

# THE EARLY STAGE BENEFIT PLANNING OF HOUSING REGENERATION PROJECTS: THE GAP BETWEEN THEORY AND PRACTICE

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The UK government renewed its commitment to invest in the regeneration of the pre-1919 terraced housing stock through its sustainable communities' agenda. The majority of such dwellings have signs of serious disrepair and are predominantly located in deprived communities. The refurbishment or demolition, of such housing is central to the government's sustainable community's agenda and as such, the long-term sustainable re-use of pre-1919 dwellings is core to the policy's success. It is suspected, that the lack of research dedicated to the achievement of sustainable housing refurbishment, may impede this outcome. Critical to the achievement of sustainable communities through housing regeneration projects is, their reliable early stage sustainable benefit planning. The general area of investigation of an on-going PhD study relates to the development of such an evaluation model; for use at project and programme level of housing regeneration schemes. Work in this area will contribute to the development of theory and practice in the field of early stage construction project evaluation and its integration with sustainable housing redevelopment practices. Relevant literature on early stage construction project evaluation as well as sustainability in regeneration projects is reviewed. The results of an initial exploratory study, which collected qualitative data from built environment regeneration professionals actively, engaged at both project and programme level is reported. Analysis of the collected data established the current understanding of sustainability and its early stage evaluation in practice revealing a gap in both understanding and application of sustainability between actors involved. The paper concludes that due to the number of barriers present within the sector, further research would not be viable until the major restrictions associated with the availability of funding and the existing legislative framework are corrected.

Keywords: evaluation, project price forecasting, regeneration, sustainability.

## INTRODUCTION

It has become more accepted that the management of the existing built environment is an important contributor in the drive towards sustainability and sustainable development (Yates 2006). This approach has already become a major focus within the myriad of public policy documents related to the regeneration of 'low demand' housing and the fulfilment of the government's sustainable communities plan. It can be argued that this plan informed recent rounds of regeneration funding aimed at the eradication of social exclusion and low demand within deprived communities. The

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problem now facing local authorities and registered social housing providers alike is how to transpose policy objectives into reality.

The research aims to explore the importance placed on the sustainability criterion by those charged with the implementation of the government's policy objectives. Literature relating to sustainable development; sustainable communities, the factors triggering community decline and current project evaluation techniques are reviewed before the results of an initial exploratory study which collected data from four housing regeneration experts to evaluate the level to which sustainability guides their decision processes is presented.

The paper concludes by proposing further research be undertaken in the social housing sector together with the need for further government intervention in the private housing regeneration sector, within which this paper suggests further academic research is not a viable prospect due to the significant of the barriers identified.

## **LITERATURE REVIEW**

### **Sustainable development**

In 1987 the world commission on environment and development (WCED) published its seminal report entitled our common future. The seminal work emphasized, for the first time the importance of environmental protection, resource efficiency, poverty and its allied social issues, population growth and human health to the future survival of our planet. This work builds on the earlier work of the United Nations Human Environment conference, which proposed the concept of eco-development, which it was suggested would harmonize economic, social, and economic objectives (Hill and Bowen 1997). The commission applied its wider objectives relating to overall sustainability to development and thus the built environment through its assertion that all development should both "meet the needs of the present without compromising the ability of future generations to meet their own needs (WCED 1987). The importance of this assertion to the construction industry, however, did not become clear until the 1992 Rio earth summit. The countries attending the summit made a commitment to implement agenda item 21, which outlined an action plan for the worldwide implementation of sustainable development. Further to this, the individual countries also signed the Rio Declaration on Environmental and Development. The declaration outlined twenty-seven defining principles, each of which acted as a guide to the requirements placed on each country when developing their own individual sustainable development strategies.

As a further assurance of each country's continued compliance to the agenda 21 commitments, the Rio + five or Kyoto earth summit (1997) called for further agreements by member countries to sustainable development. The summit resulted in the agreement of a new international target, which required all countries to have a sustainable development strategy in place before 2002. A better quality of life is the UK's sustainable development plan, and it outlines several fundamental targets for sustainable development, including the achievement of social progress, protection of the environment, prudent use of resources and sustained growth in both the economy and employment.

