

Urbanization as a Transformative force

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Abstract— Growth is a general phenomenon of any biological system. A settlement's growth can either be a planned or a biological process. With cities in today's context, whose power lies in financial ability, aim at economic growth which results a change in demographic distribution across its region. A rapid urbanization indicates a country's economy in its developing stage towards a modernized and a matured one, with a regulating plan for urbanization avoids imbalanced distribution of man power and uneven development across the country. The study aims at identifying the need for regulated urbanization for balanced growth, which acts as a catalyst for nation's development with supporting cases across the world.

Index Terms— Economic growth, middle income countries, transformation, urbanization, urban growth, urban development

1 INTRODUCTION

CHANGE is inevitable, cities need to transform in accordance with time, i.e. the resilience of a city is seen in the way it transforms itself from the pressure that is being exerted on the existing system. The transformation that a city undergoes in different situations explain how an urban system responds to a change. Irrespective of the change the transformation depends on the nature of the change exerted to the existing urban systems. Change is needed but a sudden change can disturb the existing system, thus policies and reforms should be formulated targeting not just the existing scenario but also the change induced by them along with its goals.

Developing countries with an evolving and an unstable economic model which are not yet modern, are in hunger for economic growth and economic reforms focusing on the economic growth initiate Pull factors in the settlement which triggers urbanization. Thus urbanization, a demographical change which demands spatial reforms of the city is the first stage of transformation towards development in developing countries. Urbanization is a fast growing indicator for a developing nations and a triggering force for spatial transformation, which when guided with regulations can result the growth towards development. A regulated urbanization would help Nations to prevent highly concentrated distribution or migration of people and haphazard growth without slowing down the economic growth and urbanization.

"We cannot solve our problems with the same level of thinking that created them"- Albert Einstein

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2 URBAN STRUCTURE AND GROWTH

2.1 Urban System

Urban system is one of the major components of human ecosystem and is created by human being on the way behind his wants for his comforts and a stable life. As human wants are many and never ending, he has always tried to achieve a better living compared to his current state of living. This situation is not just with an individual or an individual point of view, every unit, whatever the scale its referring has been attempting to improve or transform.

Right from historic times every community aimed for power, in today's context the power is in terms of financial capability of a body. Thus most of the cities aim at economic growth. The transition created in economic system results in transformation in other sub-systems. Urban growth is the basic or common phenomenon that every city experience.

The initial stage of urban transformation is urbanization. Though urban transformation and urbanization, both indicate the change experienced by an urban system, urbanization refers to increase in percent of urban population (whatever may be the reason for population growth), whereas urban transformation refers to entire change the urban system experiences.

2.2 Correlation between Urban Growth and Structure

Cities are crucial elements in the spatial organization of any region. At a regional level, the below mentioned parameters like,

- Urban regional setup
- Interregional networks
- Location of settlements (which allows the spatial connection across the region)

determine the growth among its wide range of opportunities to trade & economy and many. Though the regional setup is biological based on the resources available in the region. The location of a settlement is its greatest advantage competing within the region for development, is what makes it a growth pole in a region.

The internal structure of a settlement determines the locational orientation of economic activities, which is the major factor for density of urban population & employment and the

degree of centralization & decentralization. The three classic principles of urban location derive from three types of locational orientation of economic activities:

1. Cities as the sites of specialized functions
2. Cities as the expressions of the layout and the character of transport networks
3. Cities as central places

The central business district is a focus about which different land use &, the spatial patterning of the urban population densities, transportation & commuting patterns and etc. have evolved. When other specialized activities are performed, they create supplementary or additional nodes. The basic land use structure describes the regularities and irregularities of an urban structure and there are many descriptive and analytical models on internal structure of an urban settlement, which explain the organization of different land use and networks of connectivity and accessibility [1].

2.3 Urban Growth Poles and its Phenomena “Urbanization”

The growth pole theory of Perroux is much emphasized on industrial linkages in a region and talks on how firms operate in such a complex linkages with in a region, how concentration and growth of other poles take place aiming at economic growth. Hirschman in 1958 noted that “An economy to lift itself to higher income levels, should first develop within itself one or several regional centers of economic strength.”

Cities are growth poles, which are characterized by dynamics of development and generate spill-over growth in its neighboring territories and act as a source of growth distribution. In other words, economic growth can be stimulated through cities, which alone cannot drive the region towards development. Since development implies increase in both economic and social parameters of a region [2].

3 UNDERSTANDING URBAN TRANSFORMATION

The shift towards an increasingly urbanized world constitutes a transformative force which can be harnessed for a more sustainable development trajectory. Urban areas which display more growth when compared to the rural of that region tends to undergo transformation more rapidly irrespective of natural growth or planned development.

