

CHAPTER-IV
MARKETING AND FINANCIAL ANALYSIS

SECTION-A

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4.1. Introduction

“Marketing is an organizational function and set of processes for creating, communicating and delivering value to customers and for managing customer relationship in ways that benefit the organization and its stakeholders” (AMA 2013). Thus, marketing has four elements which are called 4p’s-

- a) Identification, selection and development of a *product*.
- b) *Price* of the product.
- c) Distribution channel to deliver the product to the customer’s *place*.
- d) Strategy and way of *promotion* of the product.

There is a minute difference between selling and marketing of any product. The selling involves with the tricks and techniques for motivating people to exchange their cash for their product. But the marketing is a business process which can take an endeavour to explicit, create, park up and satisfy customer needs. So, proper marketing policies make any venture successful.

4.2. Determinants of Marketing for Brick Kilns

4.2.1. Demand of Brick

Demand for any commodity can be expressed as the amount of the commodity a consumer is willing and able to purchase at a given price in a given period of time (Ghosal, 2008). Demand of bricks is rising day by day as it is very much associated with the urbanization process and developmental progress. According to the Economic Report (2011) India has produced about 250 billion bricks from about 1, 00,000 brick kilns. India’s share on brick production is second (17.97%) succeeded by China (54%). The brick kiln sector is growing at

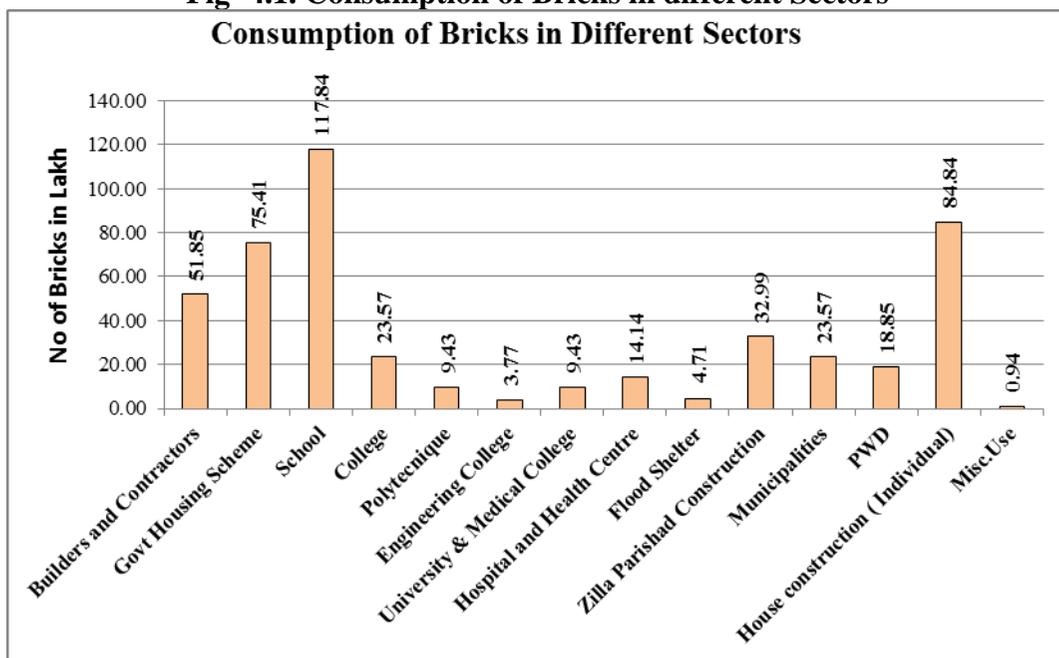
faster rate (9% per annum). Thus, the demand of bricks plays an important role in the marketing process. A list of major consumers is shown in the following table-

Table 4.1. Consumption of Bricks in Different Sectors for the Session 2015-16

Sl No	Particulars	Demand of Bricks (%)	Demand of Bricks	In Lakh
1	Builders and Contractors	11.0	51,84,763	51.85
2	Govt Housing Scheme	16.0	75,41,474	75.41
3.a	School	25.0	1,17,83,553	117.84
3.b	College	5.0	23,56,711	23.57
3.c	Polytechnique	2.0	9,42,684	9.43
3.d	Engineering College	0.8	3,77,074	3.77
3.e	University & Medical College	2.0	9,42,684	9.43
4	Hospital and Health Centre	3.0	14,14,026	14.14
5	Flood Shelter	1.0	4,71,342	4.71
6	Zilla Parishad Construction	7.0	32,99,395	32.99
7	Municipalities	5.0	23,56,711	23.57
8	PWD	4.0	18,85,369	18.85
9	House Construction (Individual)	18.0	84,84,158	84.84
10	Misc.Use	0.2	94,268	0.94
	Total	100.0	4,71,34,213	471.342

