International Research Journal of Engineering and Technology (IRJET) e-ISSN: 2395-0056

IRJET Volume: 06 Issue: 12 | Dec 2019 www.irjet.net

A Review on Self Sustainable Integrated Township

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Abstract - Now a days the rate of urbanization increases. Due to the increase rate of urbanization many problems are arises. Integrated Township is the only potential solution to overcome the challenges of urbanization. Too often the townships are planned today has been neglected in Sustainable planning point of view for next coming generation. The townships are planned with "walk to work" concept built up with public private partnership, integrated in nature can be the future of developing cities. The basic working principle is to integrate the ecological, social and economic aspects of sustainability in all sectors and enables its residents to live a good quality of life. The study deals with what makes a township sustainable, evaluation of Amanora park township and also deals with location of township, amenities they provide and quality of life are important if our cities are to be sustainable.

Key Words: Integrated Township, Self-Sustainable, Sustainable development, Amanora Park Township

1. INTRODUCTION

Urbanization is increase day by day and all cities & counties of world specially developing countries like India facing the problem of urbanization. Due to rapid urbanization people are getting attracted towards the city and urban areas where they are hoped to get more and more facilities and amenities to survive in better living conditions. As a result of this trend, the limits of the city increases. Due to this more development occurs and therefore there are huge need to fulfill demand of all sectors like housing, commercial as well as employment facilities. Increase in demand and development leads to sprawling everywhere which is look like improper management. So that there is requirement of proper planning and proper management.

To ease the pressure on big cities and improve the quality of urban living, town planners are encouraging the setting up to integrated township as an effective development tool. Based on this concept special townships communities living are upcoming need of present and future generations.

If the integrated township is planned with the concept of an environment friendly planning and sustainability, then people get better lifestyle with economic opportunities and healthier environment. Sustainable integrate township is the great opportunity for the people to live in healthy environment, to work in healthy environment with all infrastructure and good quality of life.

p-ISSN: 2395-0072

1.1 Concept of Integrated Township

The concept of Integrated Township is developed by integrating three different aspects of life 'Live, Leisure and Work'- walk to school, walk to office and walk to shops concept. A township generally refers to a small geographic area or a self contained real estate property. The Integrated township are clusters of housing and commercial business with associated infrastructure such as schools, roads, hospitals, convenience shopping, drainage and sewage facilities. It would be built and run to benefit the whole community. A township project can be in a private ownership or a public ownership or both. Everything in an integrated township is self-sustainable and environmental friendly.

1.2 Objective of Integrated Township

The main objective of integrated township is 'convenience' in the form of social, economic and living amenities to be given to the people within township. To facilitate the creation of efficient, equitable, sustainable urban settlement. Residential, Infrastructure and other basic required amenities are provided within walkable distance.

2. CONCEPT OF SUSTAINABLE DEVELOPMENT AND SUSTAINABILITY

The first definition of sustainable development is given by Brundtland Commission appeared in 1987 which states "Development that meets the needs of the present without compromising the ability of future generation to meet their own needs." Commission's report also states that in essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional changes are all in harmony and enhance both current and future potential to meet human needs and aspirations. Also central to most definitions of



International Research Journal of Engineering and Technology (IRJET)

Volume: 06 Issue: 12 | Dec 2019 www.irjet.net p-ISSN: 2395-0072

sustainability is the concept that in a sustainable world, our lives will be more integrated.

2.1 Sustainability Indicators

Indicators are the only tools that help to know the existing condition or problems of Particular Township. Indicators may be qualitative or quantitative. Indicators offers a picture of a larger situation but don't offer perfect understanding. Indicators can be used as a reporting tool to build an agreement for an action strategy.

The main sustainability indicators are

a) Environmental indicators

The following factors are responsible to define the environmental conditions of that integrated township. The environmental indicators includes

- Rain water harvesting
- Waste management
- Gardens and open spaces
- Reduction in pollution of Air, Water, Soil etc
- Use of ecofriendly materials in building constructions

b) Social indicators

The following factors are responsible to define the social conditions of that integrated township. The social indicators includes

- Social interaction space provisions in township
- Provision of temple, worship areas
- Community hall, community centers
- Provision of recreational areas like malls, multiplex, shopping centers in the same premises for peoples of different income groups
- Senior citizen meeting places
- Exhibition areas for cultural development etc.

c) Economic indicators

The following factors are responsible to define the economic conditions of that integrated township. The economic indicators includes

• Provision of housing for different income group

Cost reducing construction technologies for LIG and MIG people

e-ISSN: 2395-0056

- Affordable housing for each income group
- Use of passive technologies in planning to reduce the overall energy consumption and ultimately the cost
- Local market places
- Local farming for generating the economy.

