uplands – mixed industrial settlements, commuter towns, small scale agriculture, leisure and tourism.

- The Red Rose Forest & Community Forest NW area – mixed industrial settlements, rebuilding the multi-functional green infrastructure.

- The overall development agenda for the city-region is represented by Manchester Enterprises: a partnership organization for economic development and knowledge-based innovation.

Case study programme

- A programme of semi-structured interviews in each case study area.
- The first theme (2008-9) is on **current issues & policies**.
- The second theme (2009-10) is on **future scenarios & opportunities**.
- There is an annual stakeholder workshop, to present the results, share best practices, and build European links.
- The study uses a variety of methods: policy analysis: technical analysis: and a parallel 'evocative' project with creative and media students.
- In mid 2010 the results will be brought together and presented to the PLUREL international scientific meeting, to be held in Manchester.

2.   Introduction

This is a common introduction for all of the 7 case study reports in the PLUREL project.

Objectives of the PLUREL case studies

This report is one of the PLUREL case study reports on 'Governance and Spatial Planning Strategies' in six European urban regions: Warsaw, Montpellier, Manchester, Leipzig, Koper and Haaglanden. An outside comparison is also made to Hangzhou, China. Each of the research teams, in cooperation with regional authorities, have studied the particular forms of governance and spatial strategies in their region. As well as the official policies, their results and outcomes, and the influence of a wider range of actors have been analyzed.

This analysis forms the basis for an assessment of the different regional strategies, in terms of their physical, political, social and economic agendas. The case studies are being used by other Modules of the PLUREL project, to inform the modeling and policy analysis. Finally, the different strategies and their comparison and evaluation, will be disseminated through good practice guidance handbooks and workshops in 2010.

Urban fringe land use issues

In order to bring in real-world experience to the Module 3 research, the regional stakeholders in each of the case studies identified four major issues related to land use:

- land pressure due to housing and business development in the urban fringe and peri-urban area
- agriculture in the urban fringe under pressure
- high value nature areas in the urban fringe at risk
- integration of leisure and tourism activity in the urban fringe

Strategies, actors, and influences

The many types of 'actors' - policy makers and other stakeholders – respond to these issues, not only through formal policies, but through coalitions, resources, rules and discourses. The focus on 'strategies' includes this wider view of 'a deliberate course of actions that an actor makes, comprising a succession of decisions to achieve their goals and objectives'. The strategies identified in the case study reports concern governance and spatial planning – including for instance, the patrimonial structure of farming in France, the experiments in partnerships in the UK, or the re-invention of Warsaw as a global city.

Methodology and content based on a Joint Analytical Framework

The case study work follows a common 'Joint Analytical Framework' (JAF) that was developed on the basis of research proposals from the national research teams and consultations.

- The report begins (Section 3) with the nature of the rural-urban region, within the various boundaries which are relevant. It summarizes the land use history, the actual land use situation, and major strategic issues for each of the case study regions.
- Then, the official governance system for development and spatial planning is described (Section 4).
- This is followed with a review of planning and governance strategies in more detail, uncovering the interactions between the different actors involved, what matters to them, and how they influence the urban rural interactions and the fringe (Section 5).
- A short conclusion points the way towards the next steps in the case study, and the applications to other parts of the project (Section 6).

The effects on sustainable development of the urban fringe is the subject of the next round of case study reports, and developed in cooperation with the other PLUREL modules.

Definition of the urban fringe

A central notion to the concept of 'urban fringe' is the location in the periphery of the built-up urban area. The wording 'peri-urban area', of French origin (*peri-urbain*) can also be used. It can be either an area that at the outer limits (seen from the urban perspective, motivating the word 'fringe') extends into larger (open land) arable or green areas, as in Warsaw, Koper and Hangzhou; or it can also expand into the urban fabric of a new city or agglomeration, such as in Haaglanden, Manchester or Leipzig. This definition of the urban fringe is a spatial physical definition that is workable for all case study areas.

The functional definition of a 'rural-urban region' can be based on employment patterns, economic self-containment, or a one-hour journey time from urban centers. For more densely populated areas of Europe the fringe territory often extends right across larger agglomerations.

There are several dynamics, i.e. developments resulting from the urban influence, that especially characterize the urban fringe in economic, social terms but also environmental terms:

- recreational initiatives and land uses by urban dwellers;
- increased traffic flows to and from the urban area;
- overflow of urban uses and infrastructure that are incompatible with high density residence because of air pollution, noise, safety risks, or planned outside the urban area because of lower land prices, such as water storage, car dumpsites, waste disposal, residence of urban workers or urban rich, motor cross sites, etc.

A common feature is that the urban fringe is often ignored for its own intrinsic values, and seen merely as a solution to urban problems and as a cheap source of land. At times it is seen as a location of great contrasts, housing both very wealthy and very deprived communities.

Responses to the urban fringe agenda

The PLUREL project was financed by the European Commission because several FP5 research projects requested attention for the urban fringe as an area with specific qualities and issues and often divided over several administrative areas. The case studies research the attempts of 6 European regions in the sustainable development of their urban fringes, and what starts to emerge is a new kind of policy agenda.

Ideally the urban fringe should become an area of high quality with a more independent role than merely an area of 'spillover'. Past attempts to draw a juridical line between the urban areas and their green surroundings - like by the former Dutch Minister for Housing and Spatial Development, Jan Pronk - can be seen as an effort to realize this, and to contain for instance the financial pressure of urban land markets. There are many possible responses to this – e.g. to assign the fringe and green infrastructure the status of a municipality, or to assign land ownership and stewardship to a community land trust.

More sustainable development of the urban fringe into an area of high quality environment that serves the residents of both urban, fringe and rural areas is a concern of all regional authorities involved in PLUREL - the governance forms and spatial planning strategies contributing to this are in the focus of the following case study.

3. City-region spatial development

('Land use and spatial development in the region and its turning points')

(Note: sub-headings in brackets as above are the specific titles of the Joint Analytic Framework method for all case studies)

This section is an overview of the Manchester city-region in space and time. It looks first at the general history: then at the economic and social trends: and finally at the peri-urban areas.

3.1 History of land use

Manchester city-region - the 'world's first industrial city'

Greater Manchester (GM) is a conurbation of over 2.5 million people in the industrial heart of the North West region of England.   It grew rapidly as the world centre of the textile industry, and now has a diverse economy of about £30 billion GDP, with particular strengths in chemicals, electronics and general manufacturing. Outside of London it has the largest finance, law, media, creative industries, research and higher education clusters in the UK. It also contains some of the worst unemployment, pollution, crime, social deprivation and unfit housing.

The 10 authorities in Greater Manchester (GM) form a conurbation of 2.5 million people and 1280 km² . Greater Manchester (GM) is the name of the former Metropolitan County which contained 10 districts; following the abolition of the County administration in 1986, these are now 'unitary' or autonomous local authorities. The Districts include the Cities of Manchester and Salford, which suffer the worst conditions, along with the metropolitan districts of Rochdale and Oldham. This of course is a generalization of a very complex pattern of wealth and poverty.

The 10 districts of GM have established a consortium organization, Association of Greater Manchester Authorities (AGMA). This study refers to the 'AGMA 10' as the central unit of a wider rural-urban region.

- The additional 5 local authorities in the current definition of the 'Manchester City-Region Economic Development Forum' (GMEDF) include a further 0.65 million people, on an area of 1830 km². The average density of GM is 20 persons/hectare, and the density of the additional area is much lower at 3.5 persons/hectare.
- The PLUREL study area includes the AGMA 10: the GMEDF 5: and a further 7 authorities which cover the adjacent South and West Pennine areas. It was not extended further to the west, as those authorities would be within the Liverpool city-region. There is no one 'best' definition of the rural-urban region: below is a review of alternative boundaries.

The general context of the Manchester city-region and the PLUREL study area boundary is shown in Figure 3.1:

Figure 3.1: Greater Manchester rural-urban region & PLUREL study area.

Geography and profile

The Manchester city-region is surrounded on the north and east by low hills, the site of historic industrial activity: and on the south and west by farmland and mixed metropolitan peri-urban areas. The location is at a national crossroads, halfway between Scotland and London, and is also the gateway to the 'peripheral' North West region, and a playground for wealthy commuters and tourists.

As a guide to where future pressures are coming from, some vital statistics for the city-region are shown, in order of their annual growth rate and 'business as usual' projections (data refers to the AGMA 10 authorities: based on Ravetz, 2000:

- 'world's best' airport with 35000 trips per day: 8%
- GDP of £25 billion per year: 2.5%
- about 1 million cars: 6 million trips per day: 2%
- nearly 100 000 other buildings   2%

- derelict land on 6% of urban area   1.8%
- about 1 million households: 1%
- energy use; 90 billion kWhr per year: 1%
- CO_2 emissions: 32 million tonnes per year   0.7%
- total waste arising 11 million tonnes per year: 0.7%
- over 2.5 million people: 0.2%
- urban area 55000 hectares: 43% of total: 0.15%
- 700 000 bus trips per day, 70000 local rail: 0.1%
- 8000 km of roads: 152 km motorways: 350 km of railways
- land area 128600 hectares, or about 500 square miles

A brief history

GM has long been a multi-ethnic centre for many groups including Norse, Flemish, German, Jewish, Irish, Scottish, Asians and Chinese.   Manchester itself has been a European city since 79AD, when Roman troops started a 331-year military occupation in the Roman military settlement of 'Mancunium'.

The peri-urban areas in the Manchester city-region were among the first industrial settlements in the world, a thriving and innovative community which then enabled the centre to outgrow them. This is due to a combination of factors – climate and natural resources which suited the textile trade.   Arguably the unique opportunity came through a particular non-conformist Protestant culture, which rejected theological hierarchies, and encouraged invention, education and self development of the working classes (Hall, 1998).

Manchester City Council came into being in 1853 with an agenda of reform, at a time when riots, cholera and starvation were commonplace (Engels, 1845).   The city was then a classic model of industrial development – activity in the centre was shifting to commerce and finance, pushing industry and housing outwards, and creating extravagant merchant palaces. The first networks for water, gas and drainage were built in the heyday of Victorian engineering, while the Cooperative movement was established from a tiny shopfront in Rochdale. In 1891 the first social housing was built, and later a demonstration garden suburb (Manchester City Council 1995).

By 1901 population had doubled to nearly its present size, even while average life expectancy was 29 years. While the tide was turning for the textile industry, the pressure of growth was huge: the first city-region body was founded in 1920, with an ambitious agenda for investment and modernization. In 1926 Manchester City began the country's first municipal satellite township at Wythenshawe, but its plans for an integrated and self-contained community were never realized – the estate became an overspill and sink of deprivation adjacent to the wealthy Cheshire suburbs. Elsewhere, while new boulevards and parks were laid out on a grand scale, the oncoming wave of industrial restructuring brought large-scale unemployment, and the air was thick with dispute and radical ferment.

The war damage gave impetus to a reconstruction programme, set out in three large-scale plans in 1945-47, covering the city and an extended city-region. These plans aimed to sweep away older industries and create a modern road network – even Manchester Town Hall was to be replaced in concrete, with a grand avenue leading down to the river. Up to half the inner city population was to be moved in a massive dispersal outwards across the region. Manchester and Salford lost 20% of their populations, but due to inertia and infighting, most migrants ended up in the suburbs of the outer districts, rather than in the planned new settlements (Rodgers 1986). Many areas of over 25 dwellings to the acre

were cleared away, and it is ironic that the 'compact city' philosophy is now reinventing this kind of density level, for very different reasons.

What is the city-region?

This question is being explored in detail by other modules in PLUREL. In the case of Manchester we propose to look at a range of territories, functions and typologies, rather than a single fixed definition. This range could include, as illustrated by the maps below:

- Socio-demographics: population weighted gravity field
- Employment: travel to work area for commuting (20% threshold) / other services
- Geography: watersheds / catchments, combined with countryside character types
- Political structures: administrative and planning boundaries
- Media zones: television and press catchment areas.

Combining these typologies with further data analysis in Module 3, is likely to result in at least 3 concentric peri-urban zones:

- North West peri-urban metropolitan region, including the zone around Manchester, Merseyside and East Lancashire: *('medium centrality'* in the gravity field mapping above)
- Greater Manchester peri-urban city-region: *('high centrality'* in the gravity field mapping above)
- Greater Manchester urban fringe: physical proximity to the Greater Manchester urban –economic conurbation, within the 10 'county' authorities and part of the additional 5 authorities above).

Each of these then has to be fitted to the data availability in NUTS 3, 4, 5 or other units.

Fig 3.2: Manchester City-Region zone of influence: source: ODPM 2005, 'Northern Way'

Fig 3.3: Manchester City-Region administrative grouping: source: AGMA, 2006: Greater Manchester Economic Development Strategy

Fig 3.4: NW metropolitan region gravity fields: calculated by aggregate population / distance^2 . Source: NW Sustainability Atlas, www.eco-region.org

Fig. 3.5 accessibility to urban hubs: calculated on road / rail network analysis. Source: NW Sustainability Atlas, www.eco-region.org

Fig 3.6. Travel to work areas & commuting networks
(defined as >75% self-containment) (1991) with commuting networks (2001). Source: ONS data

Fig 3.7. PLUREL Manchester city-region study area:
this includes AGMA districts (10): GM Economic Development area (5): adjacent
districts in the South Pennines area (7).

The difference between these fringe types may not be so important, as the patterns of
landuse interactions and socio-economic issues, to be found in each one.

Within the third layer of 'urban fringe' there may be further definitions, as shown in the
diagram:

- ***urban open space*:** larger or strategic areas of open space or open land within
  urban areas and settlements.
- ***urban edge*:** the boundary between any built-up areas and open land, together with
  land parcels immediately adjoining.
- ***inner fringe*:** open land or space, mainly in mixed or non-rural uses, in larger
  metropolitan areas, or surrounded on more than one side by urban areas or
  infrastructure.
- ***outer fringe:*** open land or countryside around freestanding settlements, mainly in
  rural uses, but significantly affected by urban pressures, depending on the size of
  settlement.

Figure 3.8 Urban fringe definitions
Source: CURE, 2003:

URBAN FRINGE DEFINITIONS

Urban open space
Within urban area

Urban edge
Directly adjacent

Inner fringe
Close proximity

Outer fringe
Direct influence from
urban areas & activity

Current mapping of peri-urban, fringe and rural areas

This is based on the new DEFRA urban-rural classification, with a morphology analysis of the density of residential 'address points', at SOA (Standard output Area) or ward level (NUTS 5). (details in the Appendix).

The basis of the methodology is the concept of density profile at each 1 hectare grid cell, i.e. a function of density at different radii surrounding that cell. This enables the distinction between for instance, farmland surrounded by urban areas, and a market town surrounding by remote rural areas. This morphology approach can also be extended to a 'functional / economic' approach, using farming and business statistics to define 'rural' economic areas (Bibby & Shepherd, 2004)

This suggests the possibility of further analysis of peri-urban fringe areas, i.e. indexing the existing datasets against the ward level matrix of morphology types. Further detail is in the Annex.

This was used for the first time in Manchester in the current 'Rural Economic Baseline' study by Manchester Enterprises (2008). Note that there are two terms in use – 'rural' and 'peri-urban' which in practice refer to a similar area in this case:

- *'Rural'* Greater Manchester, which refers to the 'AGMA 10' plus all directly adjacent authorities, (for the purposes of the Rural Economic Baseline study).
- *'Peri-Urban'* Greater Manchester, covers a similar area, but excluding West Lancashire & St Helens, and including Vale Royal and Congleton as part of the Greater Manchester Economic Forum. This has been constructed for the purposes of the PLUREL case study.

This map demonstrates the main types of peri-urban geography as defined above (Figure 3.9):

- 'Town and fringe' areas: within or in close proximity to larger settlements
- 'Village' areas: in the general proximity to smaller settlements and lower population densities
- 'Hamlet and isolated dwellings' - more rural areas dominated by landscape:

The areas classed as 'village' can be seen as the linking area type across most of the peri-urban city-region. However there are more rural 'hamlet' type landscapes towards the agricultural south, and the uplands of the south-east of the city-region.

The methodology used to generate this data is summarized in the Appendix.