Source: Various Office and Field Survey, 2015-16

Fig- 4.1. Consumption of Bricks in different Sectors



An attempt has been made to estimate the consumption pattern of bricks in different sectors which has been tabulated in Table No 4.1. On the basis of the data it is observed in the Fig. 4.1 that individual use of bricks ranks highest (about 22%). This may be due to remittance of money from migrant workers who converted their houses to pucca and semi-pucca. Further, the low rate of house building loan (8.5% to 9.5%) of various banks encourages people to construct their houses to pucca. Under Indira Awas Yojana, Sardar

Patel Urban Housing Mission (former Pradhan Mantri Awas Yojona), *Amar bari*, *Amar Ashray* programmes demand a huge amount of bricks. For construction of single unit dwelling house Govt. provide Rs. 3,50,000/- in urban area. Indira Awas Yojona provides Rs. 45,000/- for the beneficiaries in rural area for construction of a dwelling house. 21584 housing units under IAY scheme, 669 houses under *Amar Ashray*, 1501 houses under *Amar bari* has been sanctioned in the year 2015-16 in Coochbehar district. This has created a considerable demand of bricks. An engineering college, a university and a medical college are being constructed in Koch Bihar Sadar. They combined use of 2.8% (13.2 lakh) bricks. Government has taken initiative to set up a poly-technique in each block of the districts. It demands 4% (18.85 lakh) bricks. Another important sector is High and Higher Secondary Schools under *Sarva Shiksha Axiyan* and *Sarva Shiksha Mission*. In Koch Bihar there are 243 upper primary, High and Higher Secondary Schools in Tufanganj Subdivision, Koch Bihar Sadar Subdivision and Dinjata Subdivision where 2,22,621 students are enrolled in the year 2015-16. If 40:1 ratio (Student: Class room) is maintained there is a need of 5565 class rooms in the district. To cater the students in the prescribed ratio, SSA and SSM sanctioned grants for construction of additional class rooms. The grants of Additional Class Room (ACR) varies from Rs. 1,00,000/- (04-05) to Rs.4,57,000/- per class room. If a school with about 500 students receives 16 rooms during this period, they consumed (3220 bricks per room with size 20feet x 30 feet) 51,520 bricks. It is estimated that an amount of 117.84 lakhs bricks were used for construction of additional class rooms. The huge demand of bricks makes it easy for marketing of bricks.

4.2.2. Cost of Production

Cost of production is an important variable for determining market value of bricks. The price of bricks depends on the input cost of production. It is the aggregate cost during the manufacturing process. It includes direct-indirect and fixed-variable cost. If the production cost is very much high, the price rate of bricks will also high. The production cost is rising gradually sometimes abruptly in the brick kiln sector of the study area. Production cost is directly related to prime cost which includes as the cost of raw material, cost of fuel, cost of transportation and direct wages. In the study area the average prime cost is 34.49% which is amounting Rs. 51,34,219/- on an average. The cost of bricks will rise if the prime cost rises.

Table.4.2. Prime Cost of Brick Making (Raw Material, Overhead Cost, Wage and Fuel)

