



Ranking of Functions in the Central Business District (CBD) of Jammu City

Sarvjeet Singh¹ and Verinder Singh Manhas²

¹Department of Geography, Govt. M.A.M College, Jammu, India

²Department of Geography, University of Jammu, Jammu, India

*Corresponding author: drsinghgeog@gmail.com

ABSTRACT

The Central Business District (CBD) developed as the market square in ancient cities. On market days, farmers, merchants and consumers would gather in the center of the city to exchange, buy, and sell goods. This ancient market is the forerunner to the Central Business District (CBD). As cities grew and developed, Central Business District (CBD) became fixed location where retail and commerce took place. The Central Business District (CBD) is typically at or near the oldest part of the city. A variety of goods are sold in the different markets of Jammu city. However, some goods are sold in some markets. This leads to functional specialization of the different market centers. The number of establishments present and the types of goods sold, help in determining the intra-city hierarchy of markets. In this paper an attempt has been made to identify the types of functions which are further ranked by applying Kendall's method.

Keywords: Central Business District (CBD), Retail, Goods, Establishments, Hierarchy, Functions

A Central Business District (CBD) is also called a Central Activities District is the commercial and often geographical heart of the city. Central Business District (CBD) is that where there is a maximum concentration of retail and services activities, highest land values and tallest buildings. It focuses on maximum pedestrian and automobile traffic (Murphy and Vance, 1954). The Central Business District (CBD) is the area where the residential population is the least and day time population is high. It is also the area where the intensity of land use is high and higher order functions are concentrated (E. Swami Nathan and A. Raja Mohan). The Central Business District (CBD) is not a static feature it is dynamic. It is constantly changing in Morphology, Structure, Shape and Size and in racial patterns to meet the changing economic conditions. The Central Business District, which variously referred to as the CBD, downtown district, urban core, central area

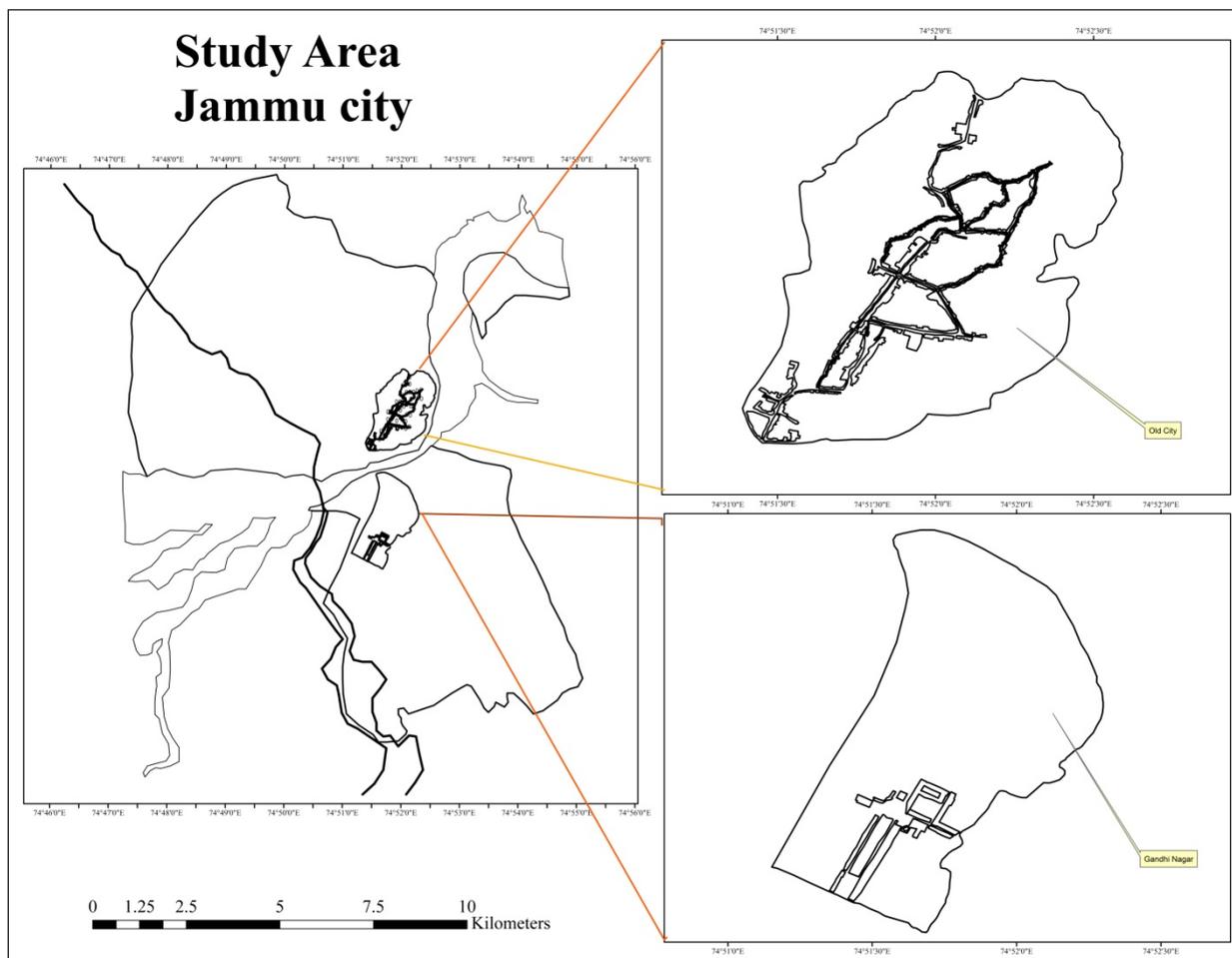
or city center, is that part of the city which contains the principal commercial streets and main public buildings.

