

December 2017
Special Issue

ISSN: 2319-3689

UGC Approved Journal
Sr. No. 126, Journal No.44813

Critical Space®

A Peer-reviewed (refereed) International Journal
in English Language and Literature

Special Issue

on

**Transformation in Language, Literature,
Society and Culture in the 21st Century**

Guest Editors

Dr. Milind Desai

Mr. Vithal Rote

Dr. Suvarna Patil

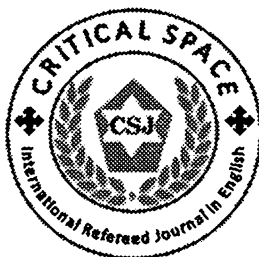
Critical Space[®]

**A Peer-reviewed (refereed) International Journal in English Language
and Literature**

GUEST EDITORS

Dr. Milind Desai Mr. Vitthal Rote

Dr. Suvarna Patil



The Journal, *Critical Space*[®] is printed by Anjuman Tamboli at Mirror Printing Press, Kolhapur, and Published by Patil Hanmant Balasaheb at Shastri Nagar, Waghwadi Road, Opp. Eagle Way Bridge, Islampur, Tal. - Walwa, Dist. - Sangli - 415 409 (MS) India. Editor: Hanmant Balasaheb Patil **Mob. 09921780790 Email: criticalspacejournal@gmail.com; criticalspace@rediffmail.com**

Follow us: <https://www.facebook.com/criticalspacejournal>; <https://unishivaji.academia.edu/CriticalSpaceJournal>

Web: <http://www.criticalspacejournal.in/index.html>

Contents

1. Library Automation: An Overview Pratibha Pachange	1
2. Sense of Dislocation in Gish Jen's <i>Typical American</i> Dr. Bhandare Shrikant Jayant	7
3. Psycho-Social Challenges and Struggle for Enlightenment in the Modern age with reference to <i>Journey to Ithaca</i> by Anita Desai Dr. Prashant Patangrao Yadav	17
4. Indian Women in Films via Literature: a Changing Scenario Mr. Mansing Vitthal Thombare	23
5. Cultural Degradation in The 21st Century Indian Society Mr. Rajendra Ashok Pradhan	29
6. A Brief Review of Arundhati Roy's <i>The God of Small Things</i>: A Booker Winning Novel. Dr. Sunil Gunwant Patil	35
7. Metafiction as a Post-modern Form of Literature Smt. Indrayani S. Jadhav Dr. Tejaswini D. Patil Dange	41
8. Exploring Significance of Quilt Image in Nikki Giovanni's Poetry Vaijayanta V. Patil	47
9. Accountability: The Master Key to Social Change Zeenat Merchant	53
10. The Wrestler's Diet Mr. Prashant Mohanrao Shinde	57
11. Web 3.0 Technology in Perspective of Five Laws of Library Science Ms. Satvashila T. Salgar	61
12. e-Granthalaya Library Management Software Smt. Susmita Mahadev Walake	71
13. Trends in India's Exports Direction: A Comparative Study of Pre and Post Reform Period	

Amit Babaso Patil

77

14. The Relationship between Job Satisfaction and Socio-Economic Status of M.I.D.C. Employees

Shri. Anil Balaso Balugade

87

15. Hierarchy of Urban Centres Based on Centrality Index in Belagavi District: A Geo-spatial Analysis

Dr. Arun. B. Patil

Miss. Sunanada I. Kittali

91

16. E (Mobile) –Wallets in India

C. J. Bharasakle

107

17. Changing Structure of Kolhapur Leather Industry

Dr. Prakash Y. Burute

117

18. Water Utilization of Major Projects in Upper Krishna Basin of Maharashtra

Jadhav Krishnat Rajaram

123

19. A Study of Teachers' Job Satisfaction and Its Impact on Their Performance

Mrs. Kalpana Balwant Patil

129

20. Role of Women Entrepreneurs in 21st Century India : Challenges and Empowerment

Dr. Malini Nair

135

21. A Software System For Effective Growth of Co-operative Sugar Industry

Mr. Sudhir V. Patil.

