USING THE HOME FOR INCOME GENERATION: - HOME BASED ENTERPRISES AND IMPLICATIONS FOR HOUSING POLICY IN NIGERIA.

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Abstract
Several housing types were surveyed in Osun and Ogun States, South West Nigeria, in two studies focusing on housing design and domestic space use. These types- public and private sector housing (multiple and single household dwellings) - provided real opportunities to investigate the prevalence of the use of dwellings for commercial activities. The results of the analysis of 612 households showed that despite differences in the educational and cultural ‘capital’ that generally result in distinct differences in domestic practices, the use of the domestic dwelling for small scale commercial and business activities remains a prevailing component of Yoruba housing. This was most prominent in dwellings occupied by low and average income residents. The findings suggest the need for architects/designers, planners and policy makers to focus on its implications for housing policies and architectural and urban design solutions; particularly in relation to housing schemes aimed at lower income earners. Consequently, this paper proposes policy options and design solutions that accommodate home based enterprises within the domestic domain.

Keywords: home based enterprises, housing design, housing policy, Yoruba domestic architecture.

1 Introduction
This paper presents two separate studies from Nigeria's housing types: - The Osun State case study of 160 households comprised of mostly privately developed multi-household and single household dwellings, and the Ogun State case study is a sample of 452 public housing units. Both studies are from predominantly Yoruba States and focused on a range of research questions, but the results presented in this paper relate specifically to home-based income generating activities. The use of the domestic dwelling for income generation or home-based enterprise (HBE) is entrenched in the informal economy in most developing countries and it is a sector that is often dominated by women, migrants and other vulnerable groups of workers, who have little choice but to engage in informal low-quality jobs; of which the home-based component is of specific interest in this paper. In recent times, the importance of home-based informal sector activities is rapidly gaining credence and researchers such as Ezeadichie (2012), Lawanson and Olanrewaju (2012), Coen, Ross and Turner (2008), Muraya (2006), Kachenje (2005), Kellett and Tipple (2002), Tipple, Coulson and Kellett (2001), and Strassmann (1981), advocate positively engaging with the merits of home-based enterprises, as it provides real economic reprieve to many urban poor. This paper supports this position as a viable position in terms of policy making, and on the strength of existing literature and the two case studies reviewed. The paper proposes a number of design strategies and solutions; particularly for lower income housing and informal settlements in Nigeria, proffering a viable and positive way forward for the urban development and economic empowerment of such areas.
The home as ‘Workplace’ in History

The use of the dwelling for both productive (HBEs) and reproductive activities (house work activities) described by Kachenje (2005) as ‘double-functioning’ is not new. The historic use of the domestic domain for income generation in Yoruba land has been documented by many researchers, and farming, commerce, and craft specialization as essential components of Yoruba economy, have traditionally been usually evident within the dwellings. Whilst farming is no longer the main occupation of most people in the country, just over one quarter of women and 40% of men in the country are still involved in agriculture according to the 2008 Nigeria demographic and health survey by National Population Commission (2008).

Historically, commerce was either local; related to crafts, or focused on trade with other Yoruba cites and non-Yoruba peoples, and predated European contact and trade. Commercial activity operating from within the domestic domain remains relevant in recent times; supported by the fact that over a quarter of households in the Osun State case study were engaged in small-scale retail activities. Commercial retail of local food crops trade was mainly a female domain, and most women at some point were involved in trading farm produce, or in the distributive network for the sale of manufactured goods; providing useful independent income to them. The existence of internal and external trades coupled with relative stability before the 18th century, enabled specialization of the crafts (weaving, gold-smiting, etc), and light manufacturing to flourish in Ile-Ife (Osun State) in particular, and these activities were often integrated side-by-side with domestic life and often, labour supply for both were inseparable. The crafts industry also had a gender demarcation, and as a result of women’s involvement in the three main traditional modes of economic production, some women were quite wealthy, and had control over their independent income (and property).

Presently, petty retailing is even more relevant in augmenting household income in Nigeria and the case studies from both Yoruba States are consistent with this. The results obtained from the two case studies support the continued relevance of home-based work and that the phenomenon is not restricted to low-income neighborhoods; a statement supported by Ezeadichie (2012).

3 Literature Review: -

The section focuses on: - a) HBEs in the African informal economy, b) Existing urban development/housing policies in Nigeria, and c) a review of design strategies advocated in specific case studies. The review forms the basis for the recommendations of design guidelines that propose the formal incorporation of the live-work component within the domestic dwelling curtilage, particularly in lower-income neighbourhoods, and in informal settlements.