Study Area

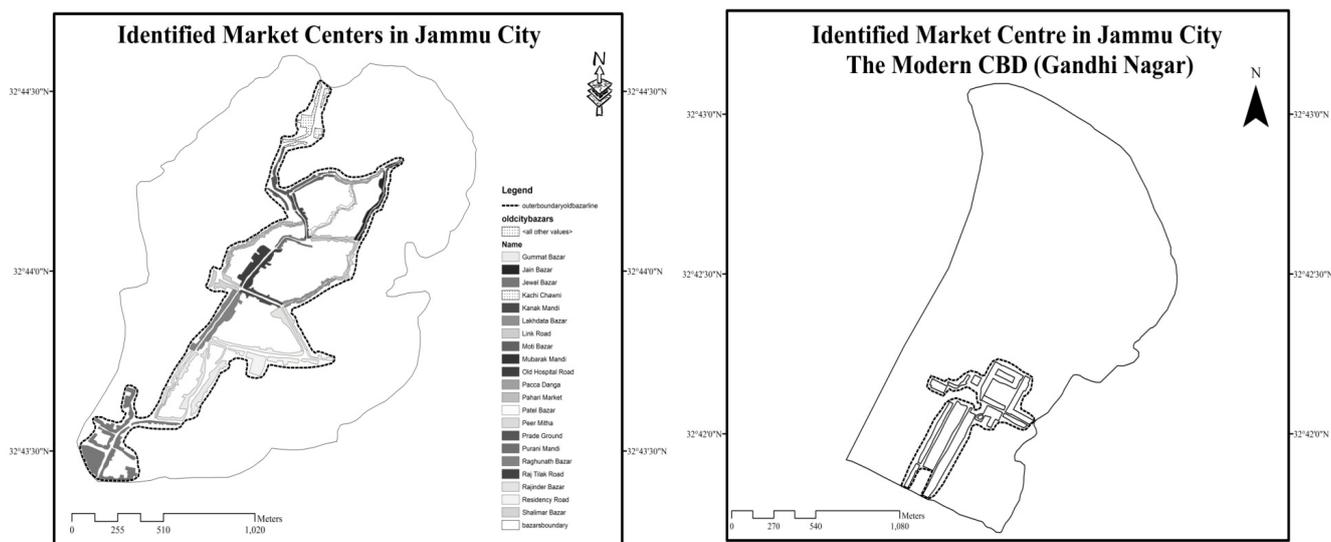
Jammu, the city of temples as it is located on both the banks of River Tawi. It has an average elevation of 327mts. The city lies on an uneven ridges of low heights at the Shivaliks foothills. It is surrounded by Shivaliks range to the north east, and south east while the Trikuta range, the abode of Shri Mata Vaishno Devi in the North West. The city of Jammu lies between 32° 44' N latitudes to 74° 87' E longitudes, is a typical foot hill urban centre located to the south of the Pir Panjal.

