DEVELOPMENT OF INFRASTRUCTURE IN KARNATAKA – A CASE STUDY OF UTTAR KANNADA DISTRICT

INTRODUCTION

Once upon a time man used to live a very primitive life. His wants were very limited and limited only to the basic needs. At different stages of evolution herd living became a way of life for various animals and ultimately human beings converted it to social living. In the process of achieving this social living, people found the necessity of various facilities. Human settlements started at simple places, where people could live with some level of convenience and enjoy some measure of security against outside threats. Although hunting, gathering and fishing were the first preoccupations of primitive man, it was soon discovered that some kinds of tools had to be made for even these elementary activities. In addition, they soon found out that provisions should be made to help them face the adversities of the local weather and the hostilities of other tribes and wild animals. These facilities were the first elemental components of an infrastructure that made living, gathering hunting and producing possible.

All these old truths remain relevant to more recent human habitation experiences. The first “towns” of the world almost instinctively were formed where transport was available and where the provision of water was secure. The ancient civilizations of Mesopotamia, Harappa and Mehenjodharo etc. were known, for the various facilities available there. Settlements that neglected to pay proper attention for the development of basic facilities or that failed to have an elemental concern for these facilities, usually experienced an early demise. Concerns for additional support structures continued in most settlements soon after their establishment. A market place, some form of a city hall, school, clinic, police station and so on tended to pop up.

Throughout history, infrastructure system and services have continuously evolved in both technology and organization. Indeed in many instances, social scientists measure the level of civilization or advancement of a society on the basis
of the richness and articulation of the infrastructure systems that society has in
place. Another way to gauge the importance of infrastructure is to note that all the
progressive movements of the nineteenth and twentieth centuries have, in essence,
focused on the need to improve one or another infrastructure system in meeting
one or another social, humanitarian or economic need. In the case of metropolitan
cities of the early twenty-first century, one can easily distinguish at least fifty
systems and subsystems that constitute the city’s infrastructure ranging from large-
scale transportation and water projects to neighbourhood medical clinic, beauty
parlors, libraries etc.

Development implies a passage from a lower to a higher stage. Economic
development is a long-term dynamic process, which enables a country to attain
high levels of income, output and employment and secure better standards of
living. It is associated with progressive changes in the socio-economic structure of
a country. There is a close link between economic development and infrastructure
facilities. No nation can build the structure of the social and economic well-being
of its people on weak foundations. We cannot visualise a country’s solid progress
in all spheres of life without a well conceived and well built social and economic
infrastructure. Given the crucial linkage of infrastructure with economic-growth,
poverty alleviation and human development, emphasis on infrastructure is critical
in achieving economic development. Infrastructure is quintessence of economic
development. It comprises all those activities and facilities which support
production functions. Like factors of production, infrastructural facilities are not
factor inputs which directly produce. They are facilitative in character and they
contribute indirectly but importantly to productivity. Their influence is diffused
and pervasive. It is used as an umbrella term for several activities referred to as
‘social overhead capital’, ‘Economic overheads’, ‘overhead capital’, ‘Basic
Economic Facilities’ and so on.

We require good hospitals, properly staffed by doctors and paramedical
staff and we require schools and colleges with libraries laboratories and sports
facilities for the growing children and a good transport and communication system
at the local, state, national and international levels. In the globalised era, we notice
drastic changes and shrinking global boundaries which magnify the need for proper infrastructure. Today repeatedly we talk about the global village and global connectivity. Good roads, highways, bridges, railway lines, airports, seaports, tele-communications, twenty-four hour uninterrupted power supply these are no longer luxury items, but a basic necessity in today’s world. India is a nation on the move and in a highly competitive and globalised society, we will be left far behind if we do not build proper social and economic infrastructure. Ever since we entered liberalization era fifteen years ago, we have laid greater emphasis on infrastructure development in order to attract foreign investment.

Infrastructure is required for social and economic growth and for promoting the quality of life both in urban and rural areas. For instance in urban areas, lack of adequate mass transport facilities has spawned an explosion of personalized transport especially of two wheelers and cars. The proliferating automobiles in cities have hiked pollution and accidents as never before. The clogged arteries of the cityscape have paradoxically slowed down mobility. And the urban-rural divide is manifest in every field of infrastructure development including transport. A large number of villages lack a reliable all weather road connection with near-by markets and towns.

