

# “Supply Chain Flexibility with respect to Product and Merchandising decisions at Food and Grocery category in Selected HKB Stores”

**Triptee\*<sup>1</sup>, B.K.Sikka\*\*\*<sup>2</sup>, Sapna A. Narula\*\*<sup>3</sup>**

\*College of Agribusiness Management, GBPUA&T, Pantnagar, Uttarakhand; triptee.cabm@gmail.com

\*\*\* Dean, College of Agribusiness Management, GBPUA&T, Pantnagar, Uttarakhand; bksikka@rediffmail.com

\*\* Assistant Professor, Dept. of Policy Studies, TERI University, Vasant Kunj, New Delhi; narulasapna@gmail.com

## **ABSTRACT**

The rural market in India is undergoing a silent but definite revolution on the back of enhanced purchasing power of rural consumers, the changing consumption patterns and increasing overall value of consumption of goods and services. It is estimated that there is no organized marketing and distribution in 87 per cent of India's villages which is home to 50 per cent of the rural population. To cater to this big chunk of unexploited market DSCL group has Hariyali Kisaan Bazaar in 2002, a rural retail venture mainly focusing on providing services to the farmers.

Food and grocery category is the highest spending category in case of rural areas and hence no doubt company is focusing on this category to increase the revenue in this category. Our study explores the customers' attitude and perception for products under Food and Grocery based on the identified parameters in selected HKB stores in

Uttarakhand. Also, a comparative analysis between the product ranges of food and grocery category at HKB vis-à-vis local kirana shops has been made.

The rural customers have a very specific consumption pattern depending upon the geographical differences, which needs a better appreciation to encash the untapped potential.

## **INTRODUCTION**

Organized retailing may have not set its foot firm in metros and other major cities yet, but corporate India is already firming up concrete plans to tap the \$100 billion-dollar rural market with innovative schemes and human resources policies<sup>4</sup>. What have prompted India Inc's to turn its energies to rural retailing are a slew of facts that rural markets are growing at double the rate of urban markets, more than 60% of the country's 1.12 billion population live in rural areas and 87% of rural markets, do not have access to any sort of organised marketing and distribution.<sup>5</sup>

The corporate majors like ITC, Godrej and DSCL are expanding their retail operations by setting up more stores, entering new states and offering newer product categories. A shift from selling agri-inputs to other sections like Food & Grocery, Households, and Lifestyle will help these stores target the non-farming segments. This will even aid in the business activities throughout the year unlike agri-seasons for agri-input section.

#### ***Uttarakhand Rural Retail Scenario:***

Poised to usher a new paradigm in rural areas, the agri-business vision of corporates is to build infrastructure for efficiency. It provides various solutions towards the farm needs, daily consumer requirements, lifestyle purchases and financial advisory solutions at the doorsteps of the farmers and semi urban household customers. Though there are mainly two major players in rural and semi-urban areas, DSCL's Hariyali Kisaan Bazaar and Triveni group's Khushali Bazaar. Continuing with the growth strategies to create a national footprint

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<sup>4</sup> (<http://www.ibef.org>)

<sup>5</sup> ([www.financialexpress.com](http://www.financialexpress.com)),

(<http://www.indiaenews.com/pdf/65179.pdf>)

covering all major agricultural markets, DCM Shriram Consolidated Ltd. (DSCL) a conglomerate with 40 years of experience in the Indian agricultural sector has extended its 'Hariyali Kisaan Bazaar' rural retail chain to Uttarakhand with the launch of the first store at Kichha, 8 kms from industrial hub Rudrapur. Presently in Uttarakhand, one center at Kichha and 3 store formats at Gadarpur, Jaspur, and Vikas Nagar are operational; the number of which is likely to be increased by the year end.

#### ***Company Overview***

"Hariyali Kisaan Bazaar" is a pioneering micro level effort, which is creating a far-reaching positive impact in bringing a qualitative change and revolutionizing the farming sector in India. It is also an example of how well meaning corporate can contribute to development of agriculture by building sustainable business models. It seeks to empower the farmer by setting up centres, which provide all encompassing solutions to the farmers under one roof.

