Towards Sustainable Human Settlements Development

The Incremental Upgrading of Urban Informal Settlements

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In the face of the high rate of urbanization, Swaziland urban landscape has seen the emergence and growth of informal settlements, characterised by inadequate self-built housing and poor living conditions. With such settlements accounting for about 60% of the urban population, there is an imperative need for improvement of these settlements. An intervention – known as the Urban Development Project (UDP) – based on the classic or traditional approach of upgrading was initiated, with the scope to regularise the informal settlements in the principal cities, Manzini and Mbabane. Recognising the improvement brought by the UDP, this paper identifies and discusses the weaknesses of the UDP. It is patent that a responsive and sustainable form of upgrading is required to address the pressing challenge of informal settlements. The vehicle for change is the incremental upgrading, which recognises that the low-income households build their shelter incrementally with their own savings and other sources. The approach places the responsibility of upgrading or improvement in the hands of urban local authorities in partnership with their communities. In support of the alternative approach, it is intended that a pilot project be identified which will serve as the ‘living laboratory’ and create the environment for the learning-by-doing methodology.

Shelter Situation Analysis

Although not comparable to other middle-income countries, Swaziland’s rate of urbanisation has rapidly grown over the recent years, considered to be 33%. The cities of Mbabane and Manzini are the main urban areas. Approximately 75% of the country’s urban population resides in the major cities – Manzini and
Mbabane – and the corridor between them. In this corridor is the town of Matsapha that forms the core industrial node. The housing pressures are attributable to the establishment of job opportunities in Mbabane and Manzini, together with Matsapha. Apart from the influence of rural-urban migration, the natural growth has contributed to the proliferation of the informal settlements. Accounting for over 60% of the urban population, the settlements are concentrated in the two cities and their surrounding areas. Most of this people live in informal, unplanned communities without adequate access to safe piped water and proper sanitation (World Bank, 2002).

The Swaziland Government (GOS) has long acknowledged that the phenomenon of urbanisation has resulted in the manifestation of informal and unplanned settlements (MHUD, 1996). The state of human settlements is exhibited by table 1 and photo 1 below. This is coupled with the reality that communities nationally spend about 50% of their income on food, leaving the other half for other needs such as housing as illustrated in table 2.

**Table 1: Access to Basic Services/Infrastructure**

<table>
<thead>
<tr>
<th>Service</th>
<th>%</th>
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<tbody>
<tr>
<td>Water</td>
<td>34</td>
</tr>
<tr>
<td>Sewerage</td>
<td>19.6</td>
</tr>
<tr>
<td>Electricity</td>
<td>60.5</td>
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<tr>
<td>Telephone</td>
<td>57.4</td>
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</table>

*Photo 1: Typology of Housing in Informal Settlements*
Table 2: Household expenditure

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Rural</th>
<th>Urban</th>
<th>Overall</th>
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</thead>
<tbody>
<tr>
<td>Food Expenditure</td>
<td>56.71%</td>
<td>45.42%</td>
<td>51.97%</td>
</tr>
<tr>
<td>Non-Food Expenditure</td>
<td>43.29%</td>
<td>54.58%</td>
<td>48.03%</td>
</tr>
</tbody>
</table>

The above factors have created an arduous challenge for the proper provision of shelter. The policy environment recognises that the delivery of shelter for this sector of the population is imperative. The Housing Policy, 2001 seeks to achieve a sustainable and equitable housing delivery system. It is the policy’s vision that “all Swazi households should have access to affordable shelter and services”. The policy seeks to among others, to ensure that women have the same legal and customary rights as men when it comes to land and housing finance; and that there is equitable and affordable access to housing and services for households affected by HIV/AIDS. The Policy has sixteen (16) strategic areas to improve the housing environment. The following elements extracted from the Policy are pertinent to the issue of informal settlements:

**Strategy 4: Land Availability and Planning in Urban Informal Areas**
- *Government should release Government-owned land in urban informal areas and undertake planning for development for low-income housing.*
- *Municipalities of Mbabane and Manzini should acquire responsibility for identifying the Government land and undertaking the planning process.*
- *Town-planning regulations should be applied in a manner that reduces the cost of settlement and increases their affordability to low-income households.*