139

22. Changing Nature of Rural Society in 21 Century: A Study in Kolhapur District

Shri. K. M. Desai

145

23. Audre Lorde's *Zami* : A Critical Study

Dr. Smt. Londhe Mangal Vishnu

149

24. Identity Crisis In Jhumpa Lahiri's *The Lowland*

Dr. Milind S. Desai

155

25. Religion and People: Reflected in Rajan Gavas's Novels

Dr. Pramod Akaram Ganganmale

159

- 26. College Teachers Participation in Research and Academic Activities: A Case Study**
Mr. Vasant K. More 163
- 27. Exploration of Myths and Legends in the Select Works of Girish Karnad with Special Reference To *Tughlaq* and *Hayavadana***
Dr. Baliram Sawant 171
- 28. Effect of Social Media on Youth and Student**
Dr. Ramesh H. Patil 175
- 29. Role of Librarians in Changing Digital Edge of Libraries**
Rahul Jadhav 183
- 30. The Theme of Death Reflected in J.G. Ballard's *Empire of The Sun***
Dr. Khavare N. P. 187
- 31. Evolution of Indian English Political Novel**
Dr. Ashwini Manik Purude 195
- 32. Collectivism in Chinua Achebe's Short Stories**
Mr. Amit Maruti Bamane 201
- 33. Ecofeminism in Margaret Atwood's *The Handmaid's Tale***
Mr. Suresh Pandurang Patil 209
- ३४. निरंजन घाटे यांच्या यंत्रमानवाची साक्ष या विज्ञानकथेतील तंत्रज्ञानाचा साहित्य व संस्कृतीवरील होणारा परिणाम**
श्री. अजितकुमार भिमराव पाटील २१५
- ३५. २१ वे शतक, जागतिकीकरण आणि मराठी कादंबरी**
प्रा. डी.जे.दनाने २२१
- ३६. मराठी कादंबरीतील विद्यार्थी-शिक्षकांचे बदलते चित्रण**
प्रा. प्रकाश हुलेनवार २२५
- ३७. महाविद्यालयीन विद्यार्थ्यांच्या अभिरूचीचा अभ्यास**
श्रीमती. यु. बी. करसाळे २३१
- ३८. अॅड. शंकरराव खरात यांचे जीवनकार्य**
श्री. भगवान मिणचेकर २३५
- ३९. जागतिकीकरण : समाज आणि साहित्यावरील परिणाम**

डॉ. प्रकाश दुकळे

२३९

४०. शिंदेरी – साखर उद्योगातील देशीवाद व कामगार जीवनाचा आद्य हुंकार

प्रा. राजाराम आ. पाटील

२४३

४१. पर्यावरणीय समीक्षा

डॉ. अरुण शिंदे

२४५

४२. किशोरांमधील चिंतापातळी आणि स्व-संकल्पनेचा अभ्यास

प्रा. श्रीमती के. एन. पाटील

२४९

४३. ग्रामीण आर्थिक विकासात महिला सक्षमीकरण काळाची गरज

प्रा. डॉ. मंगल भास्कर माळगे,

२५५

४४. संयुक्त महाराष्ट्र चळवळ परिपूर्ती : एक दृष्टिक्षेप

प्रा. मनिषा एस. पाटील

२६३

४५. २१ व्या शतकातील महिला सबलीकरण

डॉ. रमजान फत्तुखान मुजावर

प्रा. नीलकंठ विठ्ठल शिंदे

२६७

४६. इतिहास संशोधन क्षेत्रातील आव्हाने : एक दृष्टिक्षेप

प्रा. मोहिते शशिकांत महादेव

२७१

४७. २१ व्या शतकातील बदलती शिक्षण पद्धती- एक ऐतिहासिक आढावा

प्रा. डॉ. सौ. वंदना रामचंद्र लोंढे

२७९

४८. २१ व्या शतकातील महिला सबलीकरण

श्री. विलास सखाराम सुर्वे

२८३

४९. २१ व्या शतकातील क्रीडा धोरण

प्रा. डॉ. सचिन तानाजीराव पाटील

प्रा. डॉ. हेमंतकुमार आ. नारायणकर

२८७

५०. २१ व्या शतकातील बदलती शिक्षणपद्धती

प्रा. आर. एन. मदने

२९५

५१. २१ व्या शतकातील -पारंपारिक खेळ

प्रा. संजय रामचंद्र पाटील

२९७

५२. उच्च शिक्षणामध्ये अध्ययन कौशल्यांची गरज
डॉ. सीमा प्रकाश परदेशी २९९
५३. इक्कीसवीं सदी के हिंदी उपन्यासों में चित्रित सांस्कृतिक परिवर्तन (वैश्वीकरण के विशेष संदर्भ में)
डॉ. अशोक मरळे ३०५
५४. २१ व्या युगातील बदलती ग्रंथालये
डॉ.सौ. अपर्णा मकरंद कुलकर्णी ३०९
५५. भारतीय ग्रंथालयांचा इतिहास व बदलते स्वरूप
प्रा. जे. डी. हाटकर ३११
५६. २१ व्या शतकातील ग्रंथालयाचे बदलते स्वरूप व ग्रंथालयाची उपयुक्तता
प्रा. आर. एस. माशाळे ३१७
५७. आधुनिक ग्रंथालयातील माहिती : बदलते स्वरूप
श्री. नारायण नामदेव लोखंडे ३२१
५८. तंत्रज्ञानाच्या युगात ग्रंथालयांची बदलती भूमिका
सौ. संध्या गिरीश यादव ३२७
५९. हायब्रीड ग्रंथालये आणि वाचन साहित्य संग्रह
युवराज आनंदराव पाटील ३३३
६०. २१ व्या शतकातील आदिवासी - जीवन, संस्कृती आणि साहित्य
प्रा. अमोल पुंडलीक चांदेकर ३३७
६१. मूडीजने उंचावले भारतीय अर्थव्यवस्थेचे पतमानांकन
प्रा.डॉ. अनिल धोंडीराम सत्रे ३४३
६२. एकविसाव्या शतकातील वाङ्मयाचे विविध प्रवाह
प्रा.डॉ. माधुरी गोपाळ तानवडे ३४९
६३. २१ वे शतक: बौद्ध वाङ्मयातील प्रतीके
डॉ. प्रशांत गायकवाड ३५९
६४. शाश्वत विकासासाठी सेंद्रिय शेती
श्रीमती आर. व्ही. पाटील ३६५

