

ISSN: P-2455-0515
E- 2394-8450

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EDUCREATOR RESEARCH JOURNAL

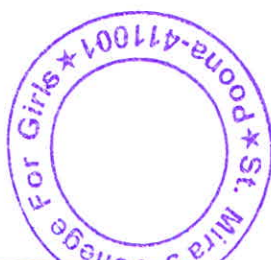
A PEER REVIEWED REFERRED JOURNAL

**“Population, Society, Development and
Environmental Sustainability”**

VOLUME-IX, SPECIAL ISSUES-I

MARCH- APRIL 2022

SJIF IMPACT FACTOR: 7.717



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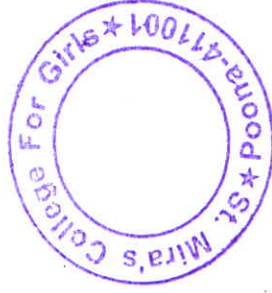
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A ZERO-SUM GAME? LOOKING AT THE ECONOMIC DEVELOPMENT OF PUNE CITY

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Abstract:

The conflict between economic development and environment sustainability appears to be never ending. While the world as we know it is melting in the onslaught of climate change manifested in untimely rains, loss of agriculture, and threat to the cities from rising sea levels, a 'global-to-local' vision is imperative for understanding the issues in proper perspective. This paper is an attempt to trace the economic development of Pune city which has emerged as a major urban centre in the last few decades with all its economic glory, in the form of educational centres par excellence, magnificent IT and auto clusters, and a bustling young population. A noticeable change in the social culture has added colours to this development. All these factors converge into an undeniable fact that Pune has arrived on the global map. While this journey is fascinating enough, the questions that need to be asked are about the loss of irreplaceable environmental assets of trees, river bodies, pleasant climate and quality of life that comes from these environmental treasures.

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Introduction:

2015 was a monumental year in the history of mankind, not because it saw the Russian intervention in Syria, the devaluation of the Chinese Renminbi from its government, or because of the prominent rise of ISIS. 2015 is monumental because it saw the creation of the 'Sustainable Development Goals (SDGs)' a path-breaking declaration from the United Nations. The SDGs channelled clear paths for the future for all member states of the UN, asking them to set their own goals regarding economic development, ecological sanctity, and public welfare.

What these goals mean for the member States is a subjective matter. Each State has the liberty to design, enforce, and execute its goals using its methods. These goals are quantified and realised by each nation, and then presented to the UN. A significant shift in the Indian method of working with SDGs was seen in the 2020-21 vision. We decided to bring global SDGs to local areas of work. The silent thought behind this concept was that we, as a nation, are a collection of individuals. For example, if each individual does not litter on roads, we, as a nation, stop littering on roads. Therefore, to ensure the seepage of SDGs into every nook and corner of India, the NITI Aayog - India's Planning Authority - decided to "go local."

Such a landmark shift in the vision has ensured a stark upward curve in the economic development of India. We now have local governments, municipalities, and panchayats working on enormous infrastructure development projects for their citizens. Indian metropolitan cities now form the benchmark for all other cities in municipal management, technological development, and ease of access to the public regarding basic necessities. We have more jobs, a steady rise in average household income, and a faster growth rate in our economy. However, we can observe a decline in the presence of one important entity - our green corridors.

in trade or business, or land a comfortable job. We can derive a very clear image of Pune city from these indicators - the city inspired belief in a young, opportunistic populous. Today, Pune continues to do the same for multiple investment entities, who are aiming to build profitable businesses in a city that continues to grow.

Pune has seen its citizens earn more and spend more with each passing year, ensuring a healthy rate of inflation. Therefore, the city has been able to expand beyond its horizons. In fact, the running joke around the city is that the economic expansion of Pune and Mumbai is at a rate so rapid that soon both cities will form a joint somewhere in the Sahyadris.

A clear indication of economic development is an ardent boost in the Foreign Direct Investment (FDI). Such an impact can be seen in Pune in several corridors, the emergence of industrial areas in and around city limits, a booming IT hub, a bustling auto cluster etc. being a handful of those. The most fruitful development happening in Pune city today, however, has to be that of the Pune Metro.

The concretization of the Pune Metro Project began in 2016. Pune Metro as a mass rapid transit system is projected to be a champion solution to the traffic woes of the city. Pune has been notorious for its traffic congestion issues in the past. In 2018, India Today reported that the number of vehicles in Pune exceeded the human population. That was a first in any urban area in the country, according to Regional Traffic Officials.

The primary goal of the Pune Metro Project is to desaturate the aforementioned traffic in the city at crucial geographical points. Initially, before the project kicked off, the city was not fully convinced that it needed another fresh attempt at a public transport option, especially after the debacle that was the BRT system. However, the project sailed through the bureaucracy and has become a reality today in 2022. Pune Metro argues that it will be monumental in reducing the traffic, pollution, and fossil fuel consumption in the city. That is because the Metro uses about 1/5th of the fossil fuels compared to what any other mode of transport would use, to move around the same number of people over the same distances while reducing the travel time by 50% to 75%.

Pune Metro is a lighthouse for future economic development in Pune, and other cities with similar demographic features. Crucial development projects need to be planned and executed rapidly in urban areas across the country. Only such moves by the national and regional planning commissions can have the necessary economic impact on the country's future. Economic development has the potential to be a label of progress for India, reserving a powerful spot for us on the global stage.