Each centre operates in a catchment of about 20 kms. A typical centre caters to agricultural land of about 50000-70000 acres and impacts the life of approx. 15000 farmers.

It also provides support through a team of qualified agronomists based at the centre. It provides a complete range of good quality, multi-brand agri inputs like fertilizers, seeds, pesticides, farm implements & tools, veterinary products, animal feed, irrigation items and other key inputs like diesel, petrol at fair prices.

It provides access to modern retail banking & farm credit through simplified and transparent processes as also other financial services like insurance etc. The centre also provides other Products and Services like Fuels, FMCG, Consumer Goods and Durables, Apparels etc. The company also launched credit services during its second

quarter 2007-08, in association with HDFC bank, providing loans for various purposes. These centers provide the much needed respect and freedom to the Indian farmer. In the near future, Hariyali Kisaan Bazaars plan to move beyond agri to meet the other needs of farmers as customers. So far, over 302 "Hariyali" outlets have been set up in different states across India. The ground-level agri-support is already way ahead of the national averages.

### **Objectives and Research Methodology**

F&G section is a recently added segment in the HKB outlets. In an organized retailing of such kind, it requires to be competitive in order to deliver the ultimate satisfaction levels to the rural customers. There exists a tough competition from the already existing Mom & Pop stores. Pulling customers towards HKB outlets has not been a problem, but to develop a good base of loyal customer has always been challenging. Owing to its varied complications, which again poses regional differences, it becomes necessary to get a concrete understanding of the customers' behavior in general & for F&G in particular. Though it has an enormous scope to explore, the problem has been chalked out under following two well defined objectives.

- To study the customers' attitude and perception for each products of Food and Grocery based on the identified parameters
- To make a comparative analysis between the product ranges of Food and Grocery category at HKB outlet vis-a-vis Local kirana shops

In order to gather required information and fulfill objectives of the study, we have followed an exploratory research design and conducted an extensive survey to collect primary data in the HKB outlets of Bahedi, Bilaspur, Gadarpur and Kichha (Uttarakhand). the judgemental sampling

has been followed to select the set of respondents. A total of 200 customers were approached with structured questionnaire with 50 customers from each outlet. In addition, telephonic survey with staff members in all the 302 outlets of HKB was done between 5<sup>th</sup> – 10<sup>th</sup> June 2009. The idea behind this survey was to get information regarding the location details of the outlets and to acquire knowledge regarding the regional specifications w.r.t. food and grocery in particular. We have conducted an extensive customers' survey in 4 outlets to get the details of customers' needs and preferences.

*The details of the survey have been presented in following segments:*

- Customers' profile : Based on the customers' visit to outlet
  - Based on the frequency of purchase of F&G
  - Based on the average family size
  - Based on the average spend on F&G in general
- Determination of customers' attitude and perception based on the three identified parameters; Price, Quality, Non-availability
- Comparative analysis of customers attitude-towards-object and attitude-towards-behavior for HKB vis-a-vis local kirana shop in the market

### **Results and discussion:**

#### **1. CUSTOMERS' PROFILE:**

*1.1. Based on the frequency of visit to the outlet:*

There were customers who used to visit the outlet weekly and fortnightly have been grouped under Regular, those who used to visit monthly or even at a lesser frequency, have been grouped under Occasional. Few customers were also found out to be at their first visit to the outlet, they have been grouped under first timer.

1.1. Based on customers' visit @ HKB (overall):

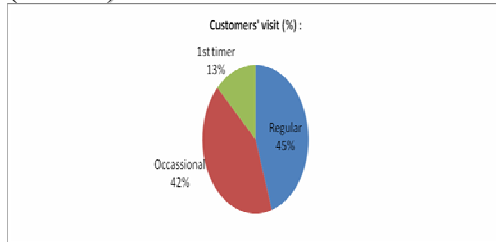


Exhibit 1.1: Frequency of customers' visit (Overall)

In general, we have a good customer base comprising of regular and occasional visitors, and a 13% of new customers often visit to the outlet, thus show a positive impression on the customers that drives them regularly to the outlet.