3.1 The Informal Economy and Home Based Enterprises.

The informal sector as described by Fapohunda (2012) is often untaxed and little monitored by any form of government. This part of the economy is consequently difficult to accurately describe or estimate, but according to Fapohunda (2012), it is estimated that up to 60% of the working population is engaged in this sector in developing countries. The role of HBEs in the informal economy has been documented in studies such as Kachenje (2005) study of a Tanzania sample, Muraya (2006) Kenyan study, and Lawanson (2012) analyses of Lagos, Nigeria, and a review of these studies shows the significant effect of HBEs on the dwelling plot and the economy. Kachenje (2005) mapped the extent of the plot curtilage used for income generation in 33 studied cases and found that the majority of the households used a significant part of the plot area for this purpose (11% to 40%). In addition, income generating activity sometimes overlapped with domestic activities, often peaks at certain times of the day, and often involves changes made to the dwelling layouts. These changes according to Kachenje (2005) vary from minor adaptions to the dwelling to significant
changes to the layout, and often include alterations that increase the floor area of the dwelling. Lawanson (2012) study of HBE's in a sample of low, medium and high density residential areas of the Lagos Metropolis also revealed a strong reliance on HBE as the sole means of livelihood (over 45% of the Lagos sample of predominantly low and medium households). The paper recommends policy changes to enable the informal economy, to encourage collective action for informal entrepreneurs, and to articulate the National Poverty Alleviation Policy and restructure the National Poverty Eradication Programme; stating that the economy provides a key route out of poverty for the poorest. The Nairobi study by Muraya (2006) also advocates the government role in this sector via the installation of basic infrastructure, and the elimination of both rigid regulations and the threat of demolition. In Nairobi, small-scale enterprises were found in the low, middle- and high-income residential areas, and many proprietors operated from their homes (HBEs), from kiosks or in the open. Muraya (2006) suggests that government policies should assist the informal sector to create jobs and compete with the formal sector since it is best suited to employ the work force that is perhaps enterprising, yet with extremely modest investment capital, and basic skills-set. Ultimately, whilst there is diversity in the studies highlighted, there is a convergence on the characteristics of the informal economy in developing economies in that it is most vital for the urban poorest, and the focus on government policies is deemed important in harnessing the benefits of the informal economy in general, and HBEs in particular.


A review of literature reveals that in the last 50 years of Nigeria nationhood, not less than five different housing policies have been operated in Nigeria. These include those launched in 1988, 1991, 2002, 2004 and 2012. This paper is not primarily interested in reviewing the contents of each of these policies, but focuses on examining what provisions these policies made with respect to home-based enterprises in Nigeria. Looking at the operational housing policy in Nigeria today, one finds that the policy document recognises that the housing sector has the potential of generating employment, increase productivity, raise the standard of living of the people and alleviate poverty (Federal Republic of Nigeria, 2012:5). Therefore, one of the objectives of this policy is to promote job creation through mass housing delivery as a catalyst for rapid and sustained socio-economic development. Specifically, the policy noted that one of the strategies for social housing is the incorporation of micro-enterprises such as agro-allied ventures into housing schemes with a view to generating employment opportunities for the beneficiaries. Notably, this is the first time government in Nigeria is thinking of integrating small scale businesses with housing for the low-income people; suggesting that our policy maker recognise that fact that home-based enterprises can really create wealth and promote economic development. Beyond these, there a need to ensure that this policy statement is translated into practical actions, that will be of benefit to the people. This is because in Nigeria, we have always had good policies, but their implementation has been the bane of our national development.

3.3 Current Design Solutions that incorporate HBEs in the upgrading of housing developments.

In addition to strong government policies, urban design solutions must also be carefully considered in order to effectively harness HBEs. Consequently some design proposals for low-cost housing and informal settlements are reviewed in this section, similar in scale and scope to the Nigerian context. Magalhaes and Rojas (2005) in their discussion of the re-urbanization of informal settlements in Manaus, Brazil, identified that an integrated approach was often more successful; incorporating physical infrastructure, upgrading environmental conditions, enhancing social inclusion by seeking
regularization of the legal position of these settlements, and evolving new housing designs. Their proposals for the new designs included a) the use of single household dwelling unit that can be combined in a number of options, b) individual dwellings to be 25% larger than the existing minimum size used for low-cost housing in Manaus, c) all homes to have direct access to the street, and d) allowing for phased expansion and upgrading by the occupants, but including basic drainage and water points to be provided by the local council. It is noted that proposals b) c) and d) will also be useful for dwellings that opt for HBEs providing the ability to make modifications to their dwelling layout, and provide access to passing trade, whilst avoiding increasing fire hazards to the buildings. A similarly holistic approach was also advocated in Gottsman and Osman (2010) with their proposed service delivery core serving as a catalyst, stimulating growth and improved living conditions, for an informal settlement in South Africa. Their key innovation is the use of a phased construction process developed around the service core, and a public services building that integrates public space with public services and amenities (water). Low-technology, low skill, labour intensive construction materials are proposed; and the main operational strategy was the early involvement of end users, and treating the design as a progressive process.