Figure 3.9: Peri-urban-rural land classifications:
Based on SOA 2004 data, ONS

Main types of peri-urban land use

The peri-urban areas are the location of most urban infrastructure, with high levels of urban pressure, pollution and contamination. While many areas are being reclaimed for multi-functional leisure and amenity uses, there are major conflicts between conservation and the need for airports, motorway links and business parks. This will continue with the demographic shift towards older, smaller households: while current planning policy is to increase density, the pressures on housing in peri-urban areas will increase. Transport congestion is severe on the strategic road and rail network, and the divided management of public transport does not help.

There are 3 main types of peri-urban landscape to be considered around Manchester: as shown by land cover and by topography (Figures 3.10 and 3.11)

- The South Pennine hills to the east and north : this is covered by the Pennine case example (Section 5).
- Flat agricultural land with much previous industrial activity, to the west and northwest of the conurbation, between Manchester and Liverpool: this is covered by the Community Forest case study (Section 5).
- Rolling landscapes with intensive arable and pastoral agriculture, to the south and south west of the conurbation and extending through Cheshire.

Figure 3.10: Peri-urban land cover
Source: CORINE data

Figure 3.11: Topographical view
Source: CORINE data

GREATER MANCHESTER
RURAL-URBAN REGION
(PLUREL Study Area)

Elevation (metres)

628
470
312
154
-3

District Boundaries (NUTS4)

PHYSICAL TOPOGRAPHY

3.2   Recent land use developments

Organizing the city-region

The clearance of quarter of a million slums and modernizing the transport network demanded increasing levels of cooperation across the city-region. But with hindsight, the planned dispersal of population coincided with the unplanned migration and decimation of industry – the result being a devastating hollowing-out of the urban area, which still exists today.

The GM County Council was set up in 1974 but lasted only 12 years – during its short and not always popular life, the County coordinated public transport and road building, green belts and river valley programmes, the GMEX exhibition centre and the Castlefield urban heritage park. The County's Structure Plan of 1979 posed three alternatives – free market, interventionist, and a middle way which became the consensus (Greater Manchester County, 1979).   But the tide was turning for strategic planning, and the incoming government promoted a market-led approach with centrally-funded Development Corporations in Central Manchester and Trafford Park. Meanwhile the hard pressed outer districts encouraged community-based initiatives for declining estates such as Hulme and Langley.

Transport and the network effect

On the periphery, the Trafford Centre, one of the UK's largest out-of-town shopping malls was constructed, competing for 20% of trade from surrounding town centres. The peri-urban M60 orbital motorway was completed in 2000, opening up further tracts of land to

development and regeneration, but cutting in half some of the most precious country parks. The worst pinch point is on the east-west M62, where a scheme for a parallel motorway has been shelved for the moment, but where traffic is well over the design capacity, and gridlock is common. Although public transport strategies are now in favour, users and managers both struggle with the deregulated and fragmented bus and rail industries. And while the town halls print cycling strategies on recycled paper, many cyclists stage mass demonstrations in the city centre.

The big issue at the time of writing (2008) is the expansion of the public transport network, including the Metrolink light rail / tram system. The UK government has made the public funding of £1.5 billion conditional on setting up the world's larges congestion charging system. This would set up two rings or 'cordons', around the city centre and around the inner suburbs, with charges of £1 and £2 at peak traffic hours. The scheme is very controversial and due to go a referendum in December 2008.

Manchester Airport is the gateway to the entire north of England, with a capacity of 30 million passengers per year. While newer aircraft reduce the noise 'footprint', surface transport flows are huge and rising, and the projected effects of aircraft emissions could undermine any climate strategy for the city-region. The axis of the airport, universities, Trafford Park and regional centre forms an international 'technopole' or 'aerotropolis' of sunrise industries and global investment flows, with effects right across the city-region (Kasarda, 2006).
Beyond are the suburbs – endless estates where at first sight there is little change. But under the surface, many households now contain multiple careers, many children now have computers instead of street games, and many local services struggle to survive.

The distribution of older industrial and newer suburban settlement patterns is shown in the mapping of housing types (Figures 3.12 and 3.13)

Figure 3.12: Older industrial terraced settlements
Source: ONS data

Figure 3.12: Semi-detached housing & suburban settlements
Source: ONS data

Peri-urban issues

The surrounding urban fringe is a fragmented landscape of marginal farming, waste tips, motorways, power lines, reclaimed river valleys, garden centres and riding stables. The Community Forest project aims to convert much fringe land to mixed woodlands, but progress so far is slow. Beyond, the empty and mostly treeless landscape of the South Pennine uplands conceals rapid changes, with structural shifts from farming to leisure industries, and from native communities to commuters and teleworkers.

For the loose and fragmented zone of urban fringe in GM, over 90% of the area is within 2km or sight and sound from urban areas. Local surveys show that farm productivity reduces with proximity to the urban areas, and nearby land shows much vacancy and fragmentation (Countryside Commission 1982). Typical fringe land-use types range from negative to positive (Blair 1987):

- disturbed landscapes: impacts from minerals, waste and dereliction
- neglected landscapes: low intensity and marginal farming with high vacancy rates
- industrial agriculture: high intensity mono-cultures with large-scale plant and buildings
- traditional agriculture: mixed farming with variegated landscapes and eco-structure
- amenity landscapes: woodland, country parks, large estates, open recreation
- wilderness landscapes: unused or uneconomic upland or marshland

Such categories overlap with a continuous flux of disturbance, reclamation, development and vacancy, and in GM many fringe areas are dominated by motorways and other infrastructure. The landscape type most obviously threatened is that of 'traditional

agriculture', whose maintenance is now the aim of 'Farm Stewardship', 'Less Favoured Area' and other schemes. 'Disturbance' also applies to psychological qualities – 'tranquillity' areas have been defined as more than 3km from major roads or urban areas, and on that basis less than 3% of GM is undisturbed.

Current land use trends are shown below, with 25-year projections. Recreation uses could increase to 10% of open land, agricultural could reduce to 60%, and most minerals and landfill sites could be reclaimed. The community forest programme will also move towards its target of 30% of rural land, while total open land could decrease on current trends by 2000 hectares or 3% of its area. This rate of urbanization would use up within 80 years the 'white' or undesignated areas.

Outline of rural land-uses in GM with current trends projected to 2020. Based on information supplied by GMR 1995

Figure 3.13: Open land trends
Source: Ravetz 2000

Open land policy is dominated by the Green Belt – 47% of the GM county area is protected in principle, although there are some 'strategic deletions' for large employment sites and motorway routes. Pressure for housing and employment could impact on green belt boundaries, but much of the landscape within shows neglect and degradation. Green Belt policies are also restrictive of farm diversification, landscape maintenance and the rural economy in general. Other local policies such as 'landscape value' and 'river valleys' aim at similar ends, but without the legal status of the green belt. In practice each is hindered by fragmented management of agriculture, land tenure, highways and leisure activities. A national review of green belt policy should consider the green belt as an 'eco-belt' – a zone of multiple use, low-impact, high value-added ecological diversity (Elson, 1993).

Similar questions apply to the 29 km² of GM which is in the Peak District National Park, much of which is a reservoir catchment between bare hillsides. The English national parks policies were reviewed recently, in an attempt to resolve conflict between the

objectives of 'quiet enjoyment' and economic development. While there is a strong case that the park area in GM should be protected as 'wilderness', the landscape itself is deteriorating from lack of maintenance. So there is a case for managing upland areas with several layers including 'inalienable' wilderness, eco-restoration activities, and uses which favour the local economy.

Environmental trends

This highly urbanized city-region already recycles most of its land – 80% of development in GM is on 'brown' sites – but the other 20% still causes the loss of 80 hectares of open land per year.   Within the urban area, 6% is derelict and about 8% is vacant, while in the urban fringe there is as much vacant land again, much agriculture is marginal, and the surrounding uplands are eroded and unproductive. Woodlands cover only 2% of the area, and ancient woodlands less than 1%.   There are over 400 'sites of biological interest' (SBI's) and 17 'sites of special scientific interest' (SSSI's), and most of these are on urban or derelict land, forming a very unique set of habitats.

Air quality has improved in recent decades, but the regional centre is still one of the worst polluted in the UK. Transport is the main source of air pollution, and improvements from cleaner technology may be overtaken by future traffic growth. Most of GM is subject to acid loading beyond its critical capacity, with damage to soils, eco-systems and buildings. Local rivers, especially the lower Mersey, are notoriously polluted, and even with the largest watershed campaign in Europe, many are still effectively lifeless. There is toxic contamination on perhaps 10% of urban land, with 'areas of search' including heavy industry, minerals, utilities and the 620 'closed' waste disposal sites. Nearly all the waste stream of 12 million tonnes per year is transported to landfills in neighbouring counties.

Economic trends

The GM economy is in continuing transition from its former manufacturing and trading base, to a new mix of high technology and service industries. The city's industrial structure has been diversifying ever since the waning of the textile industry at the beginning of the century, with strengths in chemicals, pharmaceuticals and electronics, and weaknesses in vulnerable industries such as defence. The universities and international airport are major catalysts for R&D and inward investment, and Manchester is now the largest finance, law, professional and media centre in the UK outside London. Leisure is one of the fastest growing sectors, with Manchester United for instance, as the world's most valuable club and sporting brand-name.

Behind this upbeat profile is a story of industrial shake-out on a massive scale (Lloyd, 1983). As a result most economic indicators are still 10% below national averages, with manufacturing investment at 20% below, and self employment at 30% below *(Figure 3.14)*. Some projections show growth rates in local GDP above the national average – however few sectors are likely to generate new employment, and many will show further reductions, with a short term projection of –1% loss of employment per year.   The overall unemployment level is just above the national average, but many areas suffer long term unemployment of 20-40%. While economic development and regeneration schemes strive to upgrade training, there is likely to be further polarization between those with and without the crucial assets of transferable skills.

Figure 3.14 Economic Indicators
Source: Ravetz 2000

Data for Greater Manchester relative to UK average.
Source CSO 1998

Figure 3.15 Social Indicators
Source: Ravetz 2000

Data for Greater Manchester in percentage relative to UK.
Source CSO 1994:

Social trends

The population of GM has dropped by nearly half a million people over the last 40 years – one in five persons – with waves of migration across and beyond the region. Some inner areas have been almost totally cleared for roads and industry, while some towns on the urban fringe have doubled in size. At the same time, the average household size has dropped from 3.3 to 2.5 persons per household, and further reductions are the main cause of growing numbers of households projected at over 200,000 in GM over the next 20 years (DCLG, 2007).

The population at large is caught between inner decline and outer growth, and large areas hover somewhere in the middle. Again, many social indicators for GM are 10% worse than the national average, and those for dependency, health, education and crime all tell a

similar story. But these averages hide local clusters – area mapping at larger scales shows how social problems are compounded with ill-health, crime, unemployment and pollution all overlapping in some inner areas.

At the same time there is a dense network of neighbourhood activity, community organizations, ethnic cultures and mutual self-help. GM has a long history of radical politics, including the Luddite movement (1828), cooperative movement (1844), trade unionism (1868), women's suffrage (1860's), the Pan-African Congress (1946), and the Global Forum (1994). This tradition continues to pioneer social innovations.

Peri-urban social structure

It is arguable that the dynamics of the peri-urban area help to concentrate wealth and poverty around Manchester, as in most of urban history. We can observe several processes, for both incomers and existing residents:

- Existing wealthy residents of peri-urban or rural areas were often landed or semi-landed gentry, merchants. Over time their assets in land, buildings and finance have consolidated.
- Incoming wealthy households are attracted to high quality landscapes and can afford transport or high mobility occupations.
- Existing low income households or working class households, may find changes in the rural economy and employment destructive to their livelihoods: insecure housing tenure adds to economic pressure.
- Incoming low income households were in many cases relocated as part of spatial planning policy, from the inner city slums to peripheral public estates. They often found themselves isolated from employment and services, with little ability to afford transport.

The result is shown in the mapping of 'social groups' (Figure 3.16):

Figure 3.16: Social group areas
Source ONS analysis 2007

West Pennines area – as with S.Pennines, but more variegated mix of deprived industrial settlements with urban commuters

South Pennines area – mixed 'rural fringe' and 'suburbia': indigenous owner occupier working communities, commuters & lifestyle aspirants

Mersey Belt area – very diverse mixture of industry, rural fringe, suburbia, owner occupiers, large & small settlements with new green infrastructure

"Cheshire set" – prosperous commuters centred on transport links: embedded rural wealth centred on small market towns

"Metro-professionals" – knowledge-based occupations seeking higher quality locations close to green infrastructure

"Post-shake-out" dependency - peripheral public estates along reclaimed river valleys & new green infrastructure

GREATER MANCHESTER
RURAL-URBAN REGION
(PLUREL Study Area)

ONS Group by Ward 2001

Industrial Areas
Inner City Estates
Suburbia
Rural Fringe
Rural Areas
Deprived Industrial Areas
Deprived City Areas
Prosperous Areas
Owner Occupiers (Lower Status)
Owner Occupiers (Established)
Metropolitan Professionals
Middling Britain
Minute Populations
Unclassified

PRIMARY URBAN CENTRE

TYPES OF PLACE

3.3   Peri-urban land use relationships

Note: data in this section generally refers to the 'AGMA 10' area, not the wider 22-District PLUREL study area.

This section looks at peri-urban land uses, in a more detailed 'functional' perspective on conditions and trends, and in relation to the urban system of GM. Each function contains both problems and solutions, and indicates a particular sustainability direction or 'goal' for open land.

There is a further discussion of the 'relationships' agenda in the Appendix. This is framed with the title 'spatial ecology' – a way of looking at relationships within a city-region system. Only when we understand the dynamics of the city-region system, can we understand the role and the 'sustainability' of each of its components (Ravetz, 2000).

Fig 3.15: Land cover and urban morphology (AGMA 10 area)
Source: TEP / Natural England 2008, based on mapping by CURE

Scope of the urban fringe

The term 'urban fringe' needs consideration. For our purpose it is defined simply as the land and activity within Greater Manchester but external to the urban or continuously built up areas. It takes up 73000 hectares or 57% of the land area of GM around the urban periphery, and is nearly all within 3 km of continuous urban areas (Figure 3.15).

The great majority of this land could be classified as 'mixed urban & rural' areas: a spread or patchwork of land between smaller and larger settlements, crossed by river valleys and transport corridors, with many industrial remains. This mixed landscape is now recognized as a type of its own, neither fully urban nor rural.

As well as looking inwards to the city, the urban fringe of GM flows outwards to the more open rural environments of the Cheshire Plain and the Pennines. However, 'rural' does not mean 'natural': almost none of this land is in anything like its natural or even pre-industrial state. Areas of ancient woodland are less than 1% of the total land area, and native heather moorland less than 2%. Fewer than a third of the 360 designated 'Sites of Biological Interest' across the region are actually in the rural areas. The rest have grown on the remains of former industry, where nature's colonisation of abandoned land has been less contrained by human intervention than in the apparently more natural rural fringe. The rural environment is inescapably shaped by human hand, whether that shaping takes the form of conservation or exploitation.

The proximity of open land to the built-up area of GM is shown in the diagram below. Nearly 3/4 of the area is within 1 km of the urban edge.   Many of the open corridors are dominated by the motorway and trunk road network.   About 15000 hectares or 20%of the total open land area is between 1 and 3 km distance.   Only 5000 hectares or 7% of the total area is beyond 3 km distance, and this is all in the uplands to the north and east. These uplands also adjoin some of the most unpopulated areas in northern England.

Urban fringe landscape

Many studies show that proximity to the urban centre is a general indicator of smaller land units, less cultivation and more neglect & damage, in GM as in other conurbations . More recent figures from 1993 show that over 75% of the remaining farmland in GM is under grass. The Countryside Commission's assessment of agriculture in GM showed concern that the marginal one-man units typical of the fringe could not compete with larger farms elsewhere, and the landscape could show very rapid deterioration (1982). In some areas this trend is confirmed, and for instance about 2500 hectares of urban fringe land is now designated as vacant, or nearly half the total of vacant land.

The urban fringe by its nature tends to change rapidly, and is not simple to define or measure. A study in West London identified a range of landscape types (Blair 1987):

- disturbed
- neglected
- new agricultural
- traditional agricultural
- public or private amenity

There is little research on disturbed & neglected landscapes in GM; however the definition of policy areas provides a rough guide. For 'river valley' policy areas, one could read 'neglected and semi-derelict valleys'; and for 'environmental improvement corridors and areas' read the reality of 'disturbed and unpleasant landscapes'. Ironically the 'new agricultural' areas have both less amenity and ecological value than many areas of

remains of former industry. In GM such larger agri-business is mainly found in a small area to the south and west.

