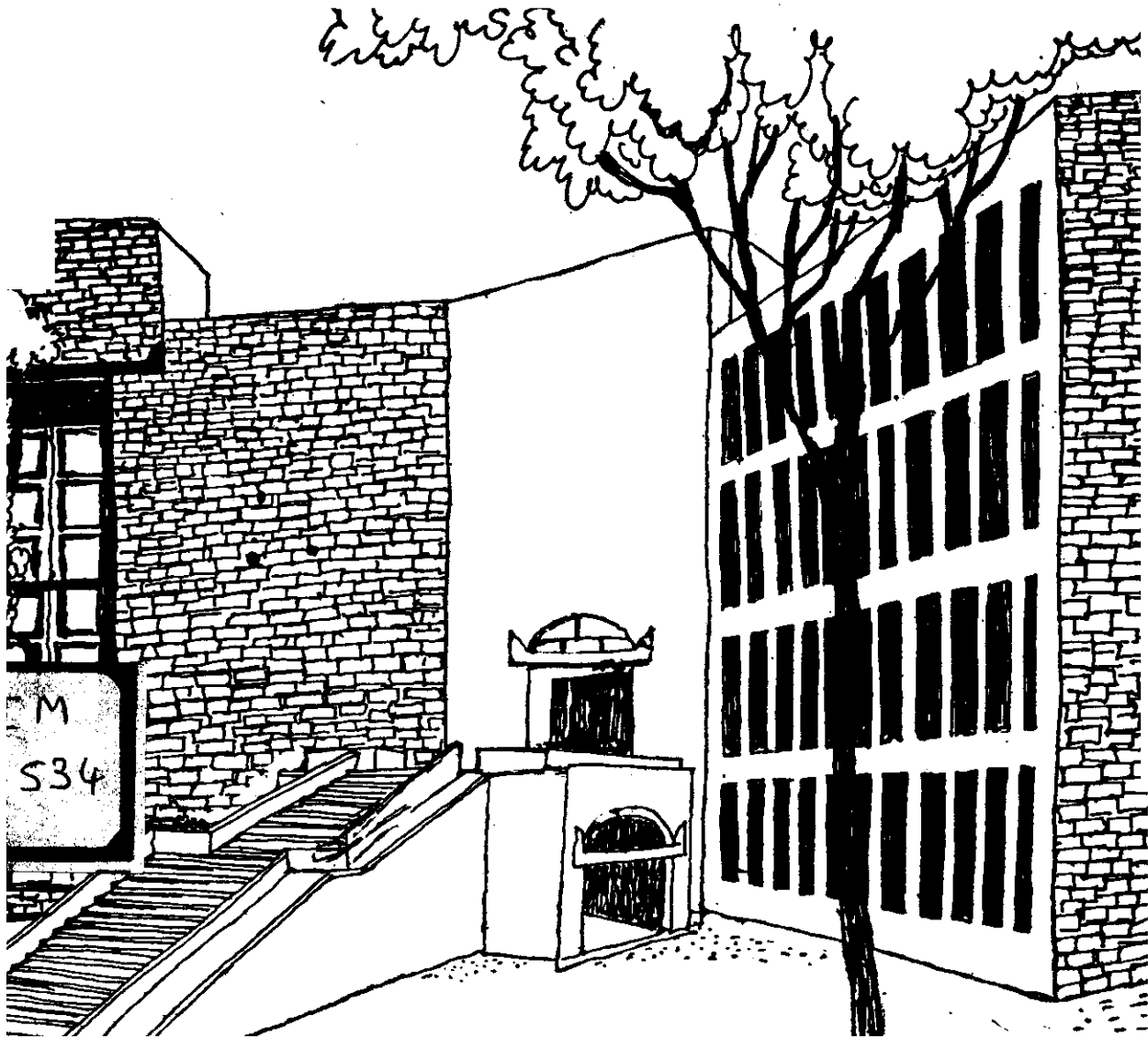




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MARKETING OF OILSEEDS AND OILS
IN INDIA: PRESENT AND FUTURE

by

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MARKETING OF OILSEEDS AND OILS IN INDIA : PRESENT AND FUTURE

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The gap between demand and supply of edible oils in India has been widening over the years and have resulted in rising prices of edible oils [1, 17]. This paper illustrates the working of intermediaries in terms of quantities handled, costs, margins, and working capital in various stages. It also looks at the role of marketing in the intensive development of non-traditional sources of oilseeds in the coming years.

