

Profiling the rural retail: An empirical study in the mountainous state of India.

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ABSTRACT--This paper is an empirical study to profile the rural retail stores situated in the hilly state of Himachal Pradesh, India. The study tries to create a profile of retail stores in terms of its physical structure, size of the retail stores concerning the distance of store from the National Highways. It also highlights the retail scenario and characteristics of retail stores situated on the National Highway and link roads of a mountainous state. This article explores the impact of location on the rural retail scenario. Mixed method research design has been used to conduct the study. Cross tabulation chi-square test and content analysis have been used to analyse both quantitative and qualitative set of data. The study discovered that retail stores are made up of brick and concrete roof and have no impact of location on it. The retailers situated near to National Highway road have a higher income to the retailers situated on the link road markets. The one store multiple solutions strategy is followed in the rural markets. There are no weekly markets or haats present in the rural areas of Himachal Pradesh which otherwise have a high presence across India.

Keywords--Retail profile, Store profile, store size, retailer profile, National Highway, Rural retail.

I. INTRODUCTION

Himachal Pradesh is a hilly state situated at the northwest part of India. The population of the state is 68, 56, 509 people and have 12 administrative districts. It has an area of 55,573 square kilometres. Himachal Pradesh consists of 158 Tehsils and 17882 villages. The average altitude of the state varies from 450m to 6500 meters. As per the census 2011, in Himachal Pradesh, 90% of the areas come under rural areas. The literacy rate is 83.78% (Govt. of India Census 2011). Times of India (2018) The per capita income in Himachal Pradesh is Rs 186778. Road network is the most significant mode of transportation in the state. The three pillars around which this paper is built upon is road network, location and retail sector in the hilly areas. The study tries to identify how rural retail shops characteristics change with change in the location of the store.

Mithileshwar Jha (1988) stated that rural marketing is a flow of goods from urban to rural, rural to urban and rural to rural. Pradhan (2016) stated that a retailer is a trader or dealer who sells the goods to the customers in small quantity. IBEF (2017) reported that the retail sector is the fourth biggest contributing sector in the Indian economy. The retail business can be seen in every nook and corner of the country. A large share of the population lives in rural areas; therefore, intense competition is going on between FMCG companies to reach rural consumers. Various organisations have given different definitions of rural. As per census 2011, rural are the

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areas which do not come under urban (Govt. of India Census, 2011). As per the FMCG and Agri-input sector, rural areas are those who have a population of up to 20000. As per the durable goods company, any town having a population of less than 50000 is considered as a rural market.

II. REVIEW OF LITERATURE

John, Raj & Selvaraj (2007) factors like high rural population, advancement in communication, rise in the rural prosperity, income rise all such factors have made the rural areas an attractive destination for the FMCG companies. Levy & Weitz (2001) suggested evaluating criteria for selecting a location for a retail store “Access to highways” is considered as an important aspect for locating a retail store. Easy accessibility to the store is a decisive facet for a retail store. It suggested that retail stores which are close to National Highways have better accessibility than stores which are present in the mountains. Bansal (2013) advocated the prospects of rural retailing, in India half of the income generated from the rural areas. There are 638000 villages resides nearly 742 million population, which makes it an ideal prospect for doing business. Pradhan (2016) retail theories such as Reilly’s law of retail gravitation, central place theory and Huff’s model of a trading area analysis. These retail theories have given a soaring significance to the location. Chisnall (2005) emphasis on using qualitative and quantitative methods together because it gives strength to research design.

III. RESEARCH QUESTIONS

1. Profiling of retail stores in terms of its structure, size of the retail store and income of retailers in relation to the distance of store from the National Highways.
2. To highlight the retail scenario and characteristics of retail stores situated on the National Highway and link roads.

3.1 Hypothesis

- H₀1: There is no change in the rural retail store structure as the distance increases from the National Highway.
- H₀2: There is no change in the store size when it moves away from the National Highway.
- H₀3: There is no change in the annual income of retailers when moves away from the National Highway.

3.2 Research design

Creswell (2003) Mixed method research design is used to conduct the research.

(Cresswell, Plano-Clark, Gutmann, & Hanson, 2003) A convergent –parallel approach is used to collect both qualitative and quantitative data.

3.3 Sources of data:

Primary data- well-designed schedule for the quantitative strand of data and semi-structured interviews for qualitative data along with unobstructed observation.