This spread of mixed landscapes is surrounded by a band of pasture land and the slopes of the South Pennine uplands. The uplands themselves could be said to be degraded from their former wooded condition, as their productivity and soil fertility has declined to very low levels. However their amenity and ecological value is clearly very high, and this quality would tend to outweigh most proposed changes towards more productive uses.

Containment of urbanization

In UK policy terms the primary function of open land is seen as the containment of urbanization and the urban area.   This is in a sense a negative or 'defensive' function, and often conflicts with other possible goals such as productivity and biodiversity. While the general issues of sustainable urban form for GM are discussed in the 'built environment' agenda, we focus here and in the next section on the localized causes and effects on open land in GM (Ravetz, 1999).

The Green Belt in GM covers 47% of the county area, excluding the National Park area to the east. It is clearly the major means of containing the urban areas and is well established in the policy structure. However this does not mean that Green Belt areas are insulated from the urban infrastructure: they are crossed by motorways, trunk roads, railways, and electrical power lines, and provide sites for sewage works, landfills, minerals extraction and many other activities.   Although the total Green Belt area is being maintained at present, the definition of 'activities requiring a rural setting' is constantly being challenged.   The Government own roads programme was until recently the largest single cause of damage to the quality of the Green Belt.

The trend of urbanization is a complex mix of social and economic development, with both localized and more widespread effects.   Within this broad theme there is evidence of 'counter-urbanization', or the dispersal of population and economic activity to a wide radius from the city, and the generally accepted goal of 're-urbanization', or the return of population to more dense city forms and lifestyles.

It can be argued that Green Belt policies, such as in GM, are aiding the counter-urbanization of population to beyond the GM boundary, in a 'leap-frogging' of the Green Belt.   Thus rural communities in the Pennines and the Cheshire plain are receiving the 'overspill' of more affluent and mobile communities from GM, who relocate in search of a certain quality of life.   Those rural communities may need the influx of new populations and economic interests in order to maintain their own progress, while at the same time the effects of this 'displaced' urbanization may overload local environmental capacities and weaken social cohesion.

Hence the local containment function of open land in GM has complex and widespread effects across the region which are not directly measurable.   Goals for 'sustainable' open land policy have to recognize this conundrum and focus on what is more tangible and localized.   In this respect it is clear that the containment function can only be 'sustainable' if it is maintained in the medium and longer term, with a minimum of localized negative effects.   While the current policy stance of stability of Green Belt areas should be maintained as is, there is scope for adjusting the criteria of Green Belt to allow for the fulfilment of other goals such as productivity, biodiversity, and demonstration of ecological lifestyles.

Resource provision

There is a ring of productive farmland around the conurbation, but the total area is small, at about one-tenth of the county area. About 3% of the area is wooded, and this is almost entirely amenity woodland. Minerals and aggregates are plentiful with coal measures in the west (although coal is no longer mined in GM) and sandstone in the east & north. Water is also plentiful, with many older reservoirs on the south Pennines; however Manchester's water has for a century been supplied mainly from the Lake District.

Overall the physical resources of the natural environment appear to be under-used and their scale is marginal in relation to the huge demands of the city. There is a clear case for improving biodiversity and meeting at least some of the needs of the city, via organic farming, energy crops and horticulture. However the scale of food or timber production is likely to be a small proportion of the overall requirements, and so the rationale behind such moves needs to be considered carefully. Ironically, sand & aggregates production meets a greater proportion of local needs (20%) than any other resource.

The employment market in land-related occupations including agriculture and minerals is less than 1% of the total, in contrast to the European average of 4%: however this does not include employment in leisure and tourism where data is not available. The potential employment from a shift to sustainable production in agriculture could be double or more from existing levels. This has to be seen in the context of other functions of the land, and current policies for the rural economy aim to balance economic growth with protection of the landscape.

Pollution assimilation

The traditional function of the urban hinterland is to receive and assimilate waste and pollution from the city. With the modern awareness of amenity and bio-diversity, it is no longer acceptable to use the surrounding countryside as a dump.

In GM, as the amount of woodland & vegetation is small, its take-up of pollution is relatively low. Estimates of carbon absorption show that at most about 0.5% of the carbon emissions of GM are taken up by local vegetation and soils. Many of the soils show concentrations of heavy metals from industry and from sewage-sludge spreading.

The upland soils surrounding GM are beyond their critical capacity to absorb acid rain, and certain areas show some of the highest exceedences in the country (as in section 8.2). Although emissions of SO2 are reducing rapidly, emissions of NOx from road traffic are increasing, so that continuing degradation and erosion of the soil can be expected. Rural areas also show the highest concentrations of tropospheric ozone, which damages both vegetation and human health.

The Mersey Basin Campaign to improve the quality of watercourses has had some success, but most of the rivers and canals in GM are still polluted to class 3, and many to class 4 - or almost lifeless. Sewage treatment is the largest source of water pollution, but run-off from agricultural silage and intensive livestock is significant in some areas.

The largest single cause of pollution in open land is perhaps the agriculture business itself, but there is very little detail in the local data. Although GM is not a 'nitrate sensitive area' and eutrophication of freshwaters is not a problem, most modern pesticides are carcinogenic or geno-toxic and will accumulate in the food chain in many complex pathways.

In general the widespread pollution of the open land of GM over the last 150 years has only recently been tackled on a major scale, and the process is likely to take some decades to show real results. Pollution control in the countryside is due to be coordinated

through the new Environment Agency, but the linkages between this and farmers as the main polluters have yet to be established.

Biodiversity and nature conservtaion

For many of the 'functions' of the urban fringe - transport, energy, the built environment and so on - questions of sustainable development may be considered in purely human terms. Protecting the environment by reducing traffic pollution can be justified as it improves people's health; reducing CO_2 emissions attempts to limit the disastrous human consequences of climate change. Even ecological concerns such as ensuring biodiversity in the rainforests can be argued for in terms of the interests of indigenous peoples, or protecting medicinal plant species we may need to use. The intrinsic value of species, independent of their usefulness to humanity, should be considered, but in the purely urban aspects of transport, energy, and the built environment, they need not be. Arguments for sustainability remain sound even if they are not.

In discussing more rural environments, however, the question of ecological balance and our assessment of the intrinsic values of species and habitats carry a great deal of weight in their own right. These are all contained in the concept of "biodiversity".

Figure 3.18: Urban greenspace / nature conservation areas
Source: TEP / Natural England 2008: based on mapping by CURE

Biodiversity considerations have to be balanced alongside long- and short-term human needs for food, housing, mobility, employment and leisure. These human needs themselves may be contradictory. In particular the provision of leisure and amenity facilities for city-dwellers, which includes most containment, biodiversity and habitat objectives, is at odds with short-term productivity targets for economic activities such as

agriculture, forestry and minerals. Social and economic development of the urban fringe will bring pressure for settlement from people who want to live as well as work in these areas (as distinct from people who wish to commute to the city). Yet to permit development tends to undermine the principle of the Green Belt, and may allow undesirable suburban sprawl.

Nevertheless there are also potential complementarities. Improving the landscape will tend to increase the demand for leisure activities, which then provides economic opportunities to serve that demand, which in turn provides an incentive and wherewithal to further improve the environment. Leisure activities also have environmental impacts, so the whole process needs careful strategic management. Sensible and sensitive design and location of rural dwellings is possible, so long as it is firmly linked to clear objectives for sustainable economic development in urban fringe communities.

In GM there are 17 Sites of Special Scientific Interest (SSSI's), 360 Sites of Biological Interest (SBI's), and as many again undesignated areas of ecological value. The definition of such sites is a policy judgement, and while the numbers have increased over the last decade since the scheme was created, the areas of each site have reduced. On a national level agriculture is the main cause of short-term damage to SSSI's, while development is the main cause of long term damage or destruction.

The SSSI at Red Moss in Bolton, which is publicly owned, was threatened by a proposed major landfill site: this is a clear example of the conflict between the ecological value of the site and revenue-earning potential to the local authority. It is also an indication of the need for a holistic approach to sustainability: the longer term solution to the ecological problem is to develop an effective waste minimisation strategy, rather than to turn habitats into landfills. Other mosslands to the south & west are severely degraded after extensive peat workings and drainage.

Ancient woodlands take up only 0.6% of the total area of GM, but are the most ecologically diverse habitats, containing up to 5000 recorded species.
About two-thirds of the SBI's in the county are in sites of former industry or infrastructure. For example, each of the major canals is now an SBI. There are often conflicts, in practice, from sites having uses such as recreation; but careful management can allow one to enhance the other.

SSSIs and SBIs are important, but they are only the flagships of a healthy and diverse environment. They should not exist as islands of rich or distinctive habitat in a desert of impoverishment. Modern agricultural techniques, insensitive leisure development and extensions of the urban infrastructure can outweigh any benefits from small localised protected areas.

Much government and European policy is now directed at the goal of bio-diversity, through the many land-management schemes and subsidies. At present these tend to go against the general trend of intensification in agriculture and the pressures of urban development. There is scope for including shadow 'valuations' of habitat sites and vegetation such as hedgerows which generate habitats, in the assessment of the development / conservation balance.

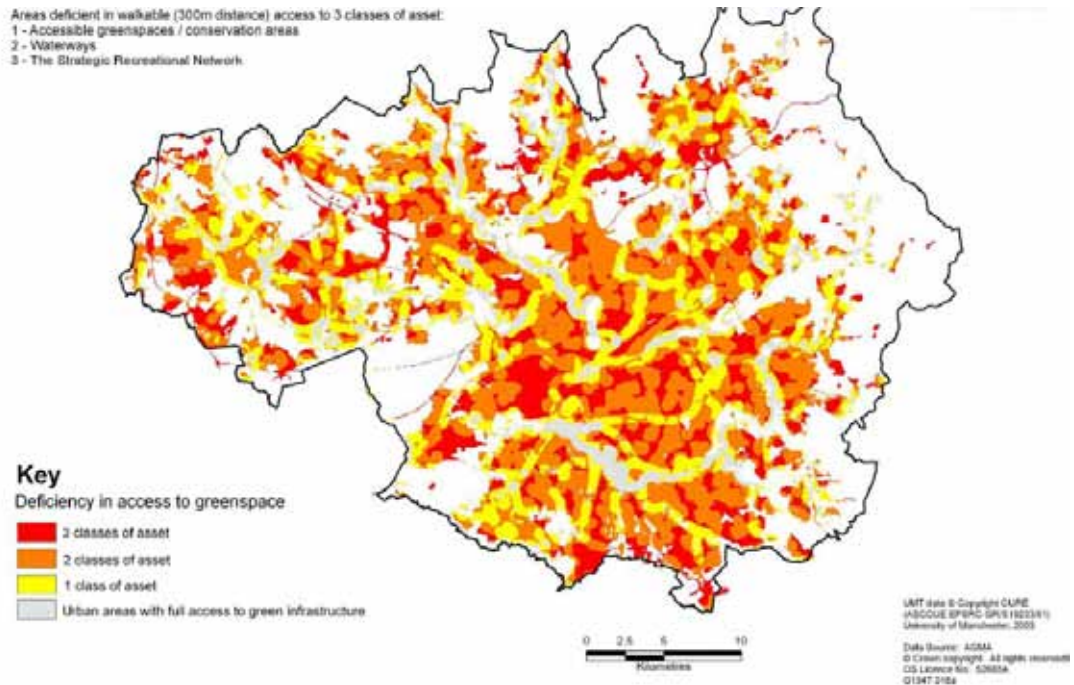
Leisure & amenity values

The amenity value of GM's rural fringe is extremely high, as demonstrated by the 250 local amenity and environmental organizations in the county. Many of the green corridors on the fringe and in river valleys are used for horse riding and grazing. Visitor numbers to country parks, woodland areas and outdoor leisure activities continue to increase, while the opposition to major road schemes and the second airport runway on grounds of local environmental destruction is intense. It may be true to say that amenity and leisure,

combined with education, is becoming the principal function of both the urban fringe and surrounding upland areas.

This trend generates conflicts between various leisure users, such as with motor sports and country walkers. There are also conflicts between amenity values in general, and other environmental goals. For instance a significant proportion of the GM electricity demand could be generated through windpower and energy cropping, but the effect that this might have on the landscape makes it difficult to propose in the foreseeable future.

The goal of providing for leisure and amenity for urban population lends itself to integration with other goals such as biodiversity, as long as the balance between visitors and the local environment is respected. IN that respect the first priority is to address the areas of deficiency in urban green space and open space (Figure 3.19)

Figure 3.19: areas of deficiency in accessible open space
Source: TEP / Natural England 2008, based on mapping by CURE

4. Governance and policies

('Government institutions and their policies')

This Section outlines the main types of governance – not only with formal public decision making, but with other types of actors – which is relevant to peri-urban development. First is an outline of the institutions: followed by a review of their agendas. Here Section 4 focuses on economic and social development: the following Section 5 focuses more on spatial planning policy.

4.1   Relevant government institutions

('Relevant government institutions and their policy developments')

National strategies for rural and peri-urban areas

While rural policy is well developed and linked from EU to UK to regional level, peri-urban or fringe policy hardly exists in its own right. Peri-urban areas are generally seen as either resources, dumps or containment functions for the urban areas. The only national government organization to take this forward was the Countryside Agency, now merged into 'Natural England'.

So below is a short summary of a complex policy field.

The national **Rural Strategy** takes as its starting point the vision of sustainable development for rural areas, as set out in the Rural White Paper (2000). It is based on targeting greatest need by working in partnership at national, regional and local level. The Rural Strategy sets out three key priorities:

- Social and economic regeneration - supporting enterprise across rural England, but targeting greater resources at areas of greatest need.
- Social justice for all - tackling social exclusion wherever it occurs and providing fair access to services and opportunities for all rural people.
- Enhancing the value of the countryside - protecting the natural environment for this and future generations.

The **Rural Development Programme for England** (RDPE) is the Government's response to the EAFRD. The Programme contributes to the delivery of the Government's Strategy for Sustainable Farming and Food by helping farmers and foresters to respond better to consumer requirements and become more competitive, diverse, flexible and environmentally responsible. It also provides help to rural businesses and communities which need to adapt and develop. RDPE is structured around the three axes of the Rural Development Regulation and broadly matches the first three axis of the EAFRD identified above.

Strategy for Sustainable Farming and Food (Defra, 2002): developed in 2002, in light of the Foot and Mouth outbreak, BSE and reform of the European Union's Common Agricultural Policy, this strategy was formed to develop sustainable farming and food in England and was backed by an initial £500m budget. The over arching aim is to promote a competitive and efficient farming and food sector which protects and enhances our countryside and contributes to the health and prosperity of communities.

Regional level: economic & spatial strategies

The city-region as a political unit and functional territory has risen and fallen, and now risen again, in relation to the larger regional agenda. The North West (NW) is one of the most active and cohesive regions in the UK, and since 1997, a powerful set of public-private partnership bodies has given rise to a new regional level of governance.

- North West Development Agency – a partnership body, non-elected and accountable directly to national government (via the Department of Business Enterprise and Regulatory Reform). Its central task is the preparation and implementation of the Regional Economic Strategy.
- North West Regional Assembly – a partnership of 44 local authorities plus other social partners from the civic and business sectors. One of its central tasks is the preparation of the Regional Spatial Strategy. (described in the next section)
- Government Office for the North West, which administers most national government programmes and funding streams. It also aims to coordinate the many other government departments and agencies.

This is all shortly to be changed by the proposals of the government's Sub-National Review (DCLG, 2007).

"4NW" is the new Regional Leaders Forum for England's Northwest. A group of leaders drawn from public, private and third sector bodies in the Northwest works together as a Board. This Northwest consensus then aims to shape government thinking and spending decisions that affect the future of the Northwest, its people and places.

4NW will operate with a board structure, with council leaders from each of the five sub-regions, Cumbria, Cheshire, Lancashire, Merseyside and Manchester, along with seven representatives from the private, non-governmental sector such as Manchester Airport Group, North West Universities Association and the North West Trades Union Congress. We currently have two different strategies (the Regional Economic Strategy and the Regional Spatial Strategy) but these will soon be replaced with a single regional strategy or SRS. Produced in partnership with the NWDA, the SRS sets out how investment will e made in vital areas such as housing, transport, the economy and skills. 4NW helps formulate this strategy and is the only organisation with responsibility to approve or reject this important document on behalf of the region.

