

PTC. 458 (N) 450

GOVERNMENT OF INDIA TARIFF COMMISSION

REPORT ON THE FIXATION OF PRICES OF AGRICULTURAL TRACTORS

BOMBAY 1967

PRINTED BY THE MANAGER GOVERNMENT OF INDIA PRESS NASIK AND PUBLISHED BY THE MANAGER OF PUBLICATIONS DELHI-6 1970

Price: (Inland) Rs. 13.50 (Foreign) 31s. 6d. or \$4 86 Cents



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PERSONNEL OF THE COMMISSION

Shri M. P. Pai .	•	•	•	Chairman (till 31st July, 1967)
Shri M. Zaheer .	•	•	•	Chairman (from 1st August, 1967)

PROF. K. T. MERCHANT . . Member

SHRI S. SUBRAMANIAN Member



(TO BE PUBLISHED IN THE GAZETTE OF INDIA EXTRAORDINARY PART I, SEC. I)

MINISTRY OF INDUSTRIAL DEVELOPMENT AND COMPANY AFFAIRS, (DEPARTMENT OF INDUSTRIAL DEVELOPMENT)

RESOLUTION

New Delhi, the 3rd June, 1968.

No. 5/44/67/AELII.—The Tariff Commission submitted a report in October, 1967, on the fixation of fair selling prices of agricultural tractors on the basis of an enquiry undertaken by it under Section 12(d) of the Tariff Commission Act, 1951. Its recommendations are as under :—

(i) The selling expenses including dealer's commission should be fixed at Rs. 2050 for 50 HP tractors, Rs. 1850 for 35/37 HP tractors and Rs. 1650 for 27 HP tractors.

(ii) No allowance for warranty need be provided for in the selling prices of tractors, in consideration of the fact that adequate allowances for wastages have been made in the cost estimations.

(iii) The selling prices of tractors should be fixed exfactory for each of the producers. Freight to the dealer's point, together with packing, forwarding and insurance charges, should be charged separately to the customers.

(iv) The return on investment thould be 15% on capital employed comprising the average net fixed assets and the working capital, which would enable the industry to provide for the outgoings such as interest on borrowings, minimum bonus under the Bonus Act, Corporation taxes etc., leaving a residue which should enable the industry to declare reasonable dividends to equity share holders and also provide for reserves.

(v) The fair ex-works retail prices recommended for two years ending 31-3-1969 are as shown below :---

(a) Hindustan 5) HP	tract	or		•		Rs. 23,370
(b) Massey Ferg	guson		•			•	Rs. 21,270
(c) Internationa	1.				•	•	Rs. 20,230
(d) Hindustan 3	5 HP					•	Rs. 15,680
(e) Escort 37				•			Rs. 17,690
(f) Escort 27			•				Rs. 14,700
(g) Eicher							Rs. 17,480

(vi) It will be sufficient if, for the next two years the change in the c.i.f. cost of ckd packs due to a change in the rates charged by the collaborators and/or any fresh deletion effected at any time is adjusted against the recommended prices of tractors.

(vii) The escalation of 57.5%, together with other elements constituting the landed cost already available to the industry as a result of devaluation, provide an adequate margin to cover the higher cost of manufacture of indigenous components in comparison with the imported post-devaluation landed costs of the same components. Therefore, no escalation on account of deletion need be allowed where such deletions are replaced by indigenous bought-out or manufactured components.

(viii) Any increase in the prices of engines locally purchased by M/s. TAFE and M/s. Escorts over the values already included in the costs, if approved by Government, should be adjusted against the recommended prices of tractors.

(ix) Variations in the costs of tyres, tubes and also batteries, either due to substitution by alternative types or due to variations in prices for other reasons, may be adjusted against the recommended prices of tractors, as and when necessary

(x) Since none of the units now in production is anywhere near the economic size, it is expected that future licensing policy would aim at making these units economic and that, if and when there is a revision of this policy, no licences for setting up of new units would be granted for the ranges of tractors now in production as well as any other ranges that may have to be manufactured in the country.

