Turkish Online Journal of Qualitative Inquiry (TOJQI)
Volume 12, Issue 3, March, 2021: 3132-3139

Exploring the Rural -Urban continuum model in Kerala

[1]Prof Dolly Sunny, [2]Julia Ittiachen Thomas

[1]Director, [2]Research Scholar, Mumbai School of Economics and Public Policy (MSEPP)

Abstract

The authors of this paper have tried to explore the prevalence of the Rural-urban continuum in Kerala. The spatial pattern of settlement in Kerala, makes it a unique state in India. The state is characterised by linear but densely agglomerated stretches of land where there is is practically no distinction between an urban area and a rural area, Using the methodology framework used by Firoz (2014), an attempt is made in this paper to examine Kerala's adherence to the RUC model.

1.1 Introduction

The focus of this paper to examine whether Kerala adheres to the framework of the RUC model (Rural - Urban Continuum). The RUC entails the merging of rural and urban spatial boundaries and a ceaseless interaction between these two spaces. Studies on Kerala in this regard by Sreekumar (1990) and Oommen (2009) have established that the traditional dichotomy between rural and urban areas is absent in the state. Using the methodology framework used by Firoz (2014), an attempt is made in this paper to examine Kerala's adherence to the RUC model

The most striking features that differentiate Kerala from rest of the country is the spatial pattern of the settlement system characterised by dispersed but interconnected, linear but densely agglomerated stretches. There is practically no distinction between an urban area and a rural area, with coexistences of the primary, secondary and tertiary sectors in both. Hence, the settlement in Kerala does not have any distinct core, nor do the villages have any marked nodality (Chatopadhyay 1995).
The unique achievements of the state set it apart from other states in the country. Literacy is one paradigm that many know about the state. According to the 2011 Census, Kerala's literacy rate stands at 93.91 percentage. The high standards in education are attributed to a range of factors such as the social reform movements in the 1920's and 1930's (Dolly,2001, 2002,2018). A female literacy rate of 91.98 percentage as per the 2011 Census is also the highest in the country (Executive summary, Kerala - Census of India 2011). The classification of a country into two distinct areas of urban and rural is either based on population, occupational structure or infrastructural facilities. A lot of literature can be sourced on the definitions of rural-urban classifications (Bhagat 2005; Denis et al 2012). Definitions demarcating rural and urban areas differ from country to country. There are a host of studies that look into other dimensions of the rural-urban divide. Guilmoto and Rajan (2013) has studied demography, specifically looking into the differences in fertility rates between urban and rural areas.
Studies on the spatial formation and settlement patterns of Kerala are many, some of which have been reviewed here. Mencher (1966), in his paper, has propounded the fact that Kerala has always exhibited a dispersed type settlement. Sankaranaryanan (1977) has noted that a developed urban system is characterised by a dominant node or a primate city, which accounts for the highest population and economic activity. But in the case of Kerala, this primate city is missing. He goes on to state that Kerala has a unique pattern of urban evolution that cannot be studied in isolation, but examined looking at spatial factors, development patterns and spatial classification norms.

Sreekumar (1990) opined in his paper that the statistical empiricism of the Census does not capture the dynamic nature of Kerala's urbanisation process. Unlike the other parts of India, habitation in Kerala is spread continuously without much open lands or fields separating these habitations. Sreekumar (1990) observes that a rural area is clearly visible elsewhere in India, which mainly consists of vast areas of agricultural land with hamlets distributed sporadically. However, in Kerala, a number of small

and medium towns are distributed in the village background and there seems to be a merging of the rural and urban spatial boundaries.

From the above, one cannot dispute that such a settlement pattern has resulted in the equitable distribution of infrastructure facilities and has resulted in a better quality of life amongst people living in both rural and urban areas. This combination of impressive social indices and spatial characteristics make Kerala a unique and interesting subject of study.

1.2 Objective of the study

The objectives of this paper focuses on the following two aspects :

- To understand the prevalence of rural-urban continuum model in the context of Kerala.
- To suggest research entry points for understanding the complex interaction and flow of resources, technology, labour across these spatial geographies.