**Strategy 13: Provision of Affordable Services**
- *All low-income households living in urban and peri-urban areas and rural growth nodes should have access to free and basic level of water, sanitation and waste removal.*
- *“Lifeline” tariffs be introduced for services.*
- *Financing mechanisms should used be to provide services minimise the cost to households.*

In recognition that the two foregoing strategies need to be hinged on a resolute financial base, there is Strategy 11, which provides as follows:
Generation of Funds to Reduce the Cost of Services

- The sale of non-productive Government assets (housing stock provided to Government employees) and the reallocation of housing subsidies from Government employees should be used to leverage finance for investment in infrastructure and for subsidising service delivery.
- Government should take out a long-term loan for investment in infrastructure.
- A study should be undertaken to identify the value of the resources that will be released in relation to the subsidies that are required.

Strategy 11 amply demonstrates that even though the improvement of informal areas is desired, it also requires mobilisation of adequate financial resources.

Identification of Critical Shelter Problem(s)

In the face of the high rate of urbanization, Swaziland urban landscape has seen the emergence and growth of informal settlements. These areas exhibit all the classic signs of rapid and unplanned urbanization, characterised by congested housing and horrendous living conditions, devoid of safe and adequate water, proper sanitation and other basic services. The increased demand for shelter has largely been met by self-help substandard buildings and the renting of rooms within households on unsurveyed ‘plots’.

With such settlements accounting for about 60% of the urban population, there is an imperative need for improvement of these settlements. This accounts for first shelter problem. The imperative to deal with this problem has been relatively recognised in the country. Hence, an intervention based on the classic or traditional approach of upgrading was initiated and expected to be replicable. This intervention has been known as the Urban Development Project (UDP). The scope of the UDP was regularising the informal settlements in the principal cities – Manzini and Mbabane – within a time horizon 1994-2006. It included investments in urban infrastructure and institutional strengthening of key implementing agencies. Financial assistance to GOS, through a loan agreement, was provided by the World Bank (MHUD, 1996). The Swaziland National Housing Board (SNHB) – a parastatal under the
jurisdiction of the Ministry of Housing & Urban Development (MHUD) – was tasked with overseeing the physical implementation. The tenets of the approach being:

- Cost recovery
- Minimum involuntary resettlement
- Involvement of communities from inception to implementation
- Granting of secure title through 99-year leasehold
- Infrastructure provision: roads, water, sanitation, street lighting

The second shelter problem relates to the approach that was employed to deal with the first problem. It is an inescapable verity that the intervention has improved the living environment of the beneficiaries. However, it has also been demonstrated that cost recovery is not attainable, which then impedes replicability.

**Analysis of Critical Shelter Problems**

**What are the problems?**

The fundamental problem is the phenomenon of urbanisation, which has resulted in the emergence of informal and unplanned settlements, accounting for over 60% of the urban population. This is accompanied by inadequate housing and poor living conditions.

It is a fact that informal settlements are a problem that cannot be ignored. Against such a background, Swaziland, like other developing countries is faced with the arduous task to cope with and find solutions to these problems. The notable response has been a programme of upgrading – the UDP. Thus emerges the second problem. The UDP was invariably reliant on substantial financial outlay and predicated on the notion that the full cost of improvement will be recovered to allow for the effort to be replicated across the country’s urban landscape. Owing to the scale of the intervention, Government was compelled to acquire a portion of the funding from external sources – the World Bank. It is clear that the traditional approach to upgrading which is based on the cost recovery principle cannot be heavily relied upon. This is because the services are delivered at once and the community expected to pay for all the services.
As the UDP has revealed, the recovered resources were meant to constitute a revolving fund to allow for upgrading of other sites.

The weaknesses of the traditional approach of upgrading are the following:

a) Affordability has been jeopardised.

b) The communities were not afforded the opportunity to contribute their sweat equity, which can reduce the cost of the product.

c) The provision of the requisite infrastructure services at once does not recognise that communities build their houses incrementally, thereby precluding the scope for sequential or incremental scale of intervention.