The solution to capacity development of the informal sector (of which HBEs are a significant part) proposed by Tyrell (2008) involves the use of urban design methodology carried out as pilot projects. The main advantage of this approach is that it allows for lessons from one project to be carried over to the next. Their proposition was borne out of site based research and community consultations in a low-cost planned settlement (Diepsloot) in Johannesburg, South Africa, and it requires mapping the spatial urban structure of the informal (unapproved housing, structures, and pathways) and formal (planned street, housing, and open spaces) layers, and integrating both layers. Other dimensions to the urban design solution included the formalisation of urban agriculture (garden allotments), as there were existing agricultural plots on site, which can provide a much needed source of income and is another dimension to HBEs, and the reintegration of new civic, retail, recycling and residential units around spaces that bring the formal and informal elements together. This solution, similar to Gottsman and Osman (2010), included using easily sourced robust construction materials and details. The growth in HBEs is an international trend and not limited to developing regions although the nature & challenges of homeworking varies across economies and is a trend also noted in Lainton (2005) review of the phenomenon for a UK local council (in London). The study found that attempts to utilize existing planning policies to create live-work housing has not often resulted in sustainable mixed communities, which is one of the targets of engaging with HBEs from a holistic position. The Lainton (2005) proposals define a minimum work area which is a separate functional work area [at least 50% of the total gross floor area].

The proposals above have the following in common: -a) an emphasis on a community-involved process; to create community capacity developed by a product geared towards establishing a stronger environmental identity, b) increased connectivity of the informal economy and settlement, with the formal economy and cityscape, c) improved storm and grey water management, and d) the incorporation of various activities (e.g. civic, retail and residential) together, rather than separate strict zoning.

4 Survey design of the Osun and Ogun State Samples
A single town (Ile-Ife) in Osun State was sampled in the mid-1990s. It is a mid-sized town with a population of about 326,000 in a state of about 3.42 million people (2006 Nigeria Census). The residential areas in the town were stratified on the basis of socio-economic character and period of construction into 3 zones (low income, average and middle income neighbourhoods) zones and one area each from the lower socio-economic strata, and two from the third stratum were chosen comprising predominantly private housing. The Ogun State study surveyed public housing
constructed for the different socio-economic groups in Ogun State in four towns/cities: Abekouta, Ijebu-Ode, Ota, Agbara and Gateway - encompassing both low and middle income households.

5 Home Based Enterprises in the Two Case studies.

5.1 The Osun State Study

40 households were sampled in each of the four areas surveyed. The Obafemi Awolowo University Staff housing (Campus), and the predominantly private housing estates (Estates) were chosen because they are recent contemporary housing influenced by western architecture both in layout and aesthetic intentions, Akarabata was chosen for its older multi-household housing, while Enuwa was chosen for its traditional extended-family dwellings. The study combined questionnaire-based structured interviews exploring general concepts, of space use. The extended family orowa-type house, multi-family tenements shared by unrelated households, and self-contained flats, semi-detached and detached houses, were found in varying proportions in low income Enuwa, average income Akarabata and middle income estates and campus housing and retailing activity was found in some proportion across all the socio-economic groups though the scale and types of goods retailed differed slightly.

