



THE YOUNG FOUNDATION

Building Sustainable Communities Seminar Series

Monday 2nd June, 2008

MDDA, 117-119 Portland Street, Manchester, M1 6ED

Seminar three: The link between environmental sustainability and participation – how can sustainable lifestyles and behaviour change be encouraged in new housing developments and how does this link to participation?

The Young Foundation is hosting a series of four seminars to explore different ways of building environmentally and socially sustainable communities. This is currently particularly important given government's emphasis on increasing housing supply. The results of the discussion will help inform a toolkit for practitioners to promote practical ways of tackling these issues.

This third seminar will how sustainable lifestyles can be encouraged in new housing developments and how this links back to our earlier discussions about wider resident participation.

The four seminars will be informed by findings from a variety of case studies exploring how similar issues have been tackled in regeneration projects over the past decade, and in previously built new housing settlements.

The seminars aim to:

- support practitioners to develop a more rounded approach to new housing developments which can help ensure that the creation of new settlements is more than just a land transaction, but also builds in good governance, participation and longer-term stewardship
- build on existing knowledge and good practice solutions, drawing on research from the UK and internationally and strong practical examples, and help ensure that policy is framed to enable their implementation.

The themes explored in the seminar discussions will, along with the case study research, form the basis of a toolkit which will be made available at the end of the project. This paper sets out some initial thoughts to help frame the discussion, building on the discussions at the first two seminars in the series, which focused on ways of increasing community and resident participation in new housing developments, and managing the conflict between policy aspirations and what residents want.

1. Making environmentally-friendly lifestyles easy for residents

Meeting the UK's ambitious target of reducing CO₂ emissions by 60 per cent by 2050, though undoubtedly challenging, appears ever more necessary in the face of increasingly disturbing predictions of the future effects of climate change.¹ Around 27 per cent of all emissions in the UK are from residential end-users, and a further 28 per cent from transport, constituting two of the most significant sources nationally.² Working on the principle of diminishing returns it is clear that tackling emissions through adaption to the built environment will be crucial to any meaningful attempt to reduce emissions overall.

In the push to meet the government's latest housing targets, there is a tangible opportunity for the UK to utilise much of the pro-environmental technology and knowledge that has, as yet, failed to become mainstream in this country. The regular updating of the building regulations and the commitment to zero-carbon new-build homes by 2016 will mean that the specification of individual homes will continue to improve.

There is an ever expanding knowledge of the role that urban planning can play across a settlement to ensure that sustainable methods of transport, and regular use of green spaces become the obvious and easy daily choice for residents. Though these standards will prove to be more costly than those that the industry has become used to, this technology is already known and retrofitting existing settlements and buildings will be significantly more complicated than enforcement of upcoming regulations. It is therefore it is vital to get the right elements in place from the start of each project.

Bringing together these aspects of a place, so that together they promote environmentally sustainable lifestyles, requires a high degree of professional expertise, foresight, investment and political will. The experience of those involved in the Hammarby Sjöstadt development in Stockholm, Sweden, is that making the area function well is primarily an infrastructure project, rather than a housing one. The various systems within the development: waste collection, public transport, district heating and cooling etc. had to work in unison in order to reduce the degree to which energy from outside sources was required to sustain the infrastructure. This

¹ A summary of the 2007 Fourth Assessment Report by the Intergovernmental Panel on Climate Change (IPCC) is available at http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf

² See Defra, Key Facts about: Climate Change:
<http://www.defra.gov.uk/environment/statistics/globalatmos/gakf07.htm>



THE YOUNG Y FOUNDATION

became the priority of the project partners long before the apartment blocks themselves began to spring up.

One of the key determinants of how successful attempts to adapt the built environment will be how, as an industry, we consider risk. In the short term there will be nervousness at the increased cost of building to higher specifications. Though higher regulatory standards will force developers to change, there is a significant risk that they will choose to build fewer homes if their perceived opportunity for profit is diminished (the impact of the credit crunch possibly complicates this further). From residents' perspectives risks are perhaps more long-term, and potentially much more frightening: flooding (and potential difficulty in finding insurance), uncontrollable indoor temperatures and growing fuel bills. How we collectively choose to balance the likely impact of these risks is a huge issue for political leadership at pan-national, national and local level.

2. Changing behaviours

Though there is much that can be achieved through the physical make-up of a place, there is still a need for individual households to modify some elements of their behaviour. Whether this can be encouraged as a positive 'carrot', especially in terms of individuals' health and wellbeing, rather than negative 'stick' remains to be seen, and perhaps increases in fuel bills will act as both. The role of marketing these behaviour changes will initially fall largely on the shoulders of local authorities, as they develop future solutions to local issues of waste collection, roads and transport, education and parks and public spaces, and later also on other agencies acting as housing providers and landlords.