1.3 Research Methodology

The research methodology is uniquely designed

To investigate the adherence of Kerala to the RUC model. The indicators used in the papers by Dutt (1986), Ballas et al. (2003), Madu (2009) and Chi (2012) are used to compare rural and urban areas. The comparison are made using the Census 2011's demarcation of rural and urban areas. Before some of the indicators in the context of this paper are discussed, an understanding of the urban-rural demarcation according to the 2011 Census of India has to be examined.

The Census of India, 2011, is the second Census of the 21st century and seventh Census after the attainment of Independence. For Census purposes, the total geographical area is broadly classified into rural and urban. The constituents of urban areas are *Statutory Towns, Census Towns and Outgrowths.*

- *Statutory Town* (ST): All places with a municipality, corporation, cantonment board or notified town area committee, etc.
- *Census Town* (CT): Places that satisfy the following criteria are termed as Census Towns (CTs) — a minimum population of 5,000; at least 75 percent of the male main working population engaged in non-agricultural pursuits; and a density of population of at least 400 per sq. km.
- *Outgrowth* (OG): An Outgrowth should be a viable unit such as a village or a part of a village contiguous to a statutory town, which possesses urban features in terms of infrastructure and amenities such as pucca roads, electricity, taps, drainage system, education institutions, post offices, medical facilities, banks, etc. Examples of OGs are railway colonies, university campuses or port areas that may come up near a city or Statutory Towns outside its statutory limits but

  within the revenue limit of a village or villages contiguous to the town or city.
- *Urban Agglomeration* (UA): It is a continuous urban spread constituting a town and its adjoining urban Outgrowths or two or more physically contiguous towns together and any adjoining urban Outgrowths of such towns.
- *Rural*: All areas other than urban are rural. The basic unit for rural areas is the revenue village. The number of villages in Kerala is 1,01

- *Urban Agglomeration* (UA): It is a continuous urban spread constituting a town and its adjoining urban Outgrowths or two or more physically contiguous towns together and any adjoining urban Outgrowths of such towns.

- *Rural*: All areas other than urban are rural. The basic unit for rural areas is the revenue village. The number of villages in Kerala is 1,018.

The Census of 2011 shows that the population of Kerala as on March 1, 2011, was 3,33,87,677, with 1,74,55,506 in rural and 1,59,32,171 in urban.

The number of STs in Kerala is 59. The number of CTs is 461. The number of OGs in Kerala is 16. The number of UAs in Kerala is 19 and the number of villages is 1,018 Dutt's (1986) study examines 23 variables for 388 Indian districts with data, segregated by sex and grouped in urban and rural categories. Variables strongly correlating with urban districts include high female/male ratio, population density, female literacy and household workers. Ballas et al. (2003), in their study, uses population density as an indicator to distinguish between urban and rural areas. In the study conducted by Madu (2009), both population density and sector-wise employment are used as indicators. Chi (2012), in their study, have included besides the above-mentioned indicators, literacy rate as a key indicator.

In this paper, the methodology to define the typology of the rural-urban continuum settlements in Kerala follows the method adopted by Firoz (2014). The study uses 9 main indicators and a number of sub-indicators under these main indicators. Further, the indicators are discussed based on their tendency to be more urban or rural in nature.

The aforementioned methodology will be used to compare the difference between urban and rural areas, using the indicators and sub-indicators.
It is a qualitative framework, which presupposes that the conventionally defined rural and urban space does not exist. Using the framework on this precondition, it determined whether the area has a rural or urban tendency.

1.4 Data sources

The study relies entirely on secondary sources of data. To achieve the first objective of investigating the adherence of Kerala to the RUC model, the Census of India, 2011, and the 71st round of the NSSO are used.