६५. २१ व्या शतकातील मराठी कादंबरीतील बदलते स्त्रीचित्रण : 'नातिचरामिच्या' अनुषंगाने
श्रीमती शैलजा श्रीधर शिंदे ३७१
६६. ग्रंथालयातील सेवांचे बदलते स्वरूप
डॉ. विकास वसंतराव खराडे ३७७
६७. ग्राहक हक्क संरक्षण चळवळीचे बदलते स्वरूप
प्रा.डॉ. चंपाताई श्रीरंग बोधले ३८१
६८. कल्पना दुधाळ यांची कविता : २१ व्या शतकातील ग्रामीण जाणिवांचा सशक्त आविष्कार
डॉ. रचना सचिन माने ३८७
६९. प्रवासवर्णनातील सांस्कृतिकता तोकोनोमाच्या अनुषंगाने
सौ. वैशाली श्रीकांत गुंजेकर ३९५
७०. अंधश्रद्धा निर्मूलन सामाजिक व्यवस्थेपुढील एक आव्हान
प्रा. एस. एन. दांडगे ३९९
७१. २१ व्या शतकातील सामाजिक व राजकीय आव्हाने : विशेष संदर्भ महाराष्ट्र राज्य
झाकीरहुसेन हाकीम संदे ४०३
७२. सानियांच्या कादंबरीतील संस्कृती संघर्ष
डॉ. सुवर्णा नामदेव पाटील ४०९
७३. २१ वे शतकातील भारतीय शेती उत्पादकता व उत्पादनातील बदल
प्रा. डॉ. माने डी. एन. ४१३

HIERARCHY OF URBAN CENTRES BASED ON CENTRALITY INDEX IN BELAGAVI DISTRICT: A GEO-SPATIAL ANALYSIS

* Dr. Arun. B. Patil

**Miss. Sunanada I. Kittali

Abstract :

This study developed a hierarchical structure of the 31 urban centres in Belagavi district by using their essential characteristics and functional attributes for classifying the urban centres. Based on the centrality scores of all the towns by using the Godlund's retail trade and service method and V.N.P. Sinha's modified method of Davies (by using the tertiary services) delineate the study emphasized the importance of the different functional centre's as service centres in the Belagavi district whose economy is essentially based on retail market service. These centres were considered as 'naturally' occurring service centre's capable of stimulating growth impulses in their catchment areas. The study recommended the adoption of the hierarchical order of the urban centre's as a workable framework for planning the development of the Belagavi district.

Key Words : Hierarchy, Centrality, Functional index, Urban Centres and Growth Foci.

INTRODUCTION :

Settlements are differing in size and functions based upon physio-historic and socio-economic conditions, but they can be graded and grouped in the hierarchical order in any regional set up. The spatial organization of growth centres and their orders distributed in geographic space is the main consideration in the present study. Hence, the gradation and re-grouping of the growth centres into of size classes is termed as hierarchy. Within the field of regional planning,

*Arts and Commerce College, Ashta.

**R.P.D. College of Arts & Commerce, Belgavi.

an important aspect of the study comprises the identification of settlements as the "Service Centres" for their respective environs. This theme has been investigated within the conceptual framework of the central place theory. It might be asserted that Geographic study of this aspects is well accommodated within this framework which, in turn, emphasises the need for hierarchical classification of service centres. Needless to point out, such studies abound in the literature of urban Geography and apparently are accepted as a legitimate part of the field of regional planning.

Centrality is the measure of importance of a place in terms of its functional capacity to serve the needs of the people in the surrounding area. Centrality can be expressed qualitatively such as, low and high centrality, as well as quantitative by centrality values which are obtained by converting the functional base of a place into scores on the basis of frequency and importance of the function. There has been a concern among the geographers to establish a precise relationship between the size of settlement in terms of population and the range of services which it offers. Centrality, however, depends upon the intensity of central functions. The functions or services which an urban settlement performs not merely for itself, but primarily for the surrounding area which is dependent for many socio-economic needs on the centre, but is not a constituent part of it, are known as 'central functions' and the centres or places wherein these functions are performed, known as central places. A central place can be only that where an exchange of central goods and services for population other than the local one exists or in other words, where a certain central institution through which such an exchange exists is made possible. Thus a central place can be defined as a permanent human establishment, where an exchange of goods, services and necessities socio-economic in nature, primarily and basically for population other than the local one, exist and which therefore commands as its region.