Identification of Different Types of Functions in Jammu City

A variety of goods are sold in the different markets of Jammu city. However, some goods are sold in some



Source: Jammu Municipal Corporation, Government of Jammu and Kashmir



Source: Jammu Municipal Corporation (JMC), Government of Jammu and Kashmir.

markets. This leads to functional specialization of the different market centers. The number of establishments present and the types of goods sold, help in determining the intra-city hierarchy of markets. The types of functions found in western cities are totally different from those of Indian cities. This is true of the Jammu city as well. The social, economic and cultural conditions obtaining in India are totally different from those obtaining in the west. The commercial organization, business pattern and government regulations are also different. These differences have a direct bearing on the commercial pattern and retail establishments. Thus, there are no shops in Jammu city which is run by cooperative societies and multiples i.e. groups of outlets centrally owned and to some extent centrally controlled.

In Jammu city, one is free to establish his own retail outlet in any part of the city without taking any prior permission from any authority central or local. This has led to haphazard growth of retailing in the city. Distributional pattern of the wholesale and retail business in Jammu city is totally different from that of any city of the west. Here, there is generally a mixture of wholesale and retail business. A large number of establishments of Jammu city are engaged not only in retail but also in whole sale trade. Thus it is difficult to distinguish a wholesale form of purely retail shop.

A high degree of specialization is the common characteristics of the shops of the western cities but this feature is rare in India. Four types of garments shops namely women's, men's, children's and families are generally found in western towns. This is also true for the footwear shops. In India, shopkeepers generally sell all kinds of footwear in the same establishment. So far as cloth shops are concerned, the only distinction may be made between those dealing in readymade garments (ladies, gents and children's wear combined) and cloths. The cloth shops sell all kinds of textiles such as woolen, cotton, silken, tapestry and handloom products etc. used both as male and female dressing. Such shops are more common in Indian cities as well as in case of Jammu city too.

In India no official records of the retail activities of towns and cities are maintained. The census of India

has prepared a classified list of industries known as the National Industrial Classification (N.I.C), but the census or any other agency does not collect any information on the distribution, location, types and number of shops. Hence, field work is the only source for collecting relevant information. About 69 different types of functions were identified in the market centers of Jammu city. These 69 different types of functions found in the city of Jammu have been made to match with the National Industrial Classification (N.I.C) of India 1981. It is important to mention that National Industrial Classification (N.I.C) consists of 10 divisions at first digit level, 66 majors groups at second digit level and 386 minor groups at the third digit level. Thus, 69 different types of functions have been accepted for the purpose of analysis. They are given in Table 1.

It may be pointed out that the classified list of National Industrial Classification (N.I.C) is based on dealing in a single product but there are limited number of establishments in Jammu city which deals in only one product. The establishments sell a number of goods and render a number of services to their customers.

It is important to note that the National Industrial Classification (N.I.C) gives a consolidated list of industrial and commercial functions. The industrial establishments and activities are outside the scope of present study. However, the conditions obtaining in India and particularly in Jammu city may have small manufactures accept direct orders of consumers and thus became retailers.

METHODS AND RESULTS

Ranking of Market Centers and different types of functions by Kendall's Method in Jammu City

The market centers and different types of functions in Jammu city has been ranked by using Kendall's method and has been categorized into high, medium, low and very low category on the basis of composite index values of different types of functions occurring in different identified market centers of Jammu city. The functions are not uniformly distributed over the city area. All functional are present in all market centers. It is seen that majority of the functions are found in

Table 1: Identification of types of Functions in Jammu City with their N.I.C Code Numbers