**Key Reasons for these problems (When did the problems appear & why they exist?)**

The occupation of Government land by informal settlements is attributable to a colonially inherited statute, the Crown Lands (Temporary Occupation) Act 22/1964. It makes provision for the granting of permits of specified areas of what was at the time of its promulgation Crown (Government) land, mostly within the capital, Mbabane. Permits were renewable one year at a time and allowed the holder to build a temporary building. Although no new permits have been issued for some time, the Act remains on the statute book. The Act included provisions allowing for the permits to be revoked. The Act also prohibited encroachment on Crown land not designated for such temporary occupation. Permits were issued for the period of one year at a fee of E2 - approximately US$0.3 today - and were renewable annually. It further specifically precluded the building of permanent housing, premised on the fact that all Swazis are entitled to a rural homestead, and this was considered the permanent and main residence of those migrating to the urban areas. The expectation was that those migrating to the urban areas for employment would on retirement or earlier return to their rural home. This resulted in the creation of the informal settlements in which the majority of urban residents now live, notably within Mbabane (Aitken, 1995). The foregoing colonial legacy and rural-urban migration demonstrates that urban areas as engines of social and economic advancement are perceived as places of great opportunities in terms of anticipated employment and better services and amenities.
Deepening poverty, influenced by factors such as rising unemployment, has exacerbated the unsatisfactory housing conditions. In addition, there is the spectre of HIV/AIDS, which has barely been in the forefront in the housing and human settlements agenda. Its impact on housing can no longer be ignored as expenditure on housing and the sustenance of it is largely centred at the household level. It is patent that the pandemic destabilizes households and increases the number of those unable to afford housing and attendant services such as electricity, water and sanitation. Further compounding the situation is the emergence of child-headed households due to loss of parents through the pandemic.

**Who is affected by the problems?**

The poor progress is a bane to Government in her role as the prime initiator of the UDP. The application of the cost recovery principle was overly optimistic. The verity is that it was not possible to recover the funds over a short period of time to proceed to other sites. The 5-year project period was never likely to be sufficient to allow for a revolving upgrading exercise (World Bank, 2002). On the other hand, the expectations of an improved living environment have been raised amongst the communities. Even the project beneficiaries were laden with all the costs such as construction costs, supervision costs and overhead costs of the implementing agency. The combination of these aspects impacted negatively on the affordability of the plots. The choice of the Swaziland National Housing Board – housing parastatal – as the implementing agency presents problems. The agency is accountable to central government and not to the community. The communities as beneficiaries ought to have a greater say on how their areas should be improved. It is essential to build on the aspect of community involvement that has been introduced by the UDP. This issue is buttressed by Satterthwaite (2001) who asserts that it is the deficient involvement of communities that as the significant reason for the limited success of housing and urban projects.
Who can influence change?

As the strategies encapsulated in the Housing Policy (2001) demonstrate, Government has a keen interest in improving the state of human settlements in the country, notably the informal settlements. Equally important is the fact that Government cannot engage in the operational arena of improvement across the broad swathe of the country. The stance towards creation of a revolving fund to facilitate replicability of the UDP is ample evidence that Government does not have all the requisite resources to undertake a full scale of upgrading nor can government sustain a patriarchal approach to improving the lives of informal settlers.

Government’s primary role is to create the amenable environment for human settlements development and provide guidance on policy and strategic issues that are required for operational issues. In this regard, it is crucial that the operational mandate be in the hands of the urban local authorities, the communities and families. It is the last group that actually knows what they need, the level of energies and resources that they can commit to the improvement of their neighbourhoods. Satterthwaite (2001) affirms the dearth of knowledge by professionals on how low income households survive on low incomes. On the other hand, local authorities possess the requisite human and physical resources to nurture and objectively direct the aspirations of the inhabitants of informal settlements.

How is the problem affecting the actors and stakeholders?

The poor living environment has a direct effect on the communities who have to contend with the realities of this arrangement. Government has the inordinate responsibility of ensuring that her people have access to basic shelter and services which confer a better standard of living. Government is not only faced with the challenge of informal settlements at the national level, there is the expectation in the global arena to tackle the issue of slums, notably under the aegis of the Millennium Development Goals (MDGs). In this regard, MDG Target 11 calls for the improvement of living conditions of slum dwellers by 2020. Even the urban local authorities are confronted with the stark realities of the informal settlements in their environs. Against all these aspects, the three levels of institutions/parties still have to find a solution to these challenges. The
attempt through the classic model or traditional approach for upgrading has not yielded all the intended outcomes, owing largely to the verity that replicability has not been attained.

