Sector- Cities

Specific Area- Poverty & Employment

Focus- What are the benefits/impacts.

Green Impact Assessment and Sustainable Cities

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This paper proposes an alternative "green" environmental impact assessment model (including green valuation) and a suggested set of essential "green" urban indicators for assessing cities particularly in the third world where poverty and unemployment are more acute. Using this approach, a cross sectional analysis of cities and slums in the third and developed world would be contrasted to show opportunities for green investment that can be supported by financial instruments such as carbon offsetting, ethical considerations of fair –trade, and domestic policy measures consistent with the philosophy of transitioning countries towards a green economy and making their cities more sustainable. At the strategic and project level, this approach addresses "green" environmental impact assessment issues as well as identification of practical investment opportunities for example, and not limited to: (1) reduction in carbon footprint in housing and spatial urban design, (2) support for "green" urban feeding systems; and (3) reduction and recycling solid waste such as plastics. The overall model will show that the process of urbanization in transitioning to a green economy can lead to more sustainable development through reduction in poverty, enhanced employment and improved well-being of city dwellers and slum dwellers.

Introduction

It has been recognized for a long time now that Housing, Urbanization and the Environment are inextricably linked. After the Earth Summit in Rio de Janeiro in 1992, the UNCHS-Habitat (United Nations Commission on Human Settlement) developed an indicators programme to monitor progress on Habitat Agenda (Agenda 21) and the resolutions 15/6 and 17/1 of the UNCHS.

In 1996, the first Global Urban Indicators Database was produced. A minimum set of urban indicators after Angel and Mayo was thereafter established (Angel, 2000). The existing set of indicators provided a starting point for monitoring progress. We now have a range of indicators for measuring housing and urban conditions; and wellbeing- whether these are health, education, literacy and income. Using these indicators for example some important indices, such as Human Development Index have been formulated and is now regularly reported.

Much has changed since 1992. For the first time in history, most of the world's population particularly in the third and fourth world, now live in urban areas. Fourth world here refereeing to potential and realized human disasters like Haiti. The existing set of urban indicators worked well for a time in that era. There are now changes in priority for the same concerns and a greater understanding of the issues and what needs to be done.

Arising out of years of meeting to understand and deal with Climate Change, and recent and ongoing negotiations, lots of emphasis has been placed on reducing Carbon footprint to slow the process of global temperature rise. Consequently, we are essentially re-packaging many of our older philosophies with new insights. We are not only concerned about transforming our urban areas to meet unfulfilled needs, but we have to be mindful in doing this in an environmentally responsible manner that does not jeopardize existing and future generations. The implications are that not only must we seek to improve living conditions, but we must realign our economies in a manner that is environmentally responsible.

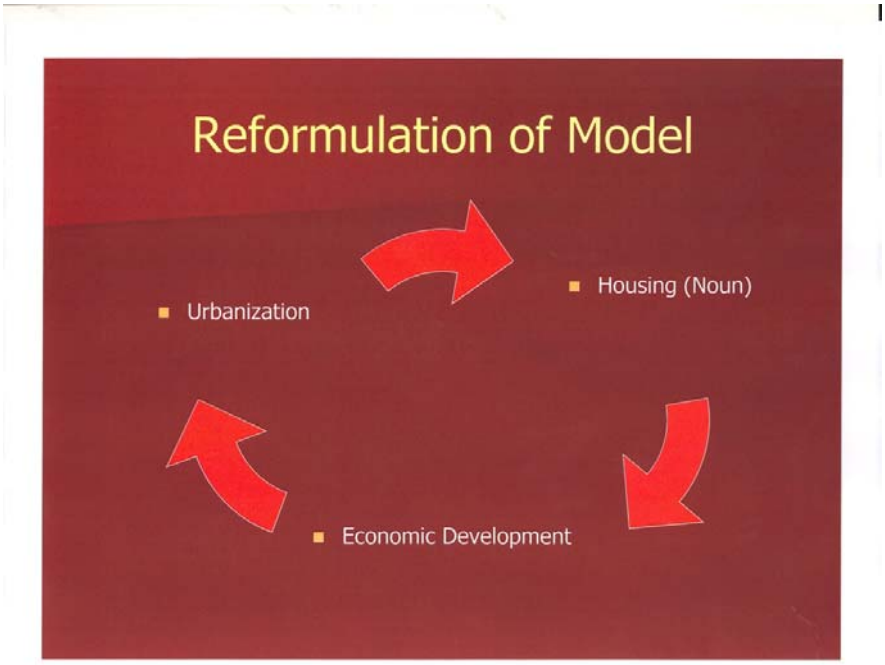
It is uncertain what is the main driver, whether the need to move to a greener economy or the need to address poverty. Recent surveys indicate that the concern is poverty. There is however a threat of increasing poverty or economic retrenchment as we transition to a greener economy. These are difficult choices and will not be addressed here. However, what is certain is that in coming years, business will not be as usual in developed economies. For developing economies, there is a dual challenge – transitioning to a green economy and improving urban conditions. Nonetheless both worlds the developed and developing face challenges to adjusting and redirecting the process of urbanization and development.