1.2. Based on the frequency of purchase of F&G products:

The lump-sum/amortized purchase of F&G items is governed by factors like fixed or seasonal income, requirement of items, shelf life of products, storage facility at house and local availability of required products. Based on this, customers prefer to purchase F&G at Monthly, Fortnightly and Weekly intervals.

Store/Center	Weekly	Fortnightly	Monthly
<b>Bahedi</b>	15%	10%	75%

Here, it was found that 75% of customers make monthly purchase of F&G items, while a small segment of population makes frequent purchase. Since the regular customers of this outlet are from the Sugar factory and Inter College, where they are entitled of fixed monthly salary, this may be one of the reasons for monthly purchase behavior.

<b>Bilaspur</b>	18%	14%	68%
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It was found that customers maintained a stock of F&G items for entire month and also for 15 days, depending on their convenience. An 18% of customer required the availability of items regularly as they make purchase as and when required.

<b>Gadarpur</b>	25%	35%	40%
Since the residential area is in market itself, customers make an evenly distributed purchase of F&G items round the year. Depending on their requirement, they maintain a stock of weekly, fortnightly and even monthly stock of various products. So it becomes very important to maintain a uniform stock throughout the month.			
<b>Kichha</b>	30%	30%	40%
Approximately 40% of customers make monthly purchase, while fortnightly and weekly purchase was also observed with good percentage of around 30% approximate. So uniformity in stocks throughout the month becomes important to maintain customers' satisfaction.			

1.2. Based on frequency of purchase of F&G in general:

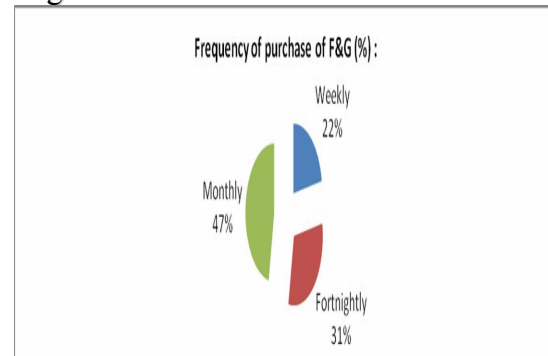


Exhibit 1.2: Frequency of purchase of F&G products (Overall)

In general, customers tend to purchase the F&G items on monthly and fortnightly basis, though 22% of customers were found to be making purchase at weekly basis.

1.3 Based on the average family size:

It is also an important factor which determines the basket size of F&G items. For the study, it has been segmented into three groups; a small family size comprising of 3-5 members, a medium size comprising of 5-10 members and a larger and joint family comprising of 10-20 members.

### 1.3 Average family size (overall):

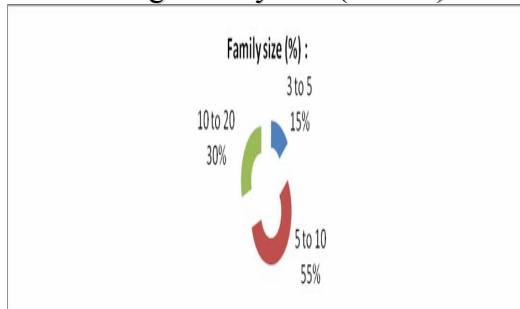


Exhibit 1.3 : Average family size (Overall)

In general, it was found that, the region surveyed comprised of mostly the medium sized family, with 30% of larger and 15% of smaller sized as well.

### 1.4. Based on the average spends on F&G items:

This is a factor which determined the purchasing power of the customers. The customer behavior towards purchase of F&G items varied from an average spends of Rs. 500 to Rs. 10,000.

### 1.4. Average spends on F&G (Overall):

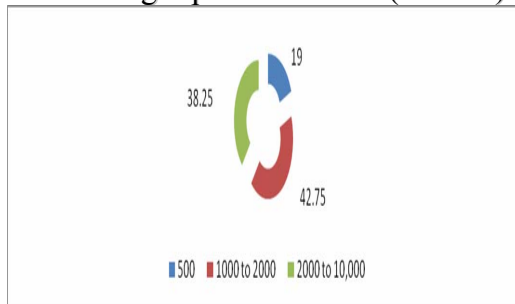


Exhibit 1.4: Average spend on F&G (Overall)

In general, customers tend to spend Rs.1000 to Rs.2000 on F&G, with 38% of customers spending behaviour was found to be of Rs.2000 to Rs.10,000; and a 19% of customers spent a sum of Rs.500 only.