If we are striving for the total development of the country, can we afford to overlook the widening hiatus between urban growth and rural growth? Much of the infrastructure facilities are geared to the needs of the urban economy, while the vast rural hinter lands are very poorly served by these facilities. For example, of nearly six lakh villages, only about three fifths are known to be connected by all weather roads. . . !

**SIGNIFICANCE OF THE STUDY**

Research is at the core of the knowledge that informs and supports public policy and decision making. It helps in strategic planning for economic development by providing a more comprehensive, rigorous and integrated knowledge base. It is universal truth that infrastructure development is a vital component of economic development. Infrastructural development can be
identified at various levels of geographical regions such as national levels, zonal levels, state levels and district levels. Today, in the 21st century there is no denying the fact that globally, there is a ‘development gap’ not only between nations but within them as well as within the sub-regions of the nations and that this gap varies among regions. The major cause for this development gap is the inadequate development of infrastructure.

The economic slowdown has much to do with the Government’s inability to allocate resources for infrastructure development especially where private investments have not been forthcoming. There is a sign of overheating because of infrastructure constraints, both physical and human. Almost one and a half decade into the economic reforms programme, the country has little to show by way of private as well as foreign investment in the infrastructure sector. There is a wide gap between the potential demand for infrastructure for high growth and the available supply. Poor infrastructure including power shortage, bad roads, inadequate water and sanitation and unreliable communication is costing the country dearly. India is a vast country with large number of villages. “The penetration level of the infrastructure is low in rural areas as compared to the urban sector. Providing rural connectivity infrastructure through private sector participation will help in bridging the technological divide between rural and urban and create an opportunity for divide convergence”

A few years back a task force on infrastructure was constituted by the central Government to attract investments in infrastructural projects. On July 21st, 2007 the central Government announced, the setting up of a Revolving Fund with an initial corpus of Rs. 100 crore to assist in infrastructure development projects of state Governments through Public Private Partnership (PPP). The revolving fund would be called the “India Infrastructure Project Development Fund” and would bear up to 75% of the development costs of projects.

1. Ajay Narayanan, Akshay Jain, B. Bowonder – “Providing Rural Connectivity Infrastructure: ICT Diffusion through Private Sector Participation”
“Poverty reduction is a primary goal of development policy. In large parts of the world people have to live on meager income and have limited access to infrastructure services, such as water, safe sanitation, power supply, roads and telephones. Infrastructure regulation plays an important role in poverty reduction in developing countries”.

Extensive studies on economic development have been undertaken in India by many research scholars. But such studies mainly concentrated at national level and state level. Infrastructure development at different levels, particularly at district levels, has been, least studied. Building new knowledge that responds directly to priority gaps in development of infrastructure is a must for economic development. In view of this, the researcher has taken a topic entitled “Development of Infrastructure in Karnataka – A case study of Uttar Kannada District” which has got more relevance in the current times.

Statement of the Problem:

The problem chosen for the study is “Development of Infrastructure in Karnataka-A Case Study of Uttar Kannada District”. Uttar Kannada is the fifth largest district in the state of Karnataka. The district is blessed with enough rainfall, fertile land, forest and the beautiful coastal belt. In spite of this, the district has not developed to its full potential even to this day. Though there is ample opportunity for economic development in this area in terms of resources, it has not been fully utilised. When we go on analysing different indicators of economic development we find that there is an inadequate infrastructure development in this area.

There is a close link between economic development of a region and the available infrastructure. Though the district is rich in natural resources, it has not been harnessed due to lack of infrastructure. For instance, tourism may be

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developed in this area as a profitable business because of natural advantage but there comes a problem of infrastructure facilities. There are many rivers in the district but the irony is that many villages in the district are suffering from lack of safe drinking water facility. Many villages lack road connectivity, electricity and so on. The development of adequate infrastructure has got global importance in the aftermath of Globalisation. If infrastructure is not properly developed, it will be a hurdle for economic development. Therefore, due attention should be given to this problem. Hence the topic “Development of Infrastructure in Karnataka – A Case Study of Uttar Kannada District” has assumed significance.