SL.N.	Name of units	Fp (Numbers)	Rw (Rs)	Oc (Rs)	Wg (Rs)	Fu(Rs)	Total
1	SARADA	21,14,344	10,43,302	2,11,434	26,36,107	16,01,891	54,92,734
2	VELAKOPA	18,71,550	9,23,498	1,87,155	24,27,790	14,23,893	49,62,336
3	NEW MARADANGA	13,81,896	6,81,883	1,38,190	20,07,667	10,67,927	38,95,667
4	SURJA(SJBF)	21,16,088	10,44,162	2,11,609	26,37,604	16,13,757	55,07,132
5	SONA	21,08,687	10,40,510	2,10,869	26,31,253	16,01,891	54,84,523
6	VIVEKANANDA	17,79,971	8,78,309	1,77,997	23,49,215	13,64,574	47,70,095
7	GOPINATH	21,83,475	10,77,414	2,18,348	26,95,422	16,61,208	56,52,392
8	BENGAL	15,25,689	7,52,836	1,52,569	21,31,041	11,56,921	41,93,367
9	NOTH BENGAL I	21,83,475	10,77,414	2,18,348	26,95,422	16,61,208	56,52,392
10	NOTH BENGAL II	16,20,378	7,99,559	1,62,038	22,12,284	12,45,915	44,19,796
11	INDIA I	18,88,596	9,31,909	1,88,860	24,42,415	14,53,568	50,16,752
12	INDIA II	12,67,522	6,25,446	1,26,752	19,09,533	9,78,933	36,40,664
13	COOCH BEHAR	21,83,475	10,77,414	2,18,348	26,95,422	16,61,208	56,52,392
14	SARAN(HBMC)	15,85,758	7,82,476	1,58,576	21,82,580	12,16,251	43,39,883
15	MADAN/ MOHAN I	21,83,475	10,77,414	2,18,348	26,95,422	16,61,208	56,52,392
16	MADAN/ MOHAN II	21,83,475	10,77,414	2,18,348	26,95,422	16,61,208	56,52,392
17	SAHA I	23,36,229	11,52,789	2,33,623	28,26,484	17,79,879	59,92,775
18	SAHA II	21,51,895	10,61,831	2,15,190	26,68,326	16,31,556	55,76,903
19	DELUX	20,18,212	9,95,867	2,01,821	25,53,626	15,42,562	52,93,876
20	SUMANA I	30,63,983	15,11,892	3,06,398	34,50,897	23,43,507	76,12,694
21	SUMANA II	20,77,976	10,25,356	2,07,798	26,04,903	15,78,159	54,16,216
22	SUN (JYOTI)	22,20,688	10,95,776	2,22,069	27,27,350	16,90,885	57,36,080
23	RRS I	14,03,103	6,92,347	1,40,310	20,25,862	10,67,927	39,26,446
24	RRS II	16,84,275	8,31,089	1,68,428	22,67,108	12,81,513	45,48,138
	Total	4,71,34,215	23,257,907	47,13,426	6,01,69,155	3,59,47,549	17,12,22,252

Source: Field Survey, 2015-16

* Fp= Final Production, Rw= Raw Material Cost, Oc= Overhead Cost, Wg= Wage Cost, and Fu= Fuel Cost

Fig.4.2. Prime Cost of Brick Making (Raw material, Overhead Cost, Wage and Fuel)

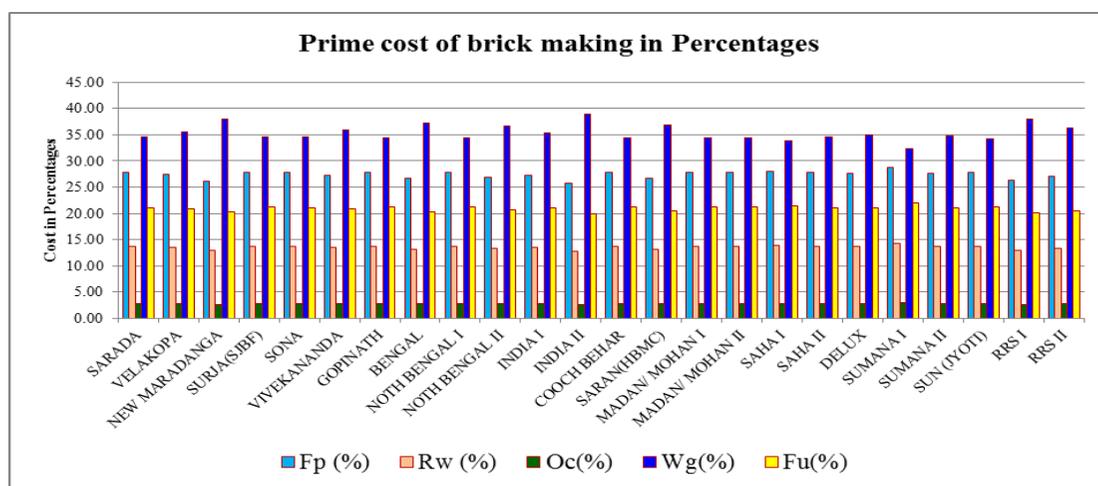


Table-4.3. ANOVA of Prime Cost

ANOVA of Prime Cost among Different Kilns						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.049	23	0.002	0.009	1.00	1.680
Within Groups	18.205	72	0.253			
Total	18.254	95				
ANOVA of Different Kilns among Different Prime Cost						
Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	18.066	3	6.0220	2941.61	0	2.70
Within Groups	0.188	92	0.0020			
Total	18.254	95				

Source: Calculated by the Researcher on the basis of Table-4.2

Anova is calculated on the basis of Table-4 among the different kilns and different prime cost. Both being is calculated at .05 levels of significances and at degree of freedom(df) 95. In the case of prime cost if different kilns the F= 0.009 and F-critical value is 1.68. Thus, the hypothesis should be accepted. It means that there are no significant differences of prime cost among the kilns. In the case of prime cost itself, there are significant differences of cost (Raw materials cost, overhead cost, wage cost and fuel cost) as the F statistic is much higher than the F-Critical Value.