As almost all central places or urban centres perform certain essential functions, the regions they occupy vary in size according to their service capacities. The small market centres, the large market centres, the sub regional market centres, regional market centres and large regional market centres are all central places, but they vary in character and importance. The inter-relationship of central places of different order shows a series of inter-connections between

unlike establishments.

STUDY AREA:

Belagavi is a district and also the headquarters of the Belgaum Revenue Division in the state of Karnataka and the city of Belgaum is the district headquarters located in North Karnataka. It is also called as the second capital of Karnataka state, as it houses the second legislative building “Suvarn souda”, where the Karnataka Legislature will meet once a year. According to the 2011 Census of India, it has 4,778,439 total population of which 24.03% living in urban areas, making it the second most populous district in Karnataka (out of 30), after Bengaluru and roughly its population is equal to the nation of Singapur or the US state of Alabama . This gives it a ranking of 25th in India (out of a total of 640).

The district has 13,415 sq. kms. of geographical area, lies between 15° 23' and 16° 58' northern latitude and 74° 05' and 75° 28' eastern longitude and administratively Belagavi district has been divided into 10 tahsils. Athani taluk is the largest with an area of 1,997.70 sq. kms and Raibag taluk is the smallest with an area of 958.8 sq. kms. The district comprises three revenue sub-divisions and six police sub-divisions. Apart from the Belagavi City Corporation, there are 17 municipalities, 13 census towns, 485 gram Panchayat, 1,138 habitated villages and 26 non-habitated villages. The district has a population density of 356 inhabitants per sq. Kms. Its population growth rate over the decade 2001–2011 was 13.38%. Belagavi has a sex ratio of 969 females for every 1000 males and a literacy rate of 73.94%. In Belagavi district out of 31 urban centers one urban centre (Belagavi) fall under class-I town, two towns (Gokak and Nippani) are noticed under class-II town category, ten towns under class-III towns, twelve towns fall under class-IV and six towns recognized under class-V town category.

OBJECTIVES:

The main objectives are:

to analyze the centrality based hierarchy of urban centres in Belagavi district.

to delineate the position of urban centres as per growth foci theory.

DATABASE:

The necessary data's are collected from district statistical report and 2011 Census of India reports for demarcating the position of urban centres in Belagavi district on the basis of population strength.

METHODOLOGY:

The centrality of all the towns of Belagavi district is worked out by using the Godlund's retail trade and service method and V.N.P. Sinha's modified method of Davies (by using the tertiary services).

GODLUND METHOD:

The regional mean index of centrality was given by the formula:

$$C = \frac{t}{T} \times 100$$

Where: C is the score of function t.

t is the one unit of function t.

T is the total number of functional units of function 't' in the region.

The above said Davies formula is used here in the modified form by V.N.P. Sinha.

$$C = \frac{T \times 100}{P}$$

Where: T is the number of persons dependent upon tertiary services of a centre.

P is the total regional tertiary population.

C is the desired centrality of the place.

COMPARISON OF POPULATION SIZE WITH THE CENTRALITY SCORES:

To make a comparison between population size of urban centres and their centrality scores the methods given by Godlund and V.N.P. Sinha are used. In

order to make them commensurable, the absolute centrality scores were used for calculating the correlation matrix between two methods a population size of urban centres, as given in Table No: 1:

Table 1: Correlation Matrix of Two Methods.

	X_1	X_2
Y_1	0.5741	0.9879

Note: Y_1 is the population size of the urban centres

X_1 is the centrality scores obtained by Godlund's method

X_2 is the centrality scores obtained by Sinha's modified method of Davies.

This matrix reveals that between the two methods, the Sinha's method (modified method of Davies) of centrality scores shows high correlation with population size of urban centres ($r = 0.9879$) with 0.01 level significance. While the centrality scores of Godlund method show positive (+0.5741) relation with population size. It is summarised that among these two centrality methods V.N.P. Sinha's method gives more appropriate result than the Godlund's method. The industrial towns namely, Belagavi (MC), Gokak, Athani, Chikkodi, Belagavi (CB) and Gokak falls have 1st, 2nd 4th, 7th, 5th and 26th ranks in their hierarchical ladder by Sinha's method but according to Godlund's method these towns have 6th, 12th 8th, 11th, 1st and 13th ranks in their hierarchy (Table No.:2) and these towns invariably qualify for the lower rungs of the ladder. The administrative centres (tahsil headquarters) are pushed up to the higher order and these centres performing socialised functions are greatly exaggerated. The higher centrality scores indicate the greater if its position in the area. In all instances whatever the method employed, true central places always show dependable centrality.

RELATIONSHIP BETWEEN THE RANKS OF CENTRALITY SCORES AND POPULATION SIZE OF URBAN CENTRES:

The relationship between centrality ranks and population ranks of urban centres are shown on the graph (Fig.1) which reveal that all the urban centres are

[95]

very close to the ideal line of Sinha's method than the Godlund's method. The higher order urban centres indicate the perfect relationship between the centrality and their population size.