BACKGROUND

Oilseeds occupy an important place in the Indian economy and contribute about six percent of India's Gross National Product and nine percent of value of all agricultural commodities. In 1982-83, the net per capita availability of edible oils including vanaspathi was 5.6 kg. while the bare minimum has been placed at 6.57 kg [19]. While the demand for edible oils has ranged between 34 and 39 lakh tonnes, indigenous production has been fluctuating between 24 and 27 lakh tonnes, leaving a gap of about 10 to 12 lakh tonnes. To bridge this gap the country is forced to import and spends about Rs. 600 to Rs. 700 crores of foreign exchange every year. According to the estimates made by various agencies the projected demand ranges between 67.7 and 81.2 lakh tonnes in 1995-96. When the demand estimates are compared with the projected supply estimates, we find that the gap ranges between 13.2 and 13.7 lakh tonnes in 1995-96 and 36 lakh tonnes in

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A.D. 2000 as shown in Table 1. This indicates that at least to the year A.D. 2000 we are likely to operate in a situation of acute scarcities of edible oils.

At the sametime technology for increasing production is available with R & D Institutions [2, 5, 11, 19]. It is a question of facilitating the diffusion and adoption of this technology by the farmers. In this context, the remunerative price becomes a crucial factor. To understand the price realization by the farmers, we need to look at the price spread and functioning of the intermediaries.

MARKETING CHANNELS AND THEIR OPERATIONS

To study the role of market intermediaries, their gross and net margins, and working capital requirements, we look into the case of groundnut which is the most important oilseed and accounts for about 30 percent of the area under oilseeds, 50 percent of oilseed production, and 55 percent of all edible oil production [4, 10]. The average yield of groundnut in India is very low being only 861 kg. per hectare compared to that of 2950 kg. per hectare in the U.S.A. [2, 3, 15]. The oilseed growers in India face tremendous uncertainty because of cultivation in unirrigated lands under rainfed conditions. It was found that production cost per hectare ranges between Rs. 2,848 in Maharashtra and Rs. 3,329 in Gujarat for the kharif crop. In the case of summer crop which is very prominent in Maharashtra, the cost per hectare ranged between Rs. 6,179 in 1981-82 and Rs. 4,964 in 1982-83. Purchased inputs range between 20 and 42 percent of the total cost of production per hectare for the kharif crop and between 23 and 27 percent for the summer crop [15]. The difference in purchased inputs is mainly because of involvement of family labour in the summer crop. The cost per quintal of groundnut ranges between Rs. 396 and Rs. 615 in kharif, and between Rs. 467 and Rs. 599 in summer.

To understand the marketing system in groundnut seed and groundnut oil, we have to look into their marketing channels.

Table 1

Comparative Estimates of Demand and Supply of Edible Oils

(in lakh tonnes)

	NCAER			STUDY GROUP			TATA CONSULTANCY			DTA*		
	Maximum demand	Supply	Maximum gap	Demand	Supply	Gap	Maximum demand	Gap with NCAER supply data	Gap with Study Group supply data	Demand @ 3.5% growth in national income	Supply	Gap
1982-83	37.0	26.7	10.3	41.4	34.1	7.3	36.7	10.0	2.6	-	-	-
1985-86	42.3	28.9	13.4	47.0	38.4	8.6	44.0	15.1	5.6	44.45	30.2	14.2
1990-91	53.1	32.9	20.2	57.8	46.9	10.9	59.8	26.9	12.9	55.7	33.4	22.3
1995-96	66.7	37.9	28.8	71.3	58.1	13.2	81.2	43.3	23.1	69.8	36.1	33.7
2000 A.D	-	-	-	-	-	-	-	-	-	87.5	51.5	36.0

Source : NCAER [19] and U.K. Srivastava [15]

* OTA = Oil Technologists Association

Marketing Channel in Groundnut Seed

The trade in groundnut seed performs the functions of assembly, transportation, broking, and rarely storage in moving the produce to the mills [15]. The marketing channel differs somewhat from state to state [3] by and large the channels in operation are shown in Figure 1.

i) Village Trader: The village trader procure from the farmer at the farm itself. All the marketing costs are borne by the trader. Sometimes the farmer gets a loan from this trader. Payment to the farmer is made after the produce is sold in the market. These traders sometimes sell directly to the miller or sometimes through a commission agent [6, 8, 9]. A study by Ranade, et. al. [10] estimates that the trader incurs about Rs. 12.34/quintal in the process.