Proposal for Change and Improvement

Introduction
There remains the quest to seek pragmatic and innovative ways of managing and financing urban development. It is patent that a responsive and sustainable form of upgrading or improvement is required to address the pressing challenge of informal settlements, as opposed to the classic or traditional approach that is underpinned by the cost recovery principle.

Vehicle for Change: Incremental Upgrading
The proposed change to improvement of informal settlements embodies the upgrading process in an incremental approach. The basic intents of the incremental approach to upgrading are to:

- Place the responsibility in the hands of urban local authorities in partnership with the communities;
- Stretch scarce resources further;
- Have each intervention build upon the previous one without having to duplicate effort and expenditure;
- Undertake sequence of infrastructure provision based on the utmost priority of communities;
- Primarily focus on granting secure tenure & allow time for improvement of housing stock.
- Adopt a learning-by-doing methodology that will create a repository for information for other local authorities and communities to learn from.

In support of the incremental approach and its intents, it is intended that a pilot project be identified which will serve as the ‘living laboratory’ and create the environment for the learning-by-doing methodology. The schematic presentation depicting the problem and the proposal for change is outlined in the figure 1 below.
Institutional Arrangements

The institutional framework shall encompass the following three-tier framework. The first tier is the National Steering Committee that shall be tasked with guiding and advising on policy and strategic issues that are required for operational issues. The Committee will also monitor the application of policies and strategies. It shall be constituted by representatives from MHUD and the local authorities.
The second level is the Project Team which shall be mandated with managing a project or programme, and would have the authority to make decisions within the parameters as laid down by Council. The focus of the team will be operational areas of the upgrading process and the resolution of any issues that interfere with the process. The team shall be constituted by staff in the employ of the LA. In cases where capacity is lacking, MHUD shall provide the necessary support. A project leader shall be in charge of the team from the relevant departments of the LA. Ideally, the project leader will maintain close contact with the settlement, and be readily available and be able to respond to issues raised by the community. The key departments will normally be: engineering services, health, and planning and community liaison. Others such as the finance department will be added when their involvement is required. The respective councillors from the area will be drawn into the meetings as well. The last tier shall be the Community Committee. The Committee shall be chosen by the respective community. The Committee must consult those it represents and obtain mandates to approve or reject issues as they arise.

Assessment of the Settlement
The assessment of the settlement will be undertaken in two stages: 1. Settlement Profile and 2. Socio-Economic Survey. Settlement parameters comprise of the physical and quantitative aspects of the settlement that inform the upgrading process. In gearing for the improvement exercise, the profile will be under the purview of the local authority. The aspects of this profile are outlined in Annex 1. The socio-economic survey will serve to gather a set of information on every household as reflected in Annex 2. Concomitant with the partnership principle, the socio-economic survey rests with the communities, as they know their area and inhabitants better. Components of the survey are shown in Annex 2.

Gearing for the Upgrading Process
Heads of household and renters shall be registered with the LA in order to preclude the participation of ineligible beneficiaries. The register shall be prepared from the information derived from the socio-economic survey. The
LA shall make this register available to the community to ensure that it is accurate. The register shall be updated from time to time as per advice by the community representation. In addition, a suitable identity card shall be issued. The card shall contain details such as name of head of household or renter, as appropriate, address, details of family members etc. Upon registration, planning shall begin at the micro-level with each area drawing up a list of existing services and identifying gaps and deficiencies. This activity should be undertaken by the community and should include a clear prioritisation of needs. The project team shall strive to reconcile these needs with those articulated in the socio-economic survey. Where in situ upgrading is impossible, it is intended that residents be given fair compensation or relocated to another place with comparable advantages.

Resources
Every LA should consider the level of resources that it can commit to a settlement to enable inhabitants to perceive themselves as an integral part of the town or city. Of note is that these are not necessarily confined to financial commitments, but include technical support, machinery etc. It must also be recognised that Inhabitants of informal settlements have many resources to tender – savings, materials, creativity, initiative and energy – towards the upgrading of their settlements.

