

DEVELOPING SUSTAINABLE COMMUNITIES: COMPARATIVE CASE STUDY FROM NORTH WEST OF ENGLAND

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Abstract. As part of sustainable development strategy and to tackle negative aspects of post industrial cities, the UK government has launched the Sustainable Communities Plan, accompanied by regional action plans, which major objective was to implement regeneration projects aiming to create sustainable communities. This paper aims to analyse the present agenda for sustainable communities and to establish how this has filtered down through the local authorities of Knowsley MBC and Halton Borough Council to the communities of Stockbridge Village (SV), Murdishaw (M) and Halton Brook (HB), which are the most deprived post industrial areas in the North West of England. The investigation was carried out into the economic, social, physical and environmental impacts on the sustainable agenda using national published statistics and reports for HB, M and SV. Study findings propose objectives that need to be addressed when implementing further urban regeneration programme.

Keywords: sustainability, community, development, North West, England.

1. Introduction

General Assembly of United Nations has raised the sustainable development issues a while ago. In 1992, nearly 180 countries met at the UN Conference on Environment and Development (Earth Summit) in Rio de Janeiro to discuss how to achieve sustainable development. There has been agreed a plan of action, *Agenda 21*, with recommendation that all countries should produce national sustainable development strategies. The United Kingdom was one of the first to publish an Environment White Paper in 1990 (HMG 1990). The focus on environmental sustainability was continued with the publication of the first Sustainable Development Strategy in the UK (HMG 1994) and revised Strategy published in 1999 (DETR 1999). In preparing this Strategy, the Government has built on the achievements of the 1994 strategy, to which a new approach was added with emphasis on the social dimension of sustainable development alongside economic issues, the environment and resource use (DETR 1998).

Sustainable development requires international co-operation on matters such as trade, the relief of global

poverty, and environmental problems. For the UK, the European Union has been especially influential. Therefore, *Towards Sustainability*, the fifth Environmental Action Programme of the EU, was adopted in 1992 (CEC 1992). Finally, many of the policies in the 1999 Strategy have been shaped by EU decisions, e.g. single European market and environmental policy.

In the Government issued report “A Better Quality of Life” (DETR 1999), there are identified four crucial aims for sustainable development: “social progress which recognises the needs of everyone; effective protection of the environment; the prudent use of natural resources; and the maintenance of high and stable levels of economic growth and employment”. The agenda and policy is shaped by Planning Policy Statements, and White Papers. There are set seven priorities for the future sustainable development (Table 1).

Planning Policy Statements explain sustainable development with particular emphasis on the planning system, housing, waste management, renewable energy and etc (DCLG 2004; 2005a,b; 2006a). For the planning system six objectives are recognised as key components that need to be addressed (Table 2).

Table 1. The sustainable development in the UK (DETR 1999)

Priorities for sustainable development	
1.	More investment in people and equipment for a competitive economy
2.	Reducing the level of social exclusion
3.	Promoting a transport system which provides choice, and also minimises environmental harm and reduces congestion
4.	Improving the larger towns and cities to make them better places to live and work
5.	Directing development and promoting agricultural practices to protect and enhance the countryside and wildlife
6.	Improving energy efficiency and tackling waste
7.	Working with others to achieve sustainable development internationally

For housing, Planning Policy Statements provide that LPA should encourage applicants to bring forward sustainable and environmentally friendly new housing developments (DCLG 2006a). When developing and assessing housing provision, LPA should carry out a sustainability appraisal of the environmental, social and economic implications, including costs, benefits and risks of development.

