

“Achieving Utopia For The Nation - Beyond The Mega Cities

Case Study: Roorkee Town”

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ABSTRACT

The smaller cities & town has been ignored in India and all our concentration for the provision of Infrastructure & Development was concentrated on our Mega Cities like Delhi & Mumbai. States and our nation is nothing but a summation of our cities; thus it is not inordinate to assert that the state of our cities reflects the state of our nation. This research paper aims to find the opportunity for a small town Roorkee in Utrakhand State and arrest the outward migration of youth to some extent from the town by providing them opportunity with in the town to work-live in a positive environment and better living standard. When our economically productive population spends time in traffic jams due to overcrowding in a Mega city, we lose a important resource – Time. Thus, We need to develop alternative future for our nation and this paper takes us a step closer to our ultimate goal of developing Roorkee Town as an Educational Hub for the Region.

Keywords:

Business oriented research Development, migration

INTRODUCTION

Experiencing the rapid urbanization within the proximity of national capital New Delhi, Roorkee witnessed a spatial trend of this development where **migration of people occurred due to polarization of job opportunities** in cities like Delhi & Mumbai, which are already choked and overcrowded. A large number of graduates with varying skills moves towards the megacities in search of jobs. Smaller cities and Towns in India face “Infrastructure Deficit” & due to lack of opportunities in the home town most of the young generation decides to migrate to Mega Cities in the wake of earnings at the cost of deteriorate living standard & poor life style. Spending a large amount of quality time in traffic Jams which is a sheer wastage of such an important resource - *Time*. It could be utilized if we manage our regional planning effectively. Mega cities of Delhi, Mumbai have been on the top agenda for India. Consequently, the potential of smaller cities to contribute to India’s Economy has largely been ignored. Provision of Fly-over & broadening of roads, is a short term solution, the root cause lies in unprecedented migration of people, and if we have to think for a long

term solution we have to get to the grass root level. This Paper will focus on the case study to develop *Roorkee Town as an Education Hub and a center of excellence in Research and development with inclination towards business oriented research*. We have to develop smaller cities and towns of the nation in order to sustain growth with a holistic approach.

NEED OF DEVELOPING ROORKEE TOWN AS A EDUCATION HUB

Roorkee is a gateway to Uttarakhand State and National Highway 58 and 73 passes across the city. It currently have a population of 1, 18,118 within its Municipal area and 2, 73,502 in its Urban Agglomeration.

‘Smaller cities are easier to govern, cities with good governance have a greater potential to create and support good living conditions. These cities have a better chance to offer their inhabitants a more equitable share in economic growth, access to infrastructure and services, and participation in political decision making. Accompanying these opportunities, however, are growing demands on the capacities of municipal institutions. As

national level public funding dwindles for cities, public resources must be stretched to meet the needs of the growing numbers of urban dwellers. This is one of the central challenges of our times.’ (Conference Proceedings: 1st Habitat Summit 2009, New Delhi)

Roorkee as a gateway to Uttarakhand is among a very few town of this state which lies in plain area, Thus supports the mechanisms of Industry set up including easy transport of goods and machinery on loaded on long trucks, which is not possible for any other town of the state with hilly terrain. About 100+ industries have come in region around Roorkee (List attached at the end) which will require human resource for their functioning. Thus it is inevitable for the Uttarakhand State to neglect the crucial importance of the strategic location of the town at NH 58 and NH 73 to develop it as research and development center for business oriented research knowledge park, which would invite a inward migration and control out migration, once we install a visionary mechanism to develop it as Education Hub and R & D centre. Following Graph shows a regular Population projection calculated by taking mean of Arithmetic, Geometric and Exponential increase method.

PROJECTIONS

The Town has registered a growth of **21%** from 2001 to 2011. The Indian urban decadal growth rate from 2001 to 2011 is 31.8%. This shows that the town is growing slower as compared to other urban centers of the country. Following tables and graph shows decadal growth of population of the town. Population Projections are being done by Arithmetic, Geometric and Exponential mathematical increase methods and then final population is projected by taking the mean of them for greater accuracy.

Arithmetic Increase method

$$X_{1(2001)} = 97,516; X_{2(2011)} = 1,18,118$$

$$\text{Difference} = (X_2 - X_1) = 20672$$

$$P_{2035} = P_{2011} + (n * \text{Difference}), \text{ where } n = \text{no. of years}/10\text{years} = 2.4$$

$$P_{2035} = 1, 67,730$$

Geometric Increase method

$$P_{2035} = P_{2011} (1+y)^n$$

Where, y = % increase from 2001 to 2011,
 $P_{2011} = 1, 18,118$, n= no. of years/10years=2.4

$$P_{2035} = 1, 86,638$$

Exponential Increase method

$$P_{2035} = P_{2011} e^{r * n}$$

Where, e is constant = 2.71828, r = rate of increase % = 0.21, n= no. of years/10years=2.4

$$P_{2035} = 1, 95, 524$$

Projected Population

$$\text{Total Population} = P_{2035} = [(A.M) + (G.M.) + (\text{Exponential Increase})]/3$$