4.2.3. Marketing Cost

Profit of any products or goods in the study area depends on marketing cost. The marketing cost includes selling and distribution cost, transportation cost. The selling and distribution cost is calculated Rs. 20 per thousand bricks. This cost is expended to the promotional purpose. Table 4.3 and Fig-4.3 show the selling and distribution costs. From the above field data, the brick kiln owners spent a nominal amount for the promotional purpose. Again, the finished bricks are mainly distributed to Tufanganj-I and II, Dinhata-I and II, Koch Bihar-I and II. Sometimes bulk selling is done outside the region.

Table-4.4. Transportation Cost of Distribution of Bricks, 2015-16

Place	Distance in km	% of Sale	No of Bricks in Lakh	Average transport cost per 1000 bricks	Average Transport cost in Lakh Rupees	Average No of trips required
Tufanganj-I	(0-30) Kms	25	117.84	500-600	64.80	3928
Tufanganj-II	(30-60) Kms	7	32.99	800-900	18.15	1100
Dinhata I & II	(35-60) Kms	20	94.27	850-900	51.85	3142
Koch Bihar I& II	(15-30) Kms	45	212.10	700-800	116.65	7070
Sitai and Sitalkuchi	(80-120) Kms	3	14.14	1000-1200	7.78	471

Source: Field Survey, 2015-16

Fig.-4.3. Amount of Sale in Percentages and No of Bricks in Lakh

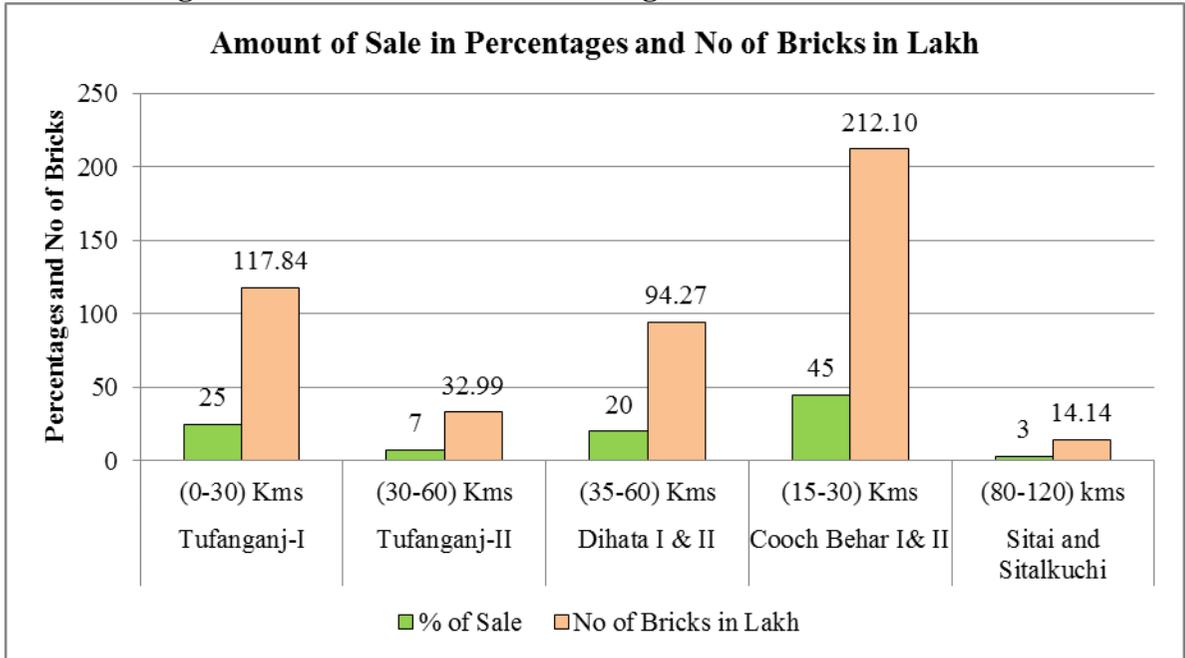


Fig.-4.4. Average Transport Cost (Rs) per 1000 bricks

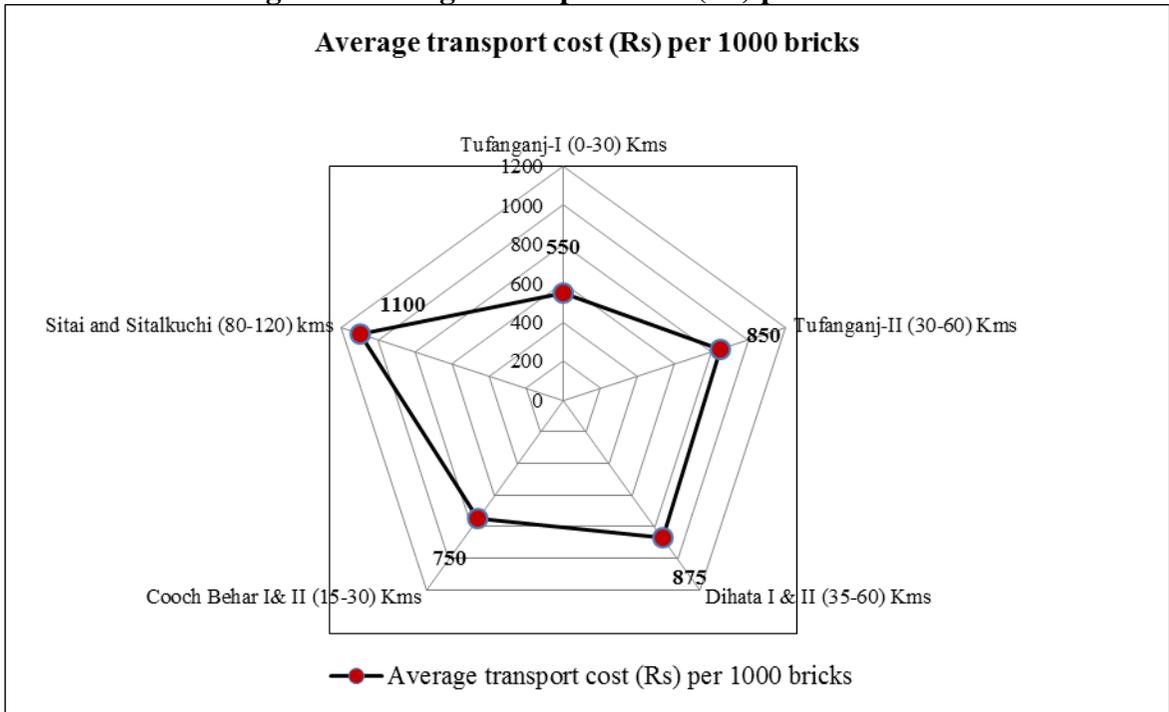
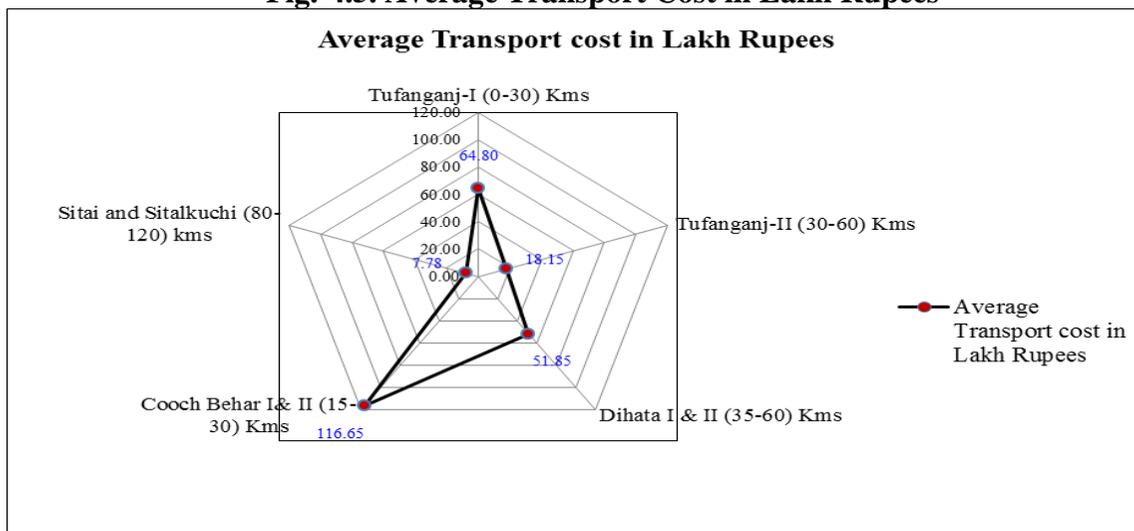


Fig.-4.5. Average Transport Cost in Lakh Rupees



From the table no 4.3, it is evident that Koch Behar I and II is the main purchaser where 116.65 lakh rupees are incurred by 7070 trips with 3000 bricks load in a truck. Again the least purchasers are Sitai and Sitalkuchi because of long distance and hence transportation cost is high. Thus, it may be deduced that marketing of bricks is very much interrelated to transportation cost.