Table 2. The planning system with focus on sustainable development

Objectives for the planning system	
1.	Development plans should ensure that sustainable development is pursued in an integrated manor, in line with the principles for sustainable development set out in the UK strategy
2.	Regional planning bodies and local planning authorities (LPA) should ensure that development plans contribute to global sustainability by addressing the causes and potential impacts of climate change
3.	A spatial planning approach should be at the heart of planning for sustainable development
4.	Planning policies should promote high quality and inclusive design in the layout of new development and individual buildings in terms of function and impact
5.	Development plans should contain clear, comprehensive and inclusive access policies – in terms of location and external physical access
6.	In developing the vision for their areas, planning authorities should ensure that communities are able to contribute to ideas about how that vision can be achieved

Urban design connects directly to the economic, political, social and cultural processes which structure social life (Cuthbert 2007). Urban regeneration in UK government ‘umbrella’ programme and Sustainable Communities Plan is one of the major issues addressed in creating sustainable communities. Series of initiatives involves the physical regeneration of urban infrastructure and the creation of new towns. Urban regeneration through the offering affordable housing is a fundamental contribution to the creating sustainable (DCLG 2006a; Maliene *et al.* 2008a; Mulliner and Maliene 2011) and healthy communities (Medickiene *et al.* 2010; Mitkus and Šostak 2009; Prochorskaine and Maliene 2011).

With regards to the sustainable waste management, sustainable development objectives are listed in Table 3 (DCLG 2005b).

Table 3. Waste management with focus on sustainable development

Objectives for the sustainable waste management	
1.	Making communities more responsible for their own waste
2.	Driving waste management up the waste hierarchy, addressing waste as a resource
3.	Helping implement national waste strategy
4.	Helping secure recovery or disposal of waste, without endangering human health
5.	Reflecting on the concerns of the community; protection of greenbelt
6.	Ensuring new development supports sustainable waste management

Planning Policy Statements provide great emphasis on the development of sustainable policies with regard to renewable energy. Here is declared that increased development of renewable energy is vital to facilitating the delivery of the Government’s commitments on climate change and renewable energy (DCLG 2004).

In the White Paper the UK Government sets intentions to delegate powers to the LPA and enable further community involvement in taking on the management or ownership of local facilities and assets by applying pace, openness, innovation, evidence-based and coherence principles (DCLG 2006b; Dargan 2009).

These policies and papers prove that steadily growing population and competition has obliged the UK Government to look for rational planning and community management instruments that could allow a better coordination of sustainable development processes in seeking to improve the quality of community living environment. Sustainable development and urban regeneration strategies have become undisputable foundation for the administration of local governments and leaders of local communities (Healey 1997; Roberts and Sykes 2000; Raco 2007, Maliene *et al.* 2008b, McDonald *et al.* 2009). This notion was reflected in the Sustainable Communities Plan and regional action plans (ODPM 2003; 2004).

2. A case study in North West of England

The aim of this research was to analyse the present government agenda on sustainable communities and establish how this affected some of the most deprived communities in North West of England. With this aim we researched how government agenda filtered down through local authorities of Knowsley MBC and Halton Borough Council to the communities of Stockbridge Village (SV), Murdishaw (M) and Halton Brook (HB). These communities are similar in size with population of 15000 (SV), 6220 (M) and 6600 (HB), respectively, located in same region of England, and, therefore, good examples for comparative analysis.

The objectives were to: (1) carry out an investigation on: government agenda and policy on sustainable communities; and indicators for the achievement of sustainable communities; (2) assess the achievements of Knowsley MBC and Halton BC in terms of quality of life indicators and broader government policy; (3) carry out investigation to establish the concerns and aspirations of the residents of SV, M and HB.

3. Research methodology

In order to meet the first objective literature review was conducted. The second objective was achieved through investigation into economic, social, physical and environmental impacts on sustainable agenda using national published statistics and health reports for HB, M and SV. Furthermore, statistical analysis of data taken from the National Statistics website, health profiles and Ofsted reports were carried out. Assessment of the achievements of the three communities (HB, M and SV) was carried out using the Local quality of life indicators: community cohesion; safety; culture and leisure; economic well-being; education; environment; health and social well-being; transport and access (AC, 2005). The third objective was achieved through a questionnaire applied by one to one surveys to the communities in HB, M and SV. Fifty respondents from each community participated in the survey. They were selected randomly from different age and social groups.

4. Results

4.1. Indicators and performance requirements for sustainable communities

Literature research revealed that there are two main documents that are central to the indicators concerned with sustainable communities: Local quality of life indicators – supporting local communities to become sustainable (AC 2005) and The New Performance Framework for Local Authorities & Local Authority Partnerships (DCLG 2007). The Audit Commission report identifies three main targets that sustainable communities should work towards, while the second report (DCLG 2007) sets out seven key areas where communities should improve (Table 4).