Regional level rural policy

The NWDA's RES is the key over arching strategy promoting economic development and sustainable economic growth in the North West. The 'rural economy' is accepted by the NWDA as a collective term for a wide range of trade, business and individual activity that varies across rural areas in North West England. The three main drivers for the NW economy mirror the issues for the rural economy. These are:

- The need to improve productivity.
- The need to grow the size and capability of the workforce.
- The need to create and maintain the conditions for sustainable growth.

Any intervention in rural areas should focus on halting and, where possible, reversing decline; tackling the barriers to productivity; bringing new opportunities to rural areas, and supporting activities that strengthen the rural economy.
The strands of the NWDA rural policy are focused on:

- Ensuring ongoing growth in the rural economy.
- Developing a skilled workforce in rural areas.
- Diversifying the economic base of rural areas.

RDPE – Implementation Plan for England's Northwest (2007-13): this is one of eight across England. The North West Regional Development Agency is responsible for Axis 1 and 3 (£72m). The Forestry Commission and Natural England is responsible for Axis 2 (£300m)

The NWDA has engaged with sub-regional partners to identify local priorities. The activities under Axis 1 & 3 are guided by the 'North West Rural Delivery Framework 2006' and the 'Regional Economic Strategy'. The plan has set 'issues and opportunities' across seven areas:

- Competitiveness and Growth: Rural areas account for 40% of businesses but only 25% of the workforce and 23% of the GVA, which suggests there are a high number of poorly performing businesses in rural areas.
- Climate Change and Energy: Rural activity should move towards making a significant contribution to achieving a low carbon and well adapted region.
- Resource Protection: The NW's natural resource – its natural capital – has an estimated value to the region of around £2.5bn, much of it through rural businesses that are directly reliant on the environment. 48,000 tourism jobs are also reliant on the natural environment.
- Sustainable Agriculture:
- Forestry and Woodlands:
- Biodiversity, Landscape and Heritage:
- Skills, Knowledge Transfer and Capacity Building:

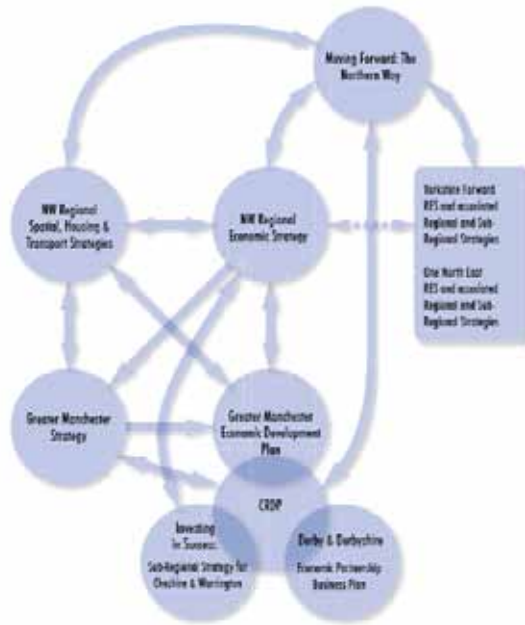## Sub-regional level: economic, spatial & environmental strategies

The City of Manchester is one of 10 municipal authorities, which together form a non-statutory Association of Greater Manchester Authorities. This oversees emergency, transport, waste and other services. Responsibility for planning is split between the Regional Spatial Strategy of the North West Regional Association of Local Authorities: and the Local Development Frameworks of the 10 municipal authorities.

The additional authorities in the current definition of the 'Manchester City-Region' include a further 5 more rural authorities who have combined for the Greater Manchester Economic Development Forum, an informal grouping (this includes one authority from the neighbouring East Midlands region).

The PLUREL study area includes the AGMA 10: the GMEDF 5: and a further 7 authorities which cover the adjacent South and West Pennine areas. It was not extended further to the west, as these authorities are definitely within the Liverpool / Merseyside functional city-region.

The main features of this complex and fast changing 'policy network' are shown in Figure 4.1.

Figure 4.1: Main institutions of sub-regional governance for Greater Manchester: Source: AGMA 2006

The GM County administration was disbanded in 1986, leaving all local government functions to 10 unitary authorities or 'Districts'. Joint functions such as public transport support and emergency services continue with the Association of Greater Manchester Authorities (AGMA). Services such as energy and water, invented by local authorities a century ago, are now privatized on a regional basis, and increasingly owned and traded on the global market.

Each district has a political and economic agenda somewhere between 'management of growth', and 'regeneration by the bootstraps'. While there are coordinating actions for city-region issues such as EU funding, industrial sites and airports, on the ground there is real conflict on issues ranging from parking to retail development and inward investment. This is partly a result of huge variations in the problems and pressures on each district – the most extreme case being Manchester City, with the most serious poverty and the wealthiest economy, side by side.

Sub-regional rural and peri-urban policies

The Manchester City Region Development Programme 2006 (CRDP):

This programme builds on the first Manchester City Region Development Programme submitted to Government in 2005 and sets out how the Manchester City Region (MCR)

can make the most significant contribution to closing the North's productivity gap within the next ten to fifteen years. The vision set out for the programme is to establish one of Europe's premier City Regions, at the forefront of the knowledge economy and with outstanding commercial, cultural and creative activities;

Manchester City Region Sub-Regional Statement, 2005: this focuses on the key policy areas of the economy, housing and transport, which are critical to the city region's future. Among a series of key principles the Statement recognises the quality of the environment as one of the vital principles that can help to enhance both the image and the lifestyle of the sub-region. A positive image and high quality lifestyle will attract businesses, residents and tourists to the area.

RDPE Implementation plan for Greater Manchester 2007-13: this forms the first ever dedicated rural plan for Greater Manchester to support rural economic development and tackle disadvantage. Agriculture plays an important role in the rural economy of Greater Manchester and is accountable for the management of over 40,000 hectares of land. There are over 1,300 registered agricultural holdings employing around 3,000 people. Many of the holdings are classed as smallholdings (more than 2/3 of all holdings are less than 20 hectares in size). Agriculture generates additional employment both directly through ancillary industries and indirectly through other sectors such as tourism, leisure, financial and professional services, and creative industries.

Axis 1 – Improve the competitiveness of the agricultural and forestry sector:
The following measures have been identified:

- Vocational training and information actions for persons engaged in the agriculture, food or forestry sectors (Measure 111, RES Action 30).
- Improving the economic value of forests (Measure 122, RES Action 117).
- Adding value to agricultural/forestry products (Measure 123, RES Action 8).
- Cooperating on the development of new products, processes and technologies in the agriculture, food and forestry sector (Measure 124).

Axis 3 – Quality of life in rural areas / diversification of the rural economy:
The following measures have been identified:

Part 1 Diversification of the Rural Economy –

- Diversification into non-agricultural activity (Measure 311, RES Action 30, 51).
- Micro business creation and development (Measure 312, RES Action 51, 56).
- Encouragement of Tourism Activities (Measure 313, RES Action 101).

Part 2 Quality of Life in Rural Areas –

- Basic Services for the rural population (Measure 321, RES Action 119).
- Conservation and upgrading of rural heritage (Measure 323, RES Action115,119).
- Area studies, information, training, animators, leaders, promotional events, partnerships (Measure 341, RES Action 109).

Green infrastructure

'Green Infrastructure' (GI) is gradually coming to be recognized, as an element that should be integrated within any spatial strategy or major development and regeneration scheme. Regional parks, tourism opportunities, a well-protected and interpreted heritage, biodiversity and connectivity are just some of the other elements that the city-region GI Statement highlights as essential to the ongoing success of the sub region.

This is at the moment in a state of flux (October 2008): a Greater Manchester GI study and package of recommendations has been launched for consultation (TEP Consultants with Natural England, 2008)

The GI analysis is based on a functional approach with an economic base. This identifies four types of impact, with 11 types of economic benefit, as quoted in "The Economic Benefits of Green Infrastructure: A review of the evidence base for the economic value of investing in Green Infrastructure" (EcoTec, 2008, for NWDA).

Four types of economic benefit can be seen to flow from GI investments:

• Direct economic outputs.
• Indirect economic outputs.
• Cost reductions to the public and private sectors.
• The management of risk.

The key economic benefits of green infrastructure are identified in 11 types:

• Climate Change adaptation and mitigation.
• Flood alleviation and Water management.
• Quality of Place.
• Health and Well-being.
• Land and Property values.
• Economic growth and Investment.
• Labour productivity.
• Tourism.
• Recreation and Leisure.
• Land and Biodiversity.
• Products from the land.

The study has so far examined five options for a strategic policy / programme:

• Laissez-faire – leaving all GI planning and delivery to Local authorities and existing / emerging GI deliverers
• Advocacy-only – a document promoting the benefits of GI but with no spatial targeting
• Framework – a document identifying priority areas for investment and enabling joint programmes
• Strategy – a framework with a focussed series of individually-owned actions, shared across several GI funding and delivery agencies
• Plan – an approach controlled and monitored centrally with a pot of funds against which local bids could be made.

From this range, and given the policy and funding context, the consultant's preferred option is the middle one –'Framework'. This is now out to consultation.

Summary: rural / peri-urban governance and policy

The table below shows the main elements of economic and social development strategy at each level, from the EU to the sub-region and local.

Table 4.2: Summary of rural and peri-urban policies and programmes

	Strategy or policy	principal agencies
European level	Lisbon Agenda, 2005	EU
	European Agricultural Fund for Rural Development (EAFRD), 2007-13	EU
UK national level	Rural Strategy, 2004	DEFRA
	Rural Development Programme for England (RDPE), 2007-13	DEFRA
	Strategy for Sustainable Farming and Food	DEFRA
North West Rural context	Northwest Regional Economic Strategy 2006	NWDA
	Northern Way	ONE / NWDA / YHE
	North West Rural Delivery Framework 2006	GONE
	RDPE – Implementation Plan for England's Northwest 2007-13	GONW / NWDA / NE / Forestry Commission
	Northwest Regional Forestry Framework 'Agenda for Growth' and 'Making it Happen'	Forestry Commission
Sub-regional level	Manchester City Region Development Programme	Manchester Enterprises
	Manchester City Region Sub-Regional Statement and Action Plan	
	RDPE – Implementation Plan for Greater Manchester, 2007-13	Manchester Enterprises
	Greater Manchester Green Infrastructure study programme & consultation.	AGMA
Local authority level	Local economic development: infrastructure: leisure and amenity: etc.	Local Authorities, Local Strategic Partnerships etc.

4.2 Main strategic issues

This section looks behind the formal structures of governance, at the main agendas or strategic issues, in other words what are the underlying problems which they are trying to solve? This review is in two parts –

- direct policy issues, as interpreted by the policy actors and programmes:
- underlying dynamics, as interpreted by the research team. This is further explored in the 'notes on methodology' section of the Appendix.

Direct policy issues

This analysis draws on the Rural Economy Baseline study produced by Manchester Enterprises, together with PLUREL interview materials. Note that the definition of 'rural' for Manchester Enterprises, is effectively the 'peri-urban' in the context of PLUREL.

Rural areas continue to experience significant social, economic and environmental change. In some cases these changes mirror what is happening in urban areas, in others there are clearly distinct rural patterns. Key changes include:

- net inward migration to rural areas (largely from urban England).
- demographic change which is producing a rural population that is older and that is ageing faster than the urban population.
- increasing number of migrant workers in rural areas, who are not just working in agriculture but in sectors such as tourism, manufacturing and public services.
- continuing reduction in the number of physical service outlets – both private (e.g. petrol stations) and public (post offices). This in turn has reduced the overall levels of service availability and accessibility for rural people.

Equity: Across a range of social and economic indicators, rural areas do very well – often demonstrating much better average outcomes in terms of health and wealth than are seen in urban areas. However key equity issues remain, including:

- The clear inequalities in the housing market – essentially between those who can afford to acquire rural housing and those who cannot.
- The inequalities in, and as a result of, transport. Car use is currently critical in rural areas for accessing services and to meet wider social needs. Hence those without access to cars are significantly disadvantaged.
- Inequality between those in the rural 'mainstream' and those experiencing disadvantage for a range of reasons. The proportions of those in need can be lower in rural areas, however they remain harder to reach than is often the case in urban areas, as they tend to be highly geographically dispersed.

Rural / urban linkages: and the extent to which the conditions and changes in rural areas are intrinsically linked to conditions and changes in urban areas. For example:

- Rural housing affordability is strongly affected by urban demand.
- Rural household incomes are influenced by the scale and nature of commuting to and from urban areas.
- The overall rural economy is highly integrated within wider national and international economies with rural businesses tending to have much broader markets than their urban counterparts. Hence their economic viability is often dependent on external demand.

4.3   Underlying dynamics

To explore the underlying dynamics it is important to see the peri-urban areas as integral with the wider city-region systems of which they are a part (Ravetz 2000: Wood & Ravetz 2000). This city-region system is itself in the middle of deep and rapid structural changes, in other words – 'transitions'. We can identify these in three parallel 'frameworks', and for each there are questions to explore as much as fixed answers:

- A *'spatial ecology'* framework, which explores the core theme of Plurel – a set of inter-dependent 'land-use relationships', i.e. the physical components of a rural-urban-regional system.
- A *'metropolitism'* framework, which looks at the systemic transition, or transformation, of rural to urban type economies and spatial structures.
- A *'cognitive capitalism'* framework, which focuses on the global dynamics and driving forces of this transition, and its implications for governance and institutions.

These agendas are explored further in the 'notes on methodology' in the Appendix.

a) Spatial ecology:

This new term describes the 'green infrastructure' transition – a way of framing the inter-dependency of different components and functions which are located in space across the city-region.

Research questions:

- What is the physical state of the green infrastructure? and
- What are the economic and social dimensions of this?

Physical spatial relationships are transformed by new transport and communications, and by the new patterns of work and lifestyle which are encouraged by this. When the average person can drive 50 km along the motorway for shopping or leisure, the significance and function of a 'local place' is changed. One of the main identifiers and anchors of 'local place' then becomes the 'green infrastructure' – the pattern and network of ecological assets, which are by their nature fixed in space. Naturally it is possible to commodify these ecological assets into 'beauty spots', 'tourist destinations' and so on, to be accessed by high spending leisure seekers arriving by rapid motorway travel. However this is not the whole of the story - there are also localized spatial effects, which might be explored by revealed preference approaches. These include housing location and employment location, where there are clear social preferences and economic premiums, which tend to favour high quality environments, where the spatial relationships are prioritized around green infrastructure.

b) Metropol-ization:

This describes an 'urban transition' which is diffused and networked across wider peri-urban and rural areas. This can be seen in terms of a metropolitan 'tipping point' – i.e. rapid conversion of rural based economies and spatial patterns, to urban-based economies and spatial patterns.

Research questions:

- What are the physical transitions (housing development and transport), in the peri-urban areas?
- What are the socio-economic urban transitions (employment and social types), in the peri-urban area?

c) Cultural capitalism:

This phrase describes the global dynamics which drive the above physical, economic and social transitions. 'Cognitive cultural capitalism' can be framed as a 'globalizing

transition', a process of cultural and cognitive restructuring, of economic and social activities, patterns and divisions (Scott, 2001):

Research questions:

- What are the new economic and social configurations which are emerging in the peri-urban areas?
- What are the stakeholders attitudes and perceptions of these ?

The 'cultural capitalism' agenda is a deeper level of analysis altogether, which is quite experimental in the context of the PLUREL project.

There are notes on the general approach, shown in the Appendix. Further research is in progress to define this in a way which can be a) measured and analysed, and b) applied to policy.

5. Spatial strategy & planning

('Regional spatial planning and decision making strategies and their impact on the urban fringe')

This section focuses on the spatial strategy, planning and governance. The introduction looks at the selected case examples, the South Pennines and the Community Forest areas. There follows a review of spatial planning institutions and policies. Finally there is an analytic section which puts these into the context of underlying dynamics and discourses.

5.1 Introduction

Clearly, spatial planning (or 'spatial strategy' as it is now called in the UK) forms an overlap with 'rural development' or peri-urban policy, as in the last section. Each is an integral component in the wider system of the city-region. There are specific policy concerns as summarized above, but to understand where they are coming from, and where the responses are likely to succeed, we have to understand the bigger picture.

To explore this further we review here some of the key '***policy agendas***' which have been highlighted by stakeholders so far in the research. These come in the form of connected chains of problems, risks and opportunities, which cover both technical issues and social behavioural issues. These are similar in the South Pennine and the Community Forest areas, but contrast to the view from the more strategic Manchester Enterprises.