Since an urban system is a complex one with many interdependent sub-systems, the transition induced in any of the sub

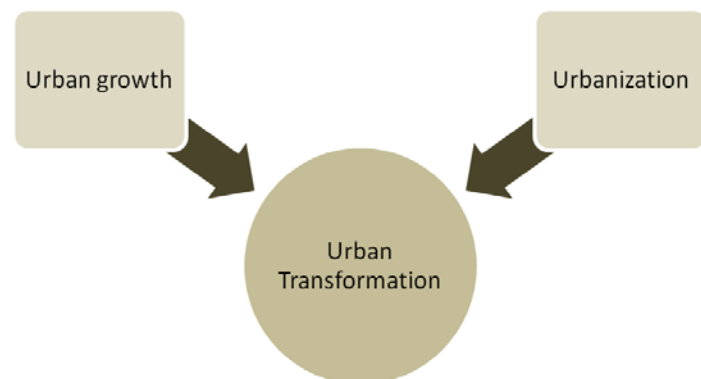


Fig. 1: Urban Transformation in terms of urban growth and urbanization

-system towards an aimed transformation will result in transformation of not just in that sub-system. From an urban planner’s perspective, who regulates the spatial transformation, the increase in demand for urban infrastructure is the result of urbanization, which acts as a driving force for spatial transformation of an urban system. Any reforms implemented targeting development of any urban sub-system will become a Pull factor for the settlement. Thus within the scope of spatial planning, urbanization can be considered as a driving force of a city for transformation.

3.1 Decoding the Process of Transformation

Urban system is a complex system with many interdependent sub-systems like urban economy, urban infrastructure, social framework and many complexly webbed, where a transition in any system can induce change in other. Urban bodies are dynamic and organic, as they react different to different situations. A city represents not just the infrastructure (if it does, it can be called as a machine), it represents the urban ecology, which includes people, the manmade environment and the natural environment. The process of urban transformation can be decoded in terms of different phases and different stages within a phase and forces inducing the change.

1. Phases of Urban Transformation
2. Stages of Urban Transformation
3. Forces of urban Transformation

4 URBAN SYSTEMS UNDER TRANSFORMATION

4.1 Phases of Transformation

Urban transformation is the change experienced by an urban body. A change is never a sudden event. Every time, change or transformation irrespective of the context can be deconstructed the process into phases as:

1. Phase of Economic Transition
2. Phase of Spatial Transition
3. Phase of Social Transition

4.2 Stages of Urban Transformation

Growth is defined as a steady rise of the indicator of a dimension of the total economy in the region or a nation, while development is defined as a combination of psychological and social changes in population. Economic growth can be stimulated through cities as growth poles without being accompanied by development. Cities are the engines of economic growth to a Nation.

Stage I: Economic growth is the first stage of transition experienced by Cities.

Economic reforms that aim at economic growth create different job opportunities in different sectors along with an increase in income levels which cause migration to urban areas, also called urbanization and lead to rapid growth in urban population.

Stage II: Demographic growth is the Step two in transition. With rapid increase in urban population, the urban infra-