(xi) Generally, full account should be taken of the domestic supply potential before entering into any further long-term or substantial commitments regarding import of agricultural tractors.

(xii) As long as requisite conditions are satisfied, customs duty should not be levied on hydraulic lift, power take off unit and three point linkage and the question of levy of the duty may not be left to the discretionary interpretation of the customs authorities; the bond executed by the importing party may be accepted uniformly in the absence of any evidence to the contrary.

(xiii) It is desirable that the incidence of taxation on agricultural tractors should be as low as possible and that there should be uniformity of all levies throughout the country.

(xiv) Government may give consideration to the suggestions for framing of separate set of simple rules governing agricultural tractors as the existing provisions of Motor Vehicles Taxation are reported to be causing considerable hardship to the farmers.

(xv) The domestic demand for agricultural tractors may be estimated at 25,000 Nos. for 1967-68 rising annually by 5,000 Nos. to 40,000 by 1970-71.

(xvi) A technical study should be undertaken of the engincering specifications of all the present makes of indigenous tractors with a view to identifying such items which could immediately be taken up for standardisation, particularly, in the context of the scope for import substitution.

(xvii) Adherence to the programme of deletions by the indigenous tractor producers should be more strictly enforced.

(xviii) Government should take effective steps so that the required quantities of rubber tyres and tubes are made available to the tractor industry. (xix) The practice of importing components outside the ckd pack is against the spirit of import substitution. Import substitution as a concept should be related to the total quantity of imports made and not merely to the deletions made from the ckd pack which are replaced not by domestic production but by importing outside the pack.

(xx) Steps should be taken to ensure that there is no discrimination between tractor producers in respect of the prices to be paid by them for tyres and tubes.

(xxi) To meet the requirements of the average Indian farmer, either small tractors or power tillers in much greater numbers than available at present are urgently needed. As for the conventional types within the range of 20 to 50 HP, unless the purchasing power of the farmer increases, they may remain beyond the reach of the average Indian farmer for quite some time to come.

(xxii) Since there is a great demand for low HP tractors which is now met from imports, it would be in the national interest if Government divert a part of the import demand for such low HP tractors to the five indigenous producers by placing bulk orders with them, thus assuring them of demand for low HP tractors. The low HP tractors purchased by Government may be sold or rented to the farmers at moderate rates.

(xxiii) It is necessary that the Land Mortgage Banks should be encouraged to advance funds to the farmers for purchase of tractors.

(xxiv) The rates of interest charged by the Land Mortgage Banks seem to be high for poor farmers. The Agricultural Credit Department of the Reserve Bank of India may look into this matter with a view to bringing about an early reduction in the interest charges.

(xxv) The establishment of Agro-Industrial Corporations recently in some of the States for supply of tractors on hirepurchase terms is an encouraging development and is likely to prove beneficial to the farmers as well as to the tractor industry. Adequate funds should be provided to these corporations. (xxvi) Government may periodically review the prices along with the availability and quality of the tractor implements and accessories which are needed for replacement frequently.

(xxvii) With greater indigenous substitution of imported components, it should be possible to eliminate the recurring charges by way of payment of royalty to foreign collaborators either by making outright purchase of the specifications and drawings or by terminating collaboration agreements and substituting indigenous specifications.

(xxviii) Appropriate action should be taken by the tractor manufacturers to ensure that genuine parts of their tractors are available to consumers from the dealers.

(xxix) The proposal to establish a net work of workshop facilities for tractors in selected areas where tractor population is concentrated should be implemented without any further delay as this is an urgently needed facility. In addition, it is also necessary that the tractor producers should extend the distribution network and workshop facilities more widely than at present.

(xxx) The producers of agricultural tractors should ensure that their dealers and other accredited suppliers do not indulge in any mal-practices in regard to the implementation of the terms of warranty.

