Green Agenda: A Socio-Cultural Response to Sick Building Syndrome (SBS) and Building Related Illness (BRI) in African Domestic Architecture

Ekhaese Eghosa Noel¹,a and Adeboye Albert Babajide¹,b

¹Department of Architecture, School of Environmental Studies, Covenant University, Ota, Ogun, Nigeria

Keywords: Green Agenda, Agenda 21, Habitat Agenda, Socio-Cultural, Domestic Architecture, SBS and BRI

Abstract: Green agenda is a participatory method for developing and implementing local sustainable development strategies and plans with active involvement of different sectors in the local community where the process is conducted. But Sick Building Syndrome (SBS) and Building Related Illness (BRI) are building concerns in African cities, because building designs, materials and styles are alien the culture and climate. The focus of the paper therefore was to deploy sustainability parameters (Green Agenda) to address SBS and BRI in African Domestic Architecture. Taking into consideration the three main aspects of green agenda which includes; identifying local values, process participation and genuinely owned result. The methodology employed was quantitative and qualitative. The findings revealed that the research had addressed the issues of imported design, sick building syndrome and building related illness using sustainability considerations. The study result has shown that the three aspects of local green agenda has socio-cultural nuance in Domestic Architecture that includes the values, beliefs, available materials in the studied community. This pre-supposes that building design necessarily need to have organic content (i.e. it has to be culture specific, socially responsive and environmentally friendly). Organic designs however have proved to be sustainable and also one of the way out of SBS and BRI.

Introduction

Environmental issues comes under two broad terms “Brown” and “Green” agendas: “Brown agenda” focuses on reducing direct threats to human health and wellbeing by improving the quality of people’s living environments (e.g. better sanitation and housing, and less industrial pollution); and “Green agenda” focuses on reducing more indirect threats to human well-being by preventing resource degradation and loss/deterioration of natural life-support. International environmental concerns have become very Green, while the Brown agenda remains the more obvious priority for urban Africa and particularly for its most deprived communities [1]. About 50 per cent of the population in most urban areas in Africa lives in poor quality homes, lacking good provision for water and sanitation thus, the need for a green agenda. In low-income urban communities, local engagement and participation is at the centre of urban environmental improvement, as drivers of Brown agenda and partners in Green agenda. Different groups have different priorities, and the conflicts between Brown and Green agendas are socio-culturally constructed. Table 1, provides a crude characterization of the two agendas. For the Brown agenda, the aspects emphasized in relation to water, air, solid waste, land and human wastes are all familiar to those working to improve conditions in low-income settlements. The aspects emphasized in Green Agenda are more clearly the responsibility of environmental agencies, and often affect a broader “public” [2]

Methodology

The paper addressed the use of green agenda to tackle health issues caused by SBS and BRI in domestic architecture employing qualitative approach, policies, proposal, actions plan and descriptive frequency table. The geographical extent of the strategy was in Africa. The strategy
focus on core elements of green agenda and was developed in collaboration with adjoining authorities and its dispatch extended beyond the local authority boundary to ensure it captured significant green spaces and communities. The strategy was practical and deliverable with measurable targets/outcomes and a statement of policies and recommendations to shape future planning, design, management and maintenance of African urban neighbourhood. The strategy established a framework for socio-cultural priorities, activities and action plan, and identified delivery agents.

Findings and Discussion
The success of an Agenda is dependent on both the intensity and extent of relevance that its contents has for a diversity of communities. The range of users reflects the variety of ways in which the document can be used; as a catalyst for funding, a record of the most pressing needs of the building community and a source of research topics and pathways. Findings from the IEQ research were fed into the building design, construction, maintenance and operations, creating a “virtuous circle” that connects all the systems addressed in green agenda. The intentions for the Agenda are that; it might inspire decision makers to move the plan and subject areas to the top of its funding priorities, and that it may provide researchers with an organized basis for planning research and collaborating across areas of expertise. A critical task of the Agenda is discussions that facilitate productive talks among the stakeholders and contribute to its impact and evolution. The Agenda has become a “living document” that grows and changes as the body of green agenda research evolve, facilitating transformative rise in building performance. The three main aspects of green agenda was discussed to show results of findings

Identifying Local Values,
Sustainable development requires that community local values be controlled in harmony with possible local cultural targets. Cultural diversity guarantees sustainability because it binds universal developmental goals to definite local values. The environment relies on the maximum diversity of such local values, since; biodiversity requires the proliferation and protection of many ecological regimes and environmental balances. Human beings are the key movers in such balances, and if diversity is gradually reduced, so are the local values linking moral and material well-being. Hence local values are a dominant guarantee of environmental sustainability. Together, the two are opposition to ideological and technological uniformity. Cultural diversity is more than cultural difference; it expresses values like creativity, dignity and community and recognizes that differences in human societies are parts of systems and relationships which are communally related and equally supportive. UNESCO places a fixed value upon cultural diversity because of its intimate tie to the entire assemblage of values. Without these values, no vision of development can be sustainable because of communities’ cultural peculiarities. There is a wide respect today of mutuality between environmental sustainability and local values [3].