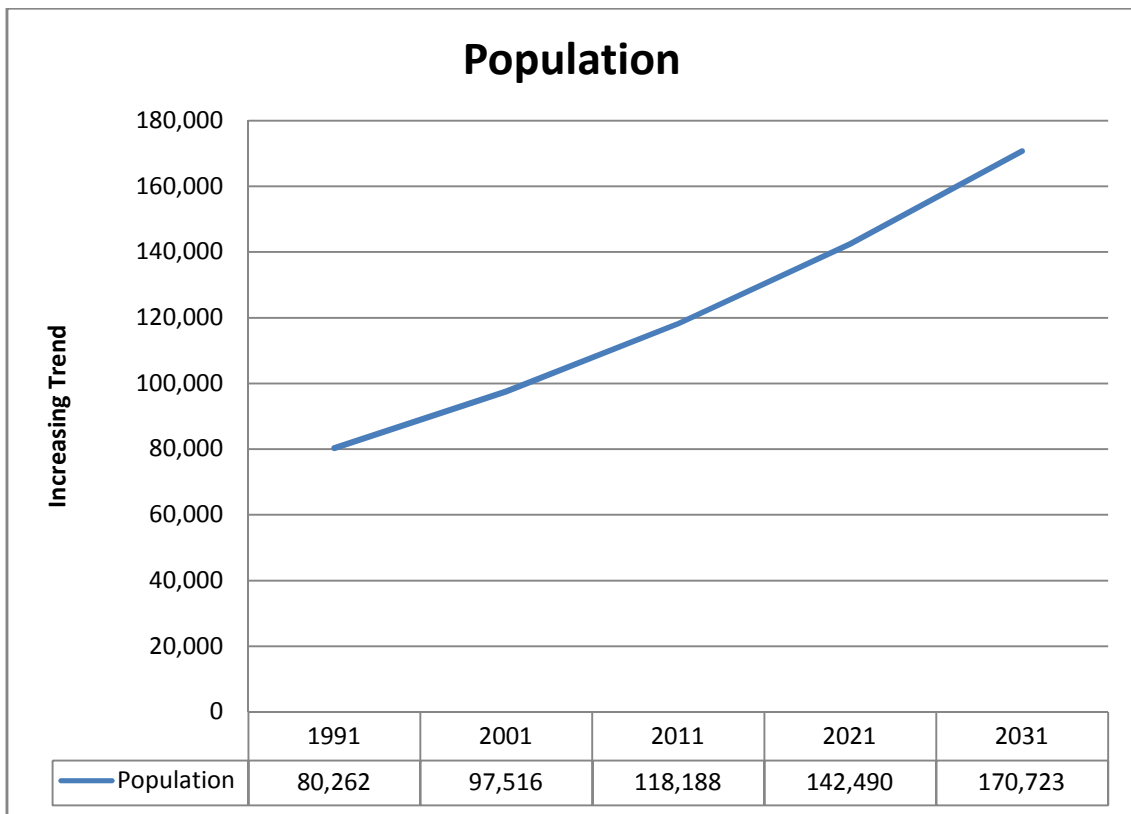
$P_{2035} = 1, 83, 297$ on approximation, we get

$P_{2035} = 1, 85, 000$ =Projected population for 2035

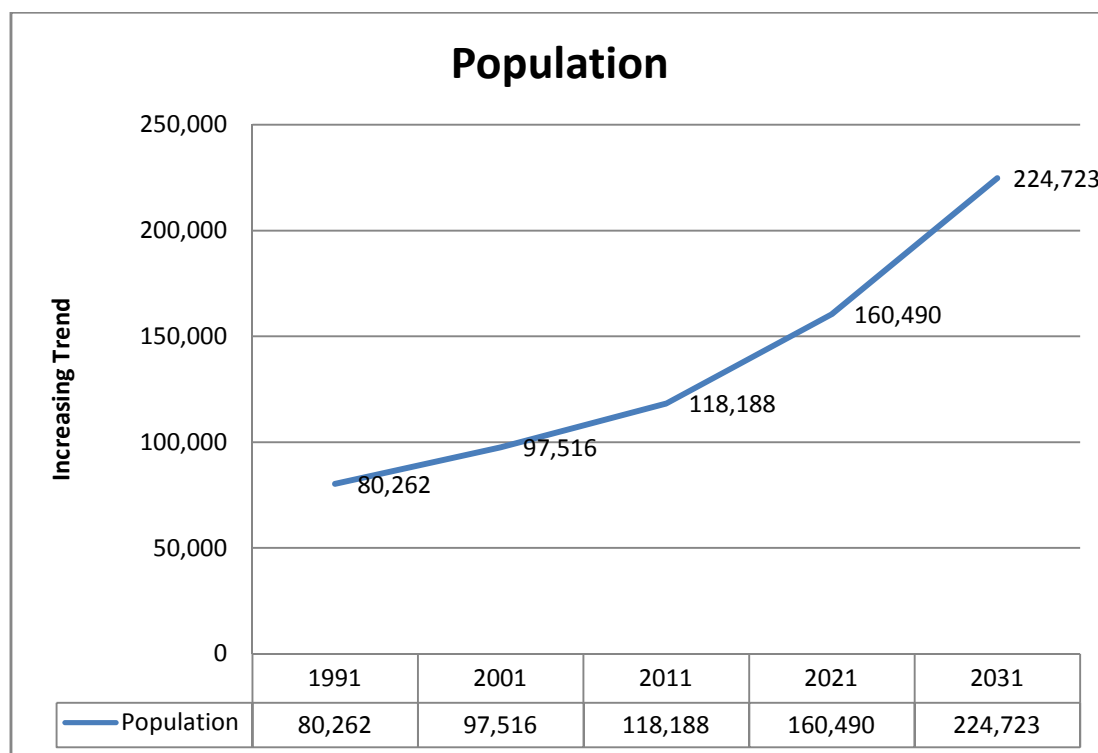
Similarly, projected population for year 2021 and 2031 have been calculated and is shown in following tables and graph. This is shown in Graph 1.