(xxxi) It would be desirable if a schedule of repair and after-sales service is provided free of charge by the tractor producers in the form of a 'free service voucher' and given directly to the customers as done now by M/s Tractors and Farm Equipments Ltd.

(xxxii) The tractor manufacturers should eliminate causes which result in inefficiency leading to increase in costs.

(xxxiii) Unless the manufacturers diversify their production (by undertaking production of low HP tractors) the off-take of the present tractors may not permit any significant reduction in their cost of production. This may in turn further retard their growth and development. (xxxiv) As state-aid may not be enough, tractor producers in their own interest may have to formulate a scheme for improving their sales performance which should, *Inter alia*, include provision of credit facilities to potential buyers.

3. Government do not accept recommendations Nos. iii, iv and v for the following reasons :

(a) The Commission has recommended the fixation of prices on ex-works basis. Government, however, feel that there should be a uniform price for a particular make of tractor throughout the country so that the consumers residing at places far away from the producing centres are not placed at a disadvantage. Moreover, if the prices were fixed on ex-works basis and the manufacturers permitted to charge extra for freight, packing, insurance etc. there would be difficulty in verifying the correctness of the ultimate prices to the consumers charged by the dealers. In view of these considerations, Government feel that the selling prices of tractors should be fixed on f.o.r. destination basis as hitherto, and not on ex-works basis.

(b) The Commission has recommended a return of 15 per cent on the capital employed. Hitherto, the normal practice has been to allow a return of only 12 percent on the capital employed and this rate of return has been adopted in determining the fair selling prices in the case of other industries. Government do not feel that there is adequate justification for allowing a higher rate of return in the case of the tractor industry.

(c) In determining the price of 50 HP tractors produced by Messrs Hindustan Tractors Ltd., the Commission has adopted a replacement ratio of more than 300 percent for expected deletions of some of the components imported by the firm outside the CKD pack (vide para 17.12 of the Commission's report). The average replacement ratio in respect of deletions already effected by all the manufacturing units including this unit is much less. In the circumstances, Government do not see any justification for allowing such a high replacement ratio in the case of expected deletions in respect of this unit.

In the case of M/s. Escorts, it has been found that, while determining the cost of production, the costs of some items have been included twice over, once in the CKD pack and again in the list of locally brought out or manufactured components.

In the case of the manufacturing units importing components and raw materials from U.K., the cost of production worked out by the Commission is based on the exchange rate prevailing prior to the devaluation of the pound sterling in November, 1967. Some adjustments in the prices recommended by the Commission are, therefore, required to allow for this.

After making necessary adjustments in the light of the factors enumerated above, Government have decided to fix the selling prices f.o.r. destination (rail head) of various makes of agricultural tractors manufactured in the country, with immediate effect and until further orders, as under :---

Make of the tractor	2	त्यमेव जयते	F. O. R. destination (rail head) selling price,			
TAFE			35 HP	Rs. 21,140		
INTERNATION	AL		35 HP	Rs . 19,570		
HINDUSTHAN		•	50 HP	Rs. 22,350		
HINDUSTHAN			35 HP	Rs. 15,710		
ESCORTS .			37 HP	Rs. 17,910		
ESCORTS .			27 HP	Rs. 13,840		
EICHER .			27 HP	Rs. 17,480		

4. Government will examine recommendations Nos. xii and xiii in consultation with the concerned authorities.

5. It is not possible to accept recommendation No. xxii for the present. Government are of the view that, if after assessing indigenous availability of tractors, it is considered necessary to resort to import of complete tractors, such imports should continue to be effected through the existing agencies, as hitherto.

6. The attention of the industry is invited to recommendations Nos. xxxii to xxxiv.



ORDER

Ordered that a copy of the Resolution be communicated to all concerned and that it be published in the Gazette of India.

(R. V. SUBRAHMANIAN)

Joint Secretary to the Govt. of India.

То

The Manager, Government of India Press, New Delhi.