Objectives of the study

The present study proposes to investigate into the role of infrastructure in economic development and especially to bring out its catalytic role in different dimensions. The following are the major objectives of the present study:

Specific objectives:
1. To find out the major components of existing infrastructure facilities in the state across major districts so as to understand the position of Uttar Kannada District.
2. To analyse the need for development of infrastructure in economic development of the district.
3. To study the problems in developing infrastructure in the district.
4. To analyse the level of development of various infrastructural indicators across different talukas in the district so as to understand the disparity in infrastructure development.
5. To review the link between infrastructure and economic development of this district.
6. To study the causes for slow development of infrastructure in this district.
7. To ascertain the infrastructure projects which are immediately required in the district to keep pace with changing global scenario.
General Objectives:

1. To draw the attention of the public about available infrastructure facilities in this area.
2. To bring to the notice of the policy makers about the deficiency of the infrastructure facilities in this district.
3. To provide broader policy suggestions for development of infrastructure in the district.

REVIEW OF LITERATURE-A SUMMARY

<table>
<thead>
<tr>
<th>Sl.no</th>
<th>Author</th>
<th>Title</th>
<th>Focus/Findings</th>
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<tbody>
<tr>
<td>1.</td>
<td>Dieter Biehl (1980)</td>
<td>“Determinants of Regional Disparities and the Role of Public Finance”</td>
<td>Finds empirical support for the positive relation between regional disparities in development levels and variations in levels of public infrastructure.</td>
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<tr>
<td>2.</td>
<td>Canning (1999)</td>
<td>“Infrastructure’s Contribution to Aggregate output”</td>
<td>Attempt has been made to estimate the general productivity of infrastructure. The outcome of this study is that investment in some of the specific infrastructure would increase the productivity manifold.</td>
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<tr>
<td>4.</td>
<td>Antle, John M. (1983)</td>
<td>“Infrastructure and Aggregate Agricultural Productivity:”</td>
<td>It was found that the contribution of a country’s infrastructure</td>
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<td></td>
<td>Author(s) and Year</td>
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<td>Conclusion</td>
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<td>6.</td>
<td>Mikelbank and R. W. Jackson (1999)</td>
<td>“Equity VS Efficiency: Public Capital Investment in Ohio 1988-92”.</td>
<td>Found that investment in infrastructure has been highest in areas of greatest distress and that the pattern suggests an equity driven investment decision whereby infrastructure policy is used to erase development disparity across the state.</td>
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<tr>
<td>7.</td>
<td>Munnuel Alicia (1990)</td>
<td>“Infrastructure Investment and Economic Growth”</td>
<td>Those states that have invested in infrastructure tend to have greater output, more private investment and more employment growth.</td>
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<td></td>
<td>Author(s)</td>
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<td>8</td>
<td>Charles R Hulten and G.E. Peterson (1984)</td>
<td>&quot;The Public Capital stock: Needs, Trends and performance&quot;</td>
<td>Concluded that public capital is not significantly important and its role in explaining productivity of other economic activities is negligible.</td>
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<td>9</td>
<td>Paul Evans and G Karras (1994)</td>
<td>&quot;Are Government Activities productive? Evidence from a panel of US States.&quot;</td>
<td>They found that government capital shows significant productivity only if production functions are mis-specified. If properly specified, then the estimates are not significantly different from zero.</td>
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<td>10</td>
<td>Conard K. and H Seitz (1997)</td>
<td>&quot;Infrastructure Provisions And International Market Share Rivalry&quot;</td>
<td>Argued that studies to estimate role of infrastructure must not assume that infrastructure services are free goods.</td>
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<td>11</td>
<td>Shah Narottam (1970)</td>
<td>&quot;Over All Summary: Infrastructure For The Indian Economy.&quot;</td>
<td>Studied the pattern and level of infrastructural facilities at the time of independence and attempted to relate the level of per capita income of Indian States with their level of infrastructural development.</td>
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<tr>
<td>12</td>
<td>Gulati S.C.(1977)</td>
<td>&quot;Dimensions Of Inter-District Disparities&quot;</td>
<td>He constructed a composite indices of development for 336 districts of India. He identified nine principal components that emerge as factors responsible for inter-district</td>
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<td>No.</td>