The South Pennines

The South Pennines has a population of around 450,000, and takes in the countryside core of Oldham, Burnley, Pendle, Rochdale and Rossendale on the west of the Pennines, and Bradford, Calderdale, Kirklees and Craven on the east. Crossing two Government regions and covering nine local authorities areas, partnership working is key to harnessing the area's rich natural, cultural and built heritage.

Some of the earliest water powered industries were built in these hills. The world's first retail cooperative was set up in Rochdale, and the first industrial cooperative in Hebden Bridge.

The context is that while the upland landscapes look timeless and unchanging, there have been powerful changes over the last half century. Some Pennine towns lost ½ their population, and since the low point of the 1970s, some have regained it. The local textile
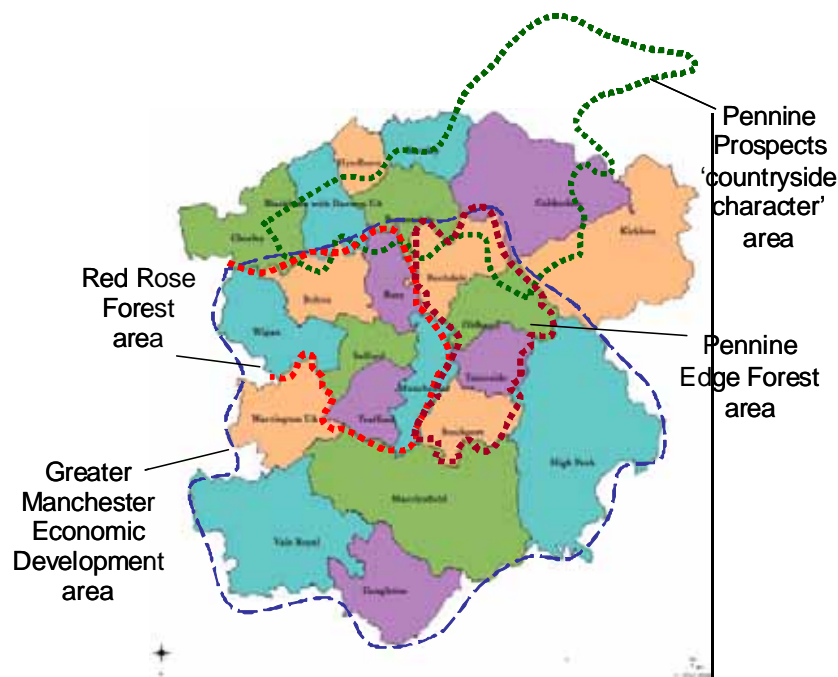
industry almost totally collapsed, and is now being replaced with a more mixed profile. Household car ownership doubled and doubled again. Production from the land, in farming, forestry or minerals, continues to drop – tourism is now the biggest land industry, but that is still fragmented and adhoc.

'Pennine Prospects' - the new Southern Pennine Rural Regeneration Company - is a non-profit company with a membership of local authorities, government bodies and private and voluntary sector bodies. (www.pennineprospects.co.uk)

Pennine Prospects is seeking to raise the profile and image of the South Pennines, and to help the area's regeneration through projects that build on its existing natural assets and heritage. All the Local Authorities within the South Pennines, Yorkshire Water, United Utilities, English Nature and representatives from the Voluntary & Community sector have come together to form the new Rural Regeneration Company. Alongside facilitating such partnerships, Pennine Prospects sees its role as being to:

- Support the development of a sustainable local economy
- Protect and enhance the character and image of the area
- Improve the South Pennine environment and infrastructure

Figure 5.1: Pennine Prospects & Forest boundaries
Based on Countryside Character map of Natural England

Spatial issues in the South Pennines

The Pennine Prospects working area is defined not by administrative boundaries but by 'Countryside Character' types, as defined by Natural England (Figure 5.1).

- Basically the South Pennines is an in-between city-region area, by definition on the periphery of 3 major conurbations (Greater Manchester, East Lancashire and West Yorkshire).
- Generally a decentralized geographical type with no single centre or corridor, and difficulties in travel apart from on existing east-west road and rail links.
- The PLUREL research agenda and data resource covers the whole of the Manchester city-region, of which the S Pennine is a part. The district data covers over half of the Pennine Prospects area (not including Bradford, Craven or Leeds)

The implication is that the South Pennines is not only a peripheral area, at the 'back of beyond'. It is also a kind of 'green heart' to 3 major conurbations with a combined catchment area of 6 million people. This is a change of perception, and change of agenda, which is the key to new opportunities for the area.

Pennine agendas and discourses

These are framed not in 'official policies', but in topical upcoming agendas, based on interview results with stakeholders. As such they are compounds of policy, media, enterprise and lifestyle themes, to suit the emerging 21st century South Pennines. They are framed in the shape of connected strings of concepts and discourses.

Where will the people go? Housing policy balance for locals and offcomers.

Population change >>> encourage in-migration & new blood >>> need more housing in different bands >>> build on floodplains / windfall sites / hillsides??? >>> then more employment >>> then more services, schools etc >>> strengthen transport >>> but risk of sucking out retail markets >>> displacing jobs & services >>> ??

Looking for new niches? In search of the good life on the fringe...

Economic restructuring >>> new niches in cultural & tourism industries >>> feed off professional commuters >>> need local services >>> skills for diversified employment >>> opportunities for new skills >>> centre-periphery linkages...

Sustainable communities? Environment at the centre ...

Replanting & relandscaping >>> climate change adaptation >>> water & soil management >>> food & energy production >>> local markets & local economies >>> diversification of land >>> land-based communities >>> extension to education & health projects >>> managing visitor flows >>> centre-periphery linkages...

These policy agendas then point towards some very topical creative ideas and project opportunities. For example,

- Local food: re-use of land: rebuilding environmental quality: local fresh / organic food: education & youth projects:
- Community economy : cooperatives & LETs schemes: small business & ICT centres: access to training & skills: social enterprise: local markets.
- Upland management: reforestation & drainage: peat bog protection: low impact leisure & eco-tourism: linkage with city providers:

From a research point of view, such opportunities work on many levels. They are demonstrations of the 'innovation / institutional' agenda, not so much technology as social and market innovation (see 'policy analysis' below). They are also tests of the technical analysis – i.e. what are the environmental trends? Is there a tourism market?

The Community Forest

The Red Rose Forest (RRF) was established as one of a national set of community forests in 1994. Its main aim is to promote partnership schemes as a means of land reclamation and beneficial re-use, environmental improvements and community woodland. It built on earlier work by the Groundwork Foundation and Trusts starting in 1981. (www.redroseforest.co.uk)

The Red Rose Forest covers the 6 western districts of Greater Manchester (Wigan, Bolton, Bury, Salford, Manchester, Trafford). The Pennine Edge forest has similar aims but is contained within the local authorities rather than a separate organization. The adjacent Mersey Forest is also very active. Each of these is represented at a regional level by the umbrella body Community Forests North West (CFNW).

The CFNW area shows the legacy of 250 years of industrial revolution and restructuring. Areas which now resemble ancient woodland are often layered over mining spoil and landfill sites. Much of the worst land contamination and dereliction has been greened and made safe and usable.

But this opens the door to a more complex agenda now emerging – how to bring together urban development and landscape in more harmonious forms of green infrastructure (GI)? As in Section 3, the GI agenda is rising up the priority scale, not only for the benefits of green, but for very real economic and social benefits. This holds out great opportunity for the community forest agenda.

Policy agendas in the Forest area:

These are based not so much on 'official policies', but in topical upcoming agendas, based on interview results with stakeholders. As such they are compounds of policy, media, enterprise themes, in the emerging 21st century forest area. They are framed in the shape of connected strings of concepts and discourses.

"Mobilizing communities"

> - forest as a means of enabling & empowering... (against many constraints) ...   environmental improvement >> focus for participation >> education & young people >>> public health >> access to funding >> conflicting uses >> empowerment of minorities >>>

"Rebuilding environmental values"

> forest as the core of the emerging green infrastructure - integrates water, soil, biodiversity, climate resilience >> landscape design as generator >> conflicts in landuse and landuse communities ??

"Economic roles & potentials"

forest as long term value generator – improved values for land, surrounding business, housing etc >> but based on land taken out of market >> longer term investment for institutions >>> role of planning policies / conditions >>> role of subsidies >>> reclamation standards >> new business opportunities >> cost effectiveness evidence ???

These policy agendas then point towards some very topical creative ideas and project opportunities. For example,

- Local food in the forest area – orchards, small holdings, forest farming
- e.g. 'incredible edible' scheme in Todmorden – feed the town???.
- Adventure playgrounds / woodland events / water sports
- e.g. summer house / plotlands around European cities
- The typical UK tourism challenge – "wet weather attractions" …. Or how to do development in the post industrial forest ??

From a research point of view, such opportunities work on many levels. They are demonstrations of the 'innovation / institutional' agenda, not so much technology as social and market innovation (see 'policy analysis' below). They are also tests of the technical analysis – i.e. what are the environmental trends? Is there a tourism market?

Regional Spatial strategy policy agendas

The more strategic view is expressed through Manchester Enterprises, together with the innovation agency Manchester Knowledge Capital. This focuses on the spatial linkages between region, city and peri-urban areas, and each of these raise questions for policy:

Regional innovation-related activity & peri-urban outcomes

Regional innovation >>> inward investment >> science parks >> environmental quality >> green field sites >> transformation of peri-urban areas

Question – how could or should innovation strategy relate to its spatial & peri-urban impacts in a positive way?

Peri-urban development and innovation capacity

patterns of urbanization >>> peri-urban population change >> commuter settlements >> local economic decline >> loss of entrepreneurial capacity >> knowledge based enterprise policy >> innovation support systems >>

Question - how could or should peri-urban areas and settlements best develop a more self-reliant and indigenous knowledge based economy ?

Linking city and hinterland

knowledge-based restructuring >> wireless communications >> flexible work patterns >> teleworking and mobile professionals >> decentralization and outward migration >> fragmentation and restructuring of peri-urban areas >>

Question – how could or should the expanding commuter / teleworking belt be a constructive influence on a) peri-urban development, or b) the environment for knowledge based activity.

As above, each of these contains a baggage of challenges and questions. This forms the essential context for the agenda of spatial planning and governance, as in the next section.

5.2 Landuse & spatial strategies

('Strategies to counter the termination of agricultural land use in the urban fringe')

General structure for spatial strategy

The English context for spatial planning and governance is highly structured at national, regional, sub-regional and local levels:

- National level: a series of Planning Policy Statements (PPS) which set out current policy. The current legal framework is set out by the Planning and Compensation Act 2004. There is no official 'national spatial strategy' at present, but each of the professional institutes have produced their version. (Wong, Ravetz & Turner 2000)
- Regional level: each region is required to produce its 'Regional Spatial Strategy' which sets out principles and general areas of search
- Local authority level: each local authority produces a 'Local Development Framework' (LDF), which is linked to its 'Community Strategy': this is overseen by the Local Strategic Partnership (LSP), and includes a Local Area Agreement (LAA).
- Recently there has been a move towards sub-regional (city-region) planning, as in Greater Manchester, and this involves a 'Multi-Area Agreement' (MAA).

Also, each of the 'Devolved Administrations' (Wales, Scotland and Northern Ireland) has different degrees of variation and autonomy on this model.

Regional spatial planning

The NW regional spatial strategy is concerned with peri-urban land use in several ways (Figure 5.2 & 5.3):
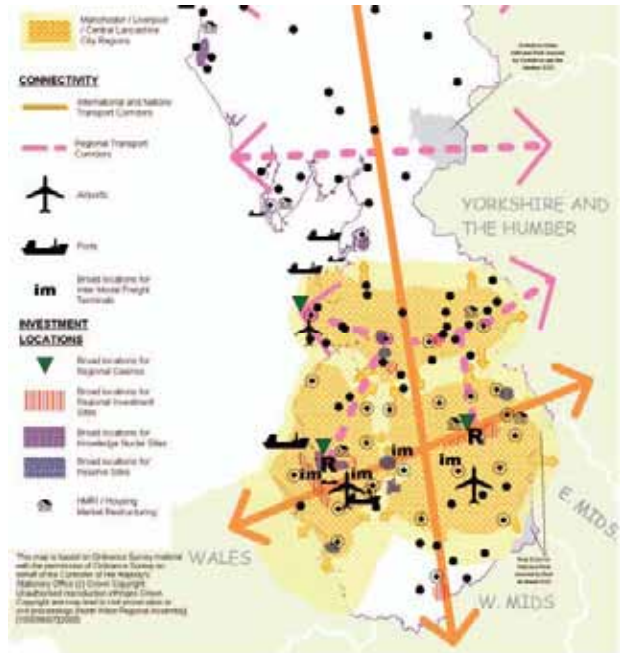
- Green Belt areas: as described in the Annex, these areas are in principle totally protected from new development. However many of the urban infrastructures and special facilities (motorways, power stations, hospitals etc) are located in the green belt.
- There are also similar designations (Areas of Landscape Value) etc, which have less legal protection but with the same intention.
- The Green Belt areas surround the urban areas of Greater Manchester, with only a few gaps or 'white land' where development could be potentially permitted.

- Concentration of development in urban areas, as in the government target for 60% of all housing to be on brownfield land. In Greater Manchester the figure is over 80% (as there is much brownfield land and little open land allocated for housing).
- 'Strategic sites' for employment and industry – major landholdings, many of which are on brownfield land in the peri-urban area. There are about 20 of these sites in the Greater Manchester peri-urban area.

Fig 5.2: NW region green belt areas
source: NW Sustainability Atlas,
www.eco-region.org

Fig 5.3: NW metropolitan region spatial strategy diagram:
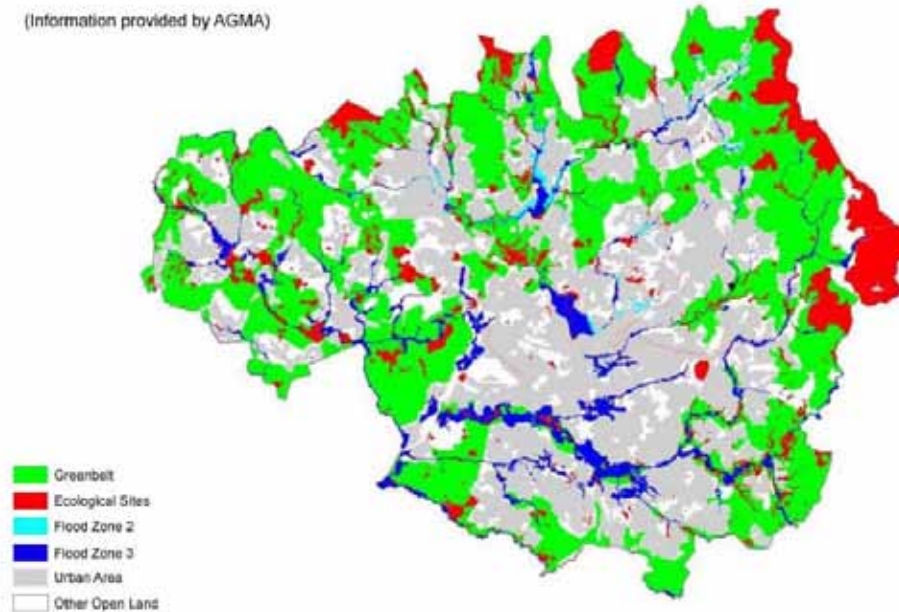source: NWRA, 2006: Draft North West Spatial Strategy

Green belt & other policies

The system of the Green Belt is more of an urban policy than rural policy, due to its crucial function and major effects on urban areas. The overall dynamics and goals of urbanization and growth of the city is discussed in Section 3.1. Here we look at the localized effects on open land and the urban fringe (Figure 5.4).

The extent to which the green belt succeeds in containing counter-urbanization (i.e. the trend for dispersal from the cities) is questionable. A certain proportion of development which would have taken place in the green belt is merely pushed still further out, 'leapfrogging' the belt itself, and leading to greater impact on the countryside and longer travel distances. The problem may become more acute as people are increasingly prepared to accept longer commuting times into the city, and with the growth in teleworking lifestyles. Ironically the development of effective public transport links may aid this process.

