



Diffuse Development

A SUSTAINABLE SOLUTION TO THE UK'S HOUSING CRISIS

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Introduction:

About this paper:

Britain seems to have had a housing crisis for as long as many people can remember. Changing demographics and household structure have conspired with inadequate supply to limit the availability of homes and in 2007 following a decade of house price inflation, they were unaffordable to many.

In early 2008 the term “sub-prime” became a household word as many UK and US banks started to write down the value of collateralised debt obligations (packages of mainly US sub-prime mortgages) that they had acquired in earlier years. Having overpaid at a time of rising house prices, the potential losses became substantial as US house prices fell. Billions were written off and the resultant contraction in banking capital reduced subsequent lending, aggravating the problem further and producing a situation known as the “credit crunch”.

With the availability of mortgage finance reduced, the UK housing market turned sharply lower in the summer of 2008 and house builders began to shelve projects. In an effort to maintain momentum with the building programme, the government pushed on with the creation of a number of new, so-called “eco-towns”. However, these have been widely criticised as being unsustainable without substantial additional infrastructure development.

Almost everyone has a view as to what they don't want but there seems little consensus on a solution to which society at large can agree. This paper suggests a novel alternative to help ease Britain's housing crisis.

This document is intended as a contribution to public debate.

About the author:

Living Countryside is a Company Limited by Guarantee No. 4066376 and registered as a Charity No. 111614.

The objects of Living Countryside are to:

- Advance the education of the public in all aspects of agriculture, the countryside and the rural economy
- Promote greater public understanding of the role of agriculture
- Conserve and protect for the benefit of the public the countryside as a whole

The website of Living Countryside is www.ukagriculture.com.

Executive summary:

This paper introduces the novel concept of “diffuse development” as a solution to help ease the UK’s housing crisis.

Diffuse development is the provision of small clusters of very low impact housing in farmyards throughout the country. The houses should be built of local materials, discretely placed and subject to the planning condition that they are made available for letting and cannot be sold outside the farm business.

Diffuse development provides a number of important environmental benefits through the use of renewable energy at the local level, sustainable water use and improved flood management.

Diffuse development helps to develop local communities and their businesses by providing affordable housing close to the place of work and in so doing encourages social and occupational mobility.

Diffuse development avoids blighting our countryside with homes that are located in large blocks far from the workplace where they destroy the natural environment and put undue pressure on the existing infrastructure.

Diffuse development can be easily adopted through simple changes to the planning system.

Analysis:

For many years Britain's housing stock has been growing at a slower rate than the demand for new homes. The supply shortage, coupled with changing demographics and household structure has forced house prices higher, pricing new entrants out of the market and reducing occupational and social mobility.

Although a number of independent and Government sponsored reviews have attempted to address the crisis, the proposed solutions have been largely technical and little seems to have changed.

What we might want from new housing

It is the responsibility of government to have in place a framework of goals that governs additions to the housing stock so that at the macro level the aggregate housing stock can develop to meet perceived societal needs.

We believe that given the challenges of:

- The UK's high population density
- The likely affects of climate change
- World population growth (to 9 billion within 40 years)

Additions to the housing stock should meet the following goals:

- Provide housing close to the place of work
- Provide housing of sympathetic local architecture
- Provide housing built from local materials
- Provide housing that meets local needs

- Preserve local heritage
- Preserve farmland
- Preserve woodland
- Preserve greenbelt
- Preserve other green spaces

- Not put undue pressure on the existing transport infrastructure
- Not put undue pressure on the existing social infrastructure
- Not contribute to adverse externalities
- Not undermine local democracy

- Be affordable
- Be energy efficient
- Be able to use water sustainably
- Be close to locally generated power

- Help create and support local communities
- Help lower house prices and encourage social mobility

Sadly over the past twenty years very little new housing has met a significant proportion of these goals and much it seems has achieved exactly the opposite. Too often new housing ticks only the boxes required to satisfy targets. Expensive, poorly designed homes are located in large blocks far from the workplace where they destroy the natural environment and put undue pressure on the existing infrastructure and community. Almost everyone is dissatisfied. It is time for new thinking.

What we can learn from history

For much of the last six thousand years, most of Britain's population has lived in small rural communities . The inhabitants have lived close to their place of work in homes built of local materials. They have been closely connected with the natural environment and used sustainable practice to provide food, materials and energy. They wasted little, reused much and ultimately had little adverse environmental impact. For the most part they lived in farming hamlets and in almost every way their developments would meet our suggested framework of goals.

A new concept

Borrowing from past practice we would like to introduce a new concept, namely:

d i f f u s e d e v e l o p m e n t

Diffuse development is the widely spread, scattered or dispersed development of new homes. This does not mean however, the creation of a vast commuting suburbia by filling every field with a new home. Rather it will be the provision of small clusters of very low impact housing throughout rural areas that sustain communities. At the local level the development will go largely unnoticed. Aggregated to the macro level and it provides a significant solution to help overcome Britain's housing crisis. The question is, where?

The 21st century farm

The purpose of agriculture is to provide planned food utilisation for its dependant societies and as little as fifty years ago the connections between farmers and local communities were very clear. With the march of globalisation much has changed. Agriculture and its dependant societies are now thoroughly disconnected and farmers battle for small profit on a world stage. Increasingly they have turned to diversification to make ends meet. Redundant agricultural buildings have been converted for holiday lets, workshops, retail and other rural activities from these diversified activities significant demand for rental accommodation now exists. At the same time farming output has changed. The commodity production of the 1980's has yielded to a more balanced output, one that includes environmental gain and energy cropping. With just a few houses, the farmyard could again become home to a sustainable rural community.