Now, With the strategic intervention by creating a vision for the town and develop it as education hub, It is advised for the proposed Master Plan of the city to allot an

area of about 300 acres for the development of Knowledge Park in New Development Zone A within the Phase 1 of the Master Plan. And therefore it is expected for the town that it will be able to attract an additional population of at least 18000 from around the region to work-live on permanent basis in the Phase 1 (2015-2020) the Master Plan. Thus, an additional population of 54000 is been accumulated shown in Graph 2.



Graph 1 Decadal Increasing Trend of Roorkee Town



Graph 2 Decadal Increasing Trend of Population after intervention of Developing Knowledge Park

‘Growth of smaller cities has been much lower as compared to mega cities. However, the real deterioration has been in the decline of small towns as centers of economic and social activity. Urbanization today is seen as the direct migration of rural workers from Bihar, Uttar Pradesh and Uttarakhand to the big cities of Delhi & Mumbai.’ (Conference Proceedings: 1st Habitat Summit 2009, New Delhi) This outmigration of the youth from the Roorkee Town is aimed to be slowed down by providing them better Job opportunities at their region itself.

Contrast this with the role universities have played in cities in the west – for instance, Boston, Oxford & Cambridge. (The Alternative Urban Future Report, wwf-India, 2009)

GOVERNMENT INITIATIVES

The 2nd Five Year Plan 1956-61 (Chapter 26, Planning Commission of India), commenced the creation of town & country planning legislations in many states and initiated institutions to prepare master plans for important towns. Master plans for a number of cities were set up and the state

capitals of Gandhinagar (Gujrat) and Bhubaneswar (Orissa) were developed in the 3rd plan, 1961-66 (Chapter 33, Planning Commission of India). New Industrial towns like Durgapur were also built. The need to limit the further growth of population in larger cities was emphasized in the 4th plan, 1969-74 (Chapter 19, Planning Commission of India). The idea of restraining the growth in larger cities and encouraging the development of smaller towns was pursued in the 5th Plan, 1974-79 (Chapter 5, Planning Commission of India).

OPTIMUM UTILIZATION OF RESOURCES

Developing Human Resource for any Developed Nation tops its priority because it has a multiplier effect on the social fabric of cities and Town. Smaller Town like Roorkee will face infrastructure deficit to move in this direction. Thus innovative strategies are to be involved based on the character of the town. Presence of research Institutes already in the Roorkee Town backs the idea of developing a Knowledge Park for the Town. Strategies involved are as follows:

- Use Land as a resource, *sanction for higher F.S.I. at important areas*

can help authorities in monetary terms, and this money can be utilized to develop other infrastructure for the Town.

- Use Public Private Partnership (PPP) to fill the gap of required technological skills and management.
- Strategy to develop Roorkee and Haridwar as Twin Towns to promote cultural and commercial ties, encourage trade and Tourism, strategic links to utilize 100+ Industries via SIDCUL.

KEY FINDINGS

- Roorkee is earmarked to grow as Industrial Zone because of very limited plain area available to Uttarakhand, with already 100+ Industries that have started in the last decade after the formation of the State.
- It would be a wise decision to propose a Knowledge Park in the close vicinity of Roorkee Town with inclination towards business oriented research, the presence of various research institutes will be an advent to make Roorkee an Education Hub.

- Strategic location of Roorkee Town, proximity to National Capital New Delhi and presence of Industries in adjacent areas can be utilized to its maximum by creating a visionary plan for the town to develop Research and Development in Business oriented manner.
- Invite More People to the Zone and Develop Human Resource Pool that will help Roorkee come out as bright and education town.
- Tourism can be developed by creating a character to the Town by using Urban Design elements and utilizing heritage structures such as Solani Aquaeduct for a potential of generating economy through Tourism.

CONCLUSION

It is not easy to develop and make strategy for a town which is at slow growth of rate, however it is always better to light a candle than to curse the darkness. Extensive Research work is being done to find the key factors which would be essential for developing a business oriented research platform at such large scale for the region. It is possible and can be done. Roorkee Town which is growing at a slow growth rate of just 20 % population increase in decadal growth have enormous potential to be the locus of Utrakhand State and pioneer in years to come in the field of Research and Development in Business oriented platform.

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