ii) Commission Agent: The commission ranges between 0.75 and 1.00 percent of the total value of the pods. Transportation charges from the farm to the market are borne by the farmer and from the market to the mill by the miller. In the regulated market payment to the farmer is made on the sale day itself. The commission agent is supposed to recover the proceeds from the miller within three days.

iii) Broker: In some of the states the processors or the wholesalers recruit some wholesalers to work as their brokers in purchasing groundnut seeds. They directly purchase seeds from the farmers on behalf of these people. Generally brokers purchase seeds from the farmers on Janghad system.

iv) Direct Sales from Producer to Miller: In a direct sale to the miller price is not fixed at the time of sales is made. On a mutual agreed date by the two parties, price is fixed and sale is recorded at that time only. The payment to farmers, therefore, is made when the sale is recorded on a mutually agreed date as per price prevailing on that day. This is known as the 'Janghad System' in Gujarat and in a few other states. Direct sales to the miller, however, account for very small proportion of the sales.

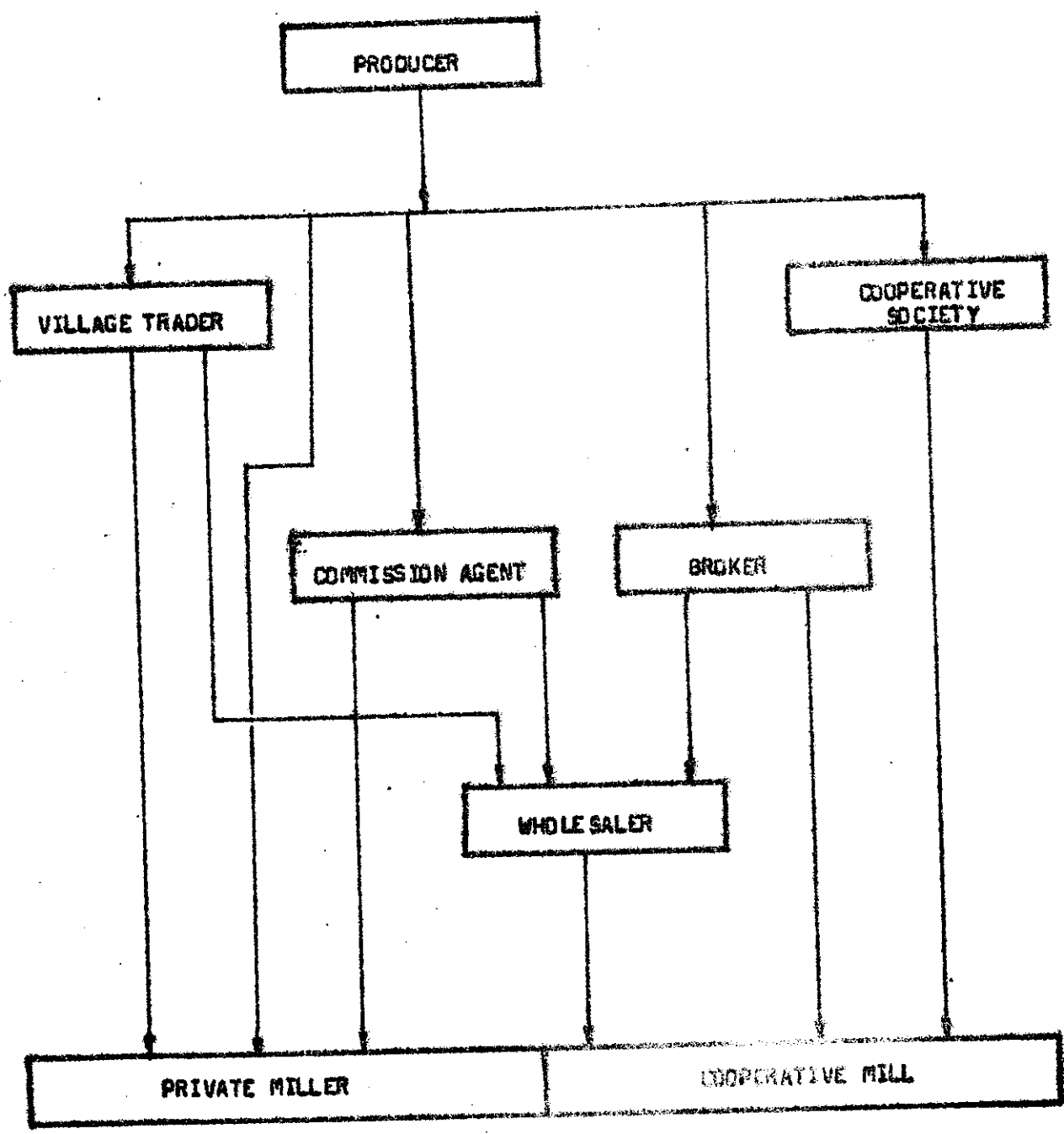


Fig. 1 : Marketing Channel of Groundnut Seed

Source: U.K. Srivastava [15]

