CHAPTER – VIII

SUMMARY AND CONCLUSIONS

8.1 INTRODUCTION

The present research work was undertaken to examine the issues of regional disparities in the development of secondary education in Karnataka from spatial perspective as an exercise in development geography. The basic preposition is that under development and large scale inequalities in Karnataka are rooted in its historical past, especially during the Mughals and the British, though the issues has been continuously debated across the state after independence but still the issue of regional disparities prevails in all sectors, including education in general and secondary education in particular. This study is motivated by mission of Universalisation of Secondary Education in India, through ‘Rashtriya Madhyamik Shiksha Abhiyaan, (RMSA) in the state of Karnataka and by the recommendations of HPCRRRI alias Nanjundappa Committee Report. In the light of the above, the main objectives of the study were to:

• To trace the inter-district, intra-district and inter taluk patterns of regional disparities in the development of secondary education in the state of Karnataka.

• To identify most backward districts and taluks in the development of secondary education in Karnataka.

• To diagnose the underlying factors like geographical, socio-economic and politico-administrative responsible for uneven development of secondary education in the state.

• To appraise the development of secondary education in the most advanced and most backward district and taluk of Karnataka.
• To examine the role of public policies in the development of secondary education.
• To evolve suitable strategies for most backward spatial units in secondary education in the state.

On the basis of the aforesaid objectives, the following research questions were framed:
• What factors are associated with the perpetuation of regional disparities in different areas of the state? Other question will be,
• What is the nature and extent of regional disparities prevailing in the secondary education?
• What kind of inter-district intra-distinct and inter-taluk patterns exists in the regional disparities of secondary education?
• Are there any underdeveloped areas within developed district and developed areas within under developed districts?
• Is there any perpetuation of social disparities within region in secondary education?
• What is the role of Government Policies in promoting secondary education and reduction of imbalances in these areas?
• What steps can be taken up to improve the status of secondary education in the state?

Based on the research questions and the objectives, the study postulated the following hypotheses for testing:

Hypotheses
• Development of secondary education is uneven in the state owing to geographical, social, political and historical factors.
- Spatial units with district headquarters witness advance levels of development of secondary education.
- District as a nodal center of educational planning had reasonable influential effect on educational development of adjoining taluks.
- Spatial variation in literacy and other demographic variables (social structure) have been major factor for spatial variation in development of secondary education.
- It has strong bias in favour of economically developed regions with strong infrastructural support.
- In spite of planned efforts spread over five decades educational disparities continue to be glaring.

A study concerned with identification of regional disparities required a selection of appropriate indicators to represent various dimensions of educational development; adoption of an optimal basic spatial unit for discerning ground realities; an objective techniques for composting the variety of data related to different indicators for every spatial unit (district and taluk); and effective statistical and cartographic techniques to represent the process and patterns of development.

Considering these parameters appropriate methodology was evolved and six attributes namely, access and availability, enrolment, availability of teachers, availability of infrastructure, internal efficiency and indicators of performance. These were meant to represent three most critical dimensions of educational development that is access, equity and quality respectively. The study was carried out at two levels; district and taluk was taken as the spatial unit. Data from educational districts and educational taluks was consolidated at revenue district and revenue taluka, hence study was confined to all the 30 districts and 176 taluks in Karnataka in 2010. Each
attribute was broken down into several indicators and each indicator was assessed in terms of at a composite index called as Secondary Education Development Index (SEDI). The entire information and data were processed and mapped for all the 30 districts and 176 taluks of Karnataka state.

Standard historical works were searched for tracing the historical roots of regional disparities in educational development. About 200 research studies on regional disparities in general and educations in specific in India and Karnataka over the last six decades were screened to obtain research premises of available literature. Census of India, data on population for 2001 & 2011, SEMIS data 2010-11, several Government Reports, publications and documents were considered while finalizing the work.

The study was organized into eight chapters beginning with a comprehensive introduction to the conceptual framework and methodology, followed by second chapter which provided in-depth background on secondary education in India and Karnataka. Chapter three dedicated to extensive review of literature. Literature was explored from the point of regional disparities in general and in education sector in particular, studies at the international level, national, regional and sub-regional were explored to strengthen the research study. Chapter four dealt was with the study area of Karnataka, provided details of history, geography, and economy, politico-administrative facets. Understanding of these facets helped in visualizing relationship of education sector vis-à-vis with other sectors. Not only had that chapter on study area helped in identifying roots of regional imbalances laid in history and geography of the state of Karnataka. Chapter five dealt with regional disparities in the development of secondary education in Karnataka. The chapter focused on two major aspects; methodology of identification of regional disparities and on spatial patterns
of various attributes of secondary education at district and taluk level. Chapter sixth provided case studies of most advanced district and taluk of Karnataka state along with the most laggard district and taluk of the state. A quantitative testing of hypotheses was carried out in chapter seven named as determinants of regional disparities in secondary education while the last offers conclusive findings of the study.