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<td>13</td>
<td>Tewari R.T. (1984)</td>
<td>&quot;Economic Infrastructure And Regional Development In India&quot;.</td>
<td>Examined the interrelationship between economic infrastructure and development and tried to identify the role of infrastructure in the economic development. He concluded that, inadequacy of existing infrastructural facilities seems to be the major obstacle in the path of progress of the developing states.</td>
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<td>14</td>
<td>Alagh Y.K. J.Shah and V.K. Shah</td>
<td>&quot;Infrastructure Planning &quot;</td>
<td>Studied various dimensions of infrastructure planning in India. They concluded that infrastructural planning in India must stress not only on greater availability but also on improvements in their efficiency.</td>
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<td>15</td>
<td>Amin Poornima (1990)</td>
<td>&quot;Infrastructure And Regional Distribution Of Small Scale Industries In Gujarat&quot;.</td>
<td>She divided the state into three regions – backward, developing and developed on the basis of their infrastructural development level and found that the industrial development level also follows similar patterns.</td>
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<tr>
<td>16</td>
<td>Dadibhavi R.V. (1991)</td>
<td>&quot;Disparities In Social Infrastructural Development In India&quot;.</td>
<td>Surveyed levels of social infrastructure in the states of India using educational and health facilities as indicators. A positive and significant association was</td>
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<td>17</td>
<td>Arunkumar A.V. and C.Upendranath (1993)</td>
<td>&quot;Infrastructure Development In India : A Alternative Approach To Measurement&quot;.</td>
<td>Used deprivation index for six infrastructural indicators and combined them to derive a composite indicator of infrastructural development using principal component method.</td>
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<td>18</td>
<td>Ghosh.B. and P.De (1998)</td>
<td>&quot;Role Of Infrastructure In The Regional Development: A Study Over The Plan Period.”</td>
<td>Tested the relationship between physical infrastructure and regional economic development in the context of Indian states using regression method. They formulated a physical infrastructure development index.</td>
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<tr>
<td>19</td>
<td>Gayathri K.(1997)</td>
<td>&quot;Role Of Infrastructure In The Industrial Development Of Karnataka : A District Level Analysis&quot;.</td>
<td>She highlighted the importance of infrastructure in industrial development.</td>
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<tr>
<td>20</td>
<td>Basavaraj S Benni (2007)</td>
<td>&quot;Infrastructural Development And Regional Disparity – A Comparative District Level Analysis In Karnataka&quot;.</td>
<td>Tried to quantify regional infrastructural development disparity among the districts of Karnataka state and rank the districts on the basis of composite development index.</td>
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<td>21</td>
<td>H.H. Uliveppa</td>
<td>“Regional Imbalances In Transport And Communication In Karnataka”</td>
<td>Attempted to discuss regional disparities in transport and communication in Karnataka which is one of the components of infrastructure. He found that there</td>
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<td>22.</td>
<td>K.K. Saxena and Satyanand Sahoo</td>
<td>“Infrastructure And Economic Development”</td>
<td>Examined the impact of major infrastructure facilities, viz. transport, electricity, gas, water supply, telecommunications etc. on output, income and employment of the Kanpur economy.</td>
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<tr>
<td>23.</td>
<td>Prabir De</td>
<td>“How Are The Indian States Doing In Infrastructure Sector? An Assessment”</td>
<td>Attempted to measure the performance of Indian states in different categories of infrastructure facilities over different time spans from the pre-reform to the post reform period. He found that states with better performance in overall infrastructural development have recorded lower percentage of people under poverty line.</td>
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<td>24.</td>
<td>Kirit S. Parikh 1999</td>
<td>“Public Goods and Markets”</td>
<td>Highlighted the need for redesigning the infrastructure to fill the infrastructure gaps.</td>
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<td>25.</td>
<td>Joshi B. N. 1999</td>
<td>“Plan outlays for Infrastructure at the All India and the state level”</td>
<td>Emphasised the various issues in infrastructure planning, identified the various deficiencies in this respect and presents polity framework for infrastructure development.</td>
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<td>No.</td>
<td>Author</td>
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<td>28.</td>
<td>P.R. Brahmananda 1998</td>
<td>“Some Aspects of Growth in Karnataka”</td>
<td>Explained the relative contribution of infrastructure in different sectors to growth</td>
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</table>