HIERARCHY OF URBAN CENTRES:

The urban centres are functionally organized in a nesting pattern and are that lower orders centres occur within the influence areas of higher order urban centres. The higher order urban centres occur at a greater distance than the lower order centres. The hierarchy of urban centres presents some contrasting features in the spatial arrangement of central places and rank size relations which are directly controlled by the physio-cultural setting. The uneven topography, irregular distribution of agricultural lands and absence of mineral resources bring great contrast in the spatial distribution of service centres. As a result there is distortion in the normal hierarchy of urban centres which Christaller proposed in the normal hierarchy of urban centres which Christaller proposed in his study of central places in South Germany. The most uneven areas of the region possess irregular and dis-organised distribution of urban centres. The concentration of urban centres in a limited area disturbs the regular distribution.

HIERARCHY OF URBAN CENTRES IN BELAGAVI DISTRICT:

The hierarchy of urban centres of Belagavi district is brought out in this section on the basis of functional scores. Keeping in view the complexity of the physical (soils), agricultural and cultural landscape of Belagavi district, it will not be correct to take centrality of single function as hierarchy index. The great variation in the functions of the urban centres has made this researcher to adopt centrality of tertiary workers as a determinant factor, because almost all urban centres of the region have significant population engaged in tertiary services than secondary. Although primary functions are significant in most of the towns it is not considered for analysis as it does not reveal urbanism. The Sinha's method (Modified Davies method) of centrality index has been chosen for calculating the hierarchy of urban centres, because, it shows high degree of correlation ($r = 0.9879$).

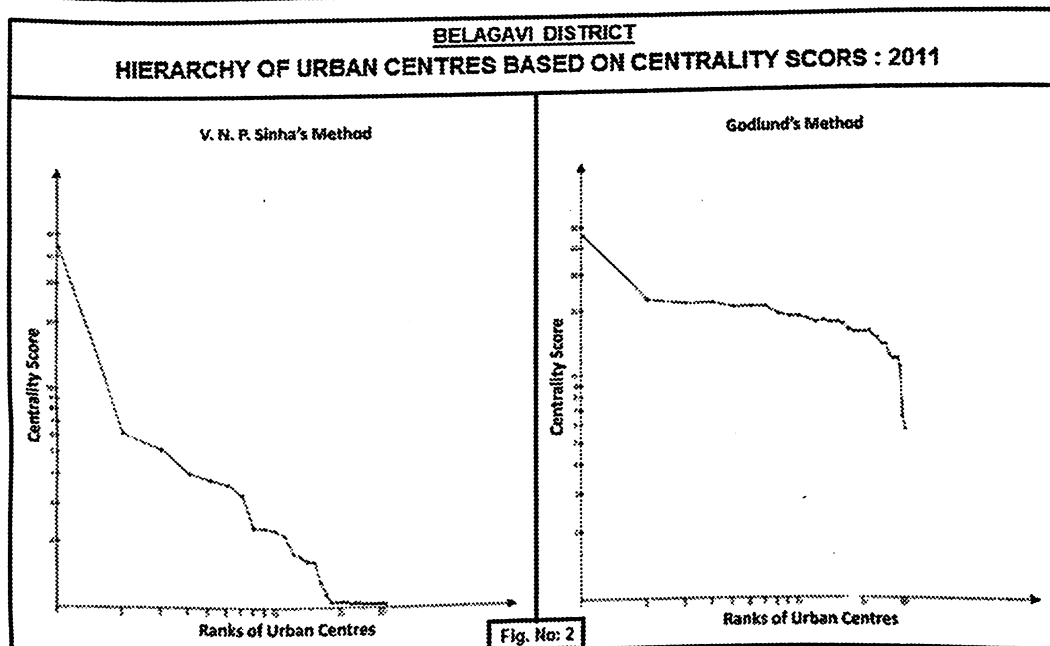
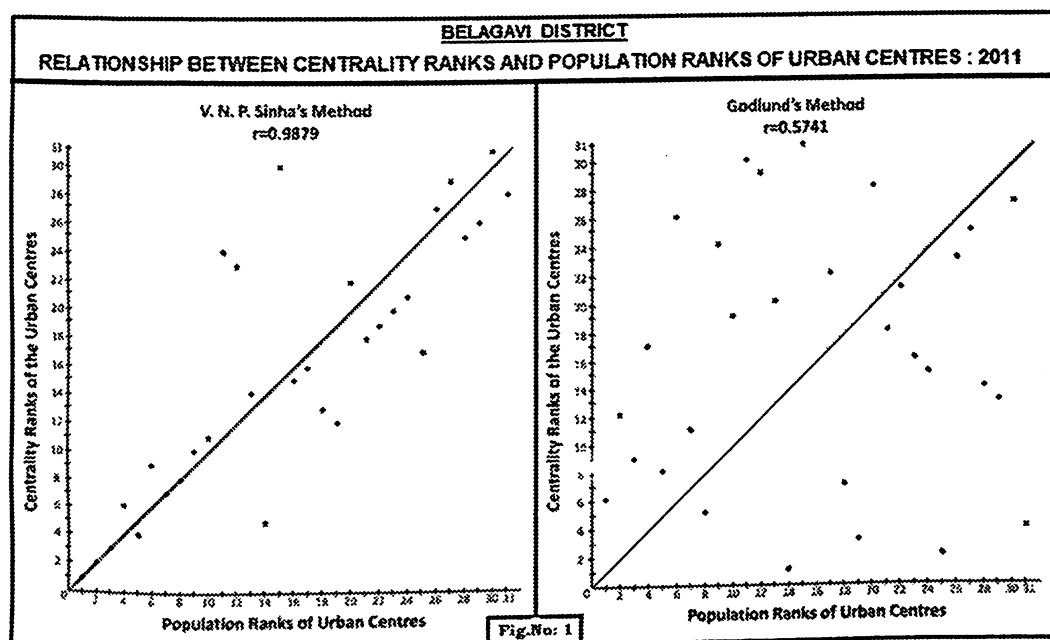
The centrality scores obtained from Sinha's method (Modified Davies

