



Planning for Special Economic Zone: A Regional Perspective

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Abstract

This paper attempts to study the policy of Special Economic Zones and its role in the development process as these zones are responsible for employment generation through industrial development along with other objectives of reviving ancillary industries, resolving housing problems, accelerate economic growth, infrastructural development, etc. Systems dynamics approach is employed to understand the nexus between the system and the zone. Finally, tools for delineation of SEZ are discussed to have balanced development in the system by considering the Special Economic Zone as a 'catalyst' for integrated development.

1. INTRODUCTION

India over the past decade has progressively opened up its economy to effectively face new challenges and opportunities of the 21st Century. To compete in the global market, Government of India has liberalized export policies and licensing of technology, and implemented tax reforms providing various incentives. Special Economic Zone (SEZ) policy is also one of the steps India has taken to boost economic growth through outward looking approach.

Although the main objective of various economic schemes remained the same, viz. industrial development of the nation, it also touched other issues like entrepreneurship development, regional dispersal of industries, export promotion, employment generation, and economic development.

According to spatio-economic analysts' view, cities are considered to be engines of economic growth. Agglomeration of economic activities is desired for the economies of scale, technological development, employment generation and growth centers. Therefore, the concept of Special Economic Zone through its impact on the development in the region is a boon. Whereas the idea envisaged by SEZ policy was to achieve rapid economic growth in the country, the concept has achieved very little due to a narrow approach being adopted. The approved SEZs have been developed near the already developed cities, instead of utilizing their spread effects in backward regions of India. As a result, old problems have been compounded in terms of higher levels of interregional disparities.

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System dynamics is a methodology for analyzing and understanding how complex systems work over a period of time. System dynamics examines inter-dependence of different variables of a system, and how problem behavior could be understood and predicted by exploring a system's underlying structure.

The complexity of the city is increasing due to the impact of recent developments in the economic arena and advancements in information and communication technology, which has led to changes in urban development processes, demographic composition and cultural and political life. This increasing complexity calls for a new integrative framework for thinking about the development of the cities. The introduction of SEZ policy will bring about changes in the existing landuse structure and occupational structure. The nexus between the urban system and the SEZ shall be studied and analyzed through the application of Systems Dynamics to solve the intricacies produced by the development of an economy within an economy.

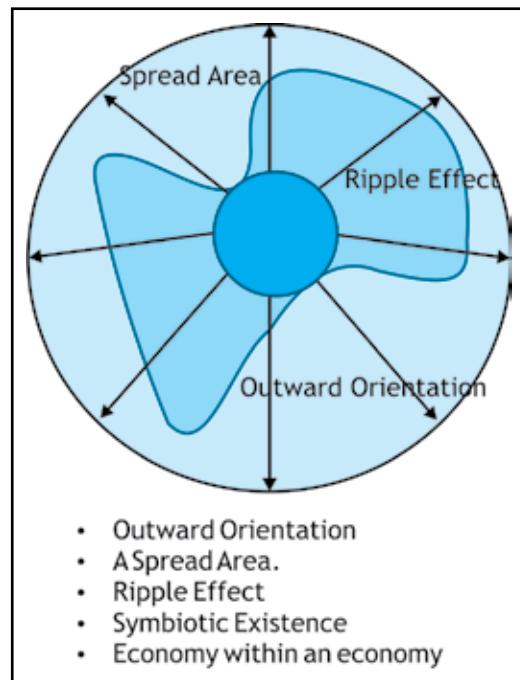
2. SPECIAL ECONOMIC ZONES

A Special Economic Zone (SEZ) is defined as a deemed foreign territory within a country with special rules for facilitating Foreign Direct Investment (FDI) for export-oriented production, and for purposes of trade and customs duties. These Zones are geographical regions that have economic laws different from a country's typical economic laws. Different economic institutions and government departments have defined it in different ways. Ministry of Commerce and Industry has provided one definition. "Special economic zone is a specifically duty free enclave and shall be deemed to be foreign territory for the purpose of trade operations and duties and tariffs".

SEZs are free trade zones, having completely different set of administrative and taxation laws outside the purview of customs authorities. Traditionally SEZs are created as open markets within an economy that is dominated by distortionary trade, macro and exchange regulations and other regulatory governmental controls. SEZs are believed to create conducive environment to promote investment and exports. Hence, many developing countries are developing SEZs with the expectation that they will provide the engines of growth for their economies to achieve industrialization.