1.5 Review of Literature

In most countries, there is an official demarcation between urban and rural settlements. It is generally assumed that the livelihoods of the inhabitants can equally be reduced to two main categories: agriculture based in rural areas, and manufacture and services based in the urban centers. Yet, recent research suggests that even where activities can be described as either urban or rural and are spatially separated, there is always a continued and varied exchange of resources between urban and rural areas. Rural- urban linkages have recently become the focus of renewed interest among policy makers and researchers (Evans, 1990, Gaile, 1992).
According to Hogan et al (2012) since the 1990's, the Asian arc from India to China is the world region where urbanisation is at its strongest and also where production activities relocate, opening up new markets
Likewise for India, Das (2015) highlights how high rural densities merge with major urban concentrations. In India, the vast coastal region of Kerala reflects this Asian model. Mc Gee (1991) has categorised it among a Deskota. He said it was a continuing agglomeration extending from the north of Kochi to the south of Thiruvananthapuram. Similar outcomes were arrived at in the studies by Denis and Zerah(2014).
Rural-urban linkage can also be viewed from the context of urban area food systems; ecological linkages comprising ecosystem services; socioeconomic linkages, including more direct supply chains; and governance linkages, which bring together urban and rural governance structures in a democratic and participatory way (Jennings et al. 2015).
There is also been a strong resolution at the United Nations for bringing to an end the

counterproductive rural-urban dichotomy debate and promoting a policy perspective that views urban and rural areas as existing in human settlement continuum (UN 2001). Internationally, too, the consensus has been towards the acceptance of a rural –urban continuum. Available empirical findings also show strong rural-urban linkages in terms of movement of people, goods, capital and other social transactions (Lynch 2005; Agargaard et al. 2010). Studies on the spatial formation and settlement patterns of Kerala are many, some of which have been reviewed here. Cohn (1971), in his paper, has propounded the fact that Kerala has always exhibited a dispersed type settlement. Sankaranaryanan (1977) has noted that a developed urban system is characterised by a dominant node or a primate city, which accounts for the highest population and economic activity. But in the case of Kerala, this primate city is missing. He goes on to state that Kerala has a unique pattern of urban evolution that cannot be studied in isolation, but can be examined looking at spatial factors, development patterns and spatial classification norms. Cyriac and Firoz (2022), in their paper, assert that the urban and rural definitions do not hold validity in Kerala and it has a unique RUC settlement pattern, where it is difficult to distinguish between the urban from the rural. Their study recommends an RUC code for Kerala and an *Eco-sensitive Regional Planning* approach for a better spatial planning process. The dispersed pattern of settlement in Kerala can be attributed to two factors (Namboodiripad 1952; Raj 1970). The first reason is the abundance of water due to which people were less constrained than elsewhere by the absence of it when choosing where to live (Namboodiripad 1952). The second reason relates to the peculiar power structure that prevailed in the region and the existence of a particular kind of landed feudal property in the state (Raj 1970). Mencher (1966) also mentions the feudal system of land ownership in Kerala. Sreekumar (1990) opined in his paper that the statistical empiricism of the Census does not capture the dynamic nature of Kerala's urbanisation process

1.6 Analysis and results

For this paper, the methodology to define the typology of the rural-urban continuum settlements in Kerala follows the method adopted by Firoz et al. (2014). The study uses nine main indicators and a number of sub-indicators under these main indicators. Further, the indicators are discussed based on their tendency to be more urban or rural in nature.

Table 1:1

List of Indicators with their sources as derived from literature that can be used in determining the settlement typology

Indicator	Sub Indicators(s)	Authors	Remarks
Demography	Population density (PD)	Dutt, A. K et al (1986), Maynooth, N. U. I (2000), June, L. (2005), Ballas D et al (2003), Bogdanov, N et al (2007), Madu, I. A (2009), Madsen, M. F et al (2010), Ogdul H.G et al (2010), Monasterolo, I et al (2010), Chi, G. et al (2011)	Higher PD is UT
	Sex Ratio (SR)	Dutt, A. K et al (1986), Bogdanov, N et al (2007)	Higher SR is UT
	Dependency Ratio (DR)	Ogdul,H.G et al (2010), Monasterolo et al (2010), Bogdanov, N et al (2007)	Higher DR is RT,