### **Sustainable communities policy**

Whilst developing its policies on sustainable development the government conceded that, the housing market in England was in itself unsustainable. In the south of the country, the market faced momentous housing shortages. Conversely, from the

Midlands upwards the market was contracting significantly; with large segments of stock evidencing high vacancy rates, falling values or in the worse affected communities, virtual abandonment. The sustainable communities plan, launched in February 2003, was to be the government's solution to these failings, through the transformation of these problem segments of the stock into 'sustainable communities', or communities in which the government advocated:

*People want to live and work, now and in the future. They meet the diverse needs of existing and future residents, are sensitive to their environment, and contribute to a high quality of life. They are safe and inclusive, well planned, built and run, and offer equality of opportunity and good services for all* (Office of the Deputy Prime Minister 2003).

The view expressed by the various proponents of the sustainable community plan suggests that the implementation of the policy would lead to the creation of communities capable of absorbing social change through self-renewal; or where existing housing could be reused or recycled to provide a range of goods and services for modern living.

Housing market renewal forms a major impetus of the sustainable communities' framework, where regeneration was to be focused towards the estimated 850,000 houses said to be exhibiting the symptoms of low demand (Bramley *et al.* 2000). The main impetus of policy being the injection of funding into deprived and socially excluded communities to foster the transformation of such areas into sustainable and desirable communities. To achieve these goals the policy adopted an inter-agency approach, controlled through the creation of sub-regional quangos, termed 'renewal pathfinders'. These quangos would in turn work with various stakeholders across large geographical areas to deliver cross boundary, multi layered regeneration initiatives. It was asserted that this approach would include an array of other housing focused policies, such as demolition, refurbishment, remodelling and new-build housing. Complemented by improvements to the non-housing related attributes of sustainable communities, which the Audit Commission (2005) suggests would include inter alia community cohesion, the provision of additional customer-focused public services and a restored pride in the community.

#### **Low demand: a review of contributing variables**

Low demand is, for housing in an area, a phenomenon which cuts across the environment, social and economic aspects of sustainability (CPRE 2004) manifesting itself within the housing stock in a multiplicity of ways. In an attempt to aid the practitioner, the DETR (1999) provided two sets of headline indicators for low demand. For the private sector, low demand, it was suggested, would be exhibited through the occurrence of following factors:

*Particularly low or falling in absolute terms; the community exhibits a high void rate; high population turnover; a significant long-term private sector voids or abandoned properties can be observed together with a visibly high instance of property for sale or available for rental.*

Looking towards the social housing sector, low demand would be indicated by:

*Small or non-existent waiting list; tenancy offers are frequently refused; high rate of voids available for letting; high rate of tenancy turnover.*

Over and above the official indicators, of low demand, however a myriad of additional contributory factors have been recognized within the literature. The seminal work by

Power (1999) together with the later work of both Lupton (2003) and Bashford and Shear (2004) assert that the phenomenon now termed low demand, is triggered by a multiplicity of interplaying factors, which can be placed into the following loose clusters:

1. The physical environment: including factors such as levels of disrepair, residents propensity to undertake maintenance interventions, room sizes and layouts, uniformity in design, density, a lack of parking and the supply of substitute goods
2. Management of the stock; Focused towards the social housing sector and the management of estates and delivery of services
3. Financial issues: including those relating to the costs associated with the creation of decent homes and the costs associated with undertaking routine maintenance operations.
4. The demising social gel: Specifically levels of crime, anti-social behaviour, littering, economic restructuring leading to reduced employment opportunities, lack of public transport and finally problems associated with what Bramley *et al.* (2004) term “residualization” or the stigma associated with certain types of housing or certain geographical locations.

### **Early stage project evaluation**

Project evaluation at feasibility stage has traditionally orientated around design cost modelling. The process itself is concerned with: (1) Providing a means by which potential design options could be compared on a basis of their capital and whole life cost traded against the anticipated utility that the finished project would provide to the client. (2) The process facilitates the accurate prediction of the initial capital costs associated with the project.

Whilst project estimating is a crucial, phase in the delivery of any successful construction project successive evaluations of current practice make it clear that professionals have adhered to the traditional age-old methodologies of project evaluation relating to what Fortune (2006) termed deterministic approaches, that aimed at assessing the anticipated tender price. Although Fortune and Cox’s (2005) latest survey of practice identifies some adoption of more sustainably and value orientated approaches including both component life cycle and whole life cost appraisals. The latest research also conversely recorded a minimal uptake of models aimed at evaluating the sustainable impact of proposed projects.