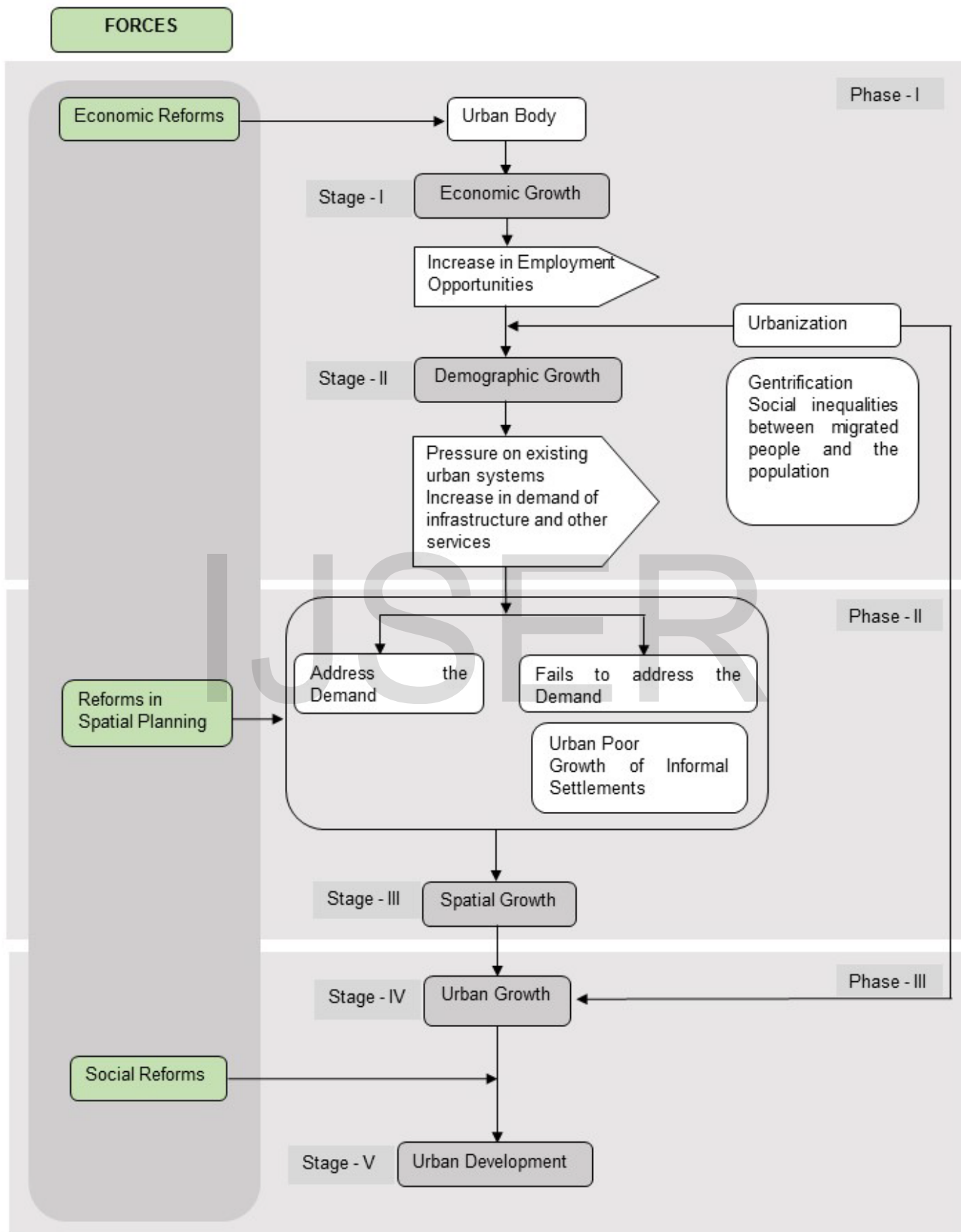


Fig. 2: Chart showing forces, stages and phases of Urban Transformation.

-structure and urban services come under pressure due to sudden increase in population through economic reforms. It creates a need to address the issues of urban services and infrastructure created by exceeding capacity. This calls for spatial reforms.

Stage III: Spatial Growth or Spatial Transition.

The demand of urban infrastructure & services and housing etc. calls for reforms in spatial planning to address the issues. If Planning and Development authorities fail to address the urbanization and its demands, it results in informal neighborhoods where informal houses are developed and informal connections to basic services can be disturbed and create pressure over existing systems with their limiting capacity reached. Even if the government is able to address the demand of urbanization, the rural migrants in search of livelihood in cities who left everything and migrate to cities find it difficult to afford urban living and form informal way of living giving birth to informal neighborhoods. Thus urban poor and increasing informal housing is a common phenomenon of urbanization, which needs to be addressed.

Stage IV: Urban growth as a step three in Transition.

The economic growth and spatial growth constitute the urban growth. As growth indicates the increase in economic parameters of an urban system, the corresponding growth in other parameters as a result of economic growth as a result of increase in employment opportunities and income levels.

Stage V: Urban Development

Urbanization transforms social relations, such as class & caste systems and gender dynamics, in ways which may provide benefits but also costs, for example, poor labor or citizenship rights for migrant workers. Economic transition which leads to urbanization and results in spatial transformation demands for social reforms to build harmony across different urban systems and make cities livable.

5 URBANIZATION IN MIDDLE-INCOME COUNTRIES

The World Bank classifies economies of the World into four groups based on gross national income (GNI) per capita as Low income, Lower middle income, Upper middle income and High income countries. The developed countries today were once developing countries in the past. Thus the classification of countries based on growth i.e. economic growth etc. or development sector are nothing but the classification is different stages in the growth process or development process of the system. Similarly, when we look at the classification of World economies based on GDP per capita explains that the classification based on economic growth of countries.

Any process in nature or any biological transformation that a system experiences as a result of its response to change, has always occurred in a stabilized manner, the start and the end of any biological process is slow. Similarly when we look at the economic system and its process of development, the low income economies and high income economies doesn't experience a rapid change in their systems. Because Low income

economies wouldn't have enough trigger or might be in slow pace of development and High income countries whose economic models are developed and almost modernized, the transition pace is slow unlike middle income countries. The Middle income countries are those which achieved a good pace of development and the High income countries are those countries who have achieved the development and comparatively who's pace of economic growth is comparatively less with Middle income countries.