2.2 Parameters of Sustainable Development

Sustainable habitat development means achieving a balance between the economic and social development of human habitat together with the protection of environment, equity in employment, shelter, basic services, social infrastructure and transportation. Some of these parameters which can be considered in planning and Development are:

1. Regional Planning

Regional development to control mushrooming unplanned and un-organized growth outside Master Plans/Development Plans along with integration of land use and transport resulting in sustainable development.

2. High Density Development

The National Mission on Sustainable Habitat (NMSH) recommends Low Rise and Higher Density Development to improve overall energy efficiency of the area; such forms are less expensive and reduce pressure on travel demand. Therefore for planning for high-density development and for increase in FAR in existing built up area, rationality for the increase in FAR should be worked out apart from carrying capacity analysis for the area.

3. Re-development / re-densification

Approaches shall be developed for Re-development / re-densification of existing urban habitat. Mixed land use, integrated and shared social space and multiple transport options can be considered and implemented to reduce trip generation and create efficient transport system.

4. Open Spaces

Emphasis should be given on vegetation / Green Belt in urban areas to reduce "heat island" effects.



International Research Journal of Engineering and Technology (IRJET)

www.irjet.net p-ISSN: 2395-0072

3. CASE STUDY-AMANORA PARK TOWNSHIP

Amanora Park Township is a unique, exclusive and the first-of-its-kind township project in Maharashtra, under the State Government's special Township Policy. Amanora Township is the first of its kind residential project located at Hadapsar, Pune with the unique concept designed to cater individual needs within the family. Amanora Township has A to Z amenities, facilities and very fine feature that make living incredibly luxurious. The infrastructure of this huge township includes healthcare, club house, water treatment plant, fire station, water filtration plant, electric sub-station, lake, central green and gas distribution station by Maharashtra Natural Gas Limited. Amanora Park Town is an independent model of developed urban life that incorporates modern values with conventional community living. In short it is a true definition of comfort, security and reliability. Spread over 400 acres, 14 million sq.ft. of carefully cherished expansion combined with 70 acres of well designed clean and open space, this place is a true landmark that would change the way everyone views life in Pune.

Amanora is designed for people who seek a systematic, peaceful and orderly way of life where public convenience and security are top priority, where trees will be protected, where kids will walk to school in total safety and elderly people will relax in a serene atmosphere, where the promoters will maintain the township for the next 999 years.

Amanora are reflects the planned development of a new township with positive urban attributes taking care not to disturb key features of the existing landscape such as tree clusters, slopes and natural drainage patterns.

3.1 Objective:

Comfort and Convenience for citizens without upsetting the ecosystem of the region.

3.2 Amenities

The basic amenities are provided in Amanora Park Town are:

- Amanora Healthcare
- Amanora- India's 1st Digital City
- E-governance
- Fire station
- Water treatment plant
- Water Filtration plant
- Electrical/ Sub station

- Amanora lake
- Amanora Hospital
- Amanora club
- Access to parking area
- Access to digital door lock in to the apartment

e-ISSN: 2395-0056

Access at main gate, etc.

4. CONCLUSION

From above theory it is conclude that, the integrated township is the best solution for the problem of urbanization. If the integrated township provided with an environment friendly and sustainability concept then it is the best option for healthy living condition as well healthy environment. Integrated township is the combination of residential, infrastructure and basic amenities with employment opportunities are provided at one place. Everything in an integrated township is self-sustainable and environmental friendly.

ACKNOWLEDGEMENT

I would like to express my deep gratitude to Zarana H. Gandhi, Ad-hoc Assistant Professor, and Sejal S. Bhagat, Assistant Professor, Faculty of Civil Engineering, Sarvajanik College of Engineering and Technology.

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