4.2.4. Quality and Size of Bricks

The demands of bricks are determined by quality and size of bricks. In the study area, size of mould varies from 9"x4.5"x3" to 10"x5"x3". Further, quality of burning and colour, uniformity of size, brand name etc determine the demand and price of bricks. The quality of bricks in the study area varies significantly. Maximum size of a brick is observed in SUMANA-I and least size is found in INDIA-II kilns.

4.2.5. Promotional Activities

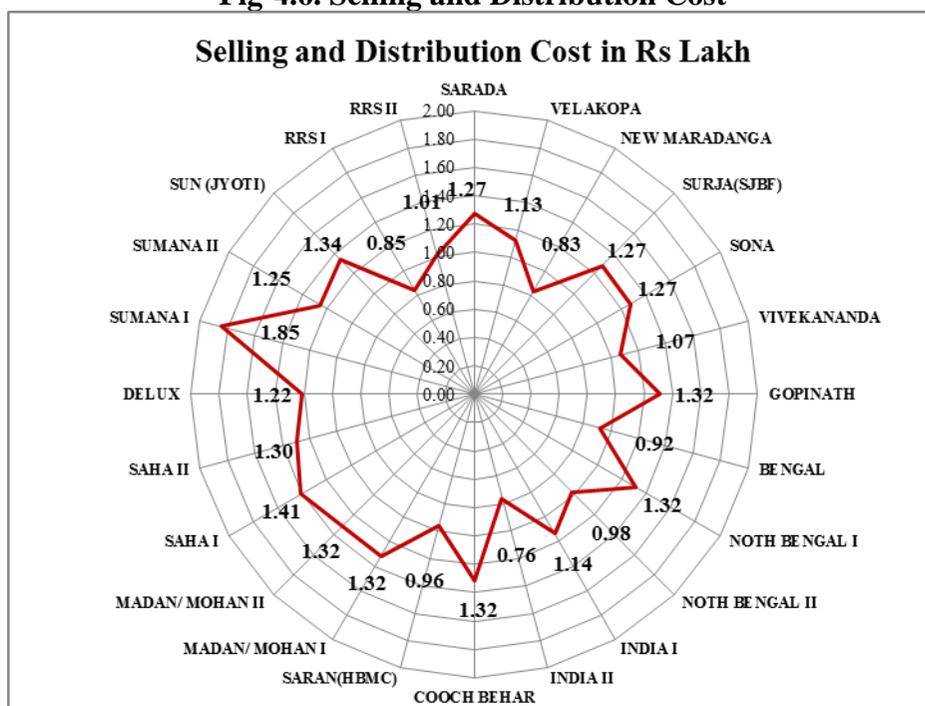
The promotional efforts taken by the brick kiln owners make the sales effective. It is one of the important techniques to market the bricks among the consumers. If the brick kiln owners want to sale brick, they have to spent more money for promotional purpose. The promotional measures include advertisement, bill boards, posters, and word to mouth, publicity, and personal recognition. It is evident from the Table-4.4. The brick kiln owners spend only 1.18 lakh rupees for promotion purpose. This is about <1% to total production cost. The nominal amount of promotional cost makes the brick market less effective.

Table 4.5. Selling and Distribution Cost

SL No	Name of The Kiln	Selling and Distribution Cost in Rs Lakh
1	SARADA	1.27
2	VELAKOPA	1.13
3	NEW MARADANGA	0.83
4	SURJA(SJBF)	1.27
5	SONA	1.27
6	VIVEKANANDA	1.07
7	GOPINATH	1.32
8	BENGAL	0.92
9	NOTH BENGAL I	1.32
10	NOTH BENGAL II	0.98
11	INDIA I	1.14
12	INDIA II	0.76
13	COOCH BEHAR	1.32
14	SARAN(HBMC)	0.96
15	MADAN/ MOHAN I	1.32
16	MADAN/ MOHAN II	1.32
17	SAHA I	1.41
18	SAHA II	1.30
19	DELUX	1.22
20	SUMANA I	1.85
21	SUMANA II	1.25
22	SUN (JYOTI)	1.34
23	RRS I	0.85
24	RRS II	1.01
	Total	28.40
	Average	1.18

Source: Field Survey, 2015-16

Fig-4.6. Selling and Distribution Cost



4.2.6. Marketing Management

It is defined as the activities that facilitate the distribution of goods and services. It includes advertisement, reduction of cost of sales and distribution and moreover communication with the consumers. The brick kiln owners and manager of the kilns perform as the marketing management. The long back experience makes it easy to marketing of their product.

4.3. Mode of Marketing

A mode of distribution of a product may follow several routes to reach to the final consumer or to the user end. The brick producer also follows the channels to market their products. There are several channels in brick marketing-

4.3.1. Direct Channel

It constitutes Producer to Consumer marketing (Channel-I). In direct marketing, the consumer comes to the brick kiln site on their basic assumption and knowledge and buys bricks as per their requirement.