	Household Density (HHD)	Ballas D etal (2003), Madu, I. A(2009)	Higher HHD is UT
	Household Size (HHS)	Authors own research	Higher HHS is RT
Labour Force Characteristics	Main workers, Marginalworkers (Male and Female) (Mw, Mrw)	Dutt, etal (1986), Madsen, M. F etal (2010)[5] Maynooth, N. U. I (2000)[6]	Higher Mw isUT and Mrw is RT
	Non workers(Male and Female) (Nw)	Dutt, A. K etal (1986)	Higher Nw is RT
Sectorwise Employment	Cultivators & Agricultural laboures as percent of working pop (Male, Female and Total) (CAL)	Dutt, A. K etal (1986) &(Monasterolo, I etal(2010), Madu, I. A(2009), Chi, G. etal (2011) Madsen, M. F etal (2010), Ogdul,H.G etal (2010) Maynooth, N. U. I (2000), Ballas D etal (2003), Bogdanov, N etal (2007) ,A etal (2010)) [7]	Higher CALis RT
	Household laborers as percent of working pop.(HHL), (Male, Female and Total)	**Dutt, A. K etal (1986) &(Monasterolo, Ietal(2010), Madu, I. A(2009))[8]**	**Higher SSE is UT**
	Other workers as percent of working pop. (Ow) (Male, Female and Total)	**Dutt, A. K etal (1986) &(Monasterolo, I etal(2010), Xuefeng, S. (2012), Jun‟e, L. (2005),Copus Madu, I. A(2009), Chi, G. etal (2011)) [9]**	**Higher Ow is UT**
Live stock(LS)	**Concentration of Live stock.**	**Madsen, M. F etal (2010)**	**Higher LS is RT**
Literacy(LT)	**Percentage literate(Male, Female and Total)**	**Dutt, A. K etal (1986), Madu, I. A(2009, Ogdul,H.G etal (2010), Maynooth, N. U. I (2000), Bogdanov, N etal (2007), Chi, G. etal (2011), Monasterolo, I etal(2010)[10]**	**Higher LT isUT**

Note. " UT" is Urban Tendency and "RT" is Rural Tendency. All Indicators are compiled by the Firoz et al (2014) from current literature

The indicators and sub indicators used to apply the model to Kerala are as follows – Demography,

labour force characteristics, sector wise employment, and infrastructure and communication characteristics. Under the listed four main indicators there are sixteen sub indicators that have been used in the framework. In table given below, it can be observed that a comparison of the indicators in Kerala according to government-ascribed urban and rural areas gives a very ambiguous result.

Table 1.2 Kerala settlement typology model

INDICATORS	SUB-INDICATORS	URBAN	RURAL	URBAN OR RURAL TENDENCY
1) DEMOGRAPHY	(i) POPULATION	47.70	52.30	RT
	(ii) HOUSEHOLD SIZE (Nos person per house)	3.9	4.0	RT
2) LABOUR FORCE CHARACTERISTICS	(i) TOTAL WORKERS	45.42	54.58	RT
	(ii) MAIN WORKER	47.55	52.45	RT
	(iii) MARGINAL WORKER	48.92	51.08	RT
3) SECTORWISE EMPLOYMENT	(i) PRIMARY SECTOR	12.77	40.93	RT
	(ii) SECONDARY SECTOR	18.92	14.32	UT
	(iii) TERTIARY SECTOR	68.31	44.75	UT
4) SOCIAL INDICATOR	(i) LITERACY RATE	96.10	94.40	UT
	(ii) SEX RATIO	1091	1078	UT
5) CIVIC INFRASTRUCTURE AND COMMUNICATION	(i) BANKS	1264	353	UT
	(ii) POST OFFICES			UT
	(iii) BATHROOMS	966	4101	UT
	(iv) LATERINES			RT
	(v) ELECTRICITY	94.60	90.30	UT
	(vi) TELEVISION			
	(vii) MOBILE PHONE	97.43	93.21	
		96.70	98.70	
		82.24	72.07	
		91.52	88.01	

Source. All Indicators are compiled from Census 2011
Note. " UT" is Urban Tendency and "RT" is Rural Tendency