On the basis of the review of existing literature, following inferences are drawn. First, there is no unanimity regarding the role of infrastructural facilities in determining economic growth and development as far as empirical results are concerned. Second, though empirical studies in the Indian context indicate that infrastructure plays a significant role in shaping the development profile, studies have been sparse and most of them have been at the national and state level. Further detailed study is required to look at the regional dimension of availability of infrastructural facilities in India and its effect on economic development. To examine the nature and level of infrastructure available and its contribution to the level of development, it was felt that we must proceed to the level of districts for the study. Thus, the present study “Infrastructure Development in Karnataka - A case study of Uttara Kannada District” seeks to analyse the infrastructure development linkage at the state and district in particular.

**Hypotheses**

The study aims at testing the following hypotheses:

1. Infrastructure is an Indicator of Economic Development.
2. Infrastructure Development contributed to the economic development of Uttar Kannada District.
3. There is a disparity in infrastructure development among different talukas of Uttara Kannada District.
**Methodology**

a) **Research Design**

**Selection of the study Area:**

Infrastructure development can be identified at various levels of geographical regions such as national levels and state levels. It is quite common that several attempts have been made at the national level due to policy implications. The role of infrastructure in economic development at a disaggregated level, for instance district level have been least studied. In this view, the Uttara Kannada district is chosen as the unit for analysis in the present study.

**Development Indicators:**

There is no unanimity regarding the methodologies used to measure the infrastructure development or under development in literature. In this study, an effort has been made to measure infrastructure development through some important economic and social infrastructure indicators like roads, railways, waterways, communication, education, health etc.

b) **Data Base:**

The study is mainly based on the secondary data at district level for all the major districts in the state regarding economic development and major infrastructure indicators. The statistical data used in the study is published by the state planning Department Directorate of Economics and statistics, Bangalore, District statistical Departments etc. Published literature in the form of books, booklets and articles on infrastructure development were made use of to provide a general background of the study.

An attempt is also made to mobilize the primary data by conducting a survey throughout the district and collecting the opinion of the public through questionnaire and personal interview.
c) Tools of Analysis:

The information collected from various sources is tabulated and presented in the form of Tables and Graphs. The infrastructure development in Uttara Kannada District is analysed with the help of set indicators. Simple statistical tools like average, percentage, standard deviation, co-relation, factor loading, composite index are used to analyse the data for the purpose of finding out the disparities in the development of infrastructure among various talukas of the district.

**Scope and Coverage of the study**

The study mainly concentrates on various components of infrastructure in Uttarakannada district. The district consists of eleven talukas and the study covers all the talukas of the district. The study stresses on various economic and social infrastructure facilities like roads, railways, banks, schools, hospitals etc. available in the district. The study is an effort to assess the development of infrastructure facilities in the U.K. District.

**Limitations of the study**

The study is subject to the following limitations:

i) As the district covers vast area consisting of more than 1289 villages, assessment of infrastructure facilities in all the villages were not made, due to lack of adequate and reliable information at the village level.

ii) Published data with regard to infrastructure were not comprehensive. Even the available information is not fully reliable.

iii) The infrastructure as a whole is taken for the study. Hence, the minute details of each component of the infrastructure could not be studied.

iv) The respondents were not ready to give the correct information at the time of survey. Hence the researcher struggled hard to quantify the information and measure the role of infrastructure in economic development.
Chapter Scheme:

The present thesis divided into six chapters. The contents of these chapters are outlined here.

**Chapter- I Introduction:**

This chapter deals with the significance of the study, statement of the problem, objectives, Review of literature, hypotheses methodology, scope and limitations of the study.

**Chapter – II Role Infrastructure in Economic Development:**

Initially the chapter throws light on the conceptual clarification with regard to infrastructure and economic development. The chapter tells about the types of infrastructure theories of infrastructure development and the role of infrastructure development in economic development.

**Chapter- III Place of Karnataka in Infrastructure perspectives: An overview:**

This chapter reviews the position of Karnataka in the country in respect of infrastructure facilities and the district wise profile of infrastructure.