Karnataka is one of the national average states of India, facing inter regional and regional disparities since its reorganization in 1956. Many historical and economic factors are responsible for these disparities along with the influence of regional diversities seen across the four regions of the state (Southern Maidan, Northern Maidan, Malnad and coastal). The old Mysore state, which comprised most of the southern parts of present Karnataka state, had dynamic rulers and administrators, which led to the development of the region, prior to the state reorganization.

At the time of state reorganization in 1956, many Kannada speaking regions which belonged to the then neighboring states were integrated and the new state of Mysore (now Karnataka) was established. Though the integration fulfilled the aspirations of both Kannada speaking people and their leaders, it brought it numerous economic problems along with it. The newly integrated areas presently known as Hyderabad–Karnataka, Bombay Karnataka were substantially neglected by the erstwhile states to which they belonged before reorganization. The Malnad region and northern coastal areas were also lagging behind in spite of their rich natural and capital resource base. Karnataka has prominently regional diversity as well as regional disparity. There is diversity in natural resources like, the soil types, climate, rainfall, mineral, rivers forests, coastal zones and hills and so on. There is also disparity
caused by the socio-economic policies pursued in the past and present. Concerned efforts have been made since the inceptions of the second five year plan to reduce regional disparities in Karnataka. However, there is still a general concern about relative backwardness of some districts belonging to these regions. In fact some regions have made considerable progress in absolute terms. But their relative position shows little change. This has lead to discontentment among the people of these regions. There are severe allegations that there their regions have seriously neglected.

Many times it is alleged that the old Mysore area is fully developed while the areas which joined new Karnataka remained backward. About this the High Power Committee on Redressal of Regional Imbalances (HPC) in 2002 expressed, “while Mysore-Karnataka has for historical reasons registered relatively a higher level of development, this is not so in respect of intra- Mysore- Karnataka region. There are wide disparities from one district to another and also from one taluka to another. Similarly, if we take Hyderabad- Karnataka or Bombay Karnataka region, it cannot be asserted that the entire region has not registered any development at all. Very substantial improvements in output, income, and infrastructure have taken place between 1956 and 2000. But due to lower base with which they started in 1956 and for historical reasons, the relative development registered through the Annual and Five Year Plans and also externally Assisted Projects implemented in those areas, and the rates of growth have not been adequate to reach the Mysore-Karnataka level, though the increase in output and income has escalated several -fold.”

The natural resource diversities are often disadvantageous for harmonious development for all the regions of the state. Most of these natural constraints have to be accepted as such. Apart from the diversity factors, there are severe disparities which emerged as a consequence of alarming rise in growth of population,
unemployment, low literacy rate, low productivity, lopsided concentration of industries and infrastructure and modern civic amenities in few metropolitan centers. With the introduction of Five Year Plans, the state accorded greater importance to regional perspectives underlying the importance of local needs in general and development of potentialities of the backward areas in particular. Attempts were made to track relative levels of development attained by different districts and to evolve planning machinery at the district level, with a view to bring harmonious state of development.

8.2 MAJOR FINDINGS

For the study six hypotheses were generated. Several of the hypotheses are well known while other was framed in the light of discussions in the initial chapters of the thesis. All of them were framed in a spatial spirit, consistent with the purview and premises of geography. Simple and appropriate statistical techniques were used for their testing. The six hypotheses have been arranged under following heads.

- Locational and Regional Disparities in Secondary Education
- Evolution of the State and Regional Disparities in Secondary Education
- District headquarters/metropolitan city and Regional Disparities in Secondary Education
- Socio-Economic-Demographic variables and Regional Disparities in Educational Development of Secondary Education
- Economy, Infrastructure and Regional Disparities in Secondary Education.
- Educational Planning and Regional Disparities in Secondary Education

Testing of Hypotheses provides the following generalizations.

- In conformity with popular notion, educational development in secondary education was found related to geographical location. The coastal taluks are at higher levels of development than those lying along the state borders. Within each
group, the pattern was further influenced by the level of educational development of the district in which the taluk was located. Border taluks along the developed states like Kerala were more developed than the border taluks of Maharashtra and Andhra Pradesh (comparatively less developed in education sector).