The farmyard

Under the current planning system, farmyards are treated as being of agricultural use and planning permission is restricted to agricultural activities. Given the challenges that we now face from population growth, climate change and overcrowding, it is time to reappraise the planning status of the farmyard. They offer us something unique:

- ▶ the opportunity to meet all of the goals we want from new housing

However, just building new houses in farmyards won't necessarily achieve this. We need to plan for sustainable living.

Planning for sustainable living

New houses in farmyards should be built from local materials and be sympathetic to the local architecture. They need to be relatively small (of traditional cottage size) and discretely placed within the curtilage of the yard so that they cause minimal intrusion into the rural environment.

They should be located so that they do not hinder the agricultural business, now or in the future. Great uncertainty exists over the possible outcomes of climate change and we must ensure that agricultural potential is retained.

The grant of planning permission should be subject to the condition that the houses cannot be sold off separately – they must be retained within the farm as a whole and made available for longer term letting. This provides new opportunities to those who cannot afford to purchase and to those who simply wish to live closer to their place of work.

Careful attention would need to be taken by the planning authorities to ensure that the scale of the development was appropriate. New homes should not put adverse pressure on the existing transport and social infrastructure although in many areas quite the opposite problem exists. Two or three new homes would be wholly appropriate for most farmyards and likely to receive local support in contrast to traditional housing development which seems to offend nearly everyone.

Affordable living

One of the great housing challenges of our time is to provide affordable housing in the places that people want to live. Unfortunately this is proving extremely difficult, not so much because of the cost of the house, but because of the prohibitive cost of land.

Recent reports have suggested that more brownfield land could be made available to ease the housing crisis. However this is unlikely to lower land prices by much as most brownfield sites are retained in the expectation that their values will continue to increase in the long term, provided their supply to the market remains restricted. Land in farmyards however has little underlying market value (there has never been any expectation of its development) and because it comes to the farmer free of

charge, high quality eco friendly homes would be affordable to construct. These would provide farmers with a competitive advantage in the letting market while society as a whole would gain from the improved quality of housing stock. With new rental supply coming to the market there would also be a stimulus for lower rents, particularly in rural areas, and this would reduce barriers to social and occupational mobility.

Living sustainably

In just a decade, the issue of global climate change has leapt from near obscurity to “the most fundamental issue facing mankind”. This societal awakening is forcing a reappraisal of the way we live and the resources we use. Increasingly we can expect to see fossil fuels replaced by renewables with agriculture playing a prominent role in the provision of bio-energy.

At the local level this is already happening. Farms and estates are installing district heating systems that can run on woodchip or crop residues. These tend to be expensive when they service the existing building infrastructure but much cheaper when they are included in the design from the outset, as is possible with new housing.

District heating systems that provide heat to new houses provide a source of revenue to the farmers and encourage them to utilise woodland produce or crop residues that otherwise would go to waste. And because these energy sources are available locally from the farm, their overall efficiency of energy utilisation is extremely high.

District heating also encourages good environmental practice. Neglected farm woodlands (the majority) could be brought back into the coppice cycle to the benefit of flora and fauna. Coppicing is man’s most sustainable activity.

At the farm level, water use is also managed much more sustainably. Water is often drawn from a borehole, used and then treated in septic tanks. It returns by soakaways to replenish ground water levels so ultimately there is little loss of freshwater. This is in marked contrast to most conurbations where used water is treated centrally and then allowed to discharge into rivers or the sea. Further, diffuse development does not require the extra roads or hard areas so common in modern housing developments. These hard areas have a propensity to flash flood in heavy rainfall contributing to flooding downstream and the loss of freshwater to the sea. With diffuse development, by contrast, rainfall is absorbed by soakaways and slowly returns to groundwater aquifers from where it can be used again.

Faced with soaring oil prices diffuse development also makes sense by helping to reduce traffic. After many years of financial difficulty farms have diversified and there is now real demand for rental accommodation from those engaged in the diversified activities. Living closer to the place of work is one of the surest ways we have of reducing our fossil fuel dependency. Generally those who live in rented accommodation have greater flexibility to follow, or be close to their place of work. With diffuse development we can achieve the ultimate by allowing people to live at their place of work.

From small beginnings

There are around 300,000 active farms in the UK with around 40,000 of these accounting for 65% of the land area. Many of the smallest farms would be unable to accommodate diffuse development without it having an adverse impact on the environment. Diffuse development becomes less attractive as the size of the agricultural holding decreases and the efficient use of natural resources and the existing infrastructure are compromised. Even so we estimate that diffuse development could be suitable in around 100,000 farmyards and that this could provide up to 250,000 new homes.

Conclusion

Diffuse development provides an effective solution to help overcome the UK's housing crisis. It falls neatly into Government policy to reduce the UK's carbon footprint whilst at the same time boosting local businesses. It encourages the use of renewable energy at a local level where it can be most efficiently deployed and at the macro level helps to lower housing costs by providing new supply.

Recommendations

Government planning guidance should be rewritten to encourage diffuse development with the provision of small clusters of very low impact housing in farmyards throughout the country.

To minimise the environmental and social impact of the new housing they should be built from local materials and be sympathetic to the local architecture. They need to be relatively small and discretely placed within the curtilage of existing farmyards.

The new houses should be located so that they do not hinder the agricultural business in the future and subject to the condition that they cannot be sold off separately – they must be retained within the farm as a whole and made available for longer term letting.