**Chapter- IV Profile of the study Area:**

This chapter presents the profile of the Uttara Kannada District. It includes geographical area, population, historical background, climate, rainfall, soil, availability of raw materials, occupational structure, development of agriculture and industry etc.

**Chapter-V Development of Infrastructure in U.K.- An Assessment:**

This chapter provides a comprehensive picture of the infrastructure development in Uttara Kannada District. The chapter throws light on the
development of transport and communication banking, co-operative sector, energy, education, health etc.

**Chapter – VI Conclusion**

This chapter includes the major findings of the study and the suggestions. It highlighted the major drawbacks of the development of infrastructure sector and also suggested some policy measures to be initiated.

**Major Findings and Conclusions;**

The present study highlights the infrastructure development in Uttar Kannada District in detail. A detailed analysis of individual sectors and the composite index discussed during the course of the study gives us macro and micro insights into the different aspects of infrastructure development in Uttar Kannada District. Some of the important findings drawn from the analysis related to various components of infrastructure and disparities are presented below:

1. In Uttar Kannada district, though water transport and rail transport are accessible, road transport is the main means of transport. The district covers about 15055 kms of road length, comprising of National Highways, State Highways, District Roads, Municipality roads and Village Roads. The village roads are mainly mud roads and majority of them are not suitable for transport during rainy season.

2. It is harsh reality that at the time of interview, public showed their anger on the authorities for the woeful neglect of the National Highways and other roads. Periodical maintenance of roads is a must and this is not usually done regularly. There are roads poorly built on account of alleged lack of funds and corruption. Funds are misused by officials in connivance with contractors and sub-standard materials are used. Corruption is an integral part of the story of the civil construction in India and the Uttar Kannada District is not an exception.
3. Passenger Transport service is mainly provided by the KSRTC in the district. However, private sector also plays an important role in providing transport service. A Few Taluks in the district have no bus depots, which comes on the way of efficient discharge of transport service by the K.S.R.T.C.

4. Konkan Railway provides train service in the coastal taluks of Uttar Kannada District. It connects the district with commercial centers like Mumbai, Goa, Mangalore, Kerala, Chennai etc. There is no rail connectivity from coastal talukas to commercial center Hubli and the State capital Bangalore.

5. Except Karwar, no other ports in the district, like Tadadi, Belkere etc are properly developed. In this connection it may be noted that the High Power Committee on Redressal of Regional Imbalance headed by Dr.D.M.Nanjundappa stressed the need for development of small ports like Tadadi, Belekeri, Bhatkal etc. in order to help the people in this region. Though the district consists of 140kms long coastal belt, the maritime infrastructure is not properly developed.

6. The district is not connected by air transport. There is an urgent need for development of air transport facility.

7. There is a great demand for mobile phones in the district but unfortunately remote areas have no proper coverage as most of the towers are in taluk areas and near taluk centers. There is a competition between various mobile service providers. Private Sector companies pose a tuff competition to BSNL in the district. There is more demand for establishment of mobile towers in remote areas.

8. Internet connections are gradually increasing in the district. However, internet connections and web-centers are mainly concentrated in taluka place.

9. As per the report of the officials of co-operative department, as on 31-3-2009 about 76 co-operative societies of different kinds, were liquidated in this region due to inefficient management and non-viability.
10. The survey revealed that there were no co-operative farming societies in the district. But such farming societies are necessary in this area as the gap between the demand for agriculture labourers and their supply, is increasing day by day.

11. There are three Hydel power stations and a nuclear power station in the district generating a total of over 1700 MW of electricity. The irony of Uttara Kannada District power generation is that – it consumes less than 20MW of over 1700MW of electricity produced from hydel and nuclear source in this district. This is a clear indication of how little the district has gained, especially considering the fact that over the decades, 3200 acres of forestland has been submerged for constructing dams. Tens of villages have been displaced due to submergence but very little in terms of rehabilitation has ever been achieved.

12. Though there are enough facilities in Government Schools, the public interest is levered towards private schools. In fact many people showed their dissatisfaction about the quality of education in government schools. As per the report of the officials of the department of education, school drop-out rate has been significantly reduced in recent years due to the implementation of various plans of the Government.