- Evolution of the state in terms of administrative divisions had impact on development of secondary education in the state. Hyderabad Karnataka region once ruled by Mughals and Nizam continue to suffer from backwardness in secondary education as compared to Hindu rulers ruling southern part of erstwhile Mysore State.

- Taluks holding seats of district administration does not hold better position than the taluks without seat of administration. There are several taluks which are district headquarters also continue to suffer from educational backwardness.

- The district headquarters and million cites were not that successful in impacting upon the educational development of their surrounding taluks.

- Secondary Education is largely influenced by socio-economic and demographic variables. Areas with more of rural population, high concentration of SC, ST population, more GDP from primary sector continue to face backwardness.

- In-spite of several planned interventions by the government at the state and central level, regional disparities in educational development is increasing day by day.

Regional Disparities in Secondary Education in nutshell

Regional Disparities with respect to attributes of Secondary Education

- The study revealed that there exists high level of regional disparities in the state of Karnataka. Disparities in SEDI are more glaring at taluks level than in district level.
Disparity Index among districts (SEDI) figured at 9.33 whereas for taluks it is slightly higher that is 10.68.

Maximum disparities are identified in access index (16.33) in the case of districts and in the case of taluks it gets doubled (32.85).

There are wide disparities in the availability of teachers, where the figure is (19.67) in case of districts, it is slightly lesser in for taluks (17.31).

In case of enrolment of students once again there are wide inter district disparities ranging from (14.82) at the district level and (16.78) at the taluk level.

Disparity index in case of infrastructural facilities is almost similar to the disparity index of enrolment; in this case the figures are 14.69 for districts and slightly higher (16.78) for taluks.

Wide disparities are also noted for performance index where the corresponding figures are (14.31) and (17.34) for district and taluk respectively.

The only exception is with index of internal efficiency, where there is very less variations among districts and taluks. The corresponding figure lies at just 2.09 for district and 3.49 for taluks.

Table reveals that there is wide range in access index when moved from districts to taluks (16.52).

Range in SEDIs of district and taluk for results, infrastructural facilities, repeaters and enrolment, is almost same and figured as (3.43), (2.09), (1.39), and (1.37).

It’s only in the case of teacher’s index that there are lesser disparities at the taluk level than at district.

There is very high strong positive correlation 0.7348 between districts and taluks for various attributes.
Regional Disparities at District Level

- At the district level Bangalore Urban district have the highest SEDI of (1.1988) and the lowest SEDI is found in Yadgir district (0.8086).
- There are slightly more than one-fifth districts in Karnataka fall under the category of relatively developed districts and there are almost equal numbers of districts under the category of most backward districts with respect to composite index of development of secondary education in Karnataka.
- Distribution of relatively high developed districts are placed in coastal areas like district of Uttar Kannada, Dakshina Kannada and Udupi have relatively developed districts along with Kodagu district.
- In south there are districts of Bangalore Urban and Bangalore Rural which falls under this category. It is visible that the SK R has better SEDI than NK R.

Intra-District Disparities

There are wide variations with respect to intra-district disparities in Karnataka.

- Bangalore Urban District has the maximum SEDI value of (17.93) as compared to Yadgir district with an SEDI of (2.01). That means within the district there are more disparities in Bangalore Urban district than in Yadgir district.
- In Bangalore Urban district though all the taluks fall under highly developed category yet there is lot of lot of gap in range of Bangalore South taluk (154) and Anekal (101) whereas in the case of Yadgir district all the three taluks Shorapur, Shahpur and Yadgir falls under the category of low developed taluks and interesting the District also falls under the category of low developed district.
- In the case of Dakshina Kannada district where Mangalore taluk stands at SEDI value of (129) there is Sulya Taluk with a SEDI value of (85) score. Out of five
districts in Dakshina Kannada three fall under high category, and one each in moderate and low category.

- On the other end Kolar and Yadgir district had very less intra-district disparity that means all the taluks in these districts are holding the similar level of development in secondary education.

- There are pockets of underdeveloped taluks in developed district like Dakshina Kannada (Sulya), Uttara Kannada (Joida, Haliyal, and Mundgod), Hassan (Hole Narsipur, Belur), Bangalore Rural (Dodballapur), Tumkur (Korategere, Madhugiri), Belgaum (Gokak, Saundatti, Bailhongal, and Khanapur), and Chikmagalur (Tarakere).