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सन्यमेव जयते

REPORT ON THE FIXATION OF PRICES OF AGRICULTURAL TRACTORS

CHAPTER I

INTRODUCTORY

1.1 The Government of India by the Ministry of Commerce letter No. 20(1)Tar/67, dated 6th February, 1967 informed the Commission that it had been decided to institute a regular inquiry with a view to fixing 1. Genesis of the reasonable selling prices of the different case makes of agricultural tractors manufactured in the country. Accordingly, the Commission was asked to undertake an inquiry into the matter under Section 12(d) of the Tariff Commission Act, 1951 and submit its report to Government within about four to five months. A copy of this letter is reproduced in Appendix I.

1.2. Pending receipt of the Commission's report, Government decided, as the matter was urgent, to fix interim prices for the various makes of tractors on the basis of a cost investigation recently carried out by the Cost Accounts Branch of the Ministry of Finance and to notify interim prices under the Essential Commodities Act.

1.3. Therefore on 30th March, 1967, the Government of India in the Ministry of Industrial Development and Company Affairs, in exercise of powers conferred by Section 3 of the Essential Commodities Act, 1955 promulgated the (Price Control) Order, 1967, a copy of which Tractors is given in Appendix II. Clause 4 of this Order empowers the Central Government to fix, from time to time, having regard to the estimated cost of production, the sale prices of tractors of different types manufactured or assembled India. Accordingly, Government fixed interim prices in under this Order in respect of tractors produced by each of the units, namely, Eicher Tractors India Ltd., Faridabad. Escorts Ltd., Faridabad, International Tractor Co. of India Ltd., Bombay, Hindustan Tractors Ltd., Baroda and Tractors and Farm Equipment Ltd., Madras. These interim prices,

togetner with the prices charged by each of the manufacturers from the time they commenced production of tractors, are given in Table I. The interim prices include the hydraulic lift, three point linkage, power take-off, lighting equipment consisting of head light, tail light and plough light, a set of tools and electric horn. If these accessories are not supplied, rebates at the rate s shown in Table 2 are to be allowed by the manufacturers.

TABLE 1

Selling prices of indigenous agricultural tractors—Pre-devaluation, post devaluation and interim

(In Rupees)

	Name of the company		At the	SELLING PRICES			
Sl. No.		Name of the Type of con company tractor m		Pre-devaluation	Post de- valuation	Interim prices statutor- n ily fixed by the Govt.	
1	2	3	4	5	6	7	
1.	Eicher	27 H.P.	, 11,900 (1960-61) (12,050 15,07 1961-62) (1-7-65	0 18,28) (14-6-66	5 17,836 5) (8-3-67)	
			सत्यमेव जय	13,300 16,17 (1-8-62) (20-11-6	0 5)		
				14,025 16,28 (1-3-63) (19-3-66			
				14,070 16,23 (1-1-64) (11-4-60			
2.	Escorts	27 W.	13,100 (1-3-66 to 6-6-66)) 15,031) (1 0 -7-67)	
		37 H-1	P. 15,400 (1-3-66 to 6-6-66)) 19,500) (3-3-67)	
3.	Hindustan	50 H.I	P. 17,500 (1-5-64)			5 21,880 () (18-4-67)	
		35 H.I	P. 12,500 (1-1-65)	13,3 50 (15-3-65)) 16,11() (18-4-67)	

1		2	3	4	5	6
4.	International		16,380 (26-2-65)	19,835 (29-3-66)		20,900 (4-3-67)
5.	TAFE	35 H.P.	(from commen-	(17-2-62) to	15,906 20,821 (7-11-62 (6-6-66 to to 5-6-66) 6-3-67)	

Note:-Effective dates are shown within brackets.