Increasingly in the public sector, there is a desire for practitioners to evaluate the “value” of proposed projects as opposed to appraisal restricted in focus towards cost. Whilst in the assessment of value, capital costs will be important, further appraisals of Whole life costing and other cost in use analysis is called for. It may be argued that the potential benefits the project would disseminate into the local community should also form a key part of this value-orientated assessment and therefore is likely to be fundamental to any form of public investment. This evaluation of benefits, it is suggested, should consider the potential benefits the project may provide against social, economic, and environmental criteria.

### **RESEARCH APPROACH**

The research aimed to evaluate how professionals, at the delivery level, both interpret the policy documents pertaining to sustainable communities and finally how their

interpretations are reflected in the early stage evaluation of both project and programmes. It was essential that the research extracted this data from the sample in such a way that would allow the viability of further research to be appraised and evaluated. Preventing the researcher taking what Farrell (2007) alluded to as an armchair evaluation of the research problem confined to the bias of the researcher and their perception of the literature. In support of Farrell's assertion, Oppenheim (1992) advocates that the instigation of some form of exploratory survey would be a fundamental stage in the conceptualization of the research hypotheses.

For the wider study, a pragmatic philosophical position was adopted, thus allowing the selection of a research paradigm suitable to the specific stage in the study.

Oppenheim's (*ibid*) seminal text on survey research design advocates the adoption of qualitative data collection during this phase. Creswell (2003: 22) concurs with Oppenheim in this regard, suggesting a qualitative methodology is essential especially where the researcher is not fully aware of the variables, which would be key to the problem under review. Interviews would therefore facilitate the collection of data with sufficient depth thus allowing the researcher to draw both meanings and ideas from the research participants.

Three local authorities together with one Registered Social landlord were initially identified from the study, whilst the sample was very limited, the local authorities selected represented a cross section in terms size, with the selection of a small, medium and large local authority. It must, however, be acknowledged that the data collected from the registered social landlord have limited validity in the context of this study. To limit potential differences in practice between pathfinders, the three initial sample organizations were selected from one pathfinder sub-region. Each interview adopted a very loose structure, whilst sufficient to ensure the collection of comparable data the interviews allowed the professional to shift the focus to some extent towards their own perceptions of the issues they felt were the most prominent.

## **EMERGING VIEWS OF CURRENT PRACTICE**

Interviews were held with three senior housing regeneration professionals, each currently functioning in the local authority arena and each possessing in excess of twenty years experience. In addition, all had specific management responsibilities orientated to the re-use of existing housing as part of regeneration activity, funded through one of the sub-regional pathfinder organizations.

As a direct contrast to the situation observed in the local authority arena, where the private housing stock forms the major focus of their work, one further exploratory interview has been conducted with a senior regeneration professional from the social housing arena to gauge if these views are across the board or limited to the local authority based professional.

### **Sustainability and sustainable communities**

The interviews revealed that a significant disparity exists between the acceptance of the government's flagship sustainable community's policies as rhetoric and the actual acceptance of the policies to an extent that would allow them to be implemented.

The data suggests that whilst all four respondents possessed a sufficient understanding of the theoretical concepts and policy guidance relating to the key deliverables outlined in the sustainable communities plan, and more specifically those deliverables associated with housing market renewal.

As the discussions developed, however, it became increasingly clear that the three interviewees based in local authorities demonstrated an unwillingness to accept the importance of sustainability within the regeneration context. The views expressed ranged from, the smallest local authority, who accepted the importance of sustainability, but felt unable to comment further due to the limited scope of their own programmes. The larger organizations, on the other hand, expressed negative views towards sustainability

*It's not a philosophy I subscribe to in all honesty as it's not really proven ... economic regeneration takes time. We have boundaries. And we can't deal with everything, such as rebuilding the job market in the area. Social regeneration is more difficult and vulnerable to political whims as it's a long term goal (Medium Sized Local Authority).*

Conversely, however, the fourth interviewee, from a social housing background, while still loosely associated with the achievement of the pathfinder objectives. The organizations commitment to the implementation of rhetoric pertaining to sustainable communities was clearly important, as demonstrated through the narrative of a small case study recounting a recent project.

*The estate itself categorized as a major crime hotspot with significant problems associated with anti-social behaviour, outdated stock and predominantly social excluded ... demolition would have been easier here, however we remodelled the estate transforming an unpopular housing estate to a mixed community and popular estate ... The asset management decision here really was fed by the appraisal of social, environment and economic benefits in deciding what the community wanted and delivering it.*

### **Low demand and low demand housing**

The literature clearly showed the correlation between sustainability and the phenomenon termed low demand. With the multiplicity of factors associated with low demand, spanning the three high level criteria associated with sustainability.