Figure 5.4: Green Belt and other policy designations (AGMA 10 area)
Source: TEP / Natural England 2008,

However the benefits of GM's Green Belt for the adjacent urban areas are almost undisputed. In its present consolidated form it was created in 1984 and has been held stable at about 600km2 or 47% of the county area. The current UDPs show an overall addition of 8km2 to Green Belt areas mainly by marginal infilling around urban settlements. The map shows the Green Belt which is outlined in the deposit draft UDP's, together with Landscape Value areas and other designations such as river valleys (Figure 3.18). The map also shows the areas between the Green Belt and built up areas, which are vital to future development, and areas currently being taken out of Green Belt. These are mainly river valleys and areas of future employment land.

However there are two larger sites which are being taken out of the Green Belt for urban development, totalling over 300 hectares (3 km2). One of these is on the motorway corridor of the M60 orbital link now under construction in Tameside. This is also one of the 29 'Strategic sites for business and industry' across the county (as in section 10.3): two more of these are also in Green Belt locations and on currently open land.

The Government's current trunk road programme is the largest single cause of destruction in many Green Belt areas in GM. The A6 bypass, Eastern relief road and North and West relief roads together add up to an outer orbital route. If the corridor of disruption of a major new route is assumed to average 500m width, including links and interchanges (which will themselves create new pressures), then the total area of disruption from the recent roads programme would be in the order of 30 km2 , or 5% of the total Green Belt area. Recent studies of areas of 'tranquillity' in England assume a corridor of disturbance 3 km each side of a major motorway: on this basis there is 4000 hectares at the most of 'undisturbed' land in GM, or less than 3% of the total area ( ). This measure is clearly a relative definition, and city dwellers are quite used to taking their

country walks with a background of distant traffic, but this also explains the urge to gain distance from the conurbation for those with the choice.

The disruption of roads has to be added to other developments such as water and power infrastructure, landfill and mineral sites, and many other uses. Hence there is a clear net loss in the quality if not the quantity of the Green Belt, which must be slowed if not halted, or balanced by reclamation elsewhere. At present it is clear to landowners - and speculative purchasers - that the spread of urbanisation is slow but remorseless. The impact this has on the agricultural economy on the fringe is profound.

The green belt nationally is the subject of continuing research: the government's recent guidance on green belts can be seen as a clarification of the various policy objectives, both negative and positive. Within this the onus is on local authorities to be clear on the nature of the local policies: where there is sufficient development land inside the envelope the green belt can be safeguarded, but where pressures build up then the long term stability of the designation can be undermined, with consequent land speculation, pressure for enabling development, and 'planning by appeal'. The difficulty arises where the situation is complex, there is no definitive assessment of urban capacity and longer term development need, and the policy is at odds with the market. Such may be the case in the complex poly-centric conurbation of GM.

Areas of landscape protection & improvement

Special landscape areas cover most of the green belt areas away from the urban edge. The policies are focused on landscape quality, amenity and aesthetic values, in contrast to those of the green belt. They seek to influence agricultural developments outside planning control, and they also have a commitment to encouraging diversification in the agricultural economy - two goals which are often in conflict. The use of landscape designations, in conjunction with Countryside Stewardship schemes and 'rural strategies' would help with the coordinated policies for diversification in these areas.
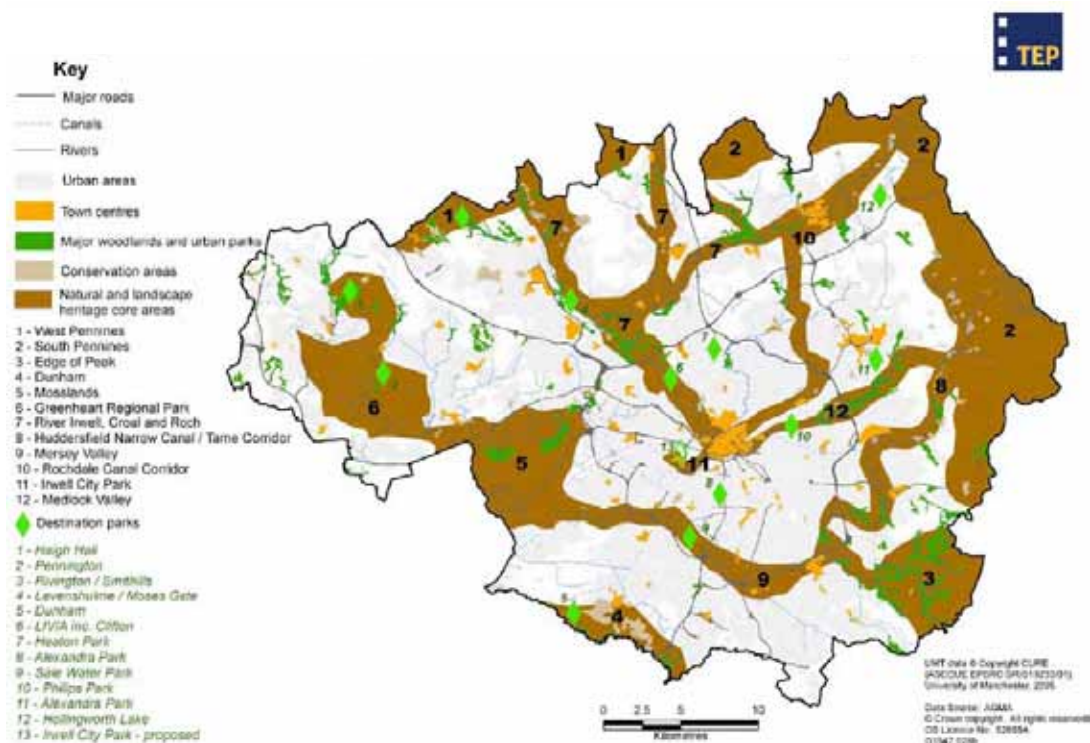
Areas of 'landscape improvement' are generally degraded and low quality landscapes. The designations cover the many river valleys, and also areas of landscape improvement in areas such as Trafford where large areas are degraded through adjacent industrial activity and power lines. The community forest has a large part to play in the regeneration of these areas, in using the trees to hide a multitude of sins.

The river valley programmes are one of the success stories in 1980's urban regeneration, although the full scale of the work has only just begun (Nicholson-Lord, 1987). They represent not only the clearance of major dereliction and contamination, but the forming of 'green wedges' penetrating towards the heart of the conurbation, so forming the basis for the strategic network of green corridors. In this purpose they are often hampered by the lack of access to the riverside, the crossing of major roads, and the general difficulty of investing in public access on private land. Many of the river valley areas contain prime development land, such as the 29 'strategic sites for business & industry'. There is a case for strengthening the role of wildlife and green corridors that pass through these future employment sites.

As discussed in 'green corridors', there is a case for strategic linking of these wedges with town and city centres wherever possible, to enable and encourage the movement of both humans and wildlife. This may require the opening up of river walls and culverts, and the building of waterside structures and bridges, and the forming of special road crossings, all of which are larger scale investment.

The strategy map for Green Infrastructure development is currently in consultation (Figure 5.5).

Figure 5.5: Green Infrastructure key diagram – (AGMA 10 area)
Source: TEP / Natural England 2008, based on mapping by CURE

5.3   Analysis of spatial strategy & governance

This section explores under the surface of the official policies, to look at the institutions, partnerships, discourses and agendas.

Institutional framework

Recent developments in UK spatial planning have highlighted an important transition (Healey, 1998: Rydin, 1994):
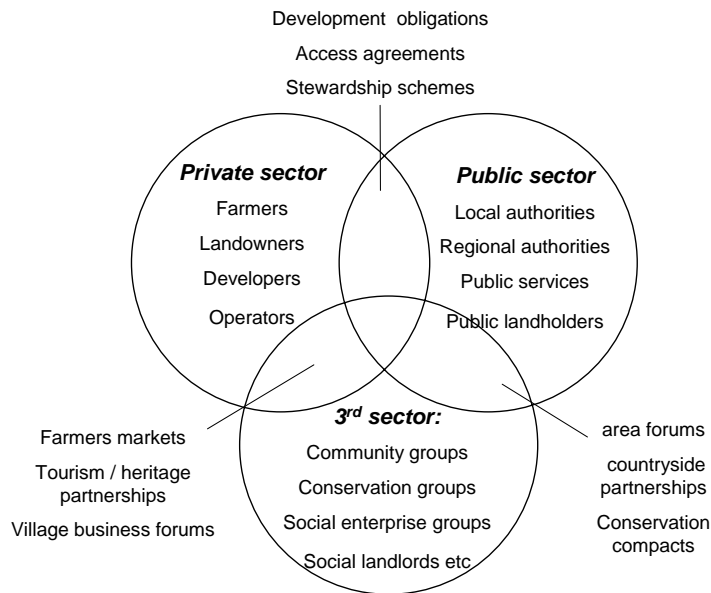
- Away from direct regulation, 'command and control' processes, and fixed zoning plans:
- Towards entrepreneurial style partnerships, spatial management of funding flows, using flexible frameworks rather than fixed zoning plans.

There are continuing debates about the success of this transition in progress. But there is a practical implication – that successful spatial planning looks at the institutional framework – the partnerships and relationships between different sectors. This is especially important in the urban fringe, often on the border line between different policy regimes, investment markets, and physical landscapes.

The chart below highlights the way in which policies in different sectors may be coordinated with needs and opportunities for different 'sustainability agendas'. Implementation of such policy coordination is often more effective through multi-agency partnership structures, and there is much experience of these in countryside management. In many of the best practice examples this is seen to be focused on the linkage and overlap between public, private and 'third' sectors. Such overlaps would combine the business skills of the private sector, the long term perspective of the public sector, and the social / environmental responsibility of the third sector. Examples can be seen in the diagram below (Figure 5.6)*:*

Figure 5.6: General relationships of sectors and partnerships
Source: based on Ravetz 2000

Development obligations

Access agreements

Stewardship schemes

Private sector

Farmers

Landowners

Developers

Operators

Public sector

Local authorities

Regional authorities

Public services

Public landholders

Farmers markets

Tourism / heritage partnerships

Village business forums

3rd sector:

Community groups

Conservation groups

Social enterprise groups

Social landlords etc.

area forums

countryside partnerships

Conservation compacts

Policy integration & project synergy

However such 'policy clusters' or 'action networks' in practice often constitute a series of free-standing initiatives. This tends to miss out on the potential added value of synergy, coordination and integration of different policies and programmes. Some examples: include:

- Potential for integration of countryside access with farm diversification.

- Potential for linking urban housing needs with local community participation.

- Potential for 'sustainable urban extensions' to link with 'sustainable landscape forms' and 'sustainable rural economies'.

- Policy integration: the case studies show the theme of 'policy coordination' across an authority, where the success is due to the potential for 'synergy', in other words where a successful action in one area or sector leads to and supports another, in a different area or sector; in other words, a 'chain' of initiatives, as in the previous section.

Each of these can be seen in the wide range of examples from the Manchester City-Region, which contains some unique innovations in peri-urban policy and management:

- Urban fringe planning policy & management experiments, including Bolling Valley, the first integrated scheme in the UK.
- Urban fringe partnerships & action bodies – the Mersey Basin Campaign and the Groundwork Trust are examples of international best practice.
- Current initiatives such as multi-functional community forests: eco-industrial parks: upland management schemes: inter-regional cycle routes: integrated river catchment management: 'sustainable urban extensions'.

The question is how to learn from these: how the success of such initiatives can be transferred to a wider scale, for a more integrated and sustainable economic-ecological pattern of development.

Table 5.7: Summary of initiatives & development models
Source: CURE 2003

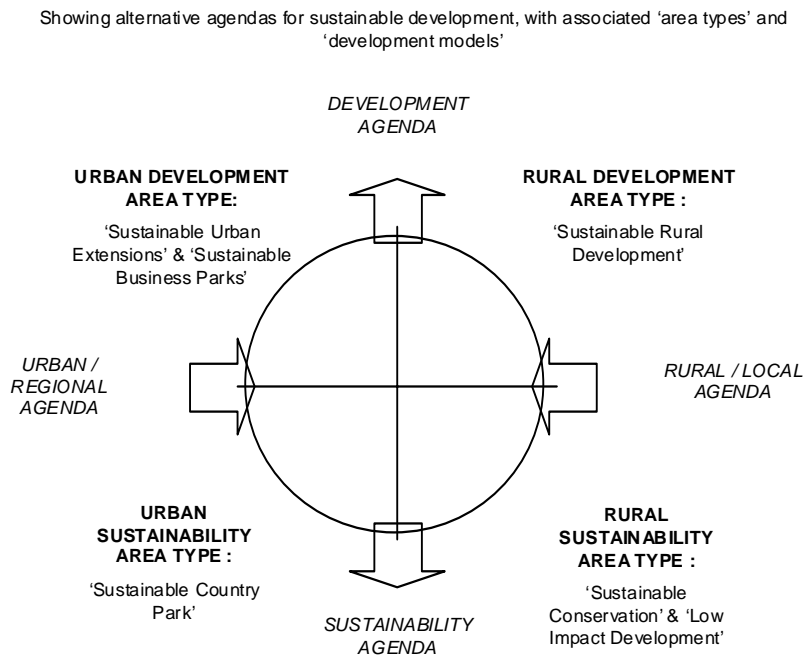|	*URBAN DEVELOPMENT*	*URBAN SUSTAINABILITY*	*RURAL DEVELOPMENT*	*RURAL SUSTAINABILITY*
KEY THEME				
Housing development	Demand / capacity appraisal: brownfield dev.	'Sustainable urban extensions': responsive Green Belt	Affordable housing: rural housing trusts: village design statements	Eco-housing: 'Low impact dev': 'eco-belt'
Industrial & commercial development	Brownfield dev: mixed use dev:	'Sustainable Business Park': landscape buffers	Local employment / training compacts:	
Transport & access	Highway eco-design: responsive public transport	Travel demand management:	Rural travel schemes:	Low-impact access: wildlife management
Utilities & infrastructure	Sub / regional infrastructure planning: utility regulation	Resources demand management:	Farm energy: local quarries: materials management:	Soft after uses & reclamation
Rural economy & communities	Poly-centric clustered dev: market town initiatives	Green belt diversification	'Sustainable rural economy': local produce: village appraisals: diversification:	Woodland / niche products: eco-tourism: eco-education
Agriculture & forestry	Regional / local farming / forestry economy	Community forests / urban woodlands	Farm diversification: forestry business	Organic / low impact farming: mixed woodlands
Landscape & ecology	River / catchment plan / urban forests	Landscape character / Country parks/ Wildlife protection / AONB	'Low impact development': Community trusts: Green tourism	'Sustainable conservation park': eco-restoration: wildlife corridors
Recreation, tourism & heritage	Green tourism: sports / leisure dev:	'Sustainable country park':	Green tourism: local access schemes	Wildlife management: green design: eco-corridors & networks

Sustainable development agendas

The table shows the linkage between each of the key themes above, and the different 'sustainable development agendas' which they can contribute to (Table 5.7). The aim is to provide a summary map of the opportunities for policy coordination: in other words, where policies and programmes can help to combine multiple objectives. These sustainable development agendas were defined by CURE (2003) as part of a larger city-region system or 'spatial ecology' (Figure 5.8):

- ***urban development agenda:*** an 'edge-city' perspective – this aims towards a zone of enterprise, innovation and quality of life in meeting the needs of urban areas
- ***urban sustainability agenda:*** a containment and regeneration perspective – aims at a managed zone via Green Belt and similar, to protect and enhance urban areas

- **rural development agenda:** a local policy perspective – aims at a zone of indigeneous development with policy and investment targeted at rural communities
- **rural sustainability agenda:** a environmental protection perspective – aims at a zone of landscape restoration, resource conservation and local produce.

Figure 5.8: Sustainable development agendas in the peri-urban area
Based on CURE, 2003

Showing alternative agendas for sustainable development, with associated 'area types' and 'development models'

The study also identified a set of strategic principles for landscape planning in urban fringe situations, including: urban-rural linkages, connectivity, hierarchy, and especially multi-functional land use. These principles can then be applied to a range of landscape characters and conditions, and the kind of responses which would be appropriate:

- High quality / good condition: **conservation:**
- High quality / poor condition: **restoration**:
- Low quality / good condition: **strengthening**:
- Low quality / poor condition: **rebuilding**.

Policy & governance analysis

In this section we explore some current examples with underlying themes, using a prototype matrix format to compare and analyse.

- To enable structured analysis within each city-region
- to compare and benchmark between the city-regions in a structured way.