Sl. No	N.I.C No.	Functions	Sl. No	N.I.C No.	Functions	Sl. No	N.I.C No.	Functions
1	661	Readymade Garments	24	N.A	Gift House	47	964 (a)	Embroidery Shops
2	660	Clothing	25	N.A	Florists	48	689 (d)	Handloom and Handicraft Shops
3	961	Dry Cleaners	26	930	Private Clinics and Labs	49	N.A	Advocates Chambers
4	800	Banks and ATMs	27	263	Mat and Carpet Shops	50	N.A	Video Halls
5	676	Footwear's	28	393	Watch Shops	51	284	Newspapers
6	691	Restaurants	29	N.A	Coaching Institutes and Tutorials	52	394	Bicycle Shops
7	691	Hotels	30	672	Cosmetic Shops	53	672	Sports Goods Shops
8	691	Dhabas	31	N.A	Property Dealers	54	963	Photostat and Lamination Shops
9	951	Cinema Halls	32	N.A	Karyana Stores	55	652	Fish Market
10	680	Chemists and Druggists	33	675	Jewellery and Gem Shops	56	N.A	Parking's
11	392	Auto spare Parts	34	674	Furniture Shops	57	284	Printing Press
12	N.A	Wild Bird Dealers	35	963	Photo Galleries	58	681	Wedding Card Shops
13	N.A	Juice Corners	36	652	Mutton and Chicken Dressing Shops	59	359	Welding Shops
14	N.A	Sweet Shops	37	N.A	Car Washing	60	689	Leather Bag Shops
15	656	Wine and Beer Shops	38	682	Hardware Shops	61	690	Soda Shops
16	682	Glass Dealers	39	964 (a)	Tailor's Shops	62	205	Bakers Shops
17	N.A	Toys Shops	40	654	Pan Shops	63	N.A	Sabzi Mandi
18	671 (a)	Crockery	41	N.A	Ice Dealers	64	N.A	Models and Charts Shops
19	355	Heavy Electronic Goods Shops (T. V, Fridge etc.)	42	689 (c)	Opticians Shops	65	N.A	Kite Shops
20	N.A	Cyber Cafes	43	670	Gas Dealers	66	672	Rice and Flour Shops
21	651	Fruit and Vegetable Shops	44	N.A	Driving Schools	67	689	Typists Shops
22	N.A	Bag Shops	45	N.A	Electric Cables Dealers	68	669	Bedsheet, Curtain and Cushion Shops
23	681	Book Shops	46	N.A	Courier Services	69	673	Light Electronic Goods Shops (Mobiles etc.)

Source: Field Survey; N.A – National Industrial Classification (N.I.C) Code Not Available.

the market centers, where there is maximum number of establishments. The functions which are common, occurring almost everywhere should be included in low category and those which are rare should be considered in high category.

Kendall's method has been used for ranking of all the

69 different types of functions in Jammu city. Firstly, the number of different types of functions was converted into the percentages of total number of different types of functions occurring at different market centers of Jammu city. This exercise was repeated for all the 69 different types of functions. The percentage shares of all the 69

different types of functions belonging to an individual market center was summed up and divided by 69. This gave the mean percentage of the function to particular market centre. This computation is repeated for all the 22 market centers identified in Jammu city. The percent shares of all the 69 different types of functions occurring in different market centers were then divided by their mean. This will give the composite index value for the different market centers as well as for the different types of functions occurring in the markets centers of Jammu city. Then, all the composite index values of a market center were awarded weightage. The weightage is given on the basis that higher is the weightage lower is the function. Higher is the function, lower is the weightage. Then, the values of composite index have been arranged in ascending i.e. from lowest to highest. Smaller the composite index value of functions higher its rank i.e. the rank of the lowest composite index values is highest and are categorized under high order functions whereas, highest composite index value shows the lowest rank and are categorized under low order functions.

The composite index given in Table 3 shows the overall importance of each function in all the 22 market centers taken together. It is clearly seen from Table 3 that under high category Mubarak Mandi rank first with composite index value of 0.94, which shows that different types of functions performed in Mubarak Mandi is lowest, which is followed by Link road, Pahari Market, Old Hospital Road and Kanak Mandi with composite index values of 1.41, 1.65 and 1.65 respectively. A set of 19 different types of functions are performed in these market centers which include karyana shops, rice and flour shops, dhabas, hotels, cosmetic shops, hardware, sweet shops, readymade garments, clothing, handloom and handicrafts, footwear's, parking, bedsheet, curtain and cushion shops, tailors, chemists and druggists, bags shops, photostat and lamination shops, typists and book shops are most dominant.

The market centers whose rank from 6 to 12 and composite index value ranges between 1.89 to 2.60 are falling under medium category. Table 3 shows that there are 29 different types of functions which are performed in Raj Tilak Road, Peer Mitha, Purani Mandi, Jain Bazar, Patel Bazar, Rajinder Bazar and Prade Ground

which include dhabas, hotels, restaurants, readymade garments, clothing, karyana shops, photo galleries, cyber cafes, photostat and laminations, light electronic goods (mobiles etc.), wine and beer shops, rice and flour shops, chemists and druggists, sweet shops, cosmetics, hardware, chicken dressing shops, leather bags, tailors, embroidery, soda, bakers, footwear's, jewellery and gems, banks, ATMs, handlooms and handicrafts, bedsheet, curtain and cushion shops and crockery. Among the medium category Raj Tilak Road has the lowest composite index value of 1.89 as compared to the rest of composite index values of other market centers under medium category. Raj Tilak Road is followed by Peer Mitha (1.89), Purani Mandi (1.89), Jain Bazar (2.36), Patel Bazar (2.36), Rajinder Bazar (2.60) and Prade Ground (2.60).