4.3.2 Indirect Channel

In this channel a considerable no of middle men are engaged in marketing of bricks on either commission basis or self-business purpose. Indirect channel may constitute-

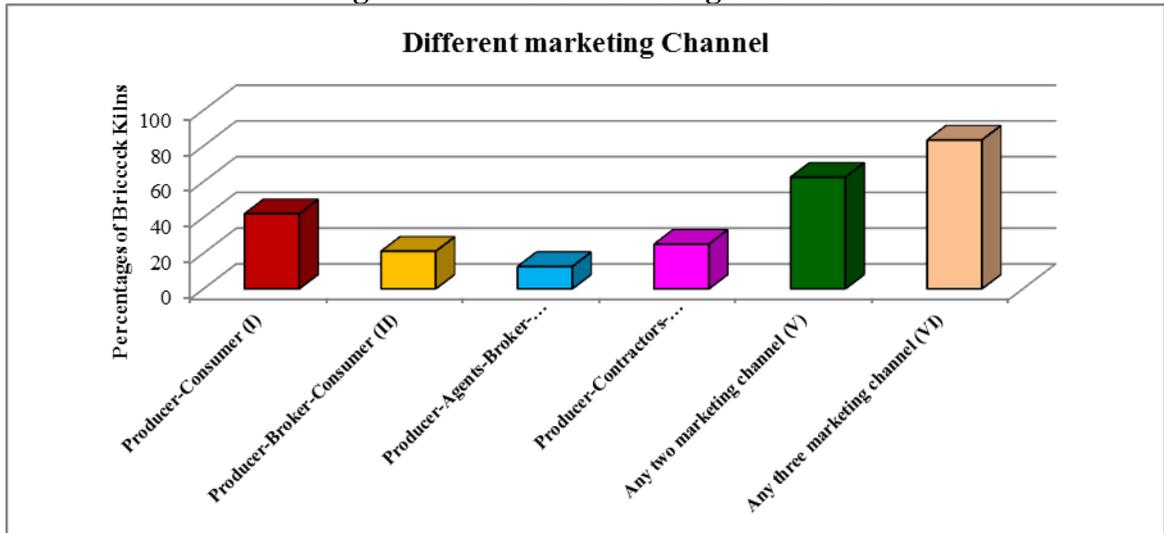
- i) Producer – Broker – Consumer (Channel-II)
- ii) Producer – Agents – Broker – Consumer (Channel-III)
- iii) Producer – Contractors – Govt. Schemes (Channel-IV)

Table No- 4.6. Marketing Channel

Sl No.	Marketing Channel	No. of Unit	Percentage
1	Producer-Consumer (I)	10	42
2	Producer-Broker-Consumer (II)	5	21
3	Producer-Agents-Broker-Consumer (III)	3	12.5
4	Producer-Contractors-Govt.Schemes (IV)	6	25
5	Any two marketing channel (V)	15	62.5
6	Any three marketing channel (VI)	20	83.3

Source: Field Survey, 2015-16

Fig- 4.7. Different Marketing Channel



It is observed from the Table No 4.5, that most important marketing channel is channel-VI (83.3%) followed by Channel-V (62.5%). The direct channel constitutes alone 42%. It is evident that most of the brick kiln owners use Channel-I on the basis of their personal experience and personal rapport. As brick business seasonal is in nature, the owners wish to sell their products before the production season starts in the next year and hence, they choose different channels for marketing of bricks.

In this study the mode of marketing is taken into consideration. From the survey it is also evident that direct selling by the producer to consumer constitutes 40% of the total owners. About 35% owners prefer to sell their product to the retailers whereas 25% owners choose to the whole sellers. A considerable number of brick makers adopt a combination of the techniques as mentioned above. It is evident that the brick manufacturers do not follow any single method to sell their all products.

The choice of marketing channels by the owners depends on different variables such as quantity of sale, marketing cost, quality of bricks, uniform purchase of the consumers, delivery of the brick at consumer's spot, advance payment by the consumers, communication with the middlemen, marketing commission for intermediaries, instant requirement of working capital etc.

4.4. Problems of Marketing

The brick kiln owners face many problems in the marketing of bricks. The nature of marketing problems differs kiln to kiln. In this section an attempt has been made to discuss the various marketing problems.