The Problem

There has historically been a lack of appreciation of the link between housing, urbanization and economic development. These were normally managed as separate undertakings. Consequently, housing tends to be dysfunctional (Huggins, 2009/2010) as shown below. These fueled earlier debates on Over-urbanization and levels of primacy. In real terms, low income families who contribute meaningfully to urban areas and lifestyles of wealthy urban dwellers, have not been afforded equitable benefits of city services such as housing and social services. Governments found it easier to relegate these families to the outskirts and slum areas outside of the city. Much of these actions were actually endorsed by scholars in the 1970s who felt that cities were growing to large-over urbanization. The general agreement at that time was to encourage sub-urbanization and constrain the growth of cities. One idea was to physically separate residential activity from work areas, sometimes by great distances. This had great appeal as it allowed cities to not address urban issues of sanitation and provision of infrastructure and services. In addition, during colonial domination urban exclusion was a deliberate policy for separating income and ethnic groups. Societies with a history of urban

exclusion simply continued on with these policies under the guise of Over-Urbanization. Thirty years after, evidence suggest that this was a grave mistake promulgated by the myth of over-urbanization. Today, it is recognized that those types of policies led to more harm than good. Cities have now been recognized as having the potential to be an important living space for modern day populations. Cities are important centers for human diversity akin to the natural environment where savannahs and forest are important areas for biological diversity. In analyzing the problems of urbanization, it is clear that housing cannot be seen as a single unit. Housing is much more that dwelling. It is the services that housing provides that is important. Cities are better poised to providing these services. Finally, housing is an essential part of the process and outcome of urbanization. One therefore cannot treat with sustainable development and the process of urbanization without considering housing.

In the proposed model, housing is seen as an outcome of urbanization and by extension a part of the development process. Planning with this in mind, we can transition to a green economy that is sustainable. This is shown below:



Housing is shown as an integral part of the process of urbanization and development. Moreover, housing is a non- specific noun. It does not represent a dwelling unit, but rather, the services that housing provides such as security, adequate space, privacy, a space for shelter, allows families to access social services, food, transportation, jobs, and recreation etc.

Proposed Framework

In transitioning to a greener economy there are some basic assumptions, paradigms, or self evident truths. The following is not exhaustive:

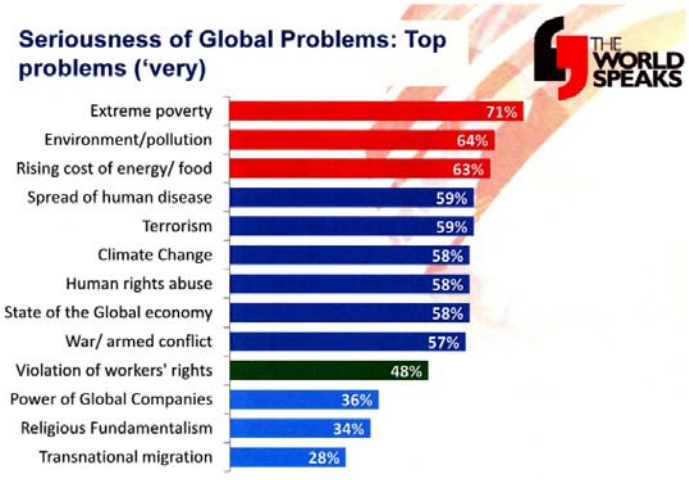
1. Cities will be the home for many of the world's population.
2. Initiatives that lead to increasing real urban incomes will address many of the shortcomings such as inadequate housing conditions.
3. Recognition that shelter and food are major expenditure items for low income families and that efforts to make these more cost effective represent saving and avenues for investment in a green economy.
4. Need to improve access to city resources and urban spaces to cater for the needs of all who live there.
5. Elimination of social exclusion from cities and urban areas.