TABLE 2

Statutorily fixed rebates for non-supply of certain accessories

(In Rupees)

	Rebate to be allowed in the case of							
Accessory/ attachment	TAFE 1035	Interna- tional B-275	Escorts Model 37&27W	Eicher	Hindustan 50 HP 35 HP			
1	2		4	5	6	7		
1. Hydraulic Lift	*	1,525	*	620	1665	1180		
2. 3-point linkage	*	473		350	380	120		
3. Power take-off	*	115	यते *	405	45	30		
4. Lighting equip- ment consisting of headlight and plough light	228	80	115	160	45	45		
5. A set of tools	30	43	27	35	55	5		
6. Electric horn	50	25	20	15	20	20		
7. Battery	*	*	*	400	*	*		

*Not applicable as it forms an integral part of the tractor.

2.1. The term "agricultural tractors" includes all tractors used in agricultural operations either for reclamation of waste land or for ordinary cultivation. It excludes power tillers and crawler tractors below 20 horse
2. Scope of inquiry. power. Since interim statutory prices have been fixed for wheeled type tractors manu factured by the five indigenous producers mentioned in the

preceding paragraph, we have confined the scope of the present inquiry to such wheeled type tractors of 20 drawbar horse power and above.

3.1 A. press note was issued on 20th March, 1967 informing producers, consumers and others interested in the inquiry to obtain copies of the relevant questionnaires from

3. Method of inquiry.

the Commission and submit their replies. Questionnaires were also issued to all the five producers of agricultural tractors important consumers and consumers'

associations, dealers/distributors and importers of agricultural tractors. Individual farmers who had participated in the All India Crop Competitions were asked to furnish their views on certain specified issues. Letters were issued to the State Registrars of Co-operative Societies asking them to furnish lists of Agricultural Service Co-operatives. Information **I** regarding the extent of financial help provided by or through them was sought from the State Departments of Agriculture. The Directorate General of Technical Development, the Ministry of Food and Agriculture and the other Central and State Government Departments concerned were addressed for information on the various issues involved in the inquirv. Central Land Mortgage Development Banks were asked to furnish data regarding loans granted by them to purchase agricultural tractors. A list of those to whom questionnaires or letters were issued and from whom replies or memoranda were received is given in Appendix III.

3.2. The Commission and its officers visited tractor manufacturing units, details of which are given in Appendix IV. This Appendix also shows the dates of visits of the Cost Accounts Officers to the tractor manufacturing factories for examining their books of accounts and other data relating to their costs of production of tractors.

3.3. A public inquiry was held at the Commission's office in Bombay on Tuesday, the 25th July, 1967. A list of persons who attended the inquiry is given in Appendix V.

CHAPTER II

DEVELOPMENT OF THE TRACTOR INDUSTRY IN INDIA

4.1. At the time of Independence fully assembled tractors were being imported but the domestic market for tractors was small. In 1947 the Central Tractor Organisation was set up initially with the tractors and bull-History of the Indian Tractor dozers purchased from the U.S. Army Industry. Disposals. This was a nucleus of an organisation for reclamation of land and mechanisation of agricultural farming. During the First and the Second Plan Periods about 4.5 lakh hectares of land were reclaimed through the Central Tractor Organisation and another 5 3 lakh hectares through the State Tractor Organisations. The Central Organisation was wound up in October 1959 as it was running under heavy losses and sufficient foreign exchange was not available for the purchase of equipment required for replacement of the old and worn out equipment. The equipment or what remained of it was made over to the Rehabilitation Reclamation Organisation for possible utilisation in the Dandakaranya areas.

4.2. A rough estimate puts the number of tractors used for agricultural purposes at about 10,000 in 1949-50 and nearly 20,000 in 1955-56. A census of tractors undertaken by the Ministry of Food and Agriculture in 1961 and 1966 revealed that the tractor population had increased to 31,000 and 51,000 in these respective years. The statewise details given in Appendix VI indicate that the Northern region comprising the Punjab, Haryana and Uttar Pradesh, account for more than one half of the total number of tractors in the country.

