

Value chain analysis of Bakery Product (Bread) in Narayangaon at Pune District of Maharashtra State

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Introduction:

An agro-industry is an enterprise that processes bio-mass, i.e. agricultural raw materials, which include ground and tree crops as well as livestock and fisheries, create edible or usable forms, improve storage and shelf life, create easily transportable forms, enhance nutritive value, and extract chemicals for others uses. As the products of agro-industries are both edible and non edible, the agro-industries can be classified as agro-food industries and agro-non food industries. Bakery is a traditional and occupies an important place in food processing industry. Despite the advent of fully automatic and semi-automatic bread as well as biscuit making plants, a sizeable number of people still prefer fresh bread and the products from bakery. Marketing system is fragmented and is uncoordinated, with inadequate infrastructure and supply chains involving high wastage and losses. As a result, the producer gets about 30-40 percent of final price, as compared to around 60 percent in advanced countries. Even an additional margin of 3 percent in final price translates into 10 percent increase in net income of the farmers and that itself is a powerful incentive to invest in agriculture. Bread is a staple food prepared from dough of flour and water, usually by baking. Throughout recorded history it has been popular around the world and is one of the oldest artificial foods, having been of importance since the dawn of agriculture. Every 100 gm of bread gives calories of 265 gm through 3.29 gm fat, 49 gm carbohydrates and 9 gm of proteins. It is rich source of calcium and iron. Present study was undertaken to analyze marketing cost, price spread and producer's share in consumer's rupees of bread at narayangaon in Pune district.

Methodology:

Pune have emerged as the most fast developing city in India. For present study from Pune district Narayangaon was purposively selected. Total five bakeries were selected randomly as a sample size. Data collected for study pertaining to the period 2015-16. Data collected by interviewing selected bakery entrepreneurs by survey method with special design schedule. Collected data then tabulated according to need and purpose of study. Simple tabular analysis was made. To collect data regarding marketing aspects first existing channels of marketing of bread were identified, then for collection of data five wholesaler, 5distributer, 5retailers, were select which were concerned with about breads of different time, different marketing charges, transportation cost etc. interviewing with special design schedule.

Result and Discussion:**1. Per unit cost of processing of Bread****Table No.1****(Units/Kg)**

Sr. No.	Particulars	Amount (Rs.)	Rs./kg.
I)	Fixed Cost		
a)	Depreciation on building @ 2 per cent on Rs. 600000	12000	0.28
b)	Depreciation on machinery and electric motors @ 10 per cent on Rs. 2800000	280000	6.67
c)	Interest on fixed capital @ 12 per cent per annum for one month on Rs. 292000	35040	0.83
	Total fixed cost for 420 quintal Bread	327040	
	Fixed cost per quintal	778	
	Fixed cost per kg.	7.78	7.78
II)	Variable cost / Working capital		
a	Wages, Pay and allowances	132000	3.14
b	Electric charges	39600	0.94
c	Repairing of machinery and equipments	1000	0.023
D	Purchase of raw material	1164240	27.72
e	Loss in processing	50400	1.2
f	Interest on working capital @ 12 per cent per annum for one month on Rs. 1387420	166468	3.96
	Total Variable cost	1553708	
	Variable cost per quintal	3699	
	Variable cost per kg.	36.99	36.99

2. Channel wise marketing cost, marketing margin & producer's share in consumer's rupee price spread in case of bread**A) Marketing Channel I**