Method) for each urban centre has been ranked in order of their centrality scores and ranks are plotted on a log-log scale. To compare the centrality scores of Sinha's method with Godlund's method another log-log graph is prepared (Fig.2). The demarcated urban centres on the graphs clearly indicate different slop grouping of urban centres of different order having different levels of functional specialization. Thus, all 31 urban centres in Belagavi district have been categorised into five different orders (see Table 2 and Fig 2). in the hierarchical important they are: Regional centres, Sub-regional centres, Intermediatory centres, Small centres and Local centre. The place distinguished on the above basis is real service centres as their centrality index depends entirely upon the hierarchy of the services they perform to serve the outside region.

Table 2: Population Size and Centrality Scores of Urban Centres of Belagavi District (2011).

Sr. No	Name of the Town	Population Size of the Town	Centrality Scores by Godlund Method	Ranks	Centrality Scores by modified Davies Method	Ranks
1	Belagavi (MC)	490,045				
2	Gokak		21.16	6	45.89	1
3	Nippani	79,121	18.32	12	6.41	2
4	Bailhongal	62,865	19.03	9	5.3	3
5	Athani	49,182	16.43	17	3.58	6
6	Savadatti	47,842	19.54	8	4.14	4
7	Chikkodi	41,215	12.51	26	2.28	9
8	Ramadurg	38,307	18.70	11	3.17	7
9	Sankeshwar	34,800	21.32	5	2.33	8
10	Mudalgi	34,637	14.24	24	2.18	10
11	Sadalgi	29,128	16.13	19	2.08	11
12	Kudchi	23,790	6.63	30	0.7	24
13	Hukkeri	23,154	10.82	29	0.71	23
14	Belagavi (CB)	22,988	15.96	20	1.62	14
15	Konmur	19411	44.45	1	3.82	5
16	Khanapur	19386	5.78	31	0.5	30
17	Raibag	19309	18.78	10	1.6	15
18	Mache	18736	15.59	22	1.3	16
19	Peeranwadi	18073	20.92	7	1.67	13
20	Kakati	17874	21.94	3	1.73	12
21	Hindalga	13946	11.66	28	0.72	22
22	Sambra	13741	16.18	18	0.98	18
23	Yellur	13159	15.95	21	0.93	19
24	Benaknalli	11850	17.46	16	0.92	20
25	Kangrali-BK	10999	17.81	15	0.87	21
26	Mouje-Nandagad	10496	22.72	2	1.06	17
27	Sulebavi	8837	15.00	23	0.59	27
28	Kangrali-KH	8503				
29	Gokak falls	8204	13.89	25	0.52	29
30	Mutga	8080	17.84	14	0.65	25
31	Londa	7561	18.00	13	0.64	26
		5956	11.68	27	0.39	31
			22.38	4	0.59	28

Source: Computed by Researcher.



The number of service centres falling in Regional centre, Sub-regional centre, Intermediatory centre, small centres and local centre appear to follow the norm of 1, 2, 4, 10 and 14. It is evident that these numbers do not strictly confirm to

any of the three principles advocated by Christaller. Christaller principles were as follows:

$$K = \frac{K_1 + K_2 + K_3 + \dots + K_n}{n}$$

Where : K stands for the number of centres in particular hierarchical class.

Therefore:

$$K = \frac{1+2+4+10+14}{5}$$

$$K = 6.20.$$

The result of above equation clearly indicates that in the study area the urban centres and their hierarchical class orders are governed by 'K' value of 6.20. This value indicate that it does not fit for any theoretical model of Christaller, because his transport principle hierarchical class value is K-3, market principle pattern value is K₄ and administrative principle is K₇. Hence it shows noticeable difference from the theoretical number.

ANALYSIS THE HIERARCHIY OF URBAN CENTRES AS PER GROWTH FOCI:

The transmission of developmental activity in space may be conceived as taking place through a selected number of growth foci (see Table No: 3 & Fig No: 3). The growth foci are distinguished by certain special characteristics in their socio-economic functional composition.