v) Sales through Cooperatives: Sales through cooperatives is yet to become popular. The share of the cooperatives is around 3.67% in Gujarat, and 0.04% in Tamil Nadu. The cooperatives acts as a commission agent. In this system farmer has to pay less commission. Transportation, loading, and unloading expenses are borne by the farmer who is paid after the produce is sold. Cooperatives sometimes supply inputs to members on credit [20].

The following are the specific features of the private intermediaries segment of the market: i) the intermediaries deal in not only groundnut, but also other oilseeds and grains; ii) most of the intermediaries perform assembly, transportation, and other services to broking and wholesale functions. It was observed that often a miller and/or a commission agent is also a large farmer handling not only his produce but also buying the produce of other farmers. They are compensated for the number of functions they perform; and iii) intermediaries as well as cooperative mills do not perform the storage functions which are undertaken by the farmers or by others at the cost and risk of farmers (as in the Janghad System). If intermediaries provide any finance to the producer they are compensated for this function also.

Marketing Channel for Groundnut Oil

After reviewing the marketing channels of groundnut seed we now look into the marketing channels of groundnut oil which is mainly routed through millers/refineries. The channel is : millers/refineries — wholesalers — retailers — consumers (Figure 2). The bulk of oil which is only filtered goes through the brokers, wholesalers, retailers, and consumers for sale within the state. For outstation sales the channel is : broker — commission agent — wholesaler — retailer — consumers [13, 14, 17, 21].

i) Broker: The broker's share is Rs. 35 per 500 tins (15.9 kg. tins) from both the parties. Minor variations exist in brokerage charge from state to state.