Both reports identify the same areas which compliment the overall sustainable agenda and the various components identified by Egan (ODPM 2004). These recurring themes are: a common goal; accountability; effective communication; adaptability, and skills. These are briefly explained below.

Table 4. Indicators and performance requirements for sustainable communities

Targets	
1.	Balanced and integral society
2.	meeting the needs of existing and future generations
3.	respect the needs of other communities to make their communities sustainable
Areas for improvement	
1.	Stronger communities
2.	Safer communities
3.	Children and young people
4.	Adult health and wellbeing
5.	Tackling exclusion and promoting equality
6.	Local economy
7.	Environmental sustainability

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The common goal for sustainable communities must be shared by all government agencies, local government, local communities and other bodies (Ploger 2001; Dargan 2009). There are eight central components necessary to achieve this goal, namely: governance; transport and connectivity; services; environment; economy; housing and the built environment, equity, and social and cultural (ODPM 2004). Although each component contributes to an overall agenda it is important to acknowledge that different local authorities will need to place greater emphasis on particular components than others.

4.2. Data obtained through statistical analysis

Community cohesion: According to the Audit Commission (AC 2005), community cohesion can be measured in terms of election turnout. The election turnout results are shown in Table 5 for each of the three areas: HB, M, and Stockbridge. These data were obtained from the Election Offices of Knowsley MBC, Halton Borough Council and (EC 2008) reflecting on the turnout for Local Government elections in 2007. While all three areas showed significantly lower election turnout than the overall in England, the SV has not even reached the half of England average and showed the lowest level of election turnout at 17.9%. This was also significantly lower, by one fifth, than the overall turnout in Knowsley MBC.

Safety: Community safety can be measured with the help of crime statistics information. Data on crime figures was collected from the Home Office Crime Statistics website [www.crimestatistics.org.uk] for Knowsley MBC and Halton BC. Figures for HB and M were provided by Cheshire Police. Data for the ward of SV were not available. However, Merseyside Police has published special policing priorities for SV. In Knowsley MBC and Halton BC overall crime numbers are significantly higher than the national and North West regional average (Table 5).

Culture and leisure: For SV there is the Heatwaves leisure centre in the central part of the area. The furthest that a resident of SV would have to travel would be 2.5 miles. For M the nearest sports centre would be the Brookvale Recreation Centre which is 1 mile from the most outside edge of M. For HB the nearest leisure facility is Runcorn Swimming Pool & Gym, which is 1.6 miles from the furthest point of the area.

Economic well-being: Table 5 illustrates the percentage of employed population for each of the three areas in comparison to the percentage for the north-west

and England. Data taken from *www.neighbourhood.statistics.gov.uk*. There are a high percentage of people not in employment in SV. The percentage of people out of employment in HB and M are closer to the regional and national average than SV. The areas of M and HB are experiencing significantly higher numbers of jobseekers allowance claimants than the regional and national average. The numbers for SV are roughly in line with the regional and national averages.

Education: The level of residents' qualifications was measured using data from the UK Statistics Authority for 2001 (Table 5). 60% of residents in SV have no formal qualifications. M and HB have higher than average numbers of people without any qualifications.

Environment: Having focused on derelict land and urban green-space to measure the environmental quality for each area, SV and M have the largest areas of green space and HB has the least. M also benefits from a marina village and canal system circled in blue on the map. This provides relief from the urban form and areas for recreational activity.