## 2. CUSTOMERS' PERCEPTIONS BASED ON THE IDENTIFIED PARAMETERS:

Customers make perception about the F&G products based on various factors; the three factors that were selected for study are: Price, Quality, and Non-availability. Depending upon the perception created, customers form an attitude for any particular product at any particular place.

Here it has been tried to explore the perception of customers regarding the F&G products at HKB outlet in terms of Price (Expensive than market / same as market / Cheaper than market); Quality (Good / Need of improvement); Non-availability (Switch of shop / Switch of brand / Wait). The products perceived to be expensive were : (Food) Pulses, Ghee, Rice, Oils, Spices, Besan & Sooji; (Non food) Body care, Detergents & Cakes.

The products that were perceived to be cheaper are : (Food) Cold drinks, Papad, Biscuits & namkeens, Sauce & ketchup, Jams; (Non food) Shaving products, Cosmetics, Oral care, and Hair care. Rest of the products were perceived to be at par with the market. The products that perceived to be in need of improvement (Food): Beans & Sooji, Sauce & Ketchup, Papad, tea, Biscuit & Namkeens, Oils, and Jams; (Non food): cosmetics, devotional products, Hair care and Body care. Rest of the products was perceived to be good in terms of quality issues.

There were products which were found to be able to make the customers wait in case of non availability (Food): Pulses, Spices, Oils, Pickles, Papad, Jams, Honey, Rice; (Non food): Toilet cleaners, Devotional products, Hair care, Shaving Products, Insecticides, Accessories. Switch of brand was common in Biscuits & namkeens, Cold drinks, Spices, Noodles; (Non foods): Body care, Oral care, Detergents & cakes, Devotional products, Insecticides, Accessories. In the result for Overall scenario, Switch of Shop came out to be less common. It again shows that the switch of shop happens when there is brand loyalty. Switch of brand occurs when

customers feel that there can be better bargain available.

### 3. COMPARATIVE ANALYSIS OF CUSTOMERS' ATTITUDE-TOWARDS-OBJECT AND ATTITUDE-TOWARDS-BEHAVIOR FOR HKB VIS-A-VIS LOCAL KIRANA SHOP IN THE MARKET.

Attitudes are an outcome of psychological process, and are directly observable. It must be inferred from what people say or what they do. Though they result from behavior, they are not synonymous with behavior.

Multi-attribute attitude models: It examines attitude in terms of selected product attributes or beliefs. Psychologists argue actively about what components should comprise the attitude concept. Although there was an agreement that all attitudes contain an evaluative component, theorists disagreed about whether beliefs (cognitions) and behaviors should be included as part of the attitude concept. The prevailing view among cognitive social psychologists is that "attitude" has both affective and belief components and that attitude and behavior should be consistent; i.e., people with positive attitudes should behave positively toward the attitude object.

#### 3.1 ATTITUDE – TOWARDS – OBJECT (HKB / MARKET) :

The Attitude toward object model is suitable for measuring attitude towards a product category or specific brands. According to this model, the consumer's attitude toward a product/brand is a function of the presence (or absence) and evaluation of certain product-specific beliefs and/or attributes.

The object here has been interpreted broadly to include specific consumption or marketing related concepts, such as product or related concepts. Here for our study, HKB and Local market's kirana shop has been taken as object.

The attitude has been depicted in the form of following equation :

$$\text{Attitude}_0 = \sum b \times e$$

'b' is the strength of the belief that the attitude – object contains for the particular attribute.

'e' is the evaluative dimension associated with the particular attribute.

'∑' indicates there are n salient attributes over which b x e combinations are summated.