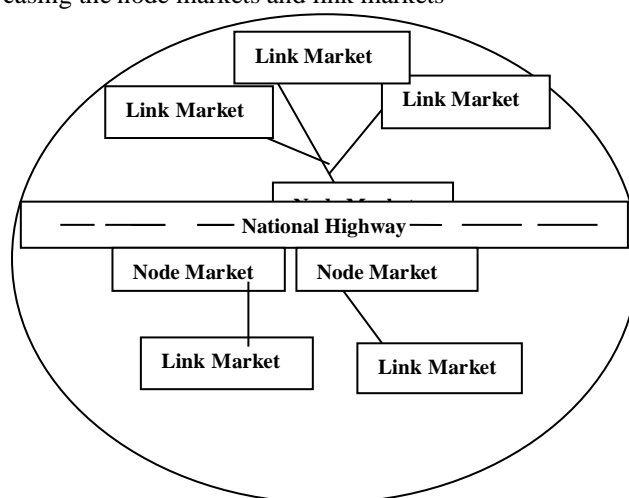
Secondary data- Research papers, government reports, websites, books were considered to get secondary data for the study.

3.4 Sampling design

Due to the absence of the sampling frame and population list of retail stores; therefore, purposeful sampling is used to generate the sample (Saunders, Lewis, & Thornhill, 2009). Gigerenzer and Selten (2001) “bounded rationality” approach for sampling frame is based on the limited information available for withdrawing the sample from the universe. Out of 12 districts. Through purposeful sampling, four districts through which National Highway passes through its maximum number of Tehsils are chosen for the study. Kangra district, Mandi, Solan and Shimla were selected for the sample. National Highway 154 and National Highway 22 considered in the study. Location is an essential part of this particular study. The samples collected from the retailers situated in the 20 km periphery from the National Highway. The total sample size is 200 retailers for the quantitative strand of data and 20 retailers out of 200 retailers were purposefully selected qualitative strand of data.

Coyle, Langley, Novack, & Gibson (2016) “nodes versus links” approach, nodes are fixed points of a particular place, and links are places which are situated away from the links. In this particular study retailers in the Tehsil headquarters on the National Highways road are considered as nodes and retailers present in the periphery of 20 km on link roads are considered as link road retail stores.

Fig1: Diagram showcasing the node markets and link markets



Source: Author

Showcasing markets within 20 km periphery of National Highway

IV. ANALYSIS AND RESULTS

To understand the rural retail scenario, foremost, it is vital to understand the physical attribute of the store in terms of its structure, the size, retail format. Does there is any impact of location on store formation, size when store location gets far from the most accessible point, i.e. National Highway. The population of villages are scattered, and population density is only 123 people per sq. Km (Govt. of India Census 2011). Location of the

store is an essential factor for any store. To understand is there any impact of location on the retail stores of mountainous state. This particular research is being conducted.

4.1 Segmentation Of Rural Retail Store Based On The Structure

Table1: Store structure

Store structure			
S.No	Type	Frequency	Percent
1.	Mudbrick and slate roof	35	17.5
2.	Bamboo and tin sheets roof	51	25.5
3.	Bakedbricks and concrete roof	114	57.0
Total		200	100.0

Source: Primary survey

Table1 represents that overall 57.0% of retail outlets in the rural areas of Himachal Pradesh are made up of baked bricks and concrete roof. 25.5% of retail stores are made up of bamboo and Tin sheets roof. 17.5% of retail stores are made up of mud bricks and slate. Being a rural state where infrastructure is lacking. This statement is contradicting with the outcomes of table 1 as the majority of retail outlets in the rural areas of Himachal Pradesh are made up of baked bricks and concrete roof.

To examine whether there is any change in the store formation when moves away from the National Highway. Following hypothesis is tested. Cross tabulation Chi-square test is performed to test the hypothesis.