Table 5. Data obtained through statistical analysis

Region	England	Halton BC	Halton Brook	Murdishaw	Knowsley MBC	Stockbridge
Local Government election turnout in %	37.4%	27.4%	27.0%	26.5%	22.3%	<u>17.9%</u>
Number of crimes per 1000 population	25.8	29.6	136	143	32.5	n/a
Employed population	63%	n/a	56%	57%	n/a	<u>37%</u>
Percentage of population with long-term illness	18%	n/a	23%	21%	n/a	<u>31%</u>
Percentage claiming jobseeker's allowance	2.3%	n/a	3.4%	<u>3.8%</u>	n/a	2.7%
Percentage of population without qualifications	29%	n/a	40%	38%	n/a	<u>60%</u>

Table 6. Community Health Indicators

Indicator	Halton BC	Knowsley MBC	England	England Worst
Children in poverty	33.2	42.9	21.3	<u>58.8</u>
Teenage pregnancy	45.1	45.7	42.1	<u>95.3</u>
Binge drinking adults	23.8	25	18.2	<u>29.2</u>
Healthy eating adults	15.3	<u>11.4</u>	23.8	<u>11.4</u>
Life expectancy (male)	74.5	73.9	76.9	<u>72.5</u>
Life expectancy (female)	<u>78.3</u>	<u>78.4</u>	81.1	<u>78.1</u>
Deaths from smoking	327.2	<u>366.5</u>	234.4	<u>366.5</u>
Infant deaths	6.2	4.9	5.1	<u>9.9</u>

'Children in poverty' is expressed in percentage of low income households. 'Teenage pregnancy' is expressed in number per 1,000 people population aged 15-17. 'Binge drinking adults' is expressed in percentage of population. 'Healthy eating adults' is expressed in percentage of population. 'Life expectancy' is expressed in years. 'Deaths from smoking' is expressed in number per 100,000 people population over 35 years old. 'Infant deaths' is expressed in number per 1,000 births. Worst indicators are underlined.