We are not trying to fill every cell in every matrix – rather, to use the matrices in a flexible way but which provides structure for analysis. This is an early version of a section to be developed in future versions, based on the analytic matrices developed in Manchester November 2007.

To demonstrate the approach, this section takes the example of housing, which is generally recognized as the top priority policy agenda in the GM city-region peri-urban areas. In practice this of course is inter-linked with other issues.

Linking evidence to policy to discourse

Firstly there is a major issue for policy – how to link evidence, to policy, to 'discourse' (i.e. the underlying set of cognitive thinking and perceptions of various stakeholders) (Table 5.9).

This aims to show a wide range of 'knowledge dimensions' for each of the main issues:

- Direct data and indicators, where these are available
- Policies and strategies which directly respond to the issue
- Indirect factors, such as law, finance, institutions.
- Underlying structural discourses as discussed above.

Table 5.9 – Linking evidence to policy to discourse

	direct data / benchmarks	policies / strategies	indirect factors	underlying norms, values, discourses
policy agendas				
housing	• household growth 0.8% per year • new housing started: 0.4% of stock.	• urban housing policy • rural housing policy • urban fringe policy • Green Belt policy	• housing tax & finance system • social security benefits system • law on landlords etc	• 'Englishman's home is his castle – and pull up the drawbridge". • "Not In My Back Yard" • "Not in my term of office" • "Build Absolutely Nothing Anywhere Anyone"
transport	• private transport growth 1.2% per year • commercial road traffic 2% per year • air travel 3%	• regional & local transport strategy • GM public transport authority • Aviation growth	• Price & tax structure of transport modes. • Integrated transport challenges.	• Freedom to drive • "buses are for losers" •
tourism & leisure	• countryside visitor trends:	• regional tourism & destination strategies • Countryside & Rights Of Way policy • Urban fringe partnerships	• Personal mobility & leisure trends • Overloading of 'honeypots' • Competition with overseas travel	• Who does the landscape belong to? • Tourism as creative destruction
agriculture	• agriculture regional productivity trend:	• Sustainable food & farming strategy • CAP reform & Stewardship schemes	• Industrialization of food supply chains & quality standards • Cheap food imports • 'Horsiculture' and land abandonment	• 'Eat the view' • Farmers – landscape stewards or destroyers? • "a third of UK kids are fat"
biodiversity	• biodiversity quality index: • site protection trends:	• biodiversity strategy • Special Landscape Areas •	• Ecological connectivity • Inter-species co-existence & multi-functional landuse.	• Suburban gardens as eco-habitats
water management	• flood vulnerability:	• Integrated catchment management • Upland stewardship program by utilities. • Sustainable Urban Drainage policy	• Finance & asset structure of utility companies. • Fragmented institutions for drainage & flood management.	• 'Dilute and disperse' approach to water treatment. • Drinking water standard for all uses.

Governance matrix

Further to that we can explore the different levels of governance: from specific physical issues, to technical analysis, to the underlying discourse of governance (Table 5.10).

Table 5.10 – Alternative levels of governance

	Economic	Political	Institutional	Cultural	informational
SOCIAL / POLITIC LEVEL – discourses etc	'private ownership & property values discourse'	housing 'strategy' discourse	fragmentation of housing supply sectors.	'the great housing debate'	Web use in house & neighbourhood search.
TECHNICAL LEVEL – plans, projects etc	housing funding allocation	housing 'strategy' document	housing tenures and allocation plan	perceived housing location quality	plan evaluation
PHYSICAL LEVEL – land use, infrastructure	local house prices & market	Green Belt policy	development industry & public-private parterships.	local campaign groups	monitoring of landuse change

Stakeholder matrix

This shows some of the detail on the types and levels of stakeholders involved in the housing sector (Table 5.11).

Table 5.11: Analysis of stakeholders

	PUBLIC AUTHORITY	PUBLIC / PRIVATE	BUSINESS	SOCIAL ENTERPRISE	CIVIL SOCIETY	COMBINATION	
	public sector	**public / private**	**private sector**	**private / third**	**third sector**	**third / public**	
EU – international	Directives on energy & climate						
national level	'English Partnerships' agency		large contractors	House Builders Federation		National Housing Forum etc.	
regional level	regional planning	public/ private partnership		regional offices: NW Centre Innovation	large NGOs – National Trust etc.		
city-regional level	city-region joint housing plan	various development partnerships	house builders			institutional landowners – education, health etc	
municipality level	District housing dept		private landlords	Social landlords	district lobby groups	Social landlords	
local / neighbourhood level	Area housing offices		local property agents	housing cooperatives	local residents associations	local area partnership	

Cause-effect matrix

Another perspective is the linkage between the perceived 'headline issues' and underlying forces, the 4 'sustainability agendas', and the many possible responses and solutions. This chain of links include the drivers of development, the pressures they exert on the countryside, the state of the countryside, the impacts caused by fringe development, and the appropriate responses, policies, programmes, design solutions and methods. The European Environment Agency's 'DPSIR' framework for environmental indicators ('driving forces, pressure, state, impacts and response'), is a useful way to organise at least some of the material (Table 5.12).

Table 5.12 – Cause-effect-response policy analysis

DPSIR	driving forces	pressures	states & trends	impacts & externalities	responses	
land use						
housing	population growth	housing demand	price rises and shortages	peri-urban sprawl	green belt policy	
	affluence & status	density, garden space	suburban development	peri-urban sprawl	social housing	
	etc…					

Within this framework, a mapping of 'policy initiatives' shows the range of current programmes in the context of their objectives and outcomes (Figure 5.13)

Figure 5.13: linking issues to policy responses
Based on CURE 2003

Such a framework can help to unravel the complexity of practical examples. For instance, the problem of economic development which results in urban fringe pollution, might be tackled through one or more of the sustainable development 'agendas': these lead to policy approaches for reclamation and access, with practical initiatives in countryside partnerships, and spin-off benefits for urban greenspace. At each stage of this process, effective solutions are likely to be the 'win-win' initiatives which serve multiple agendas, and for each stage several kinds of methods and tools may be useful.

6.   Conclusions

This section draws out the main lessons from this first baseline report. It points the way towards the next steps for the case study, and towards applications in other Modules of the PLUREL project.

Summary of the baseline

The Manchester city-region is a rapidly changing conurbation, with a complex geography of peri-urban, hinterland and rural-urban areas:

- There are great social and economic disparities within these peri-urban and rural-urban areas;
- Physical expansion of the urban area is limited, on the whole, by spatial planning policy;
- There are continuing trends of land use change, from agricultural to other uses, and from derelict land to urban green space.
- The governance of the city-region is fragmented at many levels, and there is no single definition of the city-region in context.

Behind these effects, there are powerful processes of socio-economic change:

- The main effect is the continuing process of 'metropol-ization' of former rural communities – a transition of economic activities, social types and spatial patterns of work and lifestyle;
- This can be seen as driven by the global influences and networks of 'cultural capitalism' – a transition which is based not only on new economic functions, but on a cognitive agenda – new social and cultural lifestyles, attitudes and perceptions.
- The main implication for the PLUREL agenda is to look again at the 'spatial ecology' of landuses and landuse relationships around the city-region.
- In an age of mobility and networking, the city-region Green Infrastructure is one of the main ways to re-localize and spatialize all communities within a common landscape.

In terms of governance and spatial strategy:

- Spatial strategy and planning in the UK is relatively mature, but still faces the challenges of policy integration, public participation.
- In particular there is much over-reliance on spatial planning, as means to counter the inequalities and polarizing effects of a de-regulation-focused liberal market democracy.
- To counter this, Manchester has seen some of the most pioneering experiments in the UK, in urban fringe and peri-urban policy and management;
- There is great potential for the future, being pursued by initiatives such as the Pennine Prospects and the Community Forest organizations.

Implications for next steps

This baseline review then provides guidance for the next steps in the case study programme:

a) Policy evaluation stage: this focuses on particular policies, strategies or programmes, and asks questions about their performance.

- So far the baseline evidence suggests that few policies can be really evaluated on their own terms – they need to be seen in context of the wider city-region, the spillovers and external effects, the risks and the opportunities.
- For instance the conventional Green Belt policy has external effects for the conurbation and wider rural areas: even while its effects on the green belt land area may be quite negative.

b) Scenario development stage: this is a structured exploration of the future possibilities for the peri-urban city-region, using as a starting point the EU level scenarios developed for PLUREL.

- The level of future studies techniques in the region is focused on economic development and housing demand
- Other issues such as spatial development, lifestyles and aspirations, and alternative modes of government, are there to be developed.

Applications to PLUREL

This case study is a very interesting mix, and should provide relevant material for other parts of the project. However the complexity of the Manchester situation contrasts with some of the more extreme case studies in PLUREL, e.g. of rapid urban growth. Here the agenda might be more subtle and focused on the underlying forces, as set out above.

- Module 2 – this could look at the spatial geography of Northern England as an example of post-industrial urbanization. The spatial governance systems are likewise relatively mature, but still have aspirations which seem to be difficult to achieve. This points to underlying structural challenges in spatial governance.
- Module 4 – the Agent Based Model system is under development in Manchester case study
- Module 4 – economic and social functions – the Manchester experience can provide much material to help develop this analysis.
- Module 5 – Manchester's recent experiments in interactive sustainability assessment could help to inform the development of the SIAT tool.

7. Annex

7.1 References

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7.2   Abbreviations

AONB   Area Of Outstanding Natural Beauty
CAP   Common Agricultural Policy of the EU
CAT   'countryside around towns'
CPRE   Campaign for the Protection of Rural England
DEFRA   Department of Environment, Food and Rural Affairs
DTI   Department of Trade and Industry
ERDF   European Regional Development Fund
EU   European Union
GDP   gross domestic product (total of economic activity)
GIS   geographical information systems
GLA   Greater London Authority
ICT   information & communication technologies
LB   London Borough
LDF   Local Development Frameworks
LEAP   Local Environmental Action Plan
ODPM   Office of the Deputy Prime Minister (as of June 2002)
ONS   Office of National Statistics
PPS   Planning Policy Statement of national policy
RDA   Regional Development Agency
RPG   Regional Planning Guidance
RSS   (forthcoming) Regional Spatial Strategies
RTPI   Royal Town Planning Institute
RVI   River Valley Initiative
S.106   Section 106 of the 1990 Town & Country Planning Act
SSSI   Site of Special Scientific Interest
SUDCAT   'sustainable development of the countryside around towns'
SUE   'sustainable urban extension'
TCPA   Town & Country Planning Association
TSO   The Stationery Office
UDP   Unitary Development Plan

7.3   Case study method

The method which is emerging in Manchester, looks at the trends and dynamics, alternative future scenarios, and the risks and opportunities in the peri-urban city-region. This needs both technical analysis and engagement with stakeholders.

The underlying paradigm is that of the peri-urban agenda as part of the larger complex system of the whole city-region, one which adapts and evolves in response to pressures and opportunities.

Generally we aim to look at the large and complex Manchester city-region with a series of cross-sections. This is spread rather thinly over a very broad agenda, but we see this as the only way to deal with the whole system, rather than a few of its parts. While this cannot aim to provide a complete picture, it should be a first stage which points towards the priorities for further research.

Key 'transitions' and research questions

We see the peri-urban areas as integral with the wider city-region systems of which they are a part. This is itself in the middle of rapid structural changes or 'transitions'. We can define these in three parallel strands:

Metropol-ization:

This describes an 'urban transition' which is diffused and networked across wider peri-urban and rural areas.

Research questions:

- What are the physical transitions (housing development and transport), in the peri-urban areas?
- What are the socio-economic urban transitions (employment and social types), in the peri-urban area?

Cultural capitalism:

This describes a 'globalizing transition' as a process of restructuring, of economic and social activities, patterns and divisions:

Research questions:

- What are the new economic and social configurations which are emerging in the peri-urban areas?
- What are the stakeholders attitudes and perceptions of these ?

Spatial ecology:

This new term describes the 'green infrastructure' transition – a way of framing the inter-dependency of different components and functions which are located in space across the city-region.

Research questions:

- What is the physical state of the green infrastructure? and
- What are the economic and social dimensions of this?

Governance and policy integration

This theme explores the 'responses' to the challenges of the transitions above. Research questions include:

- What are the policy responses, current and potential, to the above challenges?
- What are the structures and processes of governance which are needed?

- What are the most interesting creative schemes, initiatives and projects?

Perspectives in time and space

The trend and baseline data is the starting point. Then we look at forward projections and alternative scenarios, up to a horizon of 40 years. This adapts the PLUREL scenario framework and modeling results, to the issues which are most significant in the Manchester city-region.

There are also distinct spatial relationship issues to be looked at:

- From the regional level of spatial development – what are the impacts and outcomes on peri-urban areas?
- From the local level of spatial development – what is the scope for indigenous development (physical, economic or social) in peri-urban areas?
- What are the main types of linkages or relationships, between urban centres and peri-urban areas?

Key policy agendas

On the ground we find that policy agendas come up through stakeholder experiences, as inter-connected chains of problems and solutions. (This is not to say that policy is fully integrated, but rather the opposite). We follow in more detail, three key agendas:

- Housing development, communities, lifestyles
- Employment, economic development, infrastructure
- Environment, local quality and green infrastructure

Case study programme

- A programme of semi-structured interviews in each case study area.
- The first theme (2008) is on *current trends & policies*.
- The second theme (2009) is on *future scenarios & opportunities*.
- There is an annual stakeholder workshop, to present the results, share best practices, and build European links.
- The study uses a variety of methods: policy analysis: technical analysis: and a parallel 'evocative' project with creative and media students.
- In mid 2010 the results will be brought together and presented to the PLUREL international scientific meeting, to be held in Manchester.

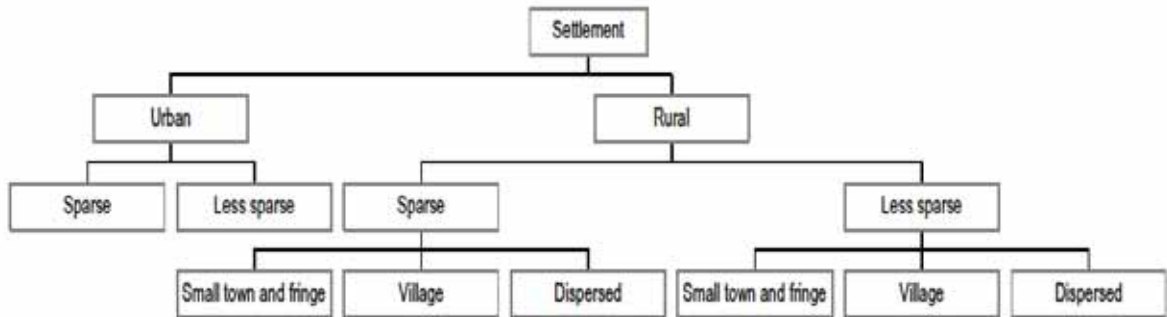## 7.4   *Notes on classification of peri-urban areas.*

IN the UK this methodology based on the new DEFRA urban-rural classification, with a morphology approach to residential household addresses, as SOA or ward level (Figure 7.1).

The basis of the methodology is the concept of density profile at each 1 hectare grid cell, i.e. a function of density at different radii surrounding that cell. This enables the distinction between for instance, farmland surrounded by urban areas, and a market town surrounding by remote rural areas. This morphology approach can also be extended to a 'functional / economic' approach, using farming and business statistics to define 'rural' economic areas. (Bibby, P. & Shepherd, J. (2004) *Developing a New Classification of Urban and Rural Areas for Policy Purposes: the Methodology,* London, DEFRA

This suggests the possibility of further analysis of peri-urban fringe areas, i.e. indexing the existing datasets against the ward level matrix of morphology types.

Figure 7.1: Classification of rural-urban density types
Bibby, P. & Shepherd, J. (2004)

Table 7.2: Average residential density at different profiles for urban-rural types.

Settlement Form	Density of Residential Delivery (mean) Points			
	At 200m	At 400m	At 800m	At 1600m
Small town	8.23	8.99	8.29	5.59
Fringe (urban, town)	6.46	7.21	5.90	4.68
Village	3.81	2.28	0.83	0.58
Peri-urban	0.30	0.59	1.57	2.80
Village envelope	0.94	1.15	1.31	0.59
Village (in peri-urban) envelope	2.96	3.27	1.81	2.13
Hamlet	0.65	0.21	0.13	0.20
Scattered dwellings	0.39	0.17	0.15	0.23
Urban (above 10k) Areas	16.09	15.17	13.78	11.89

7.3   New directions: cultural capitalism

*This section contributed by
Sally Randles*

This section is an exploration of 'structural' issues in the peri-urban area, from a cognitive-cultural-capitalist perspective, as identified in the writings of Allen Scott (Scott, Allen (2006) Creative Cities: Conceptual Issues and Policy Questions, *Journal of Urban affairs*, Vol 28, Number 1, pp1-17).