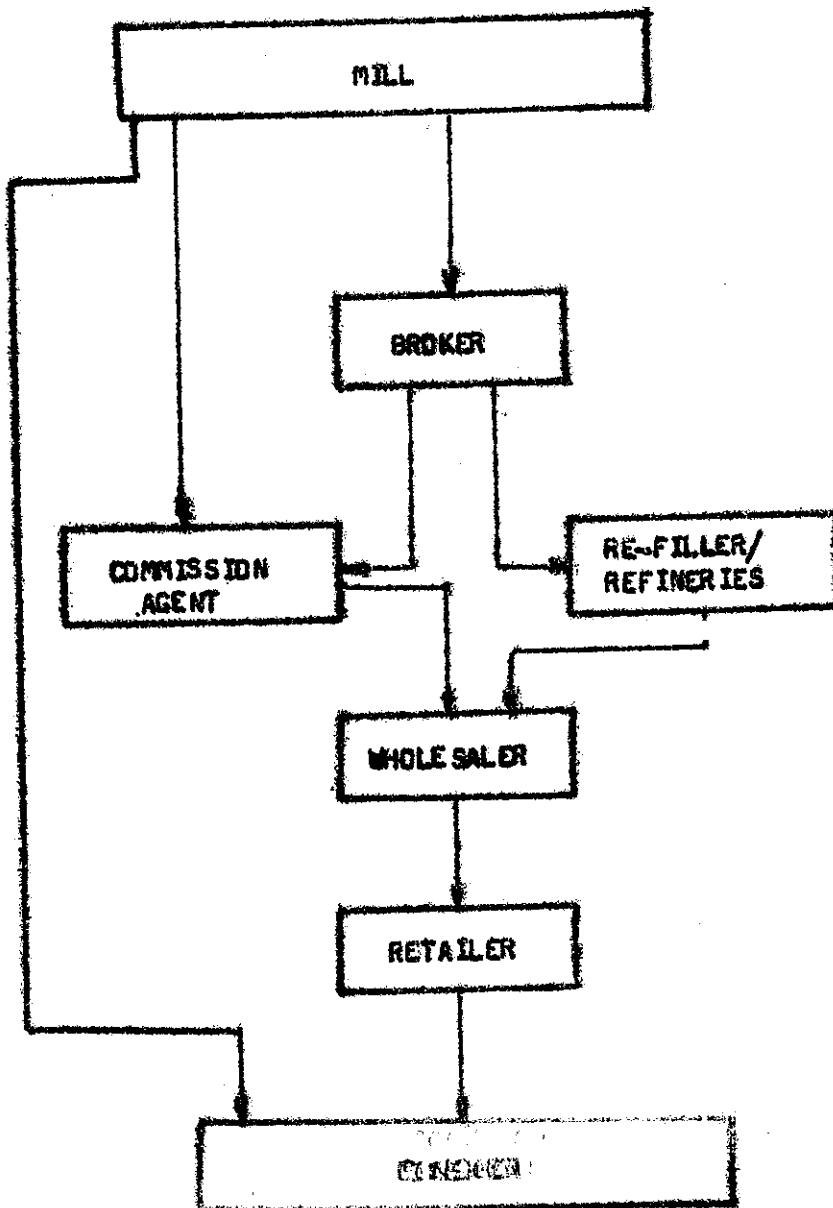


Fig. 2 : Marketing Channel of Groundnut Oil

Source: U.K. Srivastava [15]

ii) Commission Agent: The major portion of oil is sold through commission agents. The major percentage (about 70 to 80 percent) of business is done on Hundi. The commission agent gets about 70 paise per tin from the buyer.

iii) Wholesaler: The wholesaler buys groundnut oil either directly from the miller or through commission agent/broker and in turn sells to another intermediary or to the final user. An average wholesaler handles about 10 to 15 tonnes of groundnut oil per day and the working capital requirement is around Rs. 2.50 to 3.50 lakhs. They normally handle other oils also. Therefore, their actual working capital requirement exceeds this amount.

iv) Retailer: The retailer deals in many oils. The share of groundnut oil does not exceed 20 to 25 percent. The retailer gets two percent of the retail price as gross margin. In some cases he also gets Rs. 2 per tin as commission from the wholesalers.

The length of the channel and the number of the functionaries do not affect the realization of the miller or the price to the consumer. This is mainly because the market charges are based on the functions.

A standard tin is treated as a commodity. There is speculation as in any other commodity. Satta is a contract for future deal in which no physical sale or delivery is involved. Satta contracts are usually for a period of one month which can be renewed and the renewal is called 'Badla'. In some states Satta is done on a fairly organized line. For example, at Rajkot in Gujarat, the Satta bazar operates only through the dalal (agent) who gets 50 paise for a 'Tukda' (100 tins of oil). The Satta price is known as 'Tum-Tum'.

The share of various intermediaries and farmers in groundnut system is shown in Tables 2 & 3. It will be observed from Table 3 that when we include family labour, depreciation etc. the farmer has a negative net margin at about Rs. 4.60 for one kg. of oil, but when we take into account only purchased input costs he gains about Rs. 6.98 per one kg. of oil.

Table 2

Percentage Share of Intermediaries and the Farmers per Rupee Spent on Oil by Consumer (on Retail Price)

	Farmer's share	PRICE SPREAD AMONG THE INTERMEDIARIES			
		Total	Retailer's share	Miller's share	Wholesaler's (groundnut sa share)
1962-63	61.00	39.00	12.50	16.50	10.00
1963-64	53.39	46.61	9.96	10.32	16.33
1964-65	50.20	41.72	7.24	23.70	10.69
1965-66	51.93	48.07	7.71	26.53	13.03
1966-67	66.75	33.25	0.50	21.60	3.15
1967-68	64.20	35.30	12.72	21.00	2.07
1968-69	51.76	48.24	0.15	25.10	14.90
1969-70	56.36	43.64	0.01	25.44	9.39
1970-71	62.67	37.33	10.67	25.11	1.56
1971-72	50.06	41.94	9.46	23.07	0.06
1972-73	51.45	48.55	7.43	21.05	19.07
1973-74	57.83	42.17	8.76	26.52	6.89
1974-75	64.79	65.21	9.69	24.12	1.40
1975-76	57.26	42.74	8.32	29.36	5.06
1976-77	52.35	47.65	8.32	33.74	5.59
1977-78	62.45	37.55	7.01	26.51	3.23
1978-79	52.38	47.62	8.66	23.79	10.17
1979-80	59.71	40.29	7.92	29.47	2.90
1980-81	52.67	47.33	5.84	32.13	9.36
Average	57.70	42.30	8.87	25.27	8.16

Source: S.R. Narappanavar and V.P. Bharadwaj [?].