1. REGIONAL CENTRE (GROWTH POLE):

In the study area, this class includes only the Belagavi city. This city has got a little south-western location in the study area and having a population nearly five lakh (4,90,045). It has marked by highly specialised secondary and tertiary activity, which, normally cannot be performed by other centres. It has concentration of whole sale and retail traders, branches of the important banks of India, universities, post-graduate campus, medical colleges, technical colleges, large civil hospital, regional bus junction, railway stations, District

R.T.O. Office, District commissioner's office, superintendent of police, senior superintendent of post office, telephone exchange MX-1, Upper court, big sports stadium, etc. It occupies the highest rank in hierarchy of urban centres.

Hierarchical Order	Category	Hierarchical Number of Urban Service Centres (by Sinha's)	Name of the Urban Service Centres
I	Regional Centre (Growth Pole)	1	Belagavi (MC)
II	Sub-regional Centres (Growth Centre)	2	Gokak and Nippani
III	Intermediatory Centre (Growth Point)	4	Athani, Belagavi (CB), Bailhongal and Chikkodi
IV	Small Centres (Market Towns)	10	Ramdurg, Savadatti, Sankeshwar, Mudlgi, Peeranwadi, Mache, Hukkeri, Khanapur, Raibag and Kangrali-BK
V	Local Centres (Service Town)	14	Hindlaga, Sambra, Yellur, Benakanalli, Kakati, Kudchi, Sadalgi, Kangrali-KH, Gokak falls, Mouje-Nandagad, Londa, Sulebhavi, Konnur and
	Total	31	

Source: Computed by Researcher.

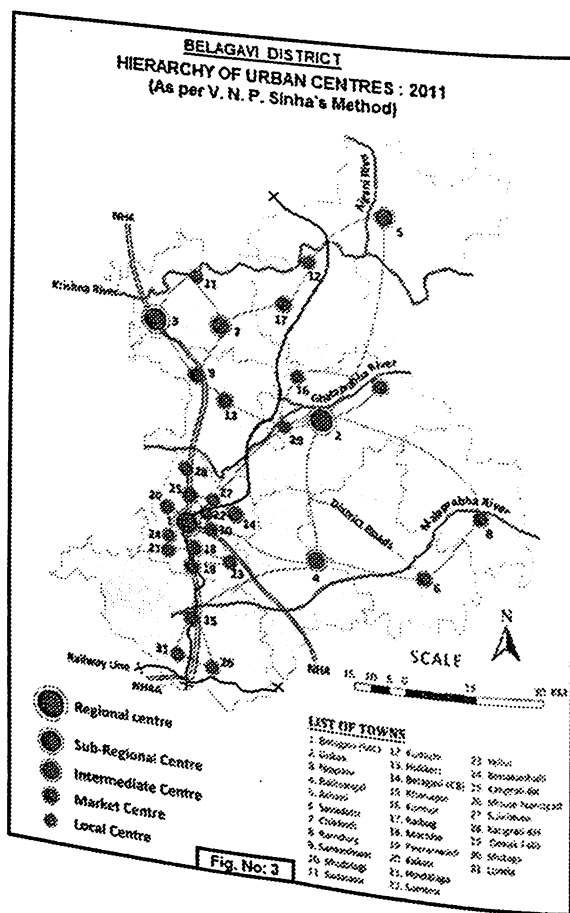
2. SUB-REGIONAL CENTRE (GROWTH CENTRE):

There are two centres i.e., Gokak and Nippani qualified to this category, which are sub-divisional headquarters in the study area. These are less developed than the first order centre. This sub-regional centres stands as sub-servient to growth pole. The population of sub regional centre (Gokak) is 79,121 and Nippani centre is 62,865 and these centres acts as the centre of propulsive activities, mainly manufacturing marketing and services for their hinterland. The composition of manufacturing activity must be of industrial hub with diversified industrial structure although very few in number of types. These centres also have large collecting storages and processing facilities for agricultural products, television station, banking facilities, degree colleges, engineering college, homeopathic medical and dental college, Assistant commissioner office, civil hospital, telephone exchange MX-2, bus depot and K.S.R.T.C. sub divisional office, traffic police station, lower court, chief engineer office and other servicing

facilities.

3. INTERMEDIATORY CENTRE (GROWTH POINTS):

In the study region four towns have identified as Intermediatory (Growth point centre). These are relatively small in comparison to the growth centres and growth pole and occupy small service area. The important economic activities of the growth points (Athani, Belagavi(CB), Bailhongal and Chikkodi) are weaving activities and processing of agricultural products. Along with this the normal service functions like degree colleges, junior colleges and secondary schools, government hospital, departmental telephone exchange office, bus depot, tahasildar office, block development office, tahsil court, head post office, daily market, public library, etc, are existing.