Processor – Distributor – Retailer – Consumer

Marketing cost at Factory level for Channel I

Table No. 2

Sr. No.	Particulars	Rate/Kg	Total (Rs.)
a) Cost incurred by the Producer			
1	Production cost	44.00	1293600
2	Marketing cost		
i.	Transportation cost	0.20	5880
ii.	Labour Charges	0.10	2940
iii.	Cost of Packaging	2.11	58800
iv.	Advertisement	0.24	5880
v.	Weighing charges	0.20	5880
vi.	Miscellaneous charges	0.43	11760
	Total	3.58	91140
3.	Margin	5.9	173460
4.	Producer sale price	53.48	1,558,200
b) Cost incurred by the Distributor			
1	Distributor Purchase price	53.48	1,558,200
i.	Marketing cost		
ii.	Transportation cost	1	29400
iii.	Labour Charges	0.12	2940
iv.	Store rent	0.16	2940
v.	Miscellaneous charges	0.10	2940
	Total	1.38	41160
3.	Margin	1.7	49980
4.	Distributor sale price	56.56	1646400
c) Cost incurred by the Retailer			
1	a) Retailer Purchase price	56.56	1,558,200
2	Marketing cost		
I	Electricity charges	0.91	26460
Ii	Labour Charges	0.30	8820
Iii	Store rent	0.62	17640
Iv	Miscellaneous charges	0.10	2940
	Total	1.93	55860
3.	Margin	2.1	61470
4.	Retailer sale price	60.03	
d) Price Spread			
1	Producer		
	Producer margin		
	Production cost/kg	44	9.83

	Marketing cost incurred by the producer	3.1	
	Producers total price	47.1	
	Producers sale price	53.48	
2	Distributor		
	Distributor margin		2.83
	Distributors purchase price	53.48	
	Cost incurred by the Distributor	1.6	2.16
	Distributor total price	55	
	Distributor sale price	56.56	
3	Retailer		
	Retailer margin		3.5
	Retailers purchase price	56	
	Cost incurred by the retailer	1.9	3.16
	Retailer total price	57	
	Retailer Sale price	60.03	99.98

Marketing Channel II

Processor – Retailer – Consumer

Marketing cost at Factory level for Channel I I

Table No. 3

Sr. No.	Particulars	Rate/Kg	Total (Rs.)
a) Cost incurred by the Producer			
1	Production cost	44.00	554400
i.	Marketing cost		
ii.	Transportation cost	0.82	10080
iii.	Labour Charges	0.14	1260
iv.	Cost of Packaging	1.60	20160
v.	Advertisement	0.11	1260
vi.	Weighing charges	0.36	3780
vii.	Miscellaneous charges	0.20	2520
	Total	3.23	39060
3.	Margin	7.2	90720
4.	Producer sale price	55.00	693000
b) Cost incurred by the Retailer			
1.	Retailer Purchase price	55.00	693000
i.	Marketing cost		
ii.	Electricity charges	0.63	7560

iii.	Labour Charges	0.20	2520
iv.	Store rent	0.15	1890
v.	Miscellaneous charges	0.11	1260
	Total	1.09	13230
3.	Margin	3.95	49770
4.	Retailer sale price	60.04	
b) Price Spread			
1	Producer		
	Producer margin		12
	Production cost/kg	44.00	
	Marketing cost incurred by the producer	3.8	
	Producers total price	47.8	79.6
	Producers sale price	55.00	
2	Retailer		6.58
	Retailer margin	55.00	
	Retailers purchase price	1.05	1.75
	Cost incurred by the retailer	56.05	
	Retailer total price	60.04	100

Table no. 2 and 3 represents the channel wise marketing cost, market margin and price spread in bread.

Table no.2 it was observed that, per kilogram cost incurred by the producer, distributor and retailer was Rs. 53.48, Rs. 56.56 and Rs. 60.03 Respectively. In channel-I cost of packaging is Rs. 2.11 accounting highest cost of channel followed by electricity charges Rs.0.91, store rent Rs. 0.62 and transportation charges Rs. 0.20.

Table no.3 it was observed that, per kilogram cost incurred by the producer and retailer was Rs. 55.00 and Rs. 60.04 Respectively. In channel-I cost of packaging is Rs. 1.60 accounting highest cost of channel followed by electricity charges Rs.0.91, store rent Rs. 0.63 and transportation charges Rs. 0.82.

Summary and conclusion:

It was observed that bakery unit is profitable agro based enterprise and there is scope to expand existing bakery industries at Naryangaon in Pune Districts. Among the two channels are observed a channel II is more profitable than channel I.

References:

- Acharya, S. S. and Agarwal, N.L. 1999. Agricultural Marketing in India. Oxford and IBH Publishing Co. Pvt., New Delhi. 311p.
- Anjani Kumar, Harbir Singha, Sant Kumara and Surabhi Mittalb. 2011. Value Chains of Agricultural Commodities and their Role in Food Security and Poverty Alleviation – A Synthesis. 169-181 p.
- Prakash Food Products company Annual report- 2014-15.

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