However in India, even after conceptualizing SEZs as engines of economic growth, they are being located near the already developed cities (existing engine of

Fig. 1 Special Economic Zone Concept





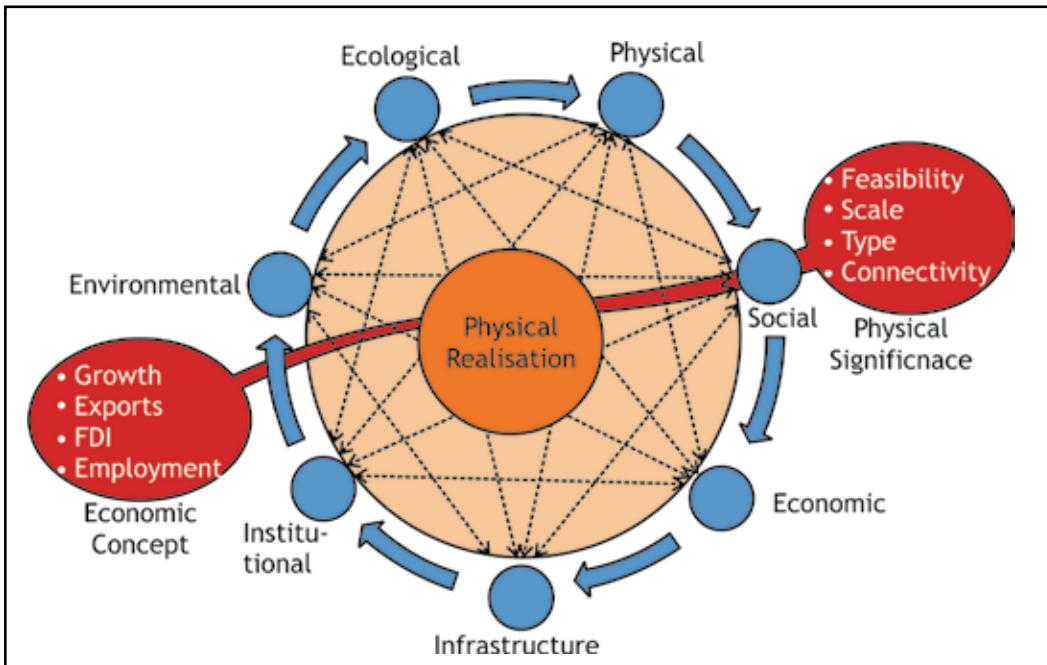
economic growth). Location of SEZs overlaps urban areas which have their own influence zones. The symbiotic existence of the Zone within the economy may not take place as the tax incentives may encourage industries in the urban area to establish them in the Special Economic Zones reducing the new investment in the zone. Thus, the economies are at unrest and there may be a backwash effect instead of spread effect by the implementation SEZ policy.

In India the concept of having free trade zones, export oriented zones and SEZs dates back to 1970. In 1979-1980, China opened up its economy to foreign investment with the establishment of Shenzhen SEZ. SEZs have been perceived as a means for India to create bigger inroads into small and medium scale manufacturing. Improving the business environment on a nationwide basis, providing a competitive platform to India's entrepreneurs are some of its motives. SEZs, however, can quickly help:

- Create high quality infrastructure in pockets
- Provide a liberal and supportive business environment
- Push for manufacturing exports
- They allow government to experiment with liberalization of labor laws
- SEZs can also provide scale-related advantages via the creation of clusters, reducing manufacturing costs
- SEZs can be particularly helpful for small and medium scale entities that cannot afford to set up captive infrastructure facilities, but can share the costs in a large group
- Finally, they can attract foreign capital and technology

3. DYNAMICS OF SEZ IN REGIONAL DEVELOPMENT

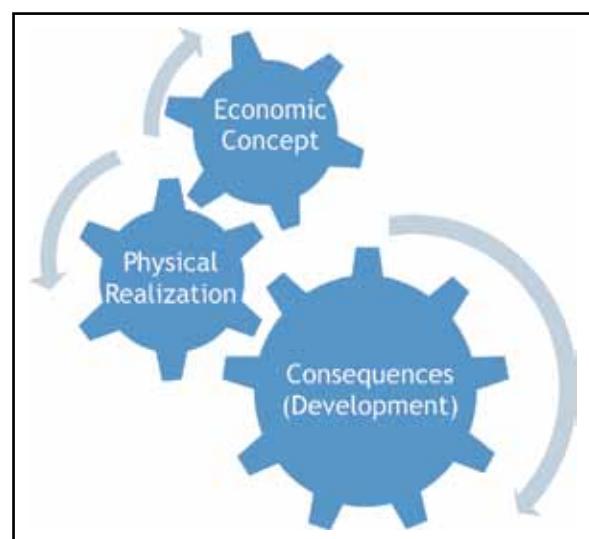
Special Economic Zone is an economic concept having goals of economic growth in a country by enhancing exports, creating favorable environment for foreign direct investment, and by generating large scale employment. These goals cannot be fulfilled without having its physical realization. This means that the locational aspects for an SEZ development is essential and the economic concept should have a physical significance. Location of an SEZ should be feasible for the industrialization with enough demand, need and resources. The physical factors of the SEZ in terms of size and type also matter as there is a direct correspondence of the zone with the region conceived as a system. Once the Zone is physically realized, the dynamic functions of an urban system will take place. The Systems Dynamics will initiate the development process within the system which also results in investment function. Various subsystems of the urban system such as physical, social, economic, infrastructural, institutional, environmental and ecological will work in concordance only if the delineation

Fig. 2 Development Process and Systems Dynamics


of the Special Economic Zone is correctly made involving urban and regional planners along with other professional experts.