Scott is concerned with the nature and significance of 'creative cities'. The context is Florida's (2002) exposition of *the creative class* as giving renewed impetus (and an injection of novelty) to Urban Studies academic debates. This is coupled with intense and optimistic attention from policy makers attuned to the possibilities of developing their cities 'into' or promoting features of 'their' cities consistent with the creative cities thesis as a vehicle for economic development and competitive advantage. He argues there is an urgent need to clarify the debate, in particular to get below superficial or unhelpfully simplified accounts of the constitution of the creative city – which is much more than a micro-economy of the creative 'sector'. In particular, Scott is concerned to connect the distinctive features of the 'new economy' (in terms of technologies, structures and features of production and labour markets and locational agglomeration) with the distinctive features of economic and cultural innovation in modern cities. He places this in the context of globalisation and the prospective emergence of a worldwide network of creative cities bound together in relations of competition and co-operation. He seeks to analyse the interactions between urbanisation and creativity. He considers the opportunities and limits for policy involvement in the purposeful construction or enhancement of the creative city, but notes in conclusion some of the 'darker' dimensions, actual and potential, of creative cities.

He has three goals:

1) To describe the 'new economy' as a specific contemporary form of capitalism. However since each successive round of capitalism (factory, fordist, post-fordist) brought its own tendencies to construct and transform urban space, each entrained its own distinctive and historically specific manifestation of 'creativity', the question is not how is the 'creative city' different to the 'uncreative city', rather what (in fine grained detail) is distinctive about the 'new' creative city?

2) To assess what policy makers can realistically seek to achieve in the search for enhanced urban creativity and economic development. How do the competitive advantages (including capacities for creativity) emerge, and how might they be enhanced by public action?

3) To situate the discussion within the context of globalisation, showing how creative cities function increasingly within a worldwide system of economic competition and co-operation.

What are the distinctive features of the 'Creative City'

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Scott prefers the term 'Cognitive-cultural capitalism'. First because though the phenomena we are interested in take form within urban space, and because locational proximity and agglomeration is an important feature of the working mechanisms of ccc, he argues that ccc simply takes shape within the city. Hence the analysis begins much more broadly with an analysis of the distinctive features of capitalist reproduction and labour markets under ccc, highlighting why the city is a privileged site for its development, rather than an analysis which is exclusive to the city per se. Attention therefore shifts to the ccc as a specific integrated form of capital reproduction, which emphasises particular forms of material and cultural production, involving distinctive human cognitive capability coupled with requisite forms of behaviour and social relations. These have implications for the tasks people do and the new structures and patterns of work they engage in to compete and survive within new structures of working practice and labour markets.

Main features of ccc include:

1) Concentrations of digital and media technologies
2) High levels of scientific and technical labour
3) Human intermediation of services (including emotive, social and behavioural skills)
4) Symbolic outputs (new artisanal, fashion, music, theatre, leisure)
5) Aestheticisation of commodities (radical de-standardisation of production 'project orientated society' increasing penetration and symbolic importance of the cultural and visual)

Driving Forces from the Production side:

1) Production occurs in extended networks, dominated in many cases by large corporate entities but also incorporating a proliferation of small firms 'cottage industries' operating in the manner of 'flexible specialisation'.
2) Destandardised forms of production (customised and commissioned to a client specification, project based).
3) Increasing returns to scale in the agglomeration
4) Networks of specialised but complementary products
5) Monopoly powers of place, because production is mediated into places (eg Hollywood films, silicon valley semi conductors). Image is recycled into the product. Branding and commodification *eg Manchester United.*

Local Labour market features:

Here we are concerned with the people, their ways of working and the types of tasks they do:
(moves away from a focus on 'efficiency', or 'productivity' rather, effectiveness in working within certain patterns and practices):

1) New liberal entrepreneurial techno-managers
2) Innovation-oriented production (the design –spec of the output is constantly changing, the client has power).
3) Task and project based working, co-ordinated through teams.
4) Privileging provision of information services
5) Naturalisation of socially useful ideologies (in education and media institutions)
6) Managerial discourse: flexibility and speed, 'fast capitalism' (Thrift). Extensive use of work practices : part time, freelance, temporary , insecure, precarious. Continuous and extensive personal investment in networking as defence against rapid job turnover and insecurity in local labour markets.
7) Rewards human capital which is adaptable, able to show empathy, creativity, advanced social skills, ability to 'socialise'(needed for networking)

8) Intelligentsia – cum- technocracy composed of individuals whose interactions are based on a sort of critical rationality governing their practical engagement in work and life
9) There exists an 'upper stratum' of mobile knowledge workers, a 'creative class' (Florida 2002).

These come into concrete expression in the city,

6) Privileges certain sectors; high technology; neo-artisanal manufacturing; business and financial services; cultural products and media;
7) Strategic competition and collaboration.
8) Concentrations of cultural amenities (museums, art galleries, concert halls, entertainment districts, festivals, street theatre) and associated cultural workers.
9) Up-scale, boutique & restaurant, street-scapes.
10) A new equilibrium between work and leisure, co-located (work, play, live within local space).
11) Iconic architecture and attention to aesthetics of built environment.

The city is no-longer hostile or incompatible with the idea of human welfare and happiness for city-residents and workers (cf factory system, fordist system).

Globalisation and City-competition

He argues that creative cities are differentiated cities. The creative city is contrary to the 'universal city', and moves away from the critique of cities as becoming uniform spaces of culture and human experience. Rather creative cities highlight and create competitive advantage around the creation of unique symbolic imagery and imaginations. The unique position becomes self-reinforcing and creates advantage in the form of recursive non-substitutability. Differentiation is further re-enforced through the production, reproduction and embedding of image/city-identity into the products of the city (eg specialist and differentiated fashion items from London, Paris, Milan). Marketed and replayed through media re-enforces (or creates) city differentiation. City-branding eg *Manchester United*.

(Query, How far is this countered by spread of the High Street Store? Fast-food outlets etc.)

Policy Implications:

Given city idiosyncrasies and specific history/place no 'one size fits all' listing of policy recommendations, need to reflexively adapt to individual cases.

Nevertheless, tasks for policy makers revolve around attractiveness of urban space and life. In terms of supporting local production systems tasks revolve around interpreting and assisting firms and individuals where production is taken as flexible specialisation of differentiated products within network configurations; training and development of labour to survive/thrive in these conditions; and encouragement of local learning and innovation in all forms. Local agencies involved in the 'collective commons' can provide critical services, training, and technological/business advice to suit these conditions. Urban planners have a role in fostering urban synergies, designing transport and civic infrastructures, and designing appropriate features built environment, as well as ameliorating bottlenecks as cities continually evolve.

BUT, beware the tempting but elusive vision of cities marching together towards some sort policy-prescribed creative utopia.

The 'darker side"

Many negative features remain stubbornly connected to the Urban experience, and in some instances the creative city exaggerates and accentuates these. Countervailing trends generating massive numbers of unstable low-wage jobs with concomitant social marginalisation will continue to impact unevenly on the already urban poor. Disconnects between the manufactured images of the creative city with its distinctive brands, and the real lived experiences of many creates a source of tension. The beneficiaries of the production-labour-culture nexus of the creative city may inhabit islands of privilege, around and outside of which poverty and social deprivation widely prevail. The formulation of specific policies to ameliorate the conditions of those excluded from islands of privilege, to extend the boundaries of the creative city to increase its reach, and to draw the less advantaged into its bounded enclaves through education, training and other measures must be a high priority.

Networks of Creative Cities in a Globalised world

There are clearly possibilities for temporary fixing of a city as a differentiated node within a global network of competing and collaborating creative city spaces. But this is never a certain or static situation. Counterveiling tendencies to agglomeration, featuring dispersion and de-concentration facilitated by communication technologies, the growth of highly qualified knowledge workers (available at low cost) in 'competing' cities across the world, the growth of international travel, and increasingly distributed/outsourced commercial activities from research and development to manufacturing means that all cities, even those labelled or aspiring to attribute the label 'creative city' experience a 'complex of cross-currents' that are involved and difficult to assess in terms of a single overall impact, or indeed impacts that stand still for long.

The articulation between the 'creative city' and the 'city-region'

It is not within the remit of the Scott paper to think about how the 'creative city' relates to the 'city-region'. Indeed questions about the spatial 'scope' and 'scale' of the creative city are not entered into. However this is clearly an important question for the UK policy with its new policy emphasis on the city-region scale. It is also of interest to MKC which operates at the city-region scale. Scott's discussion around islands of privilege, and a new urban equilibrium where people live, work, and pursue leisure activities within an evermore localised space suggests a *self-reinforcing localisation dynamic* within the creative-city thesis. It would suggest that the creative-city is one where prime activities become increasingly concentrated on and within an *urban core*, or perhaps brings into being a series of islands in and around an urban core.

Clarifying the scope and scale of the 'creative city', theoretically and empirically, is a research task worthy of attention. Illumination through city case studies would also be helpful.

In the case of Manchester, we have very little basis for understanding how the 'creative city' and the 'city-region' might relate to each other and this could be usefully clarified through research.. For Manchester Knowledge Capital and other Manchester agencies sitting at the city-region scale, a number of dynamics linking the creative city to the city region may exist (or not). They are:

a) *Limited interaction*. This suggests an absence of connections between the creative city and the city-region.

b) A *hinterland* model. This suggests the creative city is integrated with its wider conurbation through people-movements and firm-movements which link people from the periphery to the cultural, work, and business opportunities of the creative city. This is essentially a traditional commuting pattern reliant in large part on an effective transport system. It would also involve widespread marketing of the components (particularly cultural components) of the creative-city across the city-region.

c) A *multi-nodal* model. This envisions the development of secondary 'creative satellites', circling the centrally concentrated core. Satellites might be expected to exhibit a degree of autonomy and symbolic differentiation, whilst benefiting from the synergies and spillovers of the core.

d) *Hinterland-nodal model*. We might witness both hinterland and nodal dynamics operating simultaneously. A competitive-collaborative mix of relations may well exist in an 'up-scaled' creative city. However given the production, labour and cultural-symbolic features of the cognitive – cultural form of 'new' economy described by Scott with its emphasis on strong localising tendencies, it could be that such 'upscaling' is not compatible with the spatial structures and organising principles of the creative city.

7.4   New directions - spatial ecology

This section is a personal observation by Joe Ravetz, to be developed further.

This section follows the cognitive cultural capitalism perspective with its local application. This can be framed as – ***'spatial ecology'***, or the inter-dependence of actors, functions and place attributes within a city-region system.

As the context for this, a 'structural agenda' looks wider and more deeply into the dynamics of socio-economic change, urban development, land use and institutional property etc.

	Structural agenda	Manchester city-region
	structural 'metropolitization' as globalized dynamic phenomenon	expanding labour market & service catchment, enabled by road transport &

		encouraged by ICT & air travel
	peri-urban land use as zones of chaotic & creative experiments, urban residues etc	business parks: retail parks: utility infrastructure etc
	peri-urban land use as class competition for territory & control	historic country estates: public housing on periphery: new gated commuter developments:
	peri-urban land use as zone of capital accumulation in the circuit of urban property investment	property values with / without planning permission: strategic institutional landholdings.
	peri-urban land use as city dominance over rural interests	
	peri-urban development as re-invention of new socio-economic-cultural roles & agendas in obsolescent areas	urban fringe experiments: community forests: integrated catchment management: peri-urban revitalization: green tourism.
	peri-urban economies as creative destruction of obsolescent activities	declining town & village centres, shops & services, centralized by cost-efficiency
	peri-urban community initiatives as new social movements, socio-cultural enterprise etc.	community forests, urban fringe allotments, other multi-functional uses.
	etc	

Exploring spatial ecology

The pattern and dynamic of urbanization is crucial to the 21st century. It is also an active research theme for the EU. Some over-arching spatial themes have come to the fore:

- peri-urbanization – the physical transformation of landuses and activities over wider areas
- metropolitan-ization – the social / economic / cultural transformation over wider areas
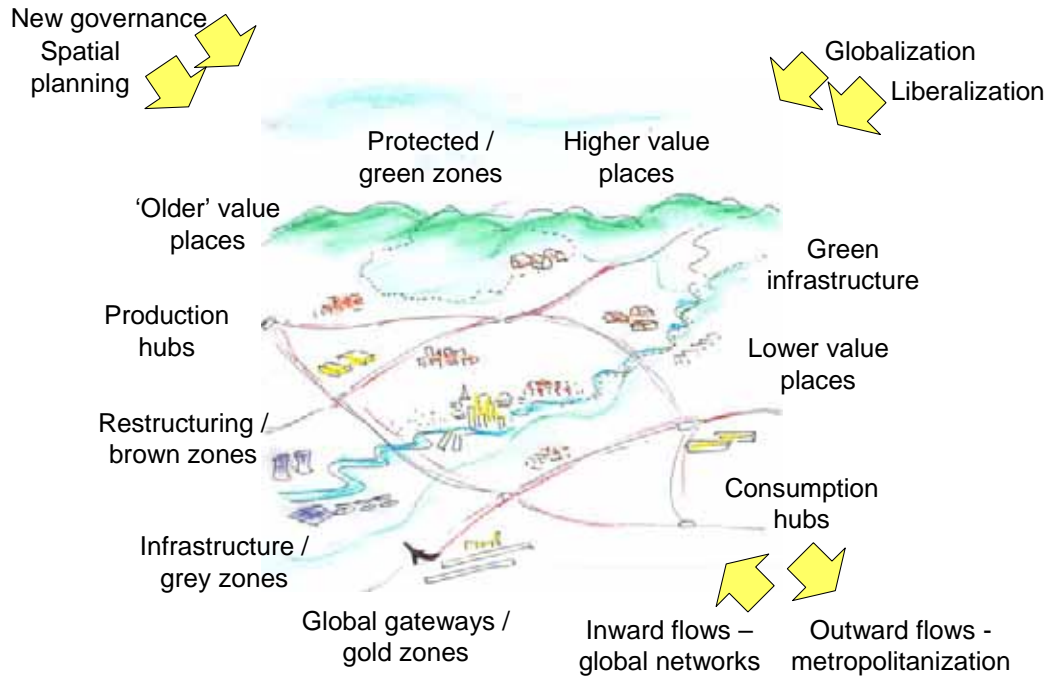
Following this through, we can envisage the concept of a 'spatial ecology', applied to cities and regions:

- Spatial inter-dependence of different settlement types across a city-region
- Spatial dimensions of economic / social systems and their sustainable development.
- Spatial governance processes and citizenship trends in the context of inter-dependence.

The first graphic below shows the spatial dimension of 'places' i.e. spatial concentrations of high or low value, fast or slow change, hubs or gateways, sinks or resources etc.

Figure 7.3: Spatial ecology of land-use relationships

Spatial ecology of places

The second graphic overlays on this to illustrate a range of themes which emerge from the spatial ecology of places. The Manchester city-region case study shows the whole range of issues, from physical land-use to critical perspectives on 'cognitive cultural capitalism'. For example the table here shows some of the more structural dimensions and conflicts in the peri-urban agenda.

This is an example of the kind of inter-disciplinary and synergistic thinking which is at the heart of the 'spatial ecology' approach. We find that the agenda for peri-urbanization / metropolitan-ization is by definition multi-level, multi-lateral and multi-disciplinary, dealing with complex adaptive systems. It follows that an effective mode of research needs to respond to this, and the door is open for further experimentation.

Figure 7.4: Spatial ecology themes in public discourses

Spatial ecology themes

New governance
Spatial planning

Globalization
Liberalization

Protected / green zones

Higher value places

'Older' value places

Ecological planning & climate change

Green infrastructure

Heritage & local identify

Production hubs

Social equity & public services

er value

Restructuring & regeneration

Sustainable consumption & leisure

Restructuring / brown zones

Competitiveness & innovation

Sustainable utilities & infrastructure

Consumption hubs

Infrastructure / grey zones

Inter-regional & global networks

Global gateways / gold zones

Inward flows – global networks

Outward flows - metropolitanization