Retailing shops and kiosks were found in sixty-six of the one hundred and sixty domestic premises surveyed, of which forty-six were owned by the households interviewed (28.7% of the total sample of 160 households). Although physical evidence of retail goods was found in only fifteen households, the fact that about a quarter of the households engaged in retail activities, and its historic presence in Yoruba domestic life, reinforces its domestic status. The range of retail goods found in the sample included raw & cooked food items, fabrics, fuel (kerosene), Tupperware (plastic bowls and covered containers), alcoholic & non-alcoholic beverages. The presence of retail goods in 11.8% of total number of households surveyed, also attests to the continued importance of trading activities in Yoruba domestic life. The main effect of the presence of HBEs on the physical layout of the building or the plot was the provision of additional rooms (usually lean-to sheds used as stalls/shops within the plot curtilage) by those in rental accommodation, constituting close to 30% of the households with HBEs. Although the most commonly used space for retailing within the building perimeter is the verandah to capture passing trade; a few respondent used the dining room, corridor, orowa (the central hall in traditional Ile-Ife house), and the garage for retail activities. These findings are consistent with some of the Kachenje (2005) findings; that the effect of HBEs on the domestic domain includes the construction of new rooms, extending or enclosing front porches/verandahs, or the use of kiosks within the curtilage of the dwelling plot, changes to the functional use of existing rooms/spaces, partitioning existing rooms, and upgrading the structural material.

The study also delved into the respondents ‘perception of dwelling performance, and yielded some insight into the ‘role’ that being able to use the home for income generating activities played in the overall identity/place attachment that the respondents had to the house/neighbourhood. Eight of the respondents emphasized the ability to operate retail outlets or activities from their dwelling as a key reason for liking their abode (mainly due to close proximity of steady supply of customers), further supporting the continued reliance on the domestic domain as also a locus of income generation. It also emphasized the advantages of being able to conduct income generating activities from home, for which the dwelling may not have been specifically designed, but for which many had successfully co-opted their domestic spaces to deal with such activities, either for storage purposes or retail activities. Further evidence of the continued relevance of three historic income generating activities was also found in the object-space inventory of the total sample, as twenty-nine households (18%) kept farm tools in their dwellings; indicating that farming activities particularly at a subsistence level also remains a fairly regular (domestic) activity in the town.
Although the percentages of each kind of HBE was not collated separately, it was instructive to obtain this type of information, and to be able to also show that the ability to operate HBEs is of increasing relevance, and government policies and design strategies must respond positively to provide support.

5.2 The Ogun State Case Study
A survey of public housing constructed for the different socio-economic groups in Ogun State between 2003 and 2009 carried out. This involved 452 housing units and households ten estates in Abekouta, Ijebu-Ode, Ota, Agbara and Gateway City between December 2009 and February 2010. The questionnaire survey sought to evaluate the performance of public housing in the study area. The key keys investigated were the adequacy of current residences provided by the government among other things. On the use of spaces within and outside the dwelling units, it was observed that among the low- and middle – income earners comprising 76% of those sampled, 32% of them operated home-based enterprises. The enterprises ranged from rental business, fashion designing, snacks and sachet water, telephone call, grinding to rental services. Some of them were operating in make –shift structures in front of the houses, while others were at the entrances of the home. One interesting aspect of these enterprises is that they were mostly rum by women and young girls. Although, the survey result also shows greater proportion (55%) of the respondents indicated that the spaces in the current dwelling units were adequate in meeting their housing need, substantial proportion (45%) of the households encountered in the survey claimed that they needed additional spaces in the dwelling units. Among the additional spaces they needed in order of importance were shops, guests' rooms, visitor's toilets, and laundry. This suggest that in the context of southwest Nigeria, people really view housing as not only a place for living family life and bringing up their children, but rather they see housing as a product that can also be used in generating income.
Based on our observations and experience of residents of public housing in Ogun State, who in the quest for economic empowerment have engaged in home-based enterprises even when spaces for such activities were not provided in their current residences, it is very obvious that public housing providers in this part of the world are not really paying attention to the specific needs of the people. Rational thinking suggests that providers of pro-low income housing should as matter of necessity strive to make provision of home-based business in homes. This is very important in promoting the sustainability of social housing programmes as well as ensuring the improved socio-economic well-being of the residents. Like in the Osun case study highlighted earlier, one of the effects of home-based enterprises as found in the public housing estates in Ogun State was the obstruction of circulation spaces and opens spaces around the houses, which of course has implications for the environment, health and well-being of the residents.

6 Discussion and Recommendations
Cities have typically grown from the need for people to live and carry out income generating activities (both small scale and larger scale) to sustain their livelihood, and the towns and cities in Nigeria are no different. A mix of urban activities was common in most cities until the nineteenth century when public health and municipal engineering considerations gave rise to physical planning regulations and separation of urban activities into different zones (UN-Habitat 2001, p 31); a position which continues in modern urban planning in many cities of developing nations (UN-Habitat 2001, p 31). The main recommendation of this paper is the ‘reconstitution’ of the historic mix of activities within neighbourhoods, particularly in low income neighbourhoods or for informal settlement upgrade programmes. The main focus ought to be the design implementation of the Nigeria Housing policy recommendations to support the sustainability of home based work, whilst mitigating any negative effects on the economy and environment. Due to the fact that the execution of policy in design is
often the point at which such interventions succeed or fail, this report proposes the following design solutions that explore the appropriate incorporation of micro-enterprises into housing plans/schemes for employment generating purposes.