Physical Implementation
In furthering the incremental approach to the upgrading process, the order of improvement will assume the following levels:

*Physical Planning*

The layout shall ensure that there is minimal relocation of dwellings. The roads and other infrastructure should be designed to fit into the shape of the settlement as far as possible. The layout shall also provide for community needs such as recreational areas, areas for undertaking economic activities, for example agricultural activities.
Street Addressing

The street addressing should be carried out to ensure that it is easier to locate residents and their homes – by the people themselves, by government or LA and by service providers – before, during and after the upgrading exercise. Even though the street signage may not be put until infrastructure provision is completed, the community should get used to the idea of street addressing.

Surveying

Since the Surveyor General’s Office is the principal agent for the surveying of Government land, it shall continue to undertake this responsibility. The costs for this exercise are not recoverable, thus providing the much-needed subsidy.

Granting of Secure Tenure & Housing Improvement

Secure tenure in the form of initially a 10-year lease and subsequently a 99-year lease shall be granted to all beneficiaries on an individual basis. The 10-year lease seeks and to allow them to demonstrate that they are serious about improving their environment and to guard against profiteering by the beneficiaries. Those who have undertaken improvements shall be legible for the 99-year lease. Eligibility for allocation shall be in the following order of priority, irrespective of marital status, sex and number of children: a) Principal Head of Households, b) Non-principal Heads of Households, c) Tenants and d) Non-residents with respect to surplus plots, and commercial, industrial and other uses. Once the beneficiaries have been allocated their plots, they shall be allowed to undertake construction or improvement of their stock.

Provision of Services

Underlying infrastructure provision is the principle that the infrastructure should be at the basic level to allow for improvement of the living environmental and affordability by the community. Further upgrading of the infrastructure shall be done when the community has been given an opportunity to improve their housing stock and when their needs or preferences change. In pursuit of the incremental approach, but depending on the needs of the community, the infrastructure provision will assume the following sequence:

- Creating access to settlements and internal road network
- Water supply
Electricity supply
Sanitation

4.3 SWOT Analysis

Strengths
- The approach acknowledges that communities incrementally build their own houses and the real challenge is that they experience difficulty in accessing clean water, safe disposal of sewage and other household waste, inadequate or lacking physical and social infrastructure.
- The agencies more accountable and with the regular interface with the communities are the urban local authorities (LAs).
- The incremental approach creates a fertile ground for forging partnerships between urban authorities & communities recognising that communities incrementally build their own houses.
- The participation of the communities is essential for success of each upgrading effort. On balance, the communities know their areas and their challenges better than practitioners as outsiders. Gaining their input and letting them have a say in the process will engender a sense of ownership and enhance prospects of success.
- The basic intent of the approach is to use scarce resources in the most efficient way, to obtain maximum benefit from minimum outlay, and to have each intervention build upon the previous one without having to duplicate effort and expenditure.
- The approach underpins that each upgrading exercise is part of a greater project, and upholds the involvement of each community in decision-making about their neighbourhood.
- It is also aims to improve the circumstances in a settlement that its inhabitants are prepared to pay the charges that may be levied.
- When residents have an assurance that their quality of life will improve, their attitude often becomes amenable to contributing their resources coupled with land ownership that can be a key catalyst for harnessing these resources.
The scale of intervention at the local level allows for the "learning by doing approach".

Weaknesses
- The process of consensus building and general interaction between the LA and the community may be tedious and protracted in ensuring that it understands issues and communicates.
- The creation and recognition of another layer of governance at the local level carries the risk of tensions with local politicians, i.e. elected councillors who are supposed to be the voice of the communities.

Opportunities
- The improvement process will harness the creative abilities and qualities of communities.
- The involvement of communities will create the opportunity for information sharing between different communities through formal or informal channels.
- The attractiveness of an area arising from the secure tenure can in turn yield increases in property values (Gilbert, 2002).
- The approach has the necessary policy backing since the 2001 Housing Policy has a bias towards the low income.