4. SMALL CENTRES (MARKET TOWNS):

There are ten urban centres which come in this category. These urban centres include five tahsil head-quarters (Ramdurg, Savadatti, Hukkeri, Khanapur and Raibag) and another five non-tahsil headquarters (Sankeshwar, Mudlgi, Peernwadi, Mache and Kangrali-BK). In these 10 centres, weaving, spinning, ginning, agricultural marketing activities (with necessary ware housing and storage facilities) are existing. Every urban centre of this category have colleges, high schools, primary health centres, post and telegraphic offices, cinema theatres, veterinary hospital, bus stand, limited number of banks, co-operative banks and police stations. The tahsil headquarters contain all the usual facilities of tahsil place.

5. LOCAL CENTRES (SERVICE TOWNS):

Service towns or local centres are the lowest level centres serving all types of activities. In the study area total 14 towns i.e., Hindlga, Sambra, Yellur, Benkanalli, Kakati, Kudchi, Sadalgi, Kangrali-KH, Gokak falls, Mouje-Nandagad, Londa, Sulebavi, Konnur and Mutga were noticed in this category, because the lowest order centres are not considered while establishing hierarchical order of central places. In this local centre sub-post office, dispensary, high school, Govt. Bus stop, weekly market, grocery stores, tailor shops, barber shops, co-operative and community centres, telephone call box, police out post and other basic facilities are available.

The appropriate number of each hierarchical order of growth foci and the interaction between them is pre-requisite for the regional development. The well developed, interrelated system of growth foci can bring the socio-economic changes in the society.

CONCLUSION:

This study has sought to examine the spatial characteristics, service functions and population dynamics of urban centres in Belagavi district. The study has emphasized the importance of the urban centres as local nodal service centres. Each urban centres link many villages and therefore integrate them into the national economic system through commodity exchange, information flow

and innovation spread. The urban centres facilitate trading activities in the study region whose economy is essentially based on agriculture and other related activities. Apart from their economic functions, the higher order other multifacets central functions offer additional services of centrality that make them attractive. They are the “drivers of the urbanization process” in the region. Indeed, the urban geography and economic history of the Belagavi district cannot be understood without reference to the population dynamics and their functional diversity.

Within this context it is emphasized that the continuous functioning of many of the lower order urban centres in the region will grow to a large extent and it depend on sustainable supply of farm produce from their local catchment areas. For improve the functional varieties towards to improve the quality of life in urban centres of Belagavi district priority should be given to the existing urban functional structure. Therefore, the towns of Belagavi district especially those which have below 50,000 populations should exhibit basic functions rather than primary and service / non-basic functions. This expected scenario may be changed if special programmes laid in our newly introduced “Smart City” programmes in five years plans to develop small and medium towns towards to grow in terms of functional dynamism. Once the district continues its trend towards development facing all the odds which are prevalent in the study region and it leads to change the hierarchy of urban centres based on their centrality of functions boost to flourish and grow towards to promotes the small urban centres as growth points and growth centers.

REFERENCES

1. Addo, S.T. (1977) Rural-Urban Linkages in Development Planning in Ghana, Ghana Social Science Journal, Vol: 4, No:2, pp.35-57.
2. Arthur B. Gallion and Symon Esnel (1984) Urban Pattern, City Planning and Design, CBS Publication, New Delhi.
3. Baskin, C.W. (1966) Central places in Southern Germany by Walter Christaller, Prentice Hall, Inc. Englewood Cliffs, NJ.
4. Berry B.J.L (1967) Geography of Market Centres and Retail Distribution, Prentice Hall, Inc. Englewood Cliffs, N.J.

5. Berry, B.J.L. and Garrison, W. L. (1958) Functional Bases of the Central Place Hierarchy, *Economic Geography*, Vol-34, pp. 145-154.
6. Bracey, H. E. (1956) A Rural Centrality Applied to Six Southern Countries in the United Kingdom, *Economic Geography*, Vol-32, pp. 38-50.
7. Christaller W (1933) *Central Places in Southern Germany*. Translation by C. W. Baskin, 1966, Prentice Hall, Inc. Englewood Cliffs, NJ.
8. Davies, W.K.D (1967) Centrality and Central Place Hierarchy, *Urban Studies*, Vol-4, pp. 61-79.
9. Hangaragi S. S (1995) Urbanization in Drought Prone Area : A Case Study of Bijapur District, Unpublished Ph.D Thesis, Karnataka University Dharwad.
10. Ishikawa T, Toda M (2000) Some Economic Extensions of Central-Place Theory Involving Profit Maximisation, *Urban Studies*, Vol: 37, pp.481-495.
11. Prakash Rao V.L.S. (1983) *Urbanization in India – Spatial Dimensions –* Concept Publishing Company, New Delhi, pp.173-174.
12. Rossi U (2009) Growth Poles, Growth Centres, published in Kitchin, R. and Thrift, N. written *International Encyclopedia of Human Geography*, Vol: 4, pp.651-656.
13. Sharma PR (1984) Growth Centre and Regional Development: Aspects of Theory and Policy, *Habitat International Journal*, Vol: 8, No: 2, pp.133-150.
14. Smailes, A. E. (1944) The Urban Hierarchy in England and Wales, *Geography*, Vol-29, Part-2, pp. 41-51.