- On the other hand there are low developed districts with developed taluks like; Bidar (Hommabad), Chamarajanagar (Yelandur), Kolar (Kolar), Koppal (Kushtagi), Gadag (Mundargi).

**Inter Taluk Disparities**

- At the taluk level, Bangalore South taluk has the highest SEDI of (1.542) and Sindagi (0.8108%) taluk has the lowest SEDI.

- Most of the taluks in south, Coastal and north-western have relatively developed taluks.

- There are more number of backward districts in NKR than in SR K As far as most backward taluks are concerned it includes Indi and Sindgi in Bijapur district, Savanur and Shiggaon in Haveri, Sandur in Bellary, Aurad, Bhalki and Basavakalyan in Bidar, Chitapur and Chincholi ion Gulbarga, Koppal in Koppal district Devadurga in Raichur district, Shahpur, Shorapur and Yadgir in Yadgir district, Holalkere in Chitradurga, Harapannahalli in Davanagere.
Classification of Districts and Taluks based on and backwardness of educational development

- Study identified seven relatively developed districts in secondary education, one in NK R (Uttara Kannada) and six in SK R (Bangalore Urban, Bangalore Rural, Udupi, Kodagu, Dakshina Kannada and Chikmagalur).
- Study delineated seven most backward districts in secondary education, two in Belgaum Division (Gadag and Haveri) and five in Gulbarga Division (Bellary, Bidar, Koppal, Raichur and Yadgir) of NK R.
- No district from SK R came under most backward district.
- In between these two extremes there were two more categories of districts that included Backward (six districts) more backward (ten districts).
- Based on SEDI taluks were categorized in 81 relatively developed taluks, 47 backward taluks, 31 more backward taluks and 17 most backward taluks.

8.3 SUGGESTIONS AND RECOMMENDATIONS

Access

- The study revealed that there were wide disparities in secondary schooling facilities in different districts and taluks of Karnataka State. In order to overcome the issue it is recommended that broadly designed norms at the national level may be followed at the state by considering geographical, social, demographic conditions of the state of Karnataka.
- New schools can be opened in districts and taluks where number of secondary schools per 1000 children is less. State norms can be chalked out in this regard.
- New schools can be started in unserved areas. This can be identified by using school mapping exercise. School mapping exercises for taluks can be placed on district and directorate of school education website.
• Researches need to carry out on the basis of data generated for school mapping. Professional from various university departments (geography) need to be consulted for setting up of new schools.

• There must be rationale of setting up of new school and upgrading of new school, the decision must be more people oriented than political oriented.

• Identification of backward districts, taluks and villages by using scientific methodology.

• Generation of Geo-Spatial Data Base on Secondary Education

• Effective implementation and monitoring of state level plan for improvement of access in secondary school.

Quality

• Provide adequate infrastructure, like drinking water facilities, toilets and urinals, playgrounds, library and integrated science laboratories.

• Reducing the digital divide by providing computer and ICT related facilities.

• Appointment of additional teachers, especially adequate number of female teachers and posting of these teachers in deficit areas. Implementation of proper rationalization scheme in deputation of teachers. Provide meaningful in-service training of teachers for the specified target group of teachers.

• Initiate bridge course for students passing upper primary stage from upper primary schools and joining high or higher secondary schools.


• Provide accommodation for teachers in rural and hilly taluks.
• Partnership with Jawahar Navodaya Vidyalayas Samiti. Since JNV claims to be apace setting institutions, the effect of this feature must be reflected on ground by improvising standards of government schools.

**Equity**

• Opening up new residential schools with modern amenities for girls and disadvantaged groups which provides comfortable and safe educational environment.

• Parents need to be counseled for promotion of education of girl child.

• Monitoring quality in existing lodging and boarding facilities for students belonging to SC, ST, OBC and Minority communities and Ensuring proper disbursement of scholarships to the disadvantaged sections. As it happens that amount does not percolate till the last level. Moreover, review the existing rates of scholarships and incentives as due to nationwide inflated inflation the amount currently offered is meager one.

• It is learnt that social welfare department invites application for deserving students of SC&ST; the department had opened several hostels in taluk and district headquarters, in order to assess the effectiveness of the scheme it is recommended that third party evaluation of the scheme need to be undertaken.

• Proper and wholehearted approach need to practice in inclusive education. It is learnt that many of the times it is a piecemeal approach practiced.

• Generating awareness among masses regarding education through community and motivating students for open and distance learning mode of education. Like students those who cannot afford formal education system can join National Institute of Open Schooling (NIOS).
• Motivating people for using mass media, channels like Gyanvani and Gyan Darshan for content enrichment.