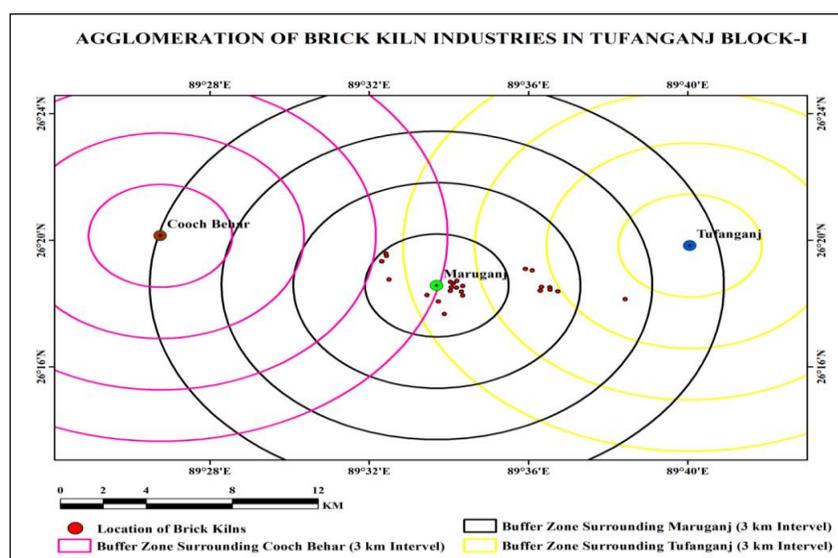
4.4.1. Price Fluctuation

In any business the fluctuation in price of the product has played a significant role. Brick kiln industry also faced such problem. It mainly depends on demand and supply pattern of the product. Low or slow growth of GDP and economic depreciation exerts a negative impact on the housing sector. Government policies for the service holder and bank policies for lending loan may have a negative impact on housing sector. In this situation the marketing of bricks become a hard job day by day.

4.4.2. Local Competition

The location of brick kilns in the study area is agglomerative in nature. Out of 24 operating kilns 16 (66.67%) kilns are located within 3 km from the Maruganj, the main cluster of the region. This means the owners face problems of tough competition among the kilns. Each owner tries to motivate the customer by assuring quality of bricks, free loading, discounts and lower rate of transportation. These policies make the marketing more difficult.

Fig- 4.8. Agglomeration of Brick Kiln Industries in Tufanganj Block-I



4.4.3. Uncertainty of the Consumer Behaviour

As there are so many options in a short distance, the consumers sometimes feel confused to buy the product. The owners fail to guess what amount of bricks will be sold and there lies an uncertainty whether the buyers will purchase the bricks of a particular kiln or not.

4.4.4. Freight Charges

Freight charge is defined at the price at which a certain product is delivered from one point to another. It depends on amount of product and distance of the delivery point. As stated earlier in this chapter that transportation cost of bricks vary Rs. 500/- to Rs.1200/- per thousand bricks according to the distance, the owners try to discount the freight charges to the customers. This makes the marketing of bricks tougher.

4.4.5. Lack of Marketing Information

At the beginning of the kiln operation, the owners do not know the actual demand of the bricks in that particular year. The owners have faced lack of information about Govt. demand of bricks for different schemes and actual fund allocating for purchasing of bricks, buyers orientation about the market and loan facilities for the consumers. This problem faced by most of the brick manufacturers.

4.4.6. Poor Bargaining

Bargaining power is the ability of any firm to compete with the other firms. Efficiency of bargaining with the customers makes the marketing easier. This is generally done by the owner, manager and brokers. The efficiency of market largely depends on bargaining power. In the study area, all the manufacturers do not have similar bargaining power which leads brick sector more vulnerable to the market.

4.4.7. Grading Problems

The brick kiln unit produces bricks of different grades such as 1st class, 2nd class, Picket, Broken etc. Further, grading may also be done on the basis of colour, size and burning quality. Sorting of bricks according to the grades is beneficial both to the owner and the customers. Generally, the customers prefer good quality higher grades bricks even at higher

rates. Lack of grading discourages the customers. But, it is observed that there is lacking of proper grading of bricks. This affects the marketing of bricks.

4.4.8. Financial Constraint

As discussed in this chapter that brick manufacturing requires a huge amount of fixed and working capital to run the process of brick making. During the manufacturing the brick sector demands a lot of working capital. So, the owners are compelled to roll up money by taking advance from the brokers, contractors, local money lender and retailers. The advance system affects the market price of the bricks. Brick kiln owners have to sale the bricks to the money lender at lower cost of actual market. Further, the contractors and promoters are the bulk purchaser of bricks. But the problem is that the owner is unable to provide bricks them as they buy the bricks on credit. This lending process freezes the working capital for a long time. This also creates the problem of marketing of bricks.

The other problems of marketing include higher commission of brokers, poor storage facilities of burnt bricks, damages of bricks on transit and loading and unloading, shortage of transport, competition from the bricks in adjacent blocks. Thus, several problems arise in the marketing of bricks.