6. Greater emphasis on efficiency of use of energy, reducing energy inputs and need to develop renewable sources of energy so as to reduce carbon foot print.
7. The need to examine product inputs along the entire production chain to ensuring greater and more environmentally responsible means of production.
8. Support for fair trade practices.
9. Greater emphasis on sanitation, recycling of waste, sewage treatment and efficiency in transportation systems.
10. Need to support income earning activities such as development of efficient urban feeding systems and recycling of waste such as plastics.
11. Upgrade of ageing infrastructure and services.
12. Improvement in housing conditions and security for urban dwellers through greater participation in decision making process.
13. Need to support policy that will reduce cost of housing faced by city residents.
14. Greater dependence on environmental services to the extent that environmental problems such as deforestation, pollution of the natural environment by industry are addressed.

Arising from these assumptions, there are approximately 5 policy measures that need to be focused upon to ensure that we transition to a green economy as follows:

(1) Need to link urbanization with Development and ensure that the process of Urbanization can sustain livelihoods, and adequate living conditions;
(2) Ensure everything we do is environmentally responsible- from energy use, construction, manufacturing, recycling to changes in preferences and tastes;
(3) Reduce Urban Exclusion and reexamine the way urban spaces are managed;
(4) Rehabilitation of ageing infrastructure and services and expansion of capacity.
(5) An appreciation of greater dependence on Environmental Services to sustain cities and urban areas and by extension modern urban living.

Cross- Sectional Comparison



A recent survey of 23 countries conducted by Globescan on behalf of BBC (Globescan, 2010) shows that globally, the most important issues facing countries were Extreme Poverty, Environmental Pollution, and Rising Cost of Energy/ Food. While individual countries would have ranked these issues differently depending on their own circumstance, level of development and urbanization, these indicators do provide a basis for focusing on likely solutions and interventions to solve these issues. In this regard, the suggested indicators, below, would provide a link between concerns expressed by city residents and path to addressing these concerns.

Proposed Indicators

The suggested new indicators consistent with the aforementioned policy measures are as follows:

(1) % of solid waste recycling
(2) % of plastic, metal, paper and glass waste recycling
(3) US dollar or local equivalent derived per kg of plastic, metal, paper and glass recycled
(4) Per capita potable water use
(5) % of potable water by supply or source
(6) Carbon foot print per capita
(7) % of energy from renewable sources
(8) Per capita energy use
(9) Imported food as % of Total Food Consumed
(10) Water input in foods for minimum daily diet
(11) Carbon foot print in foods for minimum daily diet
(12) Energy input in foods for minimum daily diet
(13) % of CO2 or equivalent produced that is sequestered
(14) Carbon and energy input in median dwelling unit construction
(15) Carbon and energy input per US dollar of National Income.
(16) Actual Fair Trade Revenue as % of Potential Fair Trade Revenue.
(17) % of urban public spaces devoted to open food markets

These indicators offer a range of possibilities for assessing peculiar conditions and concerns. Collection of data across countries would now serve as a basis for more accurately valuing environmental impacts of inefficiency, and for deriving opportunity cost based on energy and carbon input. This can be applied across the board from Haiti to Copenhagen. The proposed green urban indicators will provide a means of linking the services of the environment with environmental abuse or decay. This is just the starting point as we progress in the 21st Century, as we attempt to retool our assessment kits.

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