- **H₀1: There is no change in the store formation when moves away from the National Highway.**

Table 2: Store formation with a change in distance from National Highway

Store formation with a change in distance from National Highway					
Distance from NH road	Mudbrick and slate roof	Bamboo and tin roof	Baked brick and concrete roof	Total	Chi-Square Value
Less than 5 km	5(2.5)	9(4.5)	17(8.5)	31(100.0)	28.766
5-10 km	12(6.0)	14(7.0)	47(23.5)	73(100.0)	
11-15 km	5(2.0)	9(4.5)	16(8.0)	30(100.0)	
16-20 km	13(6.5)	19(9.5)	34(17.0)	66(100.0)	
Total	35(17.5)	51(25.5)	114(57.0)	200(100.0)	

Source: Primary survey

From the statistical table 2, it is observed that when the distance is less than 5 km from National Highway, 8.5 percent of retail outlets is made up of baked brick and concrete. 4.5 percent of retail outlets are made up of bamboo and tin roof, and only 2.5 percent of retail stores are made up of mud bricks and slate roof. When the distance of retail outlets from the National Highway increases up to 5-10 km, 23.5 percent of retail outlets are made up of bricks and concrete.

The 7.0 percent retail outlets are made up of bamboo and tin roof, and 6.0 percent retail stores are made up of mud bricks and slate roof. When the distance of retail stores from Highway is increased up to 11-15 km, 8.0 percent of retail stores are made up of brick and concrete. The 4.5 percent retail outlets are made up of bamboo and tin roof, and 2.0 percent retail outlets are made up of mud bricks and slate roof. When the distance of National Highway is increased up to 16-20 km, there is a visible change in the rural retail outlet's formation. The 17.0 percent of retail outlets are made up of baked bricks, and concrete roof. Whereas 9.5 percent retail shops are made up of bamboo and tin, and slate roof and 6.5 percent of rural retail stores are made up of mud and slate roof.

The result of Pearson Chi-Square value ($\chi^2 = 27.766$) is found to be insignificant at ($p > .05$) that shows the insignificant association between type of store formation and distance from National Highway. Hence, the Null hypothesis is accepted. Hence, it concludes that the majority of rural retail stores in Himachal Pradesh are made up of baked bricks and concrete roof. On the other hand mud, brick and slate roof shops are present minimum in the rural areas of Himachal Pradesh.

4.3 Size Of The Shop

Table 3: Size of rural retail stores of Himachal Pradesh

Size of the retail store			
S.No	Size in Sq ft	Frequency	Percent
1.	Below 50	26	13.1
2.	51-75	30	15.1
3.	76-100	44	22.1
4.	101-125	47	23.6
5.	126-150	28	14.1
6.	Above 150	24	12.1
Total		200	100.0

Source: Primary survey

From table 3, it is observed that 23.6 percent of retail stores in rural Himachal Pradesh are of size 101-125 sqft. The 22.1percent of retail stores are of size 76-100 sqft. The 15.1percent of retail stores are of size 51-75 sqft. The 14.1percent of retail stores are of 126-150 sqft. The 13.1percent stores are of below 50 sqft size. The 12.1percent of retail stores are of size above 150 sqft. The results have concluded that the majority of retail stores in Himachal Pradesh are of size 101-125 sqft.

- **H₀₂: There is no change in the store size when it moves away from the National Highway.**

Table 4: Retail store size with the change in distance from National Highway

Store size with the change in distance from National Highway								
Distance from NH road	Below 50 sq. ft	51-75sq. ft	76-100 sq. ft	101-125 sq. ft	126-150 sq. ft	Above 150 sq. ft	Total	Chi-Square Value

Less than 5km	5(14.3)	5(14.3)	6(16.1)	9(25.7)	5(14.1)	5(13.4)	35(100.0)	10.30 7
5-10 km	5(7.4)	7(10.3)	18(26.5)	17(25.0)	12(17.6)	9(13.2)	68(100.0)	
11-15 km	7(20.0)	5(14.3)	6(17.0)	7(20.)	5(14.3)	5(14.3)	35(100.0)	
16-20 km	9(14.5)	13(21.0)	14(22.6)	15(24.2)	5(8.1)	6(9.7)	62(100.0)	
Total	26(13.0)	30(15.0)	44(22.0)	48(24.0)	28(14.0)	24(12.0)	200(100.0)	