A closer examination of the demography indicator shows that it has a Rural Tendency (RT), pointing out to the fact that the proportion of the population in rural areas is greater than in the urban areas, which is contrary to the pattern seen in the rest of the country. The household density is very similar in both areas. The number of persons in a household is four persons in rural and 3.90 in urban. These statistics reveal that there is a very thin line demarcating these two areas in terms of household density. Labour force statistics reveal that all three categories of workers exhibit rural tendency, but the range

of difference between rural and urban is very narrow. This indicates RUC features. Sector-wise employment shows RT for the primary sector, while the secondary and tertiary sectors have Urban Tendency (UT), as is the norm. But a closer look at the figures shows that except for the primary sector, the difference between the urban and rural for the other two sectors is closing in. The other social and civic and infrastructure indicators show an urban tendency. This points to a high degree of urbanisation in the state. But a comparison between the indicators shows that there is hardly a marked difference between urban and rural areas.

It can be observed using the settlement typology framework, that Kerala cannot be emphatically divided into two distinctly separate areas. Many of the indicators seem to display very similar trends, irrespective of being from two distinctly different government designated spatial areas.

1.7 **Conclusions and policy implications**

An important question that has to be raised is one of the semantics. Where does the rural end and urban begin in Kerala? The Census Towns that exhibit urban characteristics but are not statutorily notified or administered as towns. So, the growth in urban population could be attributed to the natural inclusion of new areas being classified as urban. While these Census Towns exhibit urban features, they are administered by panchayats or rural councils. This allows these regions to benefit from state-funded rural development programmes, while being exempt from property taxes. Lying in between official classifications of rural and urban spaces, these areas are experiencing rapid transition In this context, it is important to highlight the role of public policies and their impact on rural-urban classifications and the devolution of funds in these distinct spatial areas. The role that government schemes play in the rural/urban classification, or what has been called the *politics of classification***.** One major tool to overcome the problems of the rural-urban dichotomy is the role of the district integrated planning committee. The district integrated planning committee is constituted of the district administration, but has elected members from both rural and urban areas. Examples in the case of Kerala, where there has been a strong policy to favour urban-rural linkages through participatory governance. This has led to very positive results. This is also related to the urban-rural continuum that characterises this small state of Kerala.

References

1. Agargaard, J., Fold, N., & Gorgh, K. (2010). Rural-Urban Dynamics. Livelihoods, Mobility and Markets in African and Asian Countries. London/New York. Routledge.
2. Ballas, D., Kalogeresis, T., & Labrianidis, L. (2003). A comparative study of typologies for rural areas in Europe.
3. Bhagat, R.B. (2005) Rural-Urban Classification and Municipal Governance in India. Singapore Journal of Tropical Geography, 26, 61-73.http.//dx.doi.org/10.1111/j.0129-7619.2005.00204.x
4. Chatopadhyay, Sreekumar (1995), "Environmental Impacts of Urbanization" Trans Ins Indian Geographers, Jan 1995, No 1, Volume 17.
5. Chi, G. (2012). The impacts of transport accessibility on population change across rural, suburban and urban areas: a case study of Wisconsin at sub-county levels. *Urban studies*, *49*(12), 2711-2731
6. Cohn, B. S. (1971), *India. The Social Anthropology of a Civilisation*, Prentice-Hall, New Jersey
7. Cyriac, Susan & Firoz, Mohammed. (2022). A Bibliometric Review of Publication Trends in the Application of Landscape Metrics in Urban and Regional Planning. Papers in Applied Geography. 1-18. 10.1080/23754931.2021.2018025.
8. Das, U. (2015). Can the rural employment guarantee scheme reduce rural out-migration. Evidence from West Bengal, India. *The Journal of Development Studies*, *51*(6), 621-641.
9. Denis, E., P. Mukhopadhyay and M.-H.Zérah (2012)."Subaltern Urbanisation in India." Economic and Political Weekly XLVII(30). 52-62.
10. Denis E. and Zérah M.H., (2014). Rural-Urban Linkages. India Case Study. Working Paper Series Nº 124. Working Group. Development with Territorial Cohesion. Territorial Cohesion for Development Program. Rimisp, Santiago, Chile
11. Dolly Sunny (2001) An Inquiry into the Migration of Educated Women of Kerala State, *Indian*