#### 3.2. ATTITUDE – TOWARDS – BEHAVIOUR (HKB / MARKET) :

Attitude toward a behavior is the degree to which performance of the behavior is positively or negatively valued. According to the expectancy-- value model, attitude toward a behavior is determined by the total set of accessible behavioral beliefs linking the behavior to various outcomes and other attributes. Specifically, the strength of each belief (b) is weighted by the evaluation (e) of the outcome or attribute, and the products are aggregated, as shown in the following equation.<sup>6</sup>

It focuses on the individual's attitude towards behaving or acting w.r.t. an object, rather than the attitude towards the object itself. It seems to correspond more closely to actual behaviour.

The attitude has been depicted in the form of following equation :

$$\text{Attitude}_B = \sum b \times e$$

Bahedi (Store):

Table 2 : ATO' & ATB' scores at Bahedi

ATO : Attitude-Towards-Object					
Attribute	Evaluation (e)	belief (b)			
		HKB	b x e	Market	b x e
Quality	1.5	1.5	2.25	0.9	1.35

<sup>6</sup> (Relationship Of Attitudes To Object and Behavior: Theory And Research )

Packaging	1.3	1.5	1.95	0.6	0.78	Conveyance	1.3	2	2.6	2	2.6
Conveyance	0.6	0.7	0.42	0.8	0.48	Pricing	1	0.5	0.5	1.5	1.5
Pricing	1.2	0.8	0.96	1.1	1.32	$\sum b \times e$ score			<b>7.67</b>		<b>7.06</b>
$\sum b \times e$ score			<b>5.58</b>		<b>3.93</b>						

ATB : Attitude-Towards-Behavior					
Attribute	Evaluation		belief (b)		
	(e)	HKB	b x e	Market	b x e
Quality	1.4	1.4	1.96	0.4	0.56
Packaging	0.7	1.1	0.77	0.7	0.49
Conveyance	0.8	0.7	0.56	0.5	0.4
Pricing	1	0.8	0.8	0.8	0.8
$\sum b \times e$ score			<b>4.09</b>		<b>2.25</b>

*Inferences:*

Customers have a positive attitude for HKB as it has scored well against the market, both for HKB as an object as well as for behavior. HKB has scored well above the market in terms of quality, packaging, & conveyance. For price factor, though, HKB has scored below the market, when it comes to actual purchase, HKB gets an edge, due to favorable attitude for the rest of the three attributes.

Gadarpur (Store):

Table 3: ATO' & ATB' scores at Gadarpur

ATO : Attitude-Towards-Object					
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ATB : Attitude-Towards-Behavior					
Attribute	Evaluation		belief (b)		
	(e)	HKB	b x e	Market	b x e
Quality	1.7	1.1	1.87	1.2	2.04
Packaging	1.4	1.7	2.38	0.4	0.56
Conveyance	1	1	1	2	2
Pricing	1.4	0.2	0.28	1.2	1.68
$\sum b \times e$ score			<b>5.53</b>		<b>6.28</b>

*Inferences:*

Though customers have a positive attitude for HKB as an object, it has not been able to meet their beliefs, when it comes to actual purchase behavior. The reason for this is that price points are not competitive, & quite often poor quality in the specialty products like Pulses has reached the shelves. HKB has scored well above the market in terms of packaging. Customer believes that products possess quality, but do not behave accordingly while making purchase.

Kichha (Center):

Table 4: ATO' & ATB' Scores at Kichha

ATO : Attitude-Towards-Object					
Attribute	Evaluation		belief (b)		
	(e)	HKB	b x e	Market	b x e
Quality	1.4	1.2	1.68	0.9	
Packaging	1.7	1.7	2.89	1	

ATB : Attitude-Towards-Behavior					
Attribute	Evaluation		belief (b)		
	(e)	HKB	b x e	Market	b x e
Quality	1.6	1.6	2.56	1.4	2.24
Packaging	1.1	1.6	1.76	0.85	1.76

Conveyance	1.5	1	1.5	1.8	2.7
Pricing	0.8	0.5	0.4	1.2	0.9
$\sum b \times e$ score			<b>6.22</b>		<b>7.6</b>

