

Urban Ecological Balance and Planning by Applying the Methods of Bioregionalism

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Abstract Bioregionalism is an interdisciplinary that examines interconnections and framework, determined to form a whole or complete picture of a geographically specific region. Natural balance, government, humanity, society, terrain, economics and history are all the fundamental aspects of place and integral to bioregional analysis. Bioregionalism recognizes the human place within, not outside the environment. This kind of understanding of place is essential for creating sustainable urban areas (Kate Matysek, 2004). India is an economically developing country, the phases of our country is also changing in many ways. As it grows the Carbon emission - Green House Gas is being increased which is due to urbanization and expansion of Industries which automatically reduces and pollutes the precious resources such as Water, Air, Land and Biomass. The reduction of biomass automatically is a key reason for Climate Change. Though these changes are happening worldwide, India has its vital role in this by ranking 4th in the world by emitting approximately 2,00,08,333 Kgs/Year. The associations between sustainability of the environment and new urban design are concentrated and the Urban Bioregionalism is proposed through this paper. The concept bioregionalisation is to design or to develop the city as the green city with reducing greenhouse gas. In this concept we propose three different policies which are i) Government Policy, which discusses about the part of government works and rules to develop for expanding cities. ii) Public Orientation, this explains how a group of people such as activity clubs to co-operate each other and work on Environment Sustainability. iii) Individual Activities, is to discuss how each individual have to work on waste management and reducing the greenhouse gas emission (Luccarelli, M., 1995). As we know Sustainable development over the Environment which is defined as development that meets the needs of the existing without destroying the ability of forthcoming generations to encounter their own needs. Hence, urban bioregionalisation helps to balance the ecosystem in future.

Keywords *Ecosystem; Climate Change; Sustainability; Bioregionalism; Urbanization; Biomass; Policies*

1. Introduction

Human activities take place in the circumstance of certain types of associations between the social order and the bio-physical world and there is a great implication in understanding the ethical values of different groups around the world. These flairs perceive "different evidence, imperatives, and

problems, and prescribe different solutions, strategies, technologies, roles for economic sectors, culture, governments, and ethics. Today, whether in growth or decline, cities are faced with regulatory requirements and disintegrating infrastructure. Incremental urban restructuring of localities through planning and designing to the specifics of local ecology has the potential to restore a balance between urban areas and natural systems. Such planning and design would reconsider current patterns of locality development and the public's relationship to urban greenspace that perpetuate the separation of human and natural systems.