Source: Primary survey

Table 4 explicit that when the distance of the store is less than 5 km from the National Highway, 25.7percent of retail stores are of size 101-125sq.ft. The 16.7percent of retail stores are of size 76-100sq.ft. Whereas 13.4 percent of rural retail stores is of size above 150 sq km. When the distance of the village market from National Highway is 5-10 km away from National Highway, 26.5percent of retail stores are of 76-100sq.ft. The 25.0 percent retail stores are of size 101-125sq.ft. Whereas on the other hand, 7.4 percent of retail stores are of a size below 50sqft. When the distance of village markets increases up to 11-15 km away from National Highway, 20.0percent of retail stores are of size 101-125sq.ft. The 17.1percent of retail stores are of size 76-100sq.ft. When the distance of village markets from National Highways increases up to 16-20 km, 24.2percent of retail stores are of size 101-150sq.ft. The 22.6percent of retail stores are of size 76-100sq.ft. The 8.1percent of retail stores are of size 126-150sq.ft. The result of Pearson Chi-Square value ($\chi^2=10.307$) is found to be insignificant at ($p>.05$) that shows the no significant association between store size and distance from National Highway. Hence, the Null hypothesis is accepted.

4.4 Annual Income of retailers

Table: 5: Annual income of rural retailer of Himachal Pradesh

The annual income of retailers			
S.No	Income	Frequency	Percent
1.	Rs 100000- 200000	69	34.5
2.	Rs 200001-300000	58	29.0
3.	Rs 300001- 400000	33	16.5
4.	Rs 400001- 500000	19	9.5
5.	Above Rs 500000	21	10.5
Total		200	100.0

Source: Primary survey

Table 5 suggested that 34.5% of retailers have an annual income of less than Rs 200000. 29.05% of retailers have an annual income of Rs 200001-300000. The 16.5% of retailers have an annual income of Rs 300001-400000. 9.5% of retailers have a yearly income of Rs above 500000. The 10.5% of retailers have an annual income of Rs 400000- 500000.

- H_03 : There is no change in the income of retailers when moves away from the National Highway.

Table6: Annual income of retailers with the change in distance from National Highway

The annual income of retailers with the change in distance from National Highway
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Distance of store	Rs100000-200000	Rs200001-300000	Rs300001-400000	Rs400001-500000	Above Rs 500000	Total	Chi-Square Value
Less than 5km	6(17.1)	2(5.7)	4(11.4)	8(22.9)	15(42.9)	35(100.0)	76.387*
5-10 km	19(27.9)	22(32.4)	13(19.1)	8(11.8)	6(8.8)	68(100.0)	
11-15 km	13(37.1)	12(34.3)	9(25.7)	1(2.9)	0(0.0)	35(100.0)	
16-20 km	31(50.0)	22(35.5)	7(11.3)	2(3.2)	0(0.0)	62(100.0)	
Total	69(100.0)	58(100.0)	33(100.0)	19(100.0)	21(100.0)	200(100.0)	

Source: Primary survey

The table 6 indicates that 42.9 percent retailers situated at a distance of less than 5 km have annual income above 500000. The 32.4% retailers situated at the distance of 5-10 km have an annual income of Rs 200001-300000. The 37.1% retailers situated at the distance of 11-15 km have an annual income of Rs 100000-200000. The 50.0% retailers situated at the distance of 16-20 km have an annual income of Rs 100000-200000. The result of Pearson Chi-Square value ($\chi^2 = 76.387$) is found to be significant at ($p < .05$) that shows the significant association between annual retailer income and distance from National Highway. Hence, the Null hypothesis is not accepted.

V. RURAL MARKET PROFILE

Himachal's topography being mountainous does not fit into existing retail store related theories given in the existing literature. The reflection from the survey report giving different trajectory.

Markets which are situated close to Highway are more developed in terms of footfall, merchandise, income, retail outlet infrastructure, size of the store.

5.1 One Store Multiple Solution Strategy

The rural retailers are following "one store multiple solution" strategy. In the same shop, retailers are offering food items, FMCG products, vegetables, stationary, shoe etcetera. E.g. in one of the village shoe shop, on the front counter desk, iodised salt and potatoes were available to sell. In another shop, the retailer was selling sweets, stationery, and vegetables. There are several shops which are engaged in one store multiple solution strategy. As most of the shops in the villages are doing the same kind of business, they have the same kind of merchandise. In order to tackle the competition, low customer base, low product sales; they are using one store multiple solution strategy to increase their daily sales.

5.2 No Weekly Markets

After surveying the village markets of 4 districts, no single weekly market is present. The concept of the weekly market or haat is not present. Weekly market or "haat" which is seen prominently in the other states of India is not present in the rural areas of Himachal Pradesh.