ATB : Attitude-Towards-Behavior

Attribute	Evaluation (e)	belief (b)		
		HKB	b x e	Market
Quality	1.75	2	3.5	1
Packaging	1.2	2	2.4	0.8
Conveyance	1.25	1.3	1.6	1.5
Pricing	0.98	1.02	0.99	1.2
$\sum b \times e$ score			<b>8.49</b>	

*Inferences:*

Customers' behavior is quite encouraging for HKB as the place to make purchase, since it has scored fairly well against the market. But it has scored below for the belief as an object, because of conveyance & pricing factor. When it comes to actual purchase, it has scored well above the market in terms of quality, & packaging.

*Overall Comparison of attitude:*

Studying consumer attitudes toward brands is of paramount important because that's what comes closest to revealing if a consumer intends to buy the brand in question. But even within the study of attributes, it is important to ascertain the implications of 'attitude towards object' vis-a-vis 'attitudes towards behavior'.

*Inferences:*

ATO: HKB has scored fairly well in terms of Quality & Packaging. Conveyance & Price factors have been scored above by Market.

ATB: HKB has been able to hold the belief of customers in these two parameters (Quality & Packaging). An important result found out was that, when it came to actual purchase, all the attributes scored lesser than their belief for HKB as an object. Its reason can be understood by observing a wide difference in the quality & packaging between HKB and Market. This difference gives an edge to the market.

This model has been designed to capture the consumer's attitude toward behaving or acting with respect to an object rather than the attitude toward the object itself. The appeal of this model is that it seems to correspond somewhat more closely to actual behavior than the attitude toward object model. Now this is where HKB fails. The attitude toward behavior (read, purchase intention) is not skewed in favour of the HKB products in India. For HKB to take off in India, consumer's 'attitude toward behaviour' must sway in favour of the brand. Else we will see them stationary, at the shelves.

**Conclusion & Managerial Implications**

It has been found that, in rural areas, there exist enough of regional differences among the different catchment areas, irrespective of extension of boundaries and adherence to the same profession. In fact, this is the key tool, which has to be used to unravel the hidden potential. The attitude and perception of customers has been found to be developed based on their past experiences. Their experiences were tapped through the well structured questionnaire, and relevant conclusions have been drawn out. Customers in the catchment of Gadarpur and Kichha outlet were found to be quality sensitive.

At Bahedi store, customer is quality sensitive, so care must be taken to keep an account of expired materials & poor quality products must be alienated from its reach to

the shelves. Lead time is less, because customers' purchase of F&G occurs more frequently in this region, so we cannot afford to bear break in the supply chain for longer period.

At Bilaspur center, even a slight break in supply chain may prove to be detrimental as it gives an edge to TKB, if their supply happens to be perfect in that particular duration. Here the major chunk of the population is of farming community, who generally have tendency to believe on the place where they are attended & catered well. So by catering those well by our efficient supply chain will definitely capture the untapped market potential

At Gadarpur store, there is a problem of wastage due to undue stock that leads to expiry of products. This can be avoided by taking the weekly requirements from the outlets and thereby auto-indention should be followed with a comparative analysis. Non-food items have less sale due to competitive market, so Exclusive brands should be kept on the shelves so that, customers may get a feel of being at advantageous position while purchasing at HKB.

At Kichha center, customers have a positive attitude for purchase from HKB, so the availability of the schemed items & its promotion will bring the occasional visitors into the regular category. Family' visit is very frequent, so good stocks for toys should be maintained for adding to the conversion percentage. Since the customer is not very price sensitive, branded products should be kept for display.

Aata, Besan, Sooji, Maida, Dalia have shelf life of 3 months. These must be dispatched as per the liquidation capacity of the particular outlet. Weekly indents from each outlet should be taken & then auto-indention should be executed with a comparative analysis of both. This will help in reducing the dead stocks in any outlet & will prevent the losses.

The study has presented useful inputs with respect to customers' behavior regarding food and grocery category i.e. shopping patterns, brand preferences, their attitude and perception towards services etc. The study offers practical implications for the retailers in designing their product – service mix and also merchandising.