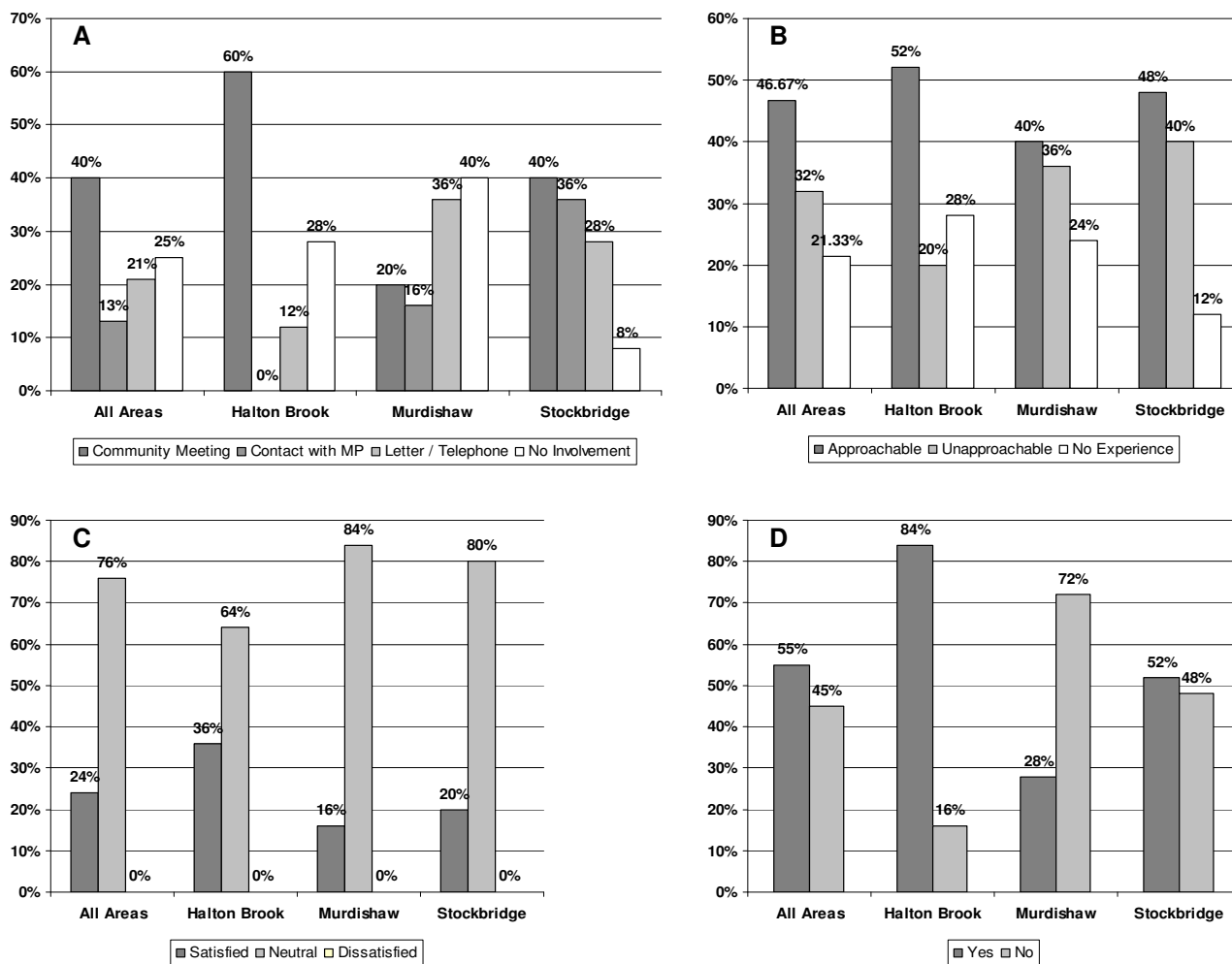


Fig 1. Community involvement and relationship with local authorities (A, methods of community involvement; B, approachability of council representatives; C, residents' satisfaction level on responsiveness of their local councils to their concerns; D, Residents' feeling on whether or not their local council keep them adequately informed of developments and proposals for their residential areas)

Health and social well-being: Table 6 was prepared based on data taken from the 2007 Health Profiles for Halton BC and Knowsley MBC from the Department of Health and the Association of Public Health Observations. Both councils are showing results matching England's worst in areas of healthy eating adults, and deaths from smoking. Their figures for female life expectancy are extremely close to the worst in England. In Knowsley MBC, there is more than double the amount of children living in poverty than the England average. The number of people who suffer from a long-term limiting illness is an indicator of the health. Table 5 illustrates the results for all three areas. SV is suffering the highest levels and is in fact 10% higher than the regional average and 13% higher than the national average.

Transport and access: There is a common feature to all of the three areas. The areas appear to be a network of cul-de-sacs and narrow roads that do not connect to the surrounding areas. In all three areas there is only one route in and one route out of the communities leaving the

area feeling isolated and cut off from the surrounding area.

4.3. Data obtained through the questionnaire

In order to establish information on concerns and aspirations of residents of SV, M and HB, the questionnaire was applied in the survey by one to one. The following response and results were gathered in these three communities:

Question 1: How do you get involved in council agenda and consultation? As it is seen in Figure 1A, HB and SV showed high levels of community involvement using community meetings. However, in M, a large percentage (40%) of people asked in M had no involvement in council agenda and consultation. Any of the respondents in HB had contact with their member of parliament.

Question 2: How approachable do you find council representatives? As shown Figure 1B, the majority of respondents found council representatives to be

approachable. However, in HB there is the highest level of respondents having no experience of contact with council representatives.

Question 3: How satisfied are you with how responsive your local council is to your concerns? Majority of the respondents in all three areas stated to be neutral while assessing their satisfaction level on responsiveness of their local councils to their concerns (Figure 1C). HB has the highest frequency of respondents who indicated that they were “satisfied”.

Question 4: Do you feel that your local council keeps you adequately informed of developments and proposals for your area? In HB majority of the respondents stated that they are informed of developments and proposals for their residential areas. 52% of the respondents in SV indicated to be informed whereas in M, majority of respondents stated that they are not informed (Figure 1D).