Defra has undertaken research exploring how different groups within the general public tend to view environmental issues, their responses and how best to encourage them to change their behaviours.³ Those cohorts, in brief are defined as:

- *Positive greens* – with high levels of self-reported knowledge. The most likely group to try to influence those around them
- *Waste watchers* – behaviour is largely driven by an urge to avoid unnecessary wastage and to protect the physical quality of the countryside
- *Concerned consumers* – those who tend to feel concern for environmental issues and take some steps to reducing energy and water usage but who largely do not alter their behaviour, especially in terms of transport to any significant degree

³ Defra (2008) *A Framework for Pro-Environmental Behaviours*, available at:
<http://www.defra.gov.uk/evidence/social/behaviour/pdf/behaviours-jan08-report.pdf>



THE YOUNG Y FOUNDATION

- *Sideline supporters* – as a group there is agreement that environmental issues are a concern but tend to assume technological solutions hold the answer. Unlikely to change their behaviour unless it fits easily into their existing lifestyle
- *Cautious participants* – people, who though acknowledging the scale of the issue, tend to feel that their ability to act is undermined by other people and other countries
- *Stalled starters* – with largely negative views, believing climate change fears are exaggerated and that there is little they can do to change the situation
- *Honestly disengaged* – who lack interest or concern in environmental issues.

It is reasonable to assume that in the case of the future eco-towns many new residents will be highly motivated people falling into some of the earlier categories above, perhaps the easiest groups to engage with. However there will be significant numbers of people moving to these towns because it is their first opportunity of a decent housing offer. In order for settlements to be successful in achieving some degree of sustainability how can elements of an environmentally friendly lifestyle be marketed to groups less keen to engage with this agenda?

As with all marketing, success relies on an understanding of your audience. Many of these new residents will have young families and this might prove the easiest way to promote lifestyle change, by demonstrating tangible benefits for their children's health and wellbeing. This could be as simple as promoting streets where children can play and socialise because they are not rat-runs for local drivers; or cycle lanes allowing children to get to school more quickly than they could by car. Where parents have been given information about levels of carbon monoxide at the school gate, people have opted not to drive in the same numbers. There is also evidence to show that using green spaces is not only beneficial to physical health but has better outcomes for mental health than similar exercise taken indoors.⁴

An additional benefit for this overall agenda is that pro-environmental behaviours can help create a local identity. Some notable examples are Freiburg, Germany, which has recently introduced with car-free zones, and Modbury South, Devon, the first town to ban plastic bags in the UK. Could some of these positive behaviour changes be the factor that puts some new settlements 'on the map' and gives their residents a sense belonging to a communal rhythm, something they collectively do for the benefit of all?

⁴ Mind (2007) Ecotherapy – the green agenda for mental health, available at: <http://www.mind.org.uk/mindweek2007/report/>

Policy Context

Housing Green Paper (CLG 2007):

Announced the government's commitment to build 3 million new homes by 2020, including five new eco-towns.

Building a greener future (CLG. 2007):

set out the government's intention for all new homes to be zero carbon by 2016 with a progressive tightening of the energy efficiency building regulations up to this date.

Planning for a sustainable future (CLG 2007):

set out proposals to improve the speed, responsiveness and efficiency of land-use planning.

First thoughts

This seminar will look at examples from abroad, in some cases from very different social and cultural contexts to explore what can usefully be transferred usefully to the UK. Also we will think about how to make behaviour change a positive addition to the lives of both individuals and wider communities.

Our questions

1. Why does this seem to be easy in Sweden and not in the UK?
2. Where does the balance lie between 'carrots' and 'sticks'?
3. How can environmentally sustainable lifestyles knit a community together?
4. What are the risks involved in enforcing high sustainable design standards in the current housing market and how can we best manage the delivery of these high standards?



THE YOUNG Y FOUNDATION

Case study profiles

ARUP

Arup is a global firm of designers, engineers, planners and business consultants working in 86 offices across the globe. Arup is acting as designer and masterplanner for Dongtan the world's first eco-city, which is intended to be sustainable not just environmentally, but also socially, economically and culturally.

Dongtan is located on the third largest island in China at the mouth of the Yangtze River. The urban area will occupy just one third of the site with the remaining land retained for agriculture and used to create a buffer zone of 'managed' wetland between the city and the 'natural' wetland.

Dongtan will produce its own energy from wind, solar, bio-fuel and recycled city waste. Clean technologies such as hydrogen fuel cells will power public transport. A network of cycle and footpaths will help the city achieve close to zero vehicle emissions. Farmland within the Dongtan site will use organic farming methods to grow food.

Hammarby Sjöstadt, Stockholm Sweden

At present 6,600 of the planned 11,000 units have been built as part of the ongoing development of Hammarby Sjöstadt in Stockholm, Sweden. The lakeside district was previously home to industrial squatters, which had caused the land and water to become heavily polluted, and had led to a near collapse of the local eco-system.

The development has involved significant investment in infrastructure, with heating and cooling for the district supplied by District Heating and Cooling plants already in existence. These plants are fuelled by bio-gas created from the sewage taken from the inhabited homes. Many of the blocks have solar cells or panels which supply around half the energy they require for heating. The area is also home to a new tram link, a car-sharing scheme and two new bus routes, again fuelled by bio-gas.



Dings, Bristol

The Home Zone initiative undertaken in Dings, Bristol was partnership between the local authority's highways team, the private developer Barratt Homes, the sustainable transport charity Sustrans and the local residents of the estate.





THE YOUNG FOUNDATION

During the recent construction of new housing by Barratt Homes in the immediate area bordering the Dings estate, the project partners worked to remodel the road layout in the existing streets to reduce traffic speed, parking by commuters and allow people to use the streets as a space for community activities. Barratt Homes complimented the scheme by mirroring the its design features in their development, in an attempt to mitigate the division between new and existing communities, and reduce car use in the surrounding area.