Threats
- Households with inadequate or low-income, particularly women-headed households, may not be able to participate if there is no disposable income.
- The Community Committee must be monitored to ensure that its members are not just acting on their own behalf or forestalling progress.
- Community committee may need to be supported to ensure their effectiveness.
- It cannot be guaranteed that the beneficiaries will strive to upgrade their housing due to competing pressures – the propensity of households to seek rental housing, maintenance of rural households and declining household income (Tomlinson et al, 2000).
There is the inherent threat of ‘downward raiding’ – whereby the true value of property is realised by selling to higher income groups (Gilbert, 2002).

Action Plan

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>PERIOD</th>
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<tbody>
<tr>
<td>Consultative session within MHUD to adopt approach.</td>
<td>2006/2007</td>
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<tr>
<td>Consultative meetings with urban local authorities to commit to approach.</td>
<td>2006/2007</td>
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<tr>
<td>Urban local authorities to identify project areas within their locales.</td>
<td>2007</td>
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<tr>
<td>Selection of pilot project to use as ‘living laboratory’.</td>
<td>2007</td>
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<tr>
<td>Implementation of approach within pilot project site.</td>
<td>2007</td>
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<tr>
<td>Urban local authorities implement approach within their environs.</td>
<td>2008-2013</td>
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Bibliography


Annex 1: Settlement Profile

The aspects include:

**Land Ownership**

It should be ascertained whether the settlement is located on private or public land.

**Planning**

This encompasses the human settlement and urban management aspects of an informal settlement, namely:

- Description of settlement (nature and size of the settlement)
- Adjoining land uses and zoning
- Transportation Access
- Location of community facilities and employment
- Planning and development policy
- Densities

As appropriate, the information should be derived from maps.

**Infrastructure Services**

Two aspects of infrastructure should ascertained:

- Existing services that have been provided to the settlement.
- Availability of bulk services in proximity to the settlement.
Annex 2: Socio-economic Survey

The components of the survey are as follows:

Community Needs

The socio-economic survey should incorporate a needs assessment the community. The people will be asked to list and prioritise their needs. Household needs should be distinguished from community needs.

Demographic & Economic Data

Age and gender

These questions will reveal the age/sex ratios of households and provide information on numbers of single woman head of households.

Household composition

It is essential to confirm the exact number of households and the presence of lodgers or tenants within a dwelling. Where there is more than one household per plot, the principal head of household should be identified. Lodgers or tenants can continue to sustain their arrangements as they wish. The age/sex information will also assist with determining dependency ratios, i.e. number of children and retirees as compared to economically active etc. The name and mailing address of head of household, as well as the name of landlord and mailing address shall also be recorded, as appropriate.

Place and Year of Origin

The survey serves to examine migration trends and to appreciate the extent whether residents consider themselves as permanent migrants or temporary visitors. This impacts on the kind of housing they are seeking.

Employment and Expenditure Linkages

The linkages should include the following set of information:

- Type of employment
- Place of employment
- Income
- Expenditure
• Shopping patterns

Responses are crucial for determining the economic position of the community with particular reference to affordability levels. This will allow tailoring the form of and scope of intervention, particularly in the integration of employment and shopping corridors with the settlement.

Education and Life Skills

The following information should be gathered:

• Literacy levels
• Level of school attendance
• Level of education attained
• Occupation/skills

Housing and Urban Environment

This section analyses the physical conditions of both the settlement itself and its surrounding urban environment. Much of this analysis can be gleaned from maps and aerial photographs.

Area and rooms per dwelling

The information will be linked to the numbers of people per household to determine the level of overcrowding. The structures should be marked with numbers to indicate those units belonging to a particular household.

Tenure and any rents or other informal payments

The preferred form of tenure should be identified, i.e. rental or freehold and the amount paid either for rent or ‘rights’ to occupy the property.

Cost and type of building construction

The cost will indicate the opportunity cost of demolishing and rebuilding dwellings elsewhere, where it is unavoidable. Assessment of the type of building materials will reveal what materials are available in the locale.

Area around dwellings

The area around a dwelling is essential for defining the plot size and setting the threshold for below which the plot sizes should be permitted.
Distance in time and kilometres from work, shopping and recreational facilities

The required information will determine how the settlement fits in with the surrounding area and how external access can be optimised.