5.3 Infrastructure

With the improvement of road connectivity, it has become easier to move from one place to another. HimVani (2007) and One India (2008) Himachal Pradesh consists of the highest road network density among the hilly states in India. Retailers stated that earlier to procure goods for their shop, they had to walk miles to reach the feeder town. They use to bring goods on the back of mules or their own back. Earlier mules were the primary source of transportation, but now with better road connectivity, they do not have to worry about going to feeder town. Nowadays, distributors themselves come to the shop to deliver the products.

5.4 Electricity

Kumar & Kaptan (2006) shops situated in small towns, only 40 percent towns have electricity in their stores. Whereas stores situated in the feeder villages, only 11 percent have electricity in their stores (Govt. of India Census, 2011). In Himachal Pradesh, 96.8 percent of habitant villages have electricity with the 24x7 hours' availability of electricity. Being a hilly state with rugged terrain, it still has 24x7 electricity. 96.5 percent of habitant villages have electricity, and it makes rural Himachal a better place for durable companies to enter. Out of its 17882 villages, 17880 villages have electricity (Govt. of India Census, 2011).

Table 7: Characteristics of retail stores situated on NH and far from National Highway

S.No	Retail store on National Highway roads	Retail stores on link roads
1.	A high number of multinational brands are available.	Few multinational brands and high number of local brands are available.
2.	Retailer consumer relation is more professional.	Retailer consumer relation is firm, and it is like an extended family relation.
3.	Product-specific shops, e.g. clothing, departmental store, vegetable/fruit shop, are present.	Traditional, convenient shops are popular. E.g. In single shop vegetables, fruits, cold drinks, stationery, are available.
4.	Loyalty towards the product is higher than to the retailer.	Loyalty towards a retailer is higher than the products.
5.	Product switching is frequent.	Product switching is very less.

Source: Primary survey

Table 8: Findings of various variables studied in this research paper

Profile of retail stores at different distances			
Distance from NH road	Store structure	Store Size	Annual income
Less than 5 km	Cement	101-125 sq. feet	Above Rs 500000
5-10 km	Cement	76-100 sq. feet	Rs 200001-300000
11-15 km	Cement	101-125 sq. feet	Rs 100000-200000
16-20 km	Bamboo	76-100 sq. feet	Rs 100000-200000

Source: Primary survey

The results of the study highlight that rural retail stores are made up of baked bricks and concrete roof and have no relation to the location of the store. It has also found that the size of the retail stores is 101-125 sqft. Furthermore, the size of the retail store does not significantly change with the change in distance from National Highway. The results have discovered that the income of the mountainous retailer starts shrinking with the change in the distance from National Highway road. The income of the retailers which are situated close to National highway has higher income in comparison to the retailers situated at link road markets. The literature is contradicting with the findings of the paper. As the literature suggests in rural areas weekly markets/ haats are very dominant. However, findings have revealed that there are no weekly market/ haats present in the rural areas of Himachal Pradesh. Retail stores follow one shop multiple solution strategy where retailer provides a variety of unrelated products under one roof.

VI. CONCLUSION

The study tried to explore the retail scenario and generates the profile of retail stores present in the hilly state of Himachal Pradesh. In the mountainous terrain accessibility is the key challenge. The study has tried to capture the characteristics of retail stores at different locations in relation to its road network. The study discovered that the retail stores in the rural areas are made up of brick and concrete roof. Results showed that no weekly markets or haats are present in the rural areas of Himachal Pradesh. With improved road connectivity and better retail store infrastructure, customers prefer buying products from the shop only. To tackle the low population customer base in the villages and to deal with the competition “one store multiple solution” strategy is followed. The income of the retailers gets lowered when the retail store is located far from the National highway road. Villages at a far distance have a low population, along with that retailers offer similar kind of products to the low customer base. High competition among retailers and lower population size lead to the lower-income of rural retailers. The customer- retailer relationship is very firm cordial in rural areas. It is like an “ extended family relationship” The village size is small, and people know each other very well. The customers prefer to have retailers insight for selecting the product. Accessibility to the villages for the collection of data was the biggest challenge for the study. The study was confined in the 20 km periphery of National Highway but future studies can make profile of the stores which are situated even further from 20 km periphery.

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