6.1 Proposed Design Solutions: - Towards sustainable Home Based Enterprise

It is clear that the dwelling is not for home life alone, but is often for generating income, and an insistence on a rigid separation between these roles does not create equitable opportunities for all. For instance, women are the majority participants in HBEs, and as such, improving their ability to combine their traditional roles as home makers and income earners, will enhance women empowerment, and the socio-economic wellbeing of households. The proposal to improve the live-work format re-connects with a ‘formula’ that in the past enabled women to be nurturers and contributors to the household income. The following design guidelines are proposed on the premise that an integrated approach is the most viable way forward.

Guideline 1: It is proposed that planning guidelines need to actively pursue mixed-use, by including ‘micro-scale’ commercial, light industry, warehousing, and even educational activities in the residential area, with the local governments overseeing the provision of physical infrastructure and services (PIS) such as waste disposal and recycling schemes. The design of the PIS should be a major part of preliminary consultations with the community, based on an exploratory pilot of a specific area/ neighbourhood.

Guideline 2: The pilot project methodology as outlined by Tyrell (2008) is advocated as a viable intervention format for the reasons stated previously. Early community consultations with all stakeholders (community leaders, household heads, housewives, etc) should occur; with the design. Guidelines and strategies that evolve from pilot projects encompassing the detailed review of existing housing, open spaces, pathways, waste management, urban agriculture, will provide the opportunity to refine and tailor the development process to suit each project, and avoid large scale reproduction of non-effective ideas that sometimes occur when proposals are rolled out across the region at the same time. This would be particularly useful in any planned redevelopment of traditional residential town core areas, where strong resistance to most government renewal schemes have often been the experience.

Guideline 3: There should be particular focus on women who are the majority operators of HBEs. The use of public squares with the traditional market is a historic urban form in the south-west Nigerian context and the incorporation of public squares into upgrade and redevelopment schemes is proposed. The squares will form the main location of public infrastructure, and other mixed uses that can enhance community identity and economic viability of such settlements.

Guideline 4: Flexibility in the design of the interior spaces at street level will allow for commercial activity to be incorporated if a household wishes to engage in home-based work. This idea is not new- it is a common model with the multi-household tenement housing of the ‘face-me-I-face-you’ style in south west Nigeria typically made up of a central corridor and double rows of rooms and a front verandah/porch, whereby the front rooms are often accessible from the road.

Guideline 5: Options for a separated but connected live and work unit, with the work unit being street facing as proposed by Tyrell (2008) should be explored as a housing design model. The work unit should include integrated plumbing for toilet facilities that can be built at a later stage by the end user. This can be compatible with the lower income examples as well as in middle income neighbourhoods/estates.

Guideline 6: The Nigerian Housing policy 2012 focus on agro-allied HBEs points towards the need for distinct work spaces with the infrastructure (waste water management and clean water provision) being an integral aspect of the design. In addition, it is suggested that the discussion about the formalisation of urban agriculture in form of local government farm allotments is also worth having, in conjunction with the small scale, home based processing of the agricultural produce.
Guideline 7: All sizes and metric areas for the work element of each dwelling should be evolved from the case study approach via data gathered on the detailed breakdown of the kinds of HBEs particularly if it is a redevelopment of an existing settlement. The data from the local levels should ultimately inform the evolution of national standards. A specific area of change that is proposed is the increase of the minimum space for 1-bed and 2-bed units currently adopted for low cost housing in Nigeria, to provide more space in the dwellings that can be co-opted for HBE storage. These interventions at the urban design and architectural design level will help facilitate the goal of harnessing the economic inputs of HBEs and also help improve the condition of the Urban poorest.

7 Conclusions

It is noted that whilst the two case studies from Osun and Ogun states were conducted at different times; yet the results of both studies indicate that home-based income generating activities remains a significant part of the economy. The 2012 Nigeria Housing policy, states that there is a need to actively encourage these micro-scale activities as a viable route to employment. The interpretation of these policies demand a carefully considered response from all parties involved in the design and construction process, but as stated in the recommendations, the process needs to embrace stakeholders, and adopt an integrated process to provide sustainable urban design solutions.

8 References

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