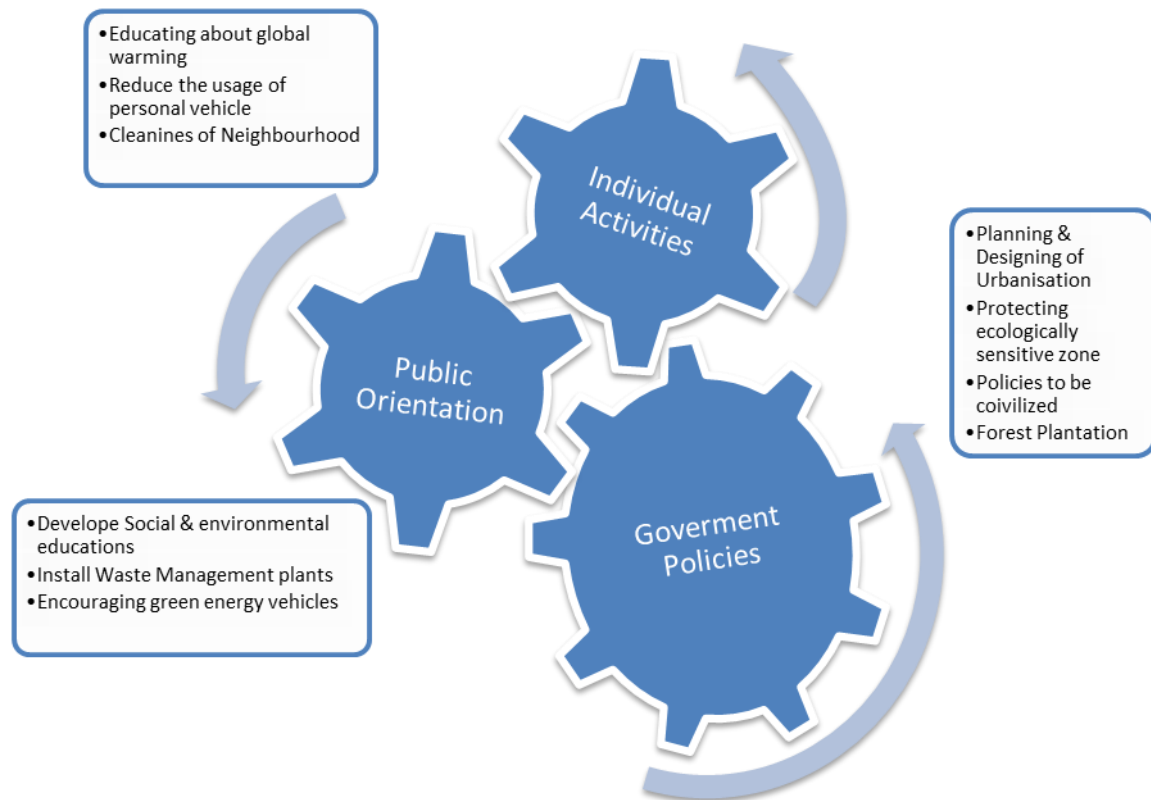
Urban inhabitants in the developed countries is detached from the environment and its natural, to a certain extent as a effect of issues of urban form and standard of living choice. This substantial separation of human and natural systems has exposed urban residents from the consequences of their performance for the environment, with a subsequent lack of general environmental acquaintance and perceptive of Earth's life-sustaining processes. This extrication has been recommended to provide communal attitudes that have led to over utilization of natural resources and deprivation of the Earth. Urban development is enhanced in infrastructures of concrete and pavement. In these environments, little contemplation is waged to minor level amalgamation of nature and nature activities at the neighbourhood and community level that might allow for recurrent contact among humans and other group of living beings, and consequent environmental knowledge and community building (Brulle, R., 2000 et al.). Integrating nature and natural systems into the built environment while simultaneously nurturing active civilian involvement in those and other natural systems has the impending to bring about environmental responsiveness and community identity. This in turn might bestow to an overall environmental ethic, whereby people would comprehend local conservationism and perform in ways that do not contribute to environmental decrepitude. Such an ethic might eventually lead to sustainable and durable patterns of urban living. A numeral hypothetical idea provides frameworks for refining the environmental ethic, including environmental education, experiences in nature active community commitment, ecological urban design and bioregional values.

2. Aims and Objectives of the Study

- 1) Ecological Sustainability
- 2) Controlling the emission of green gas
- 3) Green City Management towards 22nd Century
- 4) Biomass balance and Lost rate
- 5) Policies to develop green City

3. Methodology

Urban Bioregionalism is a representation of arising changes toward sustainable urban expansion and retrofit proposed to commence fundamentals of bioregionalism into existing cities. This review intends an iterative method for incremental changes towards an altered association between humans and nature through new ways of living and involving with nature (Steiner, F.). Through neighbourhood stewardship and the social activities the changes to the sustainable environmental and through the participation of the individuals that place in the substantial realm. Urban bioregionalism implements and broach bioregional principles of sagacity of consign and community, ecological responsiveness, dynamic contribution, stewardship, perceptible natural systems, and green cities.



4. Government Policies

By considering the environmental changes instead of planning the disaster & drought management it is always better to prevent those disasters. The government should develop the policies and programs to apply in the principles of Urban Bioregionalism and also ensure the provision of resources for further planning of environmental sustainability. There are many policies developed by the scientist who have done many research over the sustainability of the environment. In such way HLWG report by Dr. Kasthurirangan and many scientists had developed few policies to protect the biological substantial of the Western Ghats. In such way few more policies can be developed by the scientific advisor or by the suggestion of environmentalist. The policies and rules should be developed as it shapes the incremental changes over the ecological sustainability. These policies should reflect opportunities for nature actions through the support or execution of public programs such as community parks, forest plantation, ongoing nature maintenance, Waste management, Waste water treatment plants, and other environmental; restoration projects (Beatley, T., 2011). There should be rules made to real estate and construction business as their project should not disturb the ecological system or at least consideration of balancing the ecological system. The government should make the policies as such the wetlands and the natural reservoirs should be protected. By implementing specific bioregional projects such as water shed management, waste management while approving urban expansion. Decisions should be made as the Urban sprawl should not defect the ecological conservations.