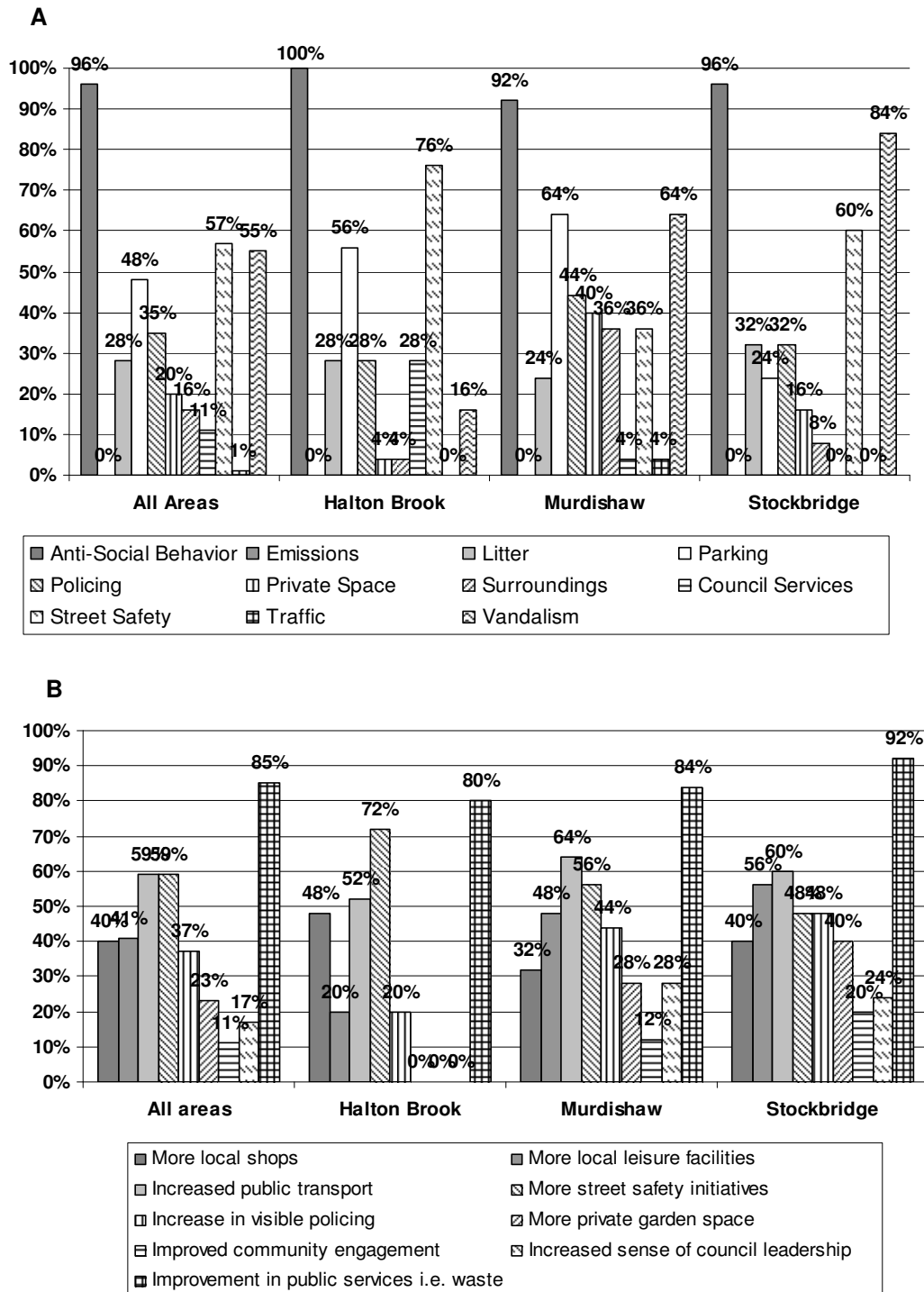


Fig 2. Community issues (A, Antisocial behaviour; B, leisure facilities)

Question 5: What issues do you feel are most important for your area? Anti-social behaviour was perceived by majority of respondents in three areas as a problem (Figure 2A).

Question 6: Which of the following would you like to see happen in your area in the near future? As seen from Figure 2B, the majority of respondents in HB are satisfied

with the quality and availability of leisure facilities. In all of the three areas, the majority of respondents indicated their will to see improvement in public services. More than half of those asked in SV and M would like to see improvements in the local transport services they are provided with.