However, the impacts of economic development projects are not limited to progress. In fact, one of the most common conflicts seen in development projects is the impact on the environment. One of the most important provisions in the 17-point SDGs is that of focusing on life on land, life in water, maintaining a clean and healthy environment, clean water, and affordable and clean energy usage.

The Cost:

While the growth story of Pune has been a fascinating and fast track affair, there is no escape from the omnipresent "cost" of economic development. Let us take the Mumbai-Pune Expressway as an example. It was a huge project undertaken by the state government of Maharashtra. The MSRDC (Maharashtra State Road Development Corporation) opened the road for public traffic in April 2002. The expressway generated revenue for the government and made the 3-hour "Bombay to Poona" drive a reality. MSRDC was successful in creating arguably the most fertile economic zone in India when it connected Mumbai and Pune efficiently. However, the tenders for the expressway were received in December 1997. In all the time it took for completion, a fraction of the Sahyadri mountain range was in constant disarray. There is no tangible data on how many plant and animal species were displaced for the concretization of this tarmac goliath. Such is our behaviour about economic development goals. We race ahead to achieve them all and leave no room for ecological sustainability and conservation.

Bringing the spotlight back to Pune, the Metro project that is rightfully the talk of the town stands tall today.

However, the cost of this venture stands not counted. Just like Pune has been a cushy cradle to educational institutes, the IT sector, and the Metro, it has also fed countless environmental and ecological territories from its bosom. These territories, assets that they are, may be overlooked when the spotlight lies on economic development. We have effectively cut down on our very own green corridors that adorn the city as we have strived to achieve a better economic life. Today, colloquially, a city is known by its tallest skyscrapers, its businesses and profits, its standard of living, etc. Take that away, and what are we left with? The answer is straightforward: the cumulative natural indices of our geosphere, biosphere, atmosphere, and hydrosphere.

Pune Metro consists of three lines running across the city. The 16.59 km Purple line runs from PCMC Bhavan to Swargate. The Aqua line runs from Vanaz to Ramwadi and spans 14.66 km. Another line, Line 3, is a 23 km project that is still in works. It is supposed to run from Hinjewadi to Shivajinagar. Together, these three Metro lines span more than 50 km. That means 50 km worth of municipal land is at stake for the project. The rich environmental elements surrounding all those areas stand before a cliff of unsure futures.

The Environmental Impact Assessment Report of the Metro Project has clearly highlighted the environmental costs of the project rating these as RI which translates as 'Significant negative impact is expected'. These include pollution effects and loss of trees.

Let us understand the cost of economic development with a clear example. The Aqua Line running from Vanaz joins Karve Road in the Paud Phata locality. 1 km before the Line takes a hard left towards Nal Stop, it starts brushing against the ARAI Hill. The ARAI Hill also known as Vetar Tekdi is a natural hill, a vast serene natural landform connecting numerous localities in Pune. It is home to a lush green cover, with some plants being native to ARAI Hill only. Moreover, it contains some beautiful and rare species of birds and small animals. In fact, the hill boasts of being the home of rare species of owls including hundreds of other birds.

Another incident associated with the Metro Project is the feared loss of bird sanctuary located on Nagar Road Private development around the ARAI Hill, including residential and commercial complexes, has been a clear cause of disturbance for the flora and fauna of the hill. The Pune Metro and its viaduct structure practically kisses the ARAI Hill as it meanders at Paud Phata. In making the viaduct stand tall, the local biosphere and geosphere are constantly losing their comfortable positions due to the onset of nearby economic, mostly infrastructural, development. The hill is also the source of grass and other fodder for grazing animals. As more and more parts of the hill are mowed down, so is the fodder for cows, buffaloes, etc. Local animal owners bring their cattle atop the hill to graze at certain specific times during the day. Such activities, inherently done by locals will deplete in due time if we continue to ignore the vices of our economic development.

A few more examples can be studied to map the cost of economic development. There are more environmental costs associated with fast economic growth of the city. A significant change in the direction of streams including that of Ambil Odha has led to flash floods and loss of value have been reported in the recent past. It is a direct and immediate result of the unregulated construction activity following a rapid influx of population. Hindustan Times takes a cautionary tone when speaking about the Ambil Odha (Ambil Stream) in Pune. The paper goes on to say "In the rapidly expanding city of Pune, natural resources are the ones that are at stake."

Another equally sensitive and critical story is that of Ram river which has practically disappeared from the map. Its existence has been reported as a 48 metre wide river in the old 1890 map of Bavdhan.. The river has practically disappeared due to inappropriate human interventions.

Conclusion:

Pune enriches lives. As do all other urban centres of development. Therefore, it is imperative that we, as a society, cumulatively try to make our lives better through our actions, for today and tomorrow. If we are building the tallest skyscrapers for our citizens today, we must not turn a blind eye to preserving our greenest lands. Economic

Development is a necessity; without it, we would all be a victim of Malthus' predictions.

The most important aspect of development, however, is striking a balance between how much we, as a species, fill our plates with, and how much we leave untouched for the benefit of our future generations. The UN SDGs are vital in bringing the human race to a technologically advanced, clean energy-rich, and ecologically comfortable future. We cannot conclude the superiority of our development plans over the sustenance of the environment, and vice versa. We however, can clearly state that overdoing either side will lead to a zero-sum game.

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Cite This Article:

**Dr. Manisha Viraj Pimpalkhare, (2022). A Zero-Sum Game? Looking at the Economic Development of Pune City, Educreator Research Journal IX (Special Issues - I), March -April, 106-110*