Table 3

Costs and Margins of the Intermediaries

(Unit : Rs./Kg. Oil)

Intermediaries	Gross Margin	Cost	Net Margin
Farmer	12.71	17.30 (5.7)	-4.68 (6.98)
Seed trader	2.54	2.04	0.50
Miller	3.25	2.25	1.00
Oil trader	1.50	0.80	0.70
Oilcake* (solvent extraction)	2.87	2.44	0.43

Source : U.K. Srivastava [15]

- Notes : 1. Figures in the parantheses are the cost and margin of only purchased inputs.
2. * The figures are for one kg. of oilcake.

Among trade intermediaries the miller gets the highest net margin which works out to be Re. 1 per kg. of oil. The seed trader gets a net margin of Rs. 0.50. In the case of the oil trader the net margin is Rs. 0.70 per kg. of oil, and the solvent extractor gets a net margin of Rs. 0.43.

Working Capital Tied-up in the Trade in Groundnut Seed
Production and Trade in Oil

Working capital tied-up in the production comes to Rs. 766.50 crores which accounts to Rs. 1.35/kg. of seed and Rs. 4.83/kg. of oil /15/. The break-up of crop loan to farmers for groundnut production is not available in the Basic Statistical Returns published by the Reserve Bank of India. But based on our discussions with the knowledgeable persons, we could find that the percentage of bank finance (crop loan) available to farmers compared to their total requirement is not substantial. Moreover, working capital tied-up with the farmer is maximum in comparison with other intermediaries as shown in Figure 3.

Coming to trade in seed, processing of seed for oil and cake, and marketing of oil, we find that Rs. 84.06 crores is tied-up. If one looks at the average production and quantity handled by for the years 1978-79 to 1980-81 working capital tied-up comes to 17 paise in terms of per kg. of seed, and 66 paise in terms of oil. The relative idea of working capital tied in one kg. of seed and oil in the entire system is presented in Figure 4. The total bank finance for groundnut seed and oil accounts to about 17.01 percent of the money used by the trade after the seed has been disposed by the farmers.

This clearly indicates that very liberal finance to farmers must be made available to facilitate higher yields and production of groundnut [15]. It is here that the non-availability of bank finance makes a major difference in terms of net margins. At the sametime if the farmer has sufficient financial support, he can sell the produce directly to the millers or cooperative societies. Moreover, similar facilities and mode of financing should be made available to the farmers engaged in cultivating other oilseeds.