The analysis suggests that the regeneration professionals working within local authorities are not fully conscious of the magnitude or multiplicity of the problem. The three professionals interviewed all adamantly avowed that housing condition was the deep-seated driver for low demand and unpopular housing. Advocating that such problems are the outcome of homeowner's low propensity to maintain and repair their own homes.

*It all comes back to the condition of the stock ... it is occupied by people who cannot for various reasons maintain it themselves. That is where we come in to carry out major maintenance for them and regenerate the housing (Medium Sized Local Authority).*

Nonetheless, the responses revealed a bias, towards the physical condition of the housing stock, which may prevent such professionals appreciating the other characteristics of low demand.

*We are guided by the Housing Act, which require certain levels of statutory unfitness or now the presence of category one hazards before we can intervene and regenerate (Large Local Authority).*

There was, however, also a belief by one of the respondents that their approach to regeneration did also trigger some external benefits to the community, although these were less planned and more incidental.

*We may have a situation whereby physical improvement is needed, but other interventions are also required. We accept that people who live in poor housing generally have worse health and low confidence ... improvement must reach out to contribute to these other problems such as improving the housing would improve the health of the occupants when joined to some other health services for example (Medium Sized Local Authority).*

Conversely, however, the fourth interviewee, from a social housing background, demonstrated a thorough understanding of the problems of low demand, which he identified as being endemic in some pockets of housing. The interviewee suggested that when appraising regeneration interventions, all the attributes of low demand should be fully appraised as part of the decision making process.

*If we are going to make decisions based on monetary costs alone we risk repeating our errors in the late 1980s where unviable or unsustainable estates were improved as they appeared to present a viable investment. Only for that estate to require further intervention five or six years later... That estate has since been demolished (Registered Social Landlord).*

### **Early stage project evaluation**

The final major theme, relates to the feasibility evaluation of regeneration programmes. The literature suggested that such an evaluation would often exhibit a monetary focus using either capital cost or whole life cost based investment appraisals. The final section of the interview, sought to identify the current approaches adopted by professionals in relation to project appraisal.

The data reveals a significant disparity between those professionals working in the local authority context and those working in the social housing sector. In terms of those from the local authority background, the discussions suggest that project evaluation is not the norm with the context of the projects. The three professionals unanimously felt the level and availability of funding actively prevented them from undertaking any meaningful feasibility appraisal of projects.

*I have a budget of £12,000 per property including all professional fees etc. ... what's the point of project evaluation? (Large Sized Local Authority).*

The views expressed by the regeneration professionals, suggest that any form of cost or value based planning and evaluation is presently not achievable within the regeneration arena given the importance of price ceilings in terms of maximum spending allowances.

Importantly all three professionals were also of the opinion that the present funding system held back the achievement of sustainable regeneration, Indeed the smallest local authority surveyed advocated that

*Our lack of funding is a major barrier to the implementation of any worthwhile regeneration (Small sized Local Authority).*

Regrettably, as the local authorities increased in scale, and therefore their overall contribution of the total funding allowance increases, the views expressed by the smallest local authority continue to be exhibited.

*If I want an impact I give a grant, but do we have enough funding to make an impact? The problem is if you're going into an area you need to do the lot and if you do half the area it will only have a 25% effect (Medium sized Local authority).*

Finally, the professional employed by the largest local authority highlighted that

*I could achieve sustainable regeneration, indeed if you look at past works under SRB I did, but I spent typically £30,000 per property. Now it's an unrealistic dream on my budget of £12,000 per property including all professional fees etc. ... if they want sustainable communities I need significantly more money.*

Conversely, the experiences in the social housing sector would again appear not to support the views expressed above, the interviewee from the housing association confirmed that investment appraisal at feasibility was fundamental to the decision making process. Although this often focused on the holistic assessment of a multiplicity of variables, which correlate with those identified in the policy framework. Whilst also linking back to the variables identified within literature associated with the low demand. However, it must be acknowledged that the funding regime in the social housing sector is less reliant on the public purse. As such, housing associations are less likely to experience the negative effects of funding pressures.