Market centers with rank orders from 13 to 17 and composite index values ranges from 2.83 to 3.54 have been grouped under low category. This group includes 27 different types of functions which include hardware shops, karyana shops, bank, ATMs, sabzi mandi, cosmetics, readymade garments, clothing, models and charts, dhabas, hotels, restaurants, kites, light electronic goods (mobiles etc.) gift house, chemists and druggists, books, watches, printing press, sweet shops, photo galleries, wedding cards, chicken dressing shops, jewellery and gems, handlooms and handicrafts, wine and beer shops. Among the low category Residency road has the lowest composite index value i.e. 2.83, whereas, Moti Bazar has the highest composite index value i.e. 3.54, which indicates that the functions performed in Moti Bazar are present in most of the market centers of Jammu city. However, Shalimar Bazar has the composite index value of 2.83, which is followed by Lakhdara Bazar and Pacca Danga whose composite index value are 3.07 each respectively. Among the functions which are most dominant are readymade garments, clothing, footwear's, banks, ATMs, restaurants, dhabas, cinema halls, chemists and druggists, auto spare parts, wild bird dealer, juice corner, sweet shops, beer and wine shops, optician, glass dealer, toys, crockery, heavy electronic goods (T.V, fridge etc.), cyber cafes, fruits and vegetables, bags, book shop, gift house, florist, private clinics and labs, mats and carpets, watches, coaching institutes and

Table 2: Identified Market Centres and different Types of Functions in Jammu city

Sl. No.	Market Centres	No. of Establishments	No. of Functions	Type of Functions	Composite Index
1	Gandhi Nagar	705	50	Readymade garments, clothing, footwear's, banks, ATMs, restaurants, dhabas, cinema halls, chemists and druggists, auto spare parts, wild bird dealer, juice corner, sweet shops, beer and wine shops, optician, glass dealer, toys, crockery, heavy electronic goods (T.V, fridge etc.), cyber cafes, fruits and vegetables, bags, book shop, gift house, florist, private clinics and labs, mats and carpets, watches, coaching institutes and tutorials, cosmetic shops, property dealers, karyana stores, jewellery and gems, furniture's, photo galleries, mutton and chicken dressing, car washing, hardware's, tailors, pan shop, ice dealer, gas dealer, driving schools, electric cable dealer, courier service, embroidery, dry cleaners, welding, Bedsheet, curtain and cushion shops and light electronic goods (mobiles etc.)	11.82
2	Raghunath Bazar	254	22	Hotels, dhabas, chemists and druggists, handlooms and handicrafts, sweet shops, readymade garments, cinema hall, heavy electronic goods(T.V, fridge etc.), toys, crockery, footwear's, advocates chambers, clinics and labs, karyana stores, juice corner, cosmetics, banks, ATMs, wine and beer shop, light electronic goods (mobiles etc.), mutton and chicken dressing shops and Bedsheet, curtain and cushion shops.	5.20
3	Lakhdata Bazar	154	13	Jewellery and gems, karyana, readymade garments, clothing, hotels, dhabas, handlooms and handicrafts, hardware, chemists and druggists, wine and beer shops, sweet shops, light electronic goods (mobiles etc.) and mutton and chicken dressing shops.	3.07
4	Gummat Bazar	219	21	Readymade garments, clothing, footwear's, bags, gift house, crockery, hardware , video halls, hotels, dhabas, newspapers, wine and beer shop, heavy electronic goods (T.V, fridge etc.), auto spare parts, photo gallery, bicycle, sports, karyana, sweet shops, light electronic goods (mobiles etc.) and mutton and chicken dressing shops.	4.96
5	Kacchi Chawni	227	18	Book shops, hotels, restaurants, dhabas, coaching institutes and tutorials, karyana stores, chemists and druggists, photostat and lamination, light electronic goods (mobiles etc.), cyber cafes, private clinics and labs, photo galleries, meat and chicken shops, wine and beer shops, readymade garments, clothing, cosmetic and footwear's.	4.25
6	Residency Road	133	12	Hotels, restaurants, readymade garments, footwear's, handloom and handicrafts, banks and ATMs, karyana stores, light electronic goods (mobiles etc.), sports, furniture's, sweet shops and mutton and chicken dressing shops.	2.83
7	Jewel Bazar	131	21	Hotels, restaurants, dhabas, karyana stores, wine and beer shops, cinema hall, heavy electronic goods (T.V, fridge etc.), courier services, readymade garments, hardware, fish market, photostat and lamination, sweets shops, car washing, fruits and vegetables, auto spare parts, sports, chemists and druggists, mat and carpet shops, footwear's, light electronic goods shops (mobile etc.)	4.96