There is thus a necessity to identify locational characteristics for implementation of Special Economic Zone policy. In the absence of a scientific, methodological and rational approach, there will be instances such as the Nandigram, Singur, Jhajjar, Raigarh, etc. where local people have opposed the setting up of SEZs. Land to be allotted for SEZs shall not have pre use economic value such as agricultural productivity or reserved forest area. In all these cases where the SEZ is being implemented, the context becomes important due to its socio-economic factors such as literate population, economic or political importance, population density and demography, etc. Depending on the above mentioned socio-economic factors and spatio-economic factors such as connectivity, type of land, location, existing industrial character, existing landuse pattern, etc., the location of an SEZ, type and size could be decided.

The economic concept of Special Economic Zone needs to be physically realized in the study

Fig. 3 Dynamics of the Economic Concept (SEZ)




area. The SEZ has a physical significance because its feasibility depends on connectivity, scale and distance from the factors of production. Determination of these factors is carried out by using spatial as well as non-spatial data with a focus to identify potential land sites and their extent in terms of area. This determination leads to the delineation of the most suitable land for proposing Special Economic Zone. This is done by considering socio-economic and physical factors in the study area. Soft MCA (multi criteria analysis) and land suitability matrix analysis can be performed to achieve this.

For our investigation we have considered Uttar Pradesh State Capital Region as the system which has already been analyzed against various subsystems of an urban system. Once an economic activity is proposed its impacts have to initiate and assist the proper functioning of all the sub-systems within the system. Therefore, it is important to scientifically delineate the SEZ within the system, unlike the existing government policy of randomly allocating land areas for SEZs. The later has been a reason for the failure of this economic scheme in India whereas it has been a great success in other countries such as China.

For identifying the potential location for SEZ development within the system, soft multi-criteria imposed over land suitability matrix can be performed. The objective of this approach is to incorporate physical, social, infrastructure, natural resources and economic values in identifying a particular location by taking the following steps:

- All the basic data shall be compiled and mapped including that of infrastructure, natural features, connectivity, hydrology, settlement pattern, etc. All these data are then interpreted and reconstituted with a value system.
- The study area is delineated and divided into square grids.
- A set of criteria shall be considered due to their importance in influencing the selection of areas intrinsically suitable for SEZ development (see table below)
- All the criteria are then mapped on the grid and valued with their respective range of frequencies in a three point scale (high 5, moderate 3, and low 1)
- With this, potential grid map for each criterion is generated with respect to the study area
- Then these grid maps shall be divided into 2 sub heads: positive attributes and negative attributes
- The criteria are then valued according to their importance and weightages are given according to the hierarchy of their influence in decision making



- After that two land suitability matrix are prepared: positive attributes and negative attributes
- Further, these two matrixes are overlaid and the zones of common influence are marked, these zones are identified as potential locations for SEZs

Table 1: Criteria for SEZ development potential

Positive Attributes:	Negative Attributes:
1. Connectivity	1. Agricultural land
2. Infrastructure	2. One crop land
3. Human settlements	3. Waste land
4. Resources availability	

4. CONCLUSIONS

A development plan is needed for the region with reference to the regional settlement system where the higher order settlements would be allowed to grow within sustainable limits. But there should be also a focus on small and medium towns in the region because such centers can play a role in supporting social and economic development in the rural areas by providing rural population with access to education and health facilities, agricultural extension services, service industries and agro-industries linked to local products. Development of small and medium towns will also lead to urban expansion within a region. In this case, the developmental role of small and medium towns cannot be considered in isolation from those of the large urban centers or that of the rural economy. This step initiated by the state government would ensure that infrastructure development outside the zone corresponds to the development taking place within the zone. As a result of this, an SEZ can locate itself away from the developed metropolitan cities near to smaller towns. As a whole, it essentially counteracts existing regional problems, such as control of growth of the metropolitan areas, creation of a settlement system capable of sustaining transition to 'green revolution' and industrialization, coordination of resource development and physical planning, development of backward areas and revival of industries in most parts the region. Thus Special Economic Zones could be planned for desired integrated development in a region rather than benefiting only developed cities, so that this economic policy can ultimately achieve economic growth of the country expected by the government.