## **ANALYSIS**

### **The gap between theory and practice**

Whilst not reaching any firm conclusions on sustainability and the evaluation of regeneration programmes, the findings from the study reveals that, a significant disparity in approach exists between local authorities and social housing providers. The data suggests that professionals based in the local authority, whose primary focus centres on privately owned housing, are not sufficiently engaged with sustainability to allow them to implement the government's policy rhetoric in practice. The findings concur with those of Smit (2008) which suggested senior regeneration practitioners lack the level of understanding necessary for the realization of sustainable regeneration. However, Smit suggests a lack of government guidance is the primary limiting factor to this.

Leaving government guidance aside the data suggests there are several additional factors, which are limiting the achievement of the government's policy objectives. There is a belief, amongst the professionals interviewed; that the availability of funding together the restrictive nature of such funding once received is the fundamental barrier to success. It is also the belief that the unpredictability of funding allocation in turn prevents accurate and detailed feasibility appraisal. Whilst the need to comply with existing legislation, requiring professionals to allocate funds based on property condition, with only those dwellings identified as unfit benefiting from investment. Together with the influence of earlier guidance, which advocated a 'bricks and mortar' philosophy (Tiesdell and Allmendinger 2001) might have further narrowed, the professional's view and understanding of sustainable regeneration. It is argued that these limitations must be overcome before sustainable regeneration can become a reality in the private housing sector.

The barriers identified within the exploratory survey data are shown in Figure 1. It is clear that on the one hand, the government through its sustainable communities plan



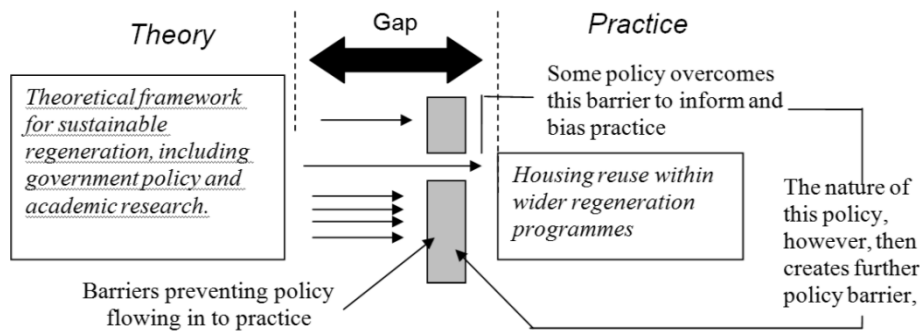


Figure 1: Model of practice in private sector housing regeneration

and allied legislation. Together with academe have identified the various contributory factors, which lead to low demand and social polarization. However, regeneration professionals charged with implementing the government's regeneration policies appear not to have accepted the true nature and magnitude of problem they have been tasked with eradicating. This would suggest that a significant gap exists between theory and practice, which contains various barriers or filters which allow only selective aspects of the body of knowledge to inform practice. The model further highlights, that this filtering process, in its self develops additional barriers to the transformation of theory into practice.

### Proposed further work

The exploratory research reveals that regeneration professionals working in the social housing arena are far more in-tune with sustainability generally, although it has to be acknowledged that the data collection undertaken in the social housing sector was very limited. The finds concur with earlier work evident in the literature (Carter and Fortune 2002). The research however also indicated that attempts to integrate sustainable benefit planning into their asset management decision making has been made, however the expert openly accepted that the process requires further refinement.

Refinement of this process will now form the basis for further research contributing to an ongoing PhD in the field of sustainable benefit evaluation. The research will build on Carter's (2005) earlier CONSUS model of sustainable procurement practice by re-affirming the significance of each of its sustainability features within the feasibility evaluation of potential estate improvement programmes. Shifting the focus of the tool towards the management of built assets. Such a shift will develop a decision aid linking the appraisal of sustainable benefits to the more traditional monetary based analysis of programme feasibility within the asset management arena.

## CONCLUSIONS

The study has identified several areas that could be developed to facilitate increased implementation of sustainability within housing regeneration projects. The professionals interviewed identified several key barriers to the implementation of sustainability within the housing regeneration arena as being a lack of funding; the unpredictable nature of funding, which prevents detailed feasibility analysis; the restrictive nature of the current legislative framework, which limits the expending of monies and finally the existence of potential bias towards bricks, and mortar focused regeneration. These are, however, issues, which must first be address by the funding

bodies and government before any further research is be considered. As a result, the authors suggest that, in the short-term at least, research grounded in the regeneration of private sector housing units via local authority regeneration departments would be unviable.

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