5.1. Upto the end of the First Plan period, tractor requirements were met largely by imports and, to a small

extent, by Indian firms assembling completely knocked down packs in agreement with foreign makers. In September, 1955, the Ministry of Commerce & Industry appointed a Committee on Tractors and Tractor-drawn Agricultural Implements which estimated the total domestic requirements for all types of

tractors at 5,000 numbers a year by 1960-61, with the following break-up :---

D.B.H.P. range	Nos.
12-18	1,500
20-30	3,000
3545	500

The Committee also observed that since the demand of 35-45 h.p. tractors was very meagre, it may not be economical to develop within the country the manufacture of tractors of this range. As against the above estimates, the Second Plan envisaged a production and capacity target of 3,000 and 4,000 numbers respectively for a range of 20-30 D.B.H.P. by 1960-61. During the formulation stages of the Third Plan the demand for agricultural tractors was assessed at 10,000 numbers per annum by 1965-66 and accordingly during the years 1960-61 the following production capacities were licensed :--

TABLE 3

L icensed	Production	Capacities—Initial	position	as	at	the
		end of 1961				

Name of the firm		the firm Draw bar horse power (D.B. H.P.) range of tractors licensed			Capacity per annum		
						Nos.	
1.	Eicher	(a)	12-18			1,000	
•••	131-114	(b)	20-30			1,000	
2.	Hindustan	(a)	35			1,000	
		(b)	50			1,000	
3.	International		35			3,500	
4.	TAFE	(a)	28.2			3,000	
••	1.11 -	(b)	48.5			500	
				Total		11,000	

All these units went into production but the progress of installation of their capacities was rather slow. On top of this, domestic requirements of tractors were progressively rising and they were expected to increase substantially during the Fourth Plan period. It was, therefore, considered essential to create additional capacity and accordingly applications were considered and additional capacities licensed. The latest position regarding licensed capacities of agricultural tractors approved or finalised during the period, January 1965 to March 1966, is as follows :--

TABLE 4

Licensed capacities for Production of Tractors as in July 1966

Name of the firm	D.B. H.O. range of tractors	Revised licensed capacity per annum	Letters of intent issued for additio- nal capacity
	STATES -	Nos.	Nos.
1. Eicher	20-30	2,000	
2. Escorts	25-35	7,000	
3. Hindustan	(a) 35	2,000	
	(b) 50	5,000	
4. International	35	3,500	6,500*
5. TAFE	35	7,000	
6. Proposed Public Sector Project	20		12,000
Total	•	26,500	18,500

*International's capacity is to be raised in the stages of 3500 and 3000 reaching finally an aggregate of 10,000 tractors per annum.

5.2 The brief particulars of the five licensed units are given below :—

5.2.1. EICHER TRACTORS INDIA LTD., FARIDABAD :

5.2.1.1. This unit was licensed for the manufacture of two sizes of tractors initially; subsequently, the licence was amended for manufacture of 2,000 tractors in the range of

20 to 30 draw bar h.p. only. The item taken up for progressive manufacture is a 26.5 h.p. air cooled diesel tractor, in technical collaboration with Messrs, Gebr. Eicher Traktorenfabrick of West Germany. The tractor manufactured by the Indian company is based on the drawings and technical specifications of its West German collaborators and is comparable with a similar model of farm tractor which the German firm was formerly manufacturing. It may, however, be noted that the German collaborators are no longer manufacturing tractors of specifications adopted in India, since they have brought out multi-cylinder and more sophisticated tractors for German market, which do not bear any comparison with the erstwhile German model and the present Indian one

5.2.1.2. Eicher is managed by a Board of seven Directors, including two West German Directors. The authorised capital of the company is Rs. 75 lakhs while the latest subscribed and paid-up capital is only Rs. 6.8 lakhs. About 6.8 per cent of the paid-up share capital amounting to Rs. 46,000 is held by non-Indians. The company has a loan capital of Rs. 3.54 lakhs as on 1st April, 1967 borrowed from the Haryana Financial Corporation which is convertible into equity.

5.2.1.3. This unit commenced production of tractors on 3rd September, 1960. However, production has remained below