Ranking of Functions in the Central Business District (CBD) of Jammu City *NP*

8	Old Hospital Road	204	7	Readymade garments, clothing, handloom and handicraft, footwear's, parking, cosmetic shops and Bedsheet, curtain and cushion shops.	1.65
9	Pahari Market	156	6	Readymade garments, clothing, tailor's, footwear's, chemists and druggists and bags shops	1.41
10	Raj Tilak Road	109	8	Readymade garments, sweet shops, footwear's, bank and ATMs, cosmetic shops, crockery, karyana shops and light electronic goods (mobiles etc.)	1.89
11	Jain Bazar	193	10	Jewellery and gems, readymade garments, electronic goods, wine and beer, bank and ATMs, foot wear's, dhabas, karyana, sweet shops and chicken dressing shops.	2.36
12	Pacca Danga	155	13	Books, chemists and druggists, restaurants, dhabas, watches, printing press, sweet shops, readymade garments, clothing, photo galleries, light electronic goods (mobiles etc.), wedding cards shops and chicken dressing shops	3.07
13	Patel Bazar	189	10	Readymade garments, cosmetic, leather bags, tailors, embroidery, karyana, sweet shops, soda, bakers and footwear's	2.36
14	Moti Bazar	147	15	Hardware, karyana, bank and ATMs, sabzi mandi, cosmetics, readymade garments, clothing, models and charts, dhabas, hotel, restaurants, kites, light electronic goods (mobiles etc.), gift house, chemists and druggists	3.54
15	Peer Mitha	154	8	Jewellery and gems, karyana, sweet shops, bank and ATMs, readymade garments, clothing, dhabas and footwear shops.	1.89
16	Kanak Mandi	113	7	Karyana, rice and flour, dhabas, hotels, cosmetic shops, hardware and sweet shops	1.65
17	Shalimar Bazar	127	12	Chemists and druggists, light electronic goods (mobiles etc.), readymade garments, parking, private clinics and labs, gift house, crockery, dhabas, hotels, watches, karyana stores and Bedsheet, curtains and cushions shops.	2.83
18	Rajinder Bazar	87	11	Karyana, rice and flour, chemists and druggists, sweet shops, hotels, dhabas, cosmetics, hardware, readymade garments, clothing and chicken dressing shops.	2.60
19	Purani Mandi	97	8	Footwear's, handloom and handicraft shops, readymade garments, clothing, wine and beer shops, restaurants, karyana shops and bedsheet. curtain and cushion shops.	1.89
20	Prade Ground	77	11	Dhabas, hotels, restaurants, readymade garments, clothing, karyana, photo galleries, cyber cafes, photostat and laminations, light electronic goods (mobiles etc.) and wine and beer shops.	2.60
21	Link Road	106	5	Readymade garments, clothing, footwear's, cosmetics and bedsheets, curtain and cushion shops.	1.18
22	Mubarak Mandi	32	4	Photostat and lamination shops, typists, books and karyana stores.	0.94
	Total	3769	69		68.95

Source: Field Work and Calculated by the Author.