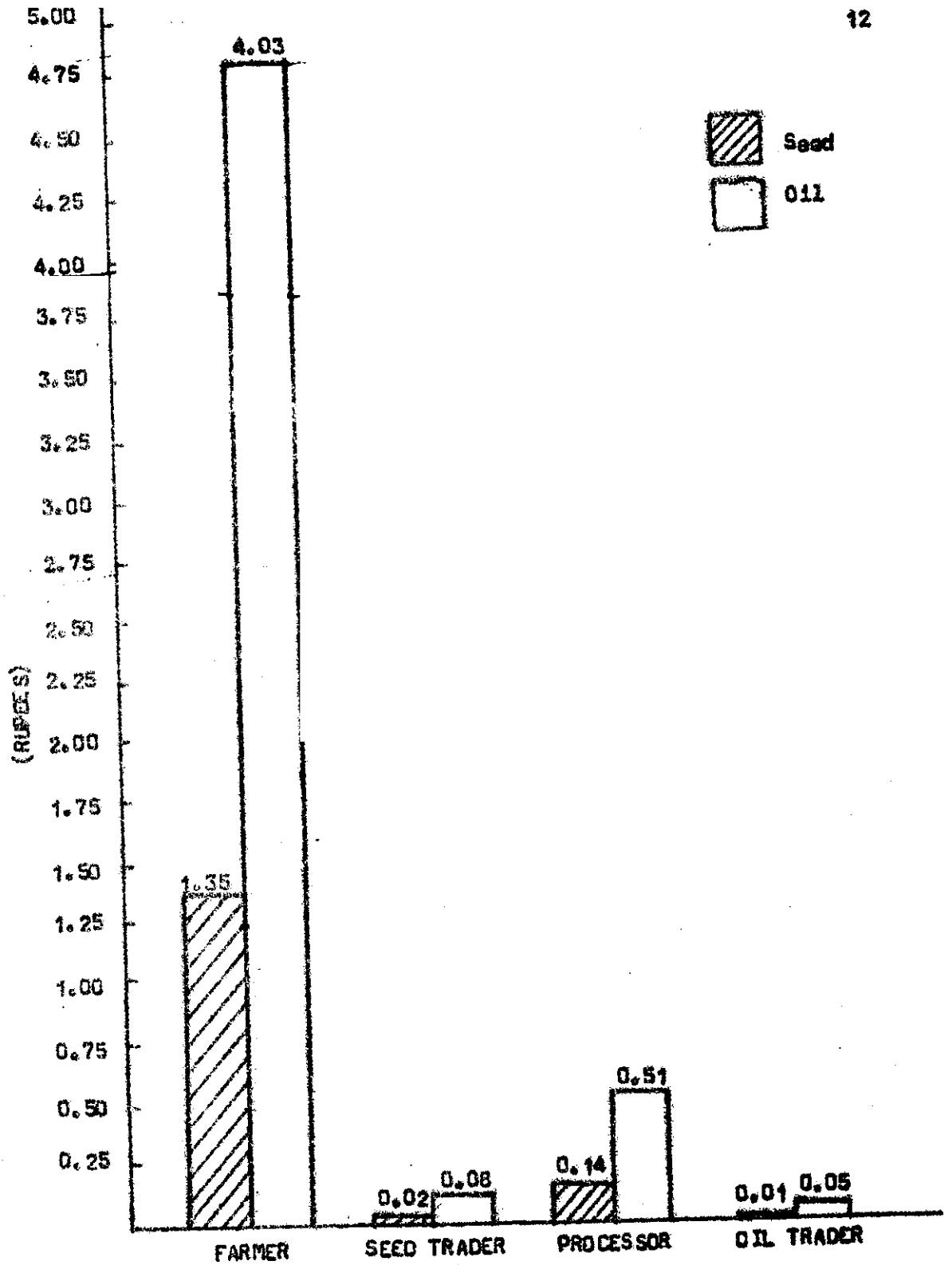


Fig. 3 : Working Capital Tied up in Rupees in One Kg. Groundnut Seed and Oil at Various States

Sources: U.K. Srivastava [15]

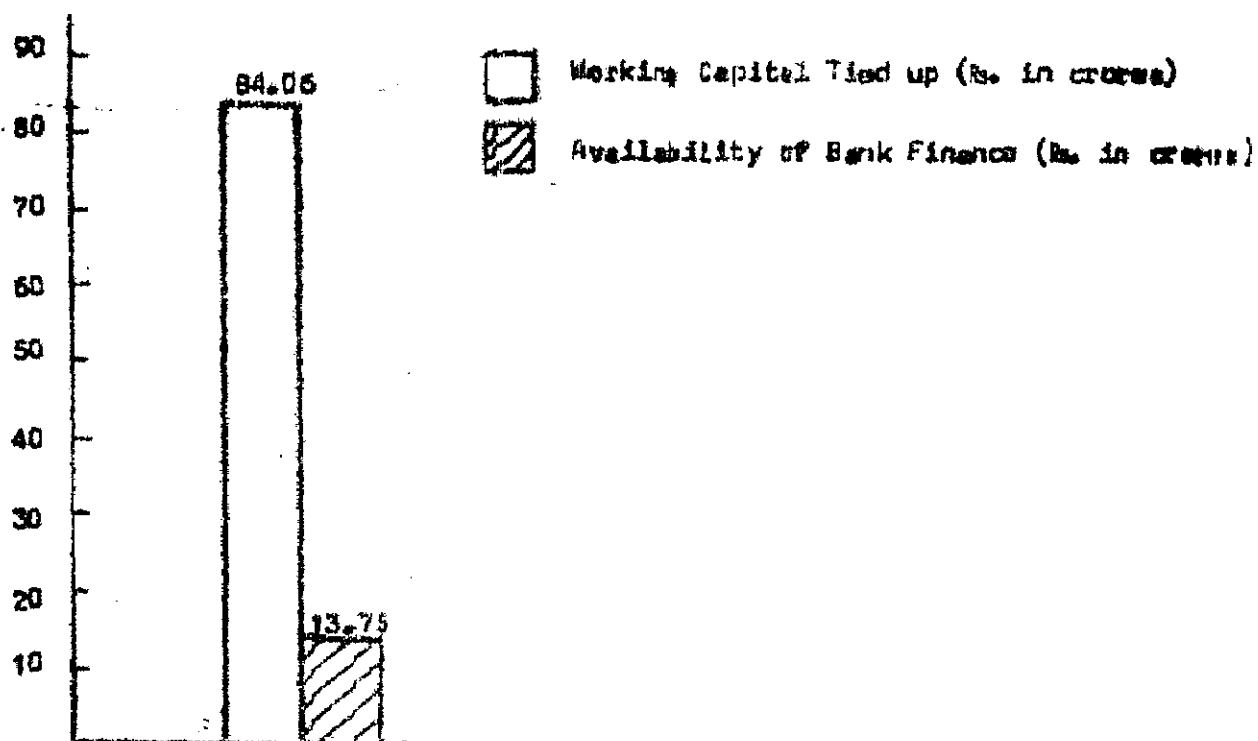


Fig. 4 : Working Capital Tied up in Groundnut Trade, Processing and Distribution of G.N. and Bank Finance Available to Traders