The urbanization trends are greater in Lower middle-income countries when compared to other countries from 2013 to 2015 as per records of world development indicators 2017 by The World Bank. Urbanization as a greater phenomenon observed in Middle income countries, a regulated and a planned approach to urbanization will a step ahead towards development avoiding haphazard growth and establishing and homogeneous demographic distribution over a region [3].

An urbanization plan is based on the urbanization pattern of the nation. Different factors that determine the character of urbanization and demographic change are

1. Change in spatial politics and different reforms implemented in the Nation.
2. Different Push and Pull factors created in a region as a result of different reforms.
3. Demographic characteristics of the Nation.
4. Natural and Urban resources

And many other factors determine the urbanization pattern on a given regional setup. The urbanization plan would help in avoiding uneven demographic distribution which will in the end lead to an uneven distribution.

6 CASE STUDIES

6.1 National Plan on New Urbanization, 2014-2020, China

Economically, western China remains rural and underdeveloped, while eastern China is urban, more modernized and much more densely populated, and supporting 96% of the population.

A. National Plan on New Urbanization, 2014 – 2020:

National New-Type Urbanization Plan (New Urbanization Plan) is a major, six-year initiative with its targets set for 2020. The scale of urbanization that China is experiencing today has a major role in China's economic achievement. Pursuing a stable and balanced version of urbanization is a vital part of China's Urbanization Plan 2014-20 [4].

B. Structure of the Plan:

Principal Aim of the Plan: To improve the quality of urbanization for it to be a people oriented urbanization.

Vision: The plan closely centers on improving the quality of urbanization to accelerate the transformation of urbanization development [5].

Four Tasks: the four major tasks the Plan sets up for itself are:

1. Settle the former agricultural population
2. Optimize urbanization

3. Increase the sustainability of cities
4. Unified urban and rural development.

Five Reforms: The reforms needed to look into in order to achieve the tasks setup by itself are

1. Population
2. Land resources
3. Secure funds
4. Urban housing
5. Environment

C. Strategies of the Urbanization Plan:

1. Encouraging urbanization in the central-western region, mainly in small and medium sized cities and reconstruction of improvised huts.
2. Accelerating the development in emerging small and medium cities equipped with a group of functions.
3. Small towns are designated with unique features based on the location resources and cultural factors that generate economy for the town.
4. Establishing new type model smart city cluster for improved convenience of public services and social control.
5. Creating model green cities, green transportation, techniques for sustainable use of energy, afforestation and expansion urban green areas.
6. Improving the system water storage facilities, drainage and irrigation in urban areas [5].

6.2 Role of Regional Planning Strategies in the Management of Urbanization process, Kenya

A. Physical Planning at regional level, Kenya

Many programs and policies implemented in Kenya focused on developing small scale farming and equitable distribution of economic growth, where few of them are listed below:

1. *Special Rural Development Programs (SRDP)*: Raise the standard of living in rural areas of Kenya, by creating jobs and increased income.
2. *Second Development Plan-1970-74*: rural development to increase share of local resources available to the nation towards the rural areas.
3. *Third Development Plan- 1974-79*: An urbanization policy aiming at more equitable distribution of resources and income.
4. *Fourth Development Plan- 1979-83*: Alleviation of poverty aimed at improving rural access to services, health and education.
5. *Fifth Development Plan - 1984-88*: Emphasis of the fourth plan in order to improve regional balance. Seventeen more small and intermediate urban centers were added.
6. *Sixth Development Plan - 1989-93*: The plan focused on small and intermediate urban centers on their development in major infrastructure like transport, communication links, water supply etc. the plan ensures increase in urbanization, occur in the small urban centers rather than large [6].

The above listed policies of Kenya show that, since urbanization is a regional phenomenon, where migration of people

from a settlement to other, a regional approach is clearly observed towards the growth and its consequence called urbanization. Even though there isn't any particular urbanization plan, the demographic distribution and rural-urban balance is focused in every plan along with its targets.

7 CONCLUSION

Urbanization is a common phenomenon experienced by Low and Middle Income Countries, which is a positive sign in reforms implemented towards economic growth, but it should not eliminate rural activities and settlements in a long run, which leads to an imbalanced distribution of population nothing but imbalanced man power. Primary sector is as important as secondary and tertiary, an imbalanced man power in these sectors can affect the nation no matter how developed the other sectors are because the sectors with less man power struggles for growth and in sectors with more man power, men struggle with unemployment.

Thus every reform along with its targets should also address its significant changes in settlement and should allow regulated urbanization across the region. Thus urban plans and reforms majorly in Low and Middle Income Countries should also focus on growth with distribution, urban-rural balance, selective dispersal and concentration strategies both for activities and men, service and growth centers strategies etc.

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