• Community mobilization and sensitization programme for girls education need to be carried out at the grassroots level. Promoting participation of parents in the development of schools in terms of girls education.

• There need to be less focus on incentives and more on mobilization of girls towards need for being educated.

• Mere representation of parents from SC& ST communities in school development management committee (SDMC) will not help the system. Their proper involvement can bring change in the system.

• Contextualization of pedagogical processes needs to be worked out so that children from these communities feel comfortable in schools.

• Inclusive education where all children study together should become the hallmark of every school especially those located in rural areas so as to take care of the children of disadvantaged group.

8.4 SCOPE FOR FURTHER RESEARCH

• Looking at the importance given to secondary education in our country it is suggested future researches must concentrate on case studies of educationally backward districts and taluks using primary data.

• Since this study will act as base line study conducted at the beginning of the programme of Rashtriya Madhyamik Shiksha Abhiyaan, it is further suggested to carry out studies in the middle of the project(mid level assessment MLS) and at the end of the project (terminal level survey TLS).
All these major findings from the study of regional disparities in the development of secondary education in Karnataka raises many a research questions having deep rooted policy implications. These are:

- Firstly, it has been observed that there were pockets of underdeveloped taluks in developed district and developed taluks in underdeveloped taluks, what can be the possible reasons for such a phenomena, this need to address?

- Secondly, it was realized that all taluks with district headquarters will be holding better SEDI, the basic assumption was that due to prevalence of district level planning it is expected that the process of educational development must begin from core to periphery, but in reality it was not so, there were taluks holding district administration were possessing low SEDI, future researches must give thought to this question.

- Thirdly, we have realized that education being social phenomena is very fluid; it is difficult to make spatial generalizations. When infrastructure development plays a major role in educational development then why taluks with better infrastructure index could not have better education index?

- Fourthly, in the modern day world, there is increased use of geo-spatial mapping; it is expected that with the application of this technology imbalances in educational development can be removed. When so much is talked about this technology in the state then why this has not been used so far. Karnataka, being hub of software-technology and home for IT sector, inspire of that why the state was not able to tap such resources to address the issue of regional imbalances in the state?

- Fifthly, it is almost fifth year of launch of centrally sponsored scheme of Rashtriya Madhyamik Shiksha Abhiyaan, when lot is said about planning for
secondary education, then why these districts and taluks are still remaining backward and occupying back seat?

- Finally, it has been learnt that in the past several studies have conducted in the past to identify backward regions and district. Each time even with the set of new indicators, similar type of patterns are arrived at. There are so much deliberations on district level educational planning but the disparities keep on prevailing. Can we go for taluk level educational planning in Karnataka, as some of the taluks had very large area even more than the area of several districts in the country?

- Do we need to revive the mechanism of educational planning and administration in the state? Will modifications in educational administration will bring certain changes to remove regional imbalance?

After enunciating the policy implications of regional disparities in the development in Karnataka, there arises a vital question of addressing the issues that have been raised. This calls for setting the agenda for the future and may be listed as follows:

- Firstly, if there is recommendation for the reorganization of educational planning process for these most backward taluks then, what should be the approach for such planning exercise?

- Secondly, if infrastructural gaps are to filled in these most backward taluks then what would be the design of this exercise?

- Thirdly, if the reasons for these regional disparities are due to improper allocation of funds than what must be the new mechanism of allocation of funds in these backward districts and taluks?
• Fourthly, if community support is imperative, then how can optimum utilization of community resources can be ensured? As present scheme of SMDC may be lacking proper effectiveness.

• Fifthly, if model educational development plan for these backward districts and taluks need be suggested than what must be the modus operandi of designing this educational development plan?

• Finally, if we have to strengthen private-public partnership model, in the developing and execution of development plan education sector, then how is this has to be strategized, planned and implemented?

Geographers are best equipped to answer all the aforesaid questions through the process of micro-level educational planning in regions. There is every reason that geographers should ensure an orientation to their learning and expertise. So to conclude finally, one can say that in order to meet the challenges of universalization of secondary education in the state of Karnataka, there is a need for a paradigm shift in the conceptual design of educational planning. Educational planning must focus on new and innovative technology of geo-spatial technology. As phenomenon of education is influenced by several physical and socio-cultural, economic and demographic variables, the geo-spatial technology will help in conceptual the problem and will provide highly specific recommendations. With this one can expect for better educational development in a region and it will be a step forward for reduction of regional imbalances in educational development.