Source: U. K. Srivastava 157

If steps are not taken by the trade to ensure remunerative prices to farmers, more and more government intervention may follow. It may take various forms such as direct controls (price and non-price), further curtailment of credit facilities to private trade and processing, and encouragement to cooperative oilseed marketing federations.

ROLE OF PROCESSING AND MARKETING IN FACILITATING PRODUCTION ENHANCING EFFORTS IN FUTURE

Since a remunerative price is the key to adoption of improved technology package, we have to examine ways to enhance the capacity of trade to give such a price to farmers. This section examines ways to do so in the context of non-traditional oilseeds. Some of the constraints in the promotion of non-traditional oilseed are given in Table 4. It is shown below that several of these constraints can be overcome if market pull is generated.

Rice bran oil is known to be one of the best edible oils containing poly-unsaturated fatty acids and phenolic compounds which are known to have an effect in lowering cholesterol serum level. In spite of its excellent properties as an edible oil, we have not been able to produce large quantities of edible rice bran oil due to certain infrastructural and technological constraints. But even if the technology is made available and other constraints are overcome, it will need considerable marketing promotional back-up to make it remunerative to edible oil processors [12, 13].

For soyabeans sufficient efforts are required to produce value added products. Approximately 80 percent of the defatted soyabean meal in India is mostly being exported as cattlefood whereas it can be processed into various high priced products such as soya protein concentrates, isolates, soya milk, and texturized vegetable products. This product-mix will not only serve as a potential source of protein but also enable the processors of soyabean to get better net returns which in turn can be passed on to the farmers.

Table 4

Some Constraints in Production of Non-traditional Oils

<u>Name of the oil</u>	<u>Constraints</u>
Rice bran oil	<ul style="list-style-type: none">i) Availability of low free fatty acid rice bran in adequate quantity.ii) Proper stabilization facility for rice bran at milling stage.iii) Appropriate refining technology.iv) Edible oil for cooking medium needs promotional back-up.v) Intensify conversion of huller mills to sheller and modern mills.
Soyabean oil	<ul style="list-style-type: none">i) Land under cultivation for soyabean to be increased.ii) Soyabean variety produced should have lowest possible linolenic acid.iii) Soyabean byproducts such as protein concentrates, texturized vegetable products etc. should be produced to the maximum possible extent.
Sal fat and Mohwaah	Forest oilseeds collection should be intensified as their potential is as high as fifteen million tonnes.
Maize oil	Maize germ oil has potential of twenty-one thousand tonnes per year. Hence, needs promotional back-up for consumer acceptance.
Dhupa, Kusum, Kokum oilseeds	All these seeds have high oil content and are being used for medicinal purposes and cosmetics. Hence, the production should be increased to the extent possible. Collection of seed possess problem.
Palash, Pilu, Pise oils	The oils derived from these seeds are excellent for the soap making. The collection of these seeds should be done to the maximum extent.
Water Melon Seed oil	The oil content is 43.1 (average) and can be used as edible oil comparable with sunflower oil. Hence, efforts should be made for collection of water melon seeds.

Market demand abroad for confectionery fats at remunerative prices led to successful research to make sal fat as cocoa butter substitute. This has not only helped in earning foreign exchange but has created vast interest in other neglected oilseeds. Hence, we should find out remunerative marketing areas for other less known oils so that they could be usefully exploited [5].

The production of non-traditional oils such as sal fat, mango kernel fat, karanja, kusum etc. can be enhanced considerably if the processors and trade can help in organizing a collection system for some of the oilseeds. In the case of rice bran oil a remunerative price for rice bran will act as an important incentive in modernizing the rice mills making additional rice bran available for extraction. In the case of soyabean, utilization of byproducts down the line will improve the total value added.

It should be realized by the trade that additional material for extraction is in the interest of all - farmers, trade, processors and consumers.

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