5. Public Orientation

As there are many environmental activists and servicing clubs are available, they could take chances to enhance the urban sprawl and bio-regionalization of urban. The importance of daily activities in shaping people's experiences requires that urban bioregionalism be focused on the local scale of the neighbourhood, the community. The physical realm of the neighbouring environment is the background for living experiences. The orientation and the stewardship could be like the followings

- Restoration of neighbouring parks

- Installing new parks in the neighbourhood
- Team should be formed to collect the house hold wastes and to clean the surrounding
- Educating about personal Organic Farming

Through these experiences, Installing and maintaining the parks will help to reduce the carbon gas which is around or the in the neighborhood (Andersson, E. et al.). The waste collectors are should be the organization which converts or recycle the collected waste such as bio waste can converted as natural fertilizers and the plastics can be recycled. Hence it will not affect the neighbourhood in forthcoming days. The organic farming and the plantations, as it will provide the food for the personal consumption. The identity of the place is the identity of the community, the identity of the community is how they behave the neighbours and the cause of the neighbourhood. The clubs in the surrounding location are the responsible for the cause and loss of the sustainable environment. This should be fostered and educated to the upcoming generation, it is also where social and environmental learning occurs Barlett, P. (Ed.) (2005).

6. Individual Actions

Individual actions should be reflecting in the transformation and as the learning actions of implementing the bio-regionalization. Every person should have three essential policies to sustain the environment of their own surroundings. The policies are explained as they follow:

- a) Resistance
- b) Renewal
- c) Restoration

If these are followed by every person in urban life style the future will not be counting the green city in fingers. Resistance: it is to resist yourself from continues demolishing of the natural system and the brutal consistent of general ethnicity; as explained in "*Living by Life: Some Bioregional Theory and Practice*", Jim Dodge. Renewal: Implementing the activities and developing the knowledge to achieve the recovery of the ecological system. This can be done by extra efforts of every individual such as i) installing rain water collector method, ii) building the house with proper drain system, as it should not affect other water bodies in your surroundings, iv) organic farming for your own consumption, v) tree plantation in your surrounding and maintaining it. By doing this it will automatically develop the connection between you and the natural system, this tends to protect the environment. Restoration: It is the process where you restore the past destructed natural activities; this can be done by installing bird breeding nest and the facilities for them. Convert your backyard as a sanctuary gets connected with nature helps you to bond with neighbors and wildlife (Church, S.P., 2013). Individual actions can be subjective through brooding and renovate learning processes during or following neighbourhood-oriented stewardship activities, or by public discourse. The bioregional urbanism representation includes a mutual arrow to illustrate an association between neighbourhood-oriented stewardship and individual actions. Such actions contribute to the environmental learning of others while influencing personal behaviours within their own daily lives (Newman, L. et al., 2009).

7. Conclusion

As much as engorgement of urban is increasing, the other natural resources are automatically in state of decrease. This leads to economy crisis of the country. When the ecological balance cannot be protected or maintained it obviously end at economical disaster. As we have to import most of the raw materials from other countries. To avoid the crisis of our ecology and the economy I suggested the government or the planners and each and every civilians to follow the management plans as I proposed above. It encourages the accessibility of the natural system and the life style, further more it increases the implementation of bioregionalization ideals in higher dwellers. Although the management plans may seem simplistic in terms, it can provide the platform for Urban planner. As those policies

discussed where to recreate a connection between the natural system and Urban dwellers. There might be the difficulties to follow these plans as per the reality. But the small-scale of planning to sustain the environment can be achievable. Besides the development of the balance between the Urban life style and the Environmental sustainability the future generations have to be educated to protect the natural attributes and to develop the Urban forest. It might create the pride of ownership by understanding the ecological system.

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