13. There is a strong demand for a medical college in this region as there is no medical college in this area including the district headquarters.

14. The district is not yet provided with a university. Hence, the students desirous of pursuing post graduation are forced to travel to the neighbouring district. A well equipped research center is also not available in this district. As a result the number of students going for research in the district is also less compared to some other districts.

15. Physical Education is an important part of total education. But adequate facilities are not provided for sports in the District. Big Indoor and out door stadium is not yet found in the district to organize the sports meet of state level or National level.
Suggestions:

1. Due to heavy rain fall and the movement of heavy vehicles the national and state highways get damaged time and again. Therefore, it is better to make cement roads as far as national highways are concerned. And these roads are to be maintained properly and National Highway Authorities should be made more responsible for proper maintenance of these roads.

2. There are many villages which do not have road connectivity due to lack of population. Government should take suitable measures to provide road connectivity to such remote places. All villages in the district should be provided with all weather roads.

3. There are many islands in the district which do not have road connectivity. The life in these islands is horrible particularly during rainy season. So Government should take proper measures for construction of bridges and to provide road connectivity.

4. The proposed projects providing rail connectivity between Ankola and Hubli and Honnavar and Talguppa are to be implemented at the earliest. Right now, to provide the rail connectivity to the state capital Bangalore, the Bangalore-Mangalore Train should be extended up to Karwar. Frequency of local passenger train from Mangalore to Margoa should be increased.

5. Banks should provide more assistance to agriculture sector, as agriculture is the main occupation in Uttar Kannada District. Banks should give priority for research and innovation in agriculture sector. They should provide assistance to research projects in agriculture which are feasible in this area.

6. Micro-finance facility should be increased by increasing and strengthening self-help groups.

7. Co-operative sector in the district should be strengthened by giving autonomy as recommended by Prof. A. Vaidyanathan committee report on co-operative sector reforms.

8. Proper irrigation facility should be provided in this area. Channel irrigation should be developed in the district to solve the problem of water.
9. Adequate and timely rehabilitation facility is to be provided to the project-displaced persons.

10. Government should give more importance for improving the quality in primary and secondary education. Mere increase in the number of students enrolled is of no use unless they come out with good quality. While implementing various schemes in primary and secondary education, the Government should not concentrate much on the records rather it should develop student centered programme which will develop and enhance the competence of the students. Government should provide computer education facility at higher primary level.

11. While establishing the Government degree colleges the government should make a detailed analysis of the requirement of the college in a particular area and must give due importance for providing basic infrastructure to these colleges and their viability should also be looked into. Mere establishment of Government colleges without assurance of quality will not serve any purpose. In the era of drastic change the college education is passing through a critical stage and phenomenal change is noticed. Therefore, it is a tough challenge for the Government colleges to provide learner based quality education. If they fail to provide quality education the newly established government colleges may prove to be an unnecessary burden to the Government exchequer! They may even turn out into factories of producing unemployable graduates!

12. At least one medical college should be established in this area as many students are going outside for getting medical education.

13. Training programmes should be emphasized in horticulture aquaculture, beekeeping, mobile and electronic item repairs etc.

14. Private participation in construction of infrastructure projects should be encouraged. Schemes like BOT, BOOT BOLT should be pursued for establishment of infrastructure projects.

15. An institution providing education specifically for handicapped and disabled persons according to their capacity should be established in the district.
16. Agricultural infrastructure such as cold storage warehousing, agriculture training institutes, research centers, etc. should be developed in the district, to augment agricultural development.

17. Uttar Kannada district has a potential for tourism development. Therefore, to develop the ecotourism in the district, tourism infrastructure should be properly developed.

18. An IT park should be established in the district to increase the employment avenues in the district. The establishment of IT park in each district is recommended even by the High power committee on Redressal of Regional Imbalance headed by Dr. D.M. Nanjundappa.

19. A Special Economic Zone (SEZ) should be set-up in the district to augment trade and industry in the district.

20. Air transport service is to be provided to the district, as strategically important projects like, sea-bird, Kaiga are located here.

21. A University is to be established in the district to spread the higher education in the district.

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SEPTEMBER-2011