Green Agenda: Process, Participation and Document
Green Agenda has two goals: first, a participatory process through which common agreement, communication and cooperation of various local actors can be achieved. Second, the outcome of the process is equally an important action plan to improve the quality of life by means of sustainable development [2]. The method consists of several steps divided into phases, as shown on a schematic drawing in figure 2. The coordinator and initiator of the process is the local civil society organization (CSO). The main work is carried out by working groups involving all the different sectors in a local community. The working groups involve local stakeholders’ representatives (local authorities, companies, CSOs and individuals). Because it involves many participants, the process takes time. Depending on the size of the community, number and size of working groups and motivation of the participants’ results may be achieved within 10 to 18 months. It is a cyclical process: the ending of one process can mean the beginning of a new cycle based on the previous experience and results.
Figure 1, Schematic Drawing Consists of Several Steps Divided into Phases

Therefore, the new Phase one is the appraisal of the previous cycle. New citizens and participants can be invited for the ‘start up meeting’ of a new cycle and existing working groups can convolute on their values/new working groups can be established. This way Green Agenda can keep including citizens in the definition and implementation of policies on sustainable development in community. Green Agenda document is an agreement among the citizens to bind limits in time and budget. Both the initiating and coordinating civil society organization and the working groups are supported by trainers and experts. They provide expert knowledge on issues, coaching of the working groups and training on communication, project development and result based programming. This capacity building component of our Green Agenda projects is pivotal in ensuring local ownership and in empowering local people towards being able to take responsibility for their own sustainable development, thus improving the quality of lives for unborn generation [4]. On the national level, communities assemble with each other, national stakeholders and experts in a National Platform Council. The Council meets to share experiences, provide new ideas and motivate each other and new communities to step in. On the international level, communities talk through the website www.greenagenda.net, international meetings and exchange visits. Green Agenda has an enormous impact on community activities.

Genuinely Owned Result.
Residents of communities have created their own strategy for sustainable development of their communities. They initiated, raised funds and implemented pilot activities, due to commitment and responsibility [5]. In many cases citizens found NGO by joining efforts within the Green Agenda process. Civil societies in several countries has improved relations with and within communities during the work on Green Agenda and have gained better insight into the values, needs and wishes of the local community. Coordinating local CSOs gained support as a result of great media interest. The media interest for Green Agenda process presented a broader image of the importance of the environment and nature [6]. Donors see that Green Agenda is an excellent tool for community development. International donors appreciate the concept, and local, provincial and national donors have financially supported the activities and strategic plans. The project Green Agenda was evaluated in 2005 [7]. The conclusions were: Local people were genuinely involved in the design of many activities and there was a clear connection between the awareness raising activities realized and the success of later pilot projects, for instance in the area of waste separation; local people designed both long-term and short-term projects [8]. The long-term projects seem more viable in those communities in which the local authorities have a clear commitment and involvement from the beginning [9]. Short-term activities fall within the capabilities of the local NGO and local working groups easily realized (without active support of the local authorities), clear results on the themes and become visible, but the working groups established materials produced, education and training provided [10]. The fact that first steps have been taken have created a huge local
commitment to seeing the plans through, this include; Setting up a Local Agenda 21 Forum and/working groups, Discussion and analysis of the main local issues, Identification of goals and ideas for action for the sustainable development of the local area, Integration of the goals and ideas into a Local Agenda 21 action plan that is adopted by the local authority and others, and implementation of the action plan, with the involvement of all relevant players.

Conclusion
Sustainability and sustainable construction is an issue of increasing importance to everyone. Sustainability assessment needs to be in environmental, social and economic terms at the building level. Green and brown agendas are both relevant for a sustainable urban development. A spatial assessment of the two agendas shows varied inter-relationships of supremacy, balance and competition over space which can be mapped and planned. These inter-relationships reflect varied systems and vulnerability, the understanding of which can help to find integrated solutions for the two agendas and accordingly plan mitigation strategies. It can aid the use of participatory approach not only by informing people about integrated brown and green issues but also by enhancing local acceptance and participation in finding ways for integrated solutions for effective mitigation and governance. Most aid comes from bilateral aid agencies of governments in high-income nations, either directly or through multilateral banks and agencies, and tends to go to national governments. Creative institutional rethinking is needed, for large centralized “foreign” agencies to support diverse local processes that are best able to benefit the urban poor.

References