Table 3: Ranking of Market Centers and different Types of Functions in Jammu City by Kendall's Method

Categories	Market Centers	Rank	Types of Functions	Total No. of Functions	Composite Index
High	Mubarak Mandi	1	Karyana shops, rice and flour shops, dhabas, hotels,	19	0.94
	Link Road	2	cosmetic shops, hardware, sweet shops, readymade		1.18
	Pahari Market	3	garments, clothing, handloom and handicrafts,		1.41
	Old Hospital Road	4	footwear's, parking, bedsheet, curtain and cushion		1.65
	Kanak Mandi	5	shops, tailors, chemists and druggists, bags shops, photostat and lamination shops, typists and book shops.		1.65
Medium	Raj Tilak Road	6	Dhabas, hotels, restaurants, readymade garments,	30	1.89
	Peer Mitha	7	clothing, karyana shops, photo galleries, cyber cafes,		1.89
	Purani Mandi	8	photostat and laminations, light electronic goods		1.89
	Jain Bazar	9	(mobiles etc.), wine and beer shops, rice and flour		2.36
	Patel Bazar	10	shops, chemists and druggists, sweet shops, cosmetics,		2.36
	Rajinder Bazar	11	hardware, chicken dressing shops, leather bags, tailors,		2.60
	Prade Ground	12	embroidery, soda, bakers, footwear's, jewellery and gems, banks, ATMs, handlooms and handicrafts, bedsheet, curtain and cushion shops and crockery.		2.60
Low	Residency Road	13	Hardware shops, karyana shops, bank, ATMs, sabzi	26	2.83
	Shalimar Bazar	14	mandi, cosmetics, readymade garments, clothing,		2.83
	Lakhdata Bazar	15	models and charts, dhabas, hotels, restaurants, kites,		3.07
	Pacca Danga	16	light electronic goods (mobiles etc.), gift house,		3.07
	Moti Bazar	17	chemists and druggists, books, watches, printing press, sweet shops, photo galleries, wedding cards, chicken dressing shops, jewellery and gems, handlooms and handicrafts, wine and beer shops.		3.54
Very Low	Kacchi Chawni	18	Readymade garments, clothing, footwear's, banks,	58	4.25
	Gummat Bazar	19	ATMs, restaurants, dhabas, cinema halls, chemists		4.96
	Jewel Bazar	20	and druggists, auto spare parts, wild bird dealer, juice		4.96
	Raghunath Bazar	21	corner, sweet shops, beer and wine shops, optician,		5.20
	Gandhi Nagar	22	glass dealer, toys, crockery, heavy electronic goods (T.V, fridge etc.), cyber cafes, fruits and vegetables, bags,		11.82
			book shop, gift house, florist, private clinics and labs, mats and carpets, watches, coaching institutes and tutorials, cosmetic shops, property dealers, karyana stores, jewellery and gems, furniture's, photo galleries, mutton and chicken dressing, car washing, hardware's, tailors, pan shop, ice dealer, gas dealer, driving schools, electric cable dealer, courier service, embroidery, dry cleaners, welding, Bedsheet, curtain and cushion shops, light electronic goods (mobiles etc.), Handlooms and handicrafts, advocates chamber, fish market, photostat and lamination, sports shops, video halls, newspapers and bicycle shops.		

Source: Prepared on the basis of Table 2.

tutorials, cosmetic shops, property dealers, karyana stores, jewellery and gems, furniture's, photo galleries, mutton and chicken dressing, car Washing Bedsheet, curtain and cushion shops, light electronic goods (mobiles etc.), Handlooms and handicrafts, advocates chamber, fish market, photostat and lamination, sports shops, video halls, newspapers and bicycle shops. Among the very low category Kacchi Chawni has the lowest composite index value i.e. 4.25, whereas, Gandhi Nagar has the highest composite index value i.e. 11.82, which indicate that the concentration of different types of functions is highest among all the market centers in very low category. All these different types of functions are more common in their occurrence and are of convenience type. Gummat Bazar stands in second position with composite index value of 4.9, which is followed by Jewel Bazar having composite index value of 4.96 too and Raghunath Bazar whose composite index value is 5.20.

It is thus clear from Table No.3 that highest the rank of the market centre lowest its composite index value whereas, lowest the rank highest its composite index value which indicates that the market centers having highest rank shows less concentration of occurrence of the particular function whereas, the market centers whose rank is lowest show high composite index value which indicates that the frequency of the particular function is highest as the result they are categorized as lowest order functions.

CONCLUSION

The Jammu city Central Business District (CBD), defined in terms of retail business functions is endowed with stupendous variety of functional elements. The retail district was found of 69 different functions or types of retail business. It is seen that about 50 different types of functions are performed in Gandhi Nagar which are highest whereas least number of functions i.e. 4 are performed in Mubarak Mandi. It is evident from the analysis that functions such as Readymade Garments, Footwear's, Electronic Goods and Karyana Stores are available almost everywhere in the Central Business District (CBD) of Jammu city.

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