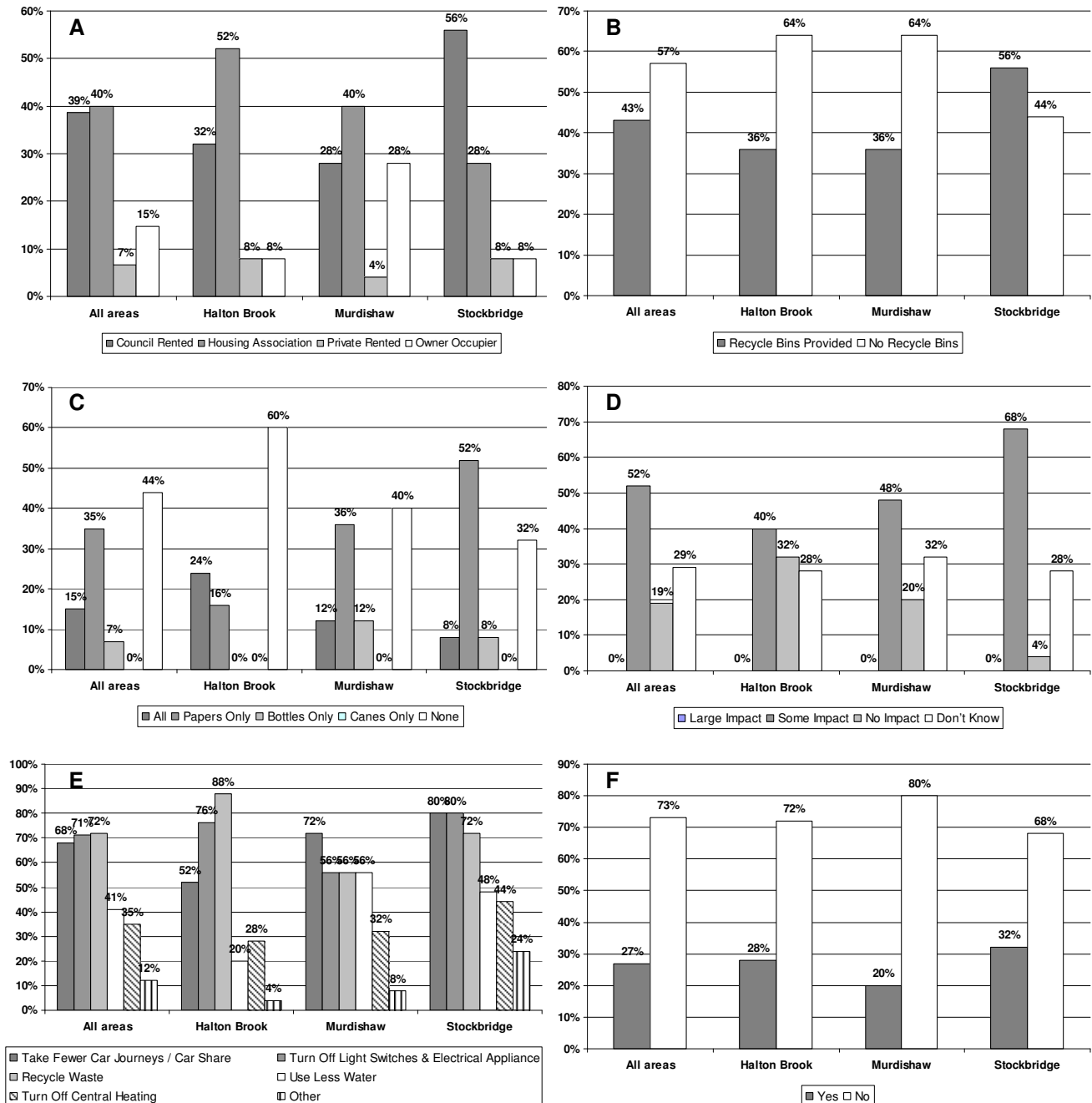


Fig 3. Home ownership and related issues with waste management and carbon emission (A, Home ownership; B, Percentage of homes with and without separate recycle bins; C, Percentage of waste recycled; D, Level of residents' contribution made to reducing carbon emissions and saving the environment; E, Residents' contribution to reducing emissions and saving the environment; F, Whether or not local councils provide their residents with information on how to contribute to reducing carbon emissions and saving energy in their homes)

Question 7: What is your home ownership type? In HB over half of the respondents live in housing association owned property (Figure 3A). The second largest proportion is council owned housing. This reveals a lack of economic well-being in HB. In M most of the respondents live in housing association. 28% of respondents were living in council owned properties. Another 28% were living in council rented houses. The majority of the respondents in SV live in council rented accommodation.