Journal of Social Development, Volume 1, Number 1, 2001, pp. 105-126.
12. Dolly Sunny (2002) The Paradox of Education and Unemployment in Kerala, Development Digest, Volume1, Number 1, 2002, Madhya Pradesh.
13. Dolly Sunny (2018) **Unionism in Informal Sector: Revisiting the Wood-load Workers of Rubber Plantations,** published by Southern Economist Publication,Bangalore-560008.
14. Dutt, A.K.(1986). Vertical trading and uneven development. *Journal of Development Economics*, *20*(2), 339-359.
15. Evans, H. E., 1990, "Rural-Urban Linkages and Structural Transformation", in Report INU 71, Infrastructure and Urban Development Department, World Bank, Washington D.C.
16. Executive summary, Kerala - Census of India 2011https;//censusindia.gov.in
17. Gaile, G. L. (1992), "Improving rural-urban linkages through small town market-based development", Third World Planning Review Vol.14, No.2, pages 131-48.
18. Guilmoto, C. Z., & Rajan, S. I. (2013). Fertility at the district level in India: Lessons from the 2011 census. *Economic and Political weekly*, 59-70.
19. Hogan, Bunnell, Po-P, Padmasree, Morshidi S. (2012) "Asian urbanism and the privatization of cities." Cities, vol. 29, no. 1, p 59-63.
20. Jennings, Steve, Cottee, Julian, Curtis, Tom, Miller, Simon, (2015). Food in an urbanised world. the role of city region food systems in resilience and sustainable development. In. Paper Presented at the Report on Food in an Urbanized World Conference, 4th February 2015.
21. Lynch, K. (2005). Rural-Urban Interaction in the Developing World. London. Routledge/Chapman and Hall.
22. Madu, I. A. (2009). The environmental impacts of regional disparity in population and wealth distribution in Nigeria. *Environment, development and sustainability*, *11*(2), 265-276.
23. McGee G. (1991). "Introduction." In Ginsberg &., Koppel, Mcgeet G. (eds) (1991), The extended metropolis. Settlement transition in Asia. Honolulu. University of Hawaii Press, p. 3-25.
24. Mencher, Joan (1966), "Kerala and Madras. A Comparative Study of Ecology and Social Structure," *Ethnology*, vol. 5, no. 2, pp. 135–71.
25. Firoz, C., Banerji, H., & Sen, J. (2014). A Methodology to Define the Typology of Rural Urban Continuum Settlements in Kerala. *Journal of Regional Development and Planning*, *3*(1), 49.
26. Namboodiripad, E. M. S. (1952), *The National Question of Kerala*, People's Publishing House, New Delhi
27. NSSO 71st Round ID:DDI-IND-MOSPI-NSSO71st.Sch25dot2-2013
28. Oommen T.K. (2009). Development Policy and the Nature of Society: Understanding the Kerala Model. Economic & Political Weekly EPW march 28, 2009 vol xliv no 13
29. Raj, K. N. (1970), "Foreword," in T. C. Varghese (ed.), *Agrarian Change and Economic Consequences. Land Tenures in Kerala. 1850–1960,* Allied Publishers, Bombay.
30. Sankaranarayanan, V.C (1977); Urbanisation of Kerala and Tamil Nadu, working Paper 57, Centre for Development Studies, Trivandrum.
31. Sreekumar, T.T. (1990) , 'Neither Rural Nor Urban', Economic and Political Weekly, Vol.XXV, No.37, September 15.
32. UN. (2001). Reducing Disparities. Balanced Development of Urban and Rural Areas and Regions within the Countries of Asia and the Pacific. New York. United Nations.
33. UNDP/UNCHS (1995) United Nation development program 1995 and United Nations compendium of human settlements statistics 1995 United Nations.