Question 8: Does your council provide you with separate bins for recycling? According to Figure 3B, 64% of respondents in HB and M are without their own separate recycle bin. The figure for SV is significantly lower at 44%.

Question 9: How much of your household waste is recycled? Figure 3C show the amount of people surveyed who recycle their household waste.

Question 10: How much of a contribution do you believe you can make to reducing carbon emissions and saving the environment in your area? In all of the three areas, most of the respondents assessed their contribution to reducing carbon emissions as having “some impact” (Figure 3D).

Question 11: As a resident how do you think you could contribute to reducing emissions and saving the environment? As seen from Figure 3E, majority of respondents contribute reducing carbon emissions by: taking fewer car journeys / car sharing; turning off light switches and electrical appliance; recycling waste.

Question 12: Does your local council provide you with information on how to contribute to reducing carbon emissions and saving energy in your home? According to the majority of the respondents in three areas, the local councils do not provide their residents with information on how to contribute to reducing carbon emissions and saving energy in their home (Figure 3F).

5. Discussion

Sustainable development focuses on the economic development, social development, and environmental protection. Agenda 21 emphasizes that public participation in decision making is a fundamental factor for the sustainable development.

According to Hasna (2007), sustainability is a process which affects development of all aspects of human life affecting supplies. This involves resolving the conflict between the competing goals and the simultaneous pursuit of economic prosperity, environmental quality and social equality. Sustainability is a continually evolving process.

Previously, UK urban regeneration has been based on social and economic improvement, but since introduction sustainable community policies, the emphasis has been shifted towards environmental, social and economic coherence (Maliene *et al.* 2008b, McDonald *et al.* 2009; Mitkus and Šostak 2009; Stähle 2010; Kytä *et al.* 2011).

In view of sustainable development, this study surveys economic, social, physical and environmental circumstances in two councils of North West, Knowsley MBC and Halton BC, and individually focuses on communities of SV, M and HB.

Assessing the achievements of Knowsley MBC and Halton BC in terms of quality of life indicators and broader government policy, statistics revealed that overall crime levels in Knowsley MBC and Halton BC were higher than the UK and North West regional average. Unemployment rate, long-term illness, Jobseekers claimants is higher than regional and national levels in three areas. Education level is below the national and regional levels. The consequences of these adverse conditions were reflected in the questionnaire answers of respondents. Accordingly, majority stated that anti-social behaviour was a problem in their area. Furthermore, as these areas are suffering high amounts of people out of employment, high levels of people suffering from a long-term limiting illness, very few people are living as owner occupiers. This verifies that there is a significant lack of economic well-being in the three areas.

SV has consistently come out as the worst performing area in a large range of datasets. The data suggests that SV has the highest number of people out of employment, suffering from a limiting long-term illness and the highest number of people with no formal qualifications. The area suffers in terms of health statistics in the broader spectrum –high levels of deaths from smoking, low levels of healthy eating adults and low life expectancy in relation to the England averages.

Overall HB and M are performing marginally better than SV. However, they still fall far short of England targets. The communities of HB, M and SV are a long way off being classified as sustainable communities. However, there are areas that provide encouragement and hope. The councils of Knowsley MBC and Halton BC need to look to the Egan Review and Local Quality of Life indicators to assess their own targets and performance. This would provide the framework for the council to work within to improve the quality of life for residents now and in the future.

To conclude, the development of sustainable communities in the light of urban regeneration strategy is one of the effective ways for dealing with deprived post industrial urban areas. As highlighted in sustainable community plan, the urban regeneration has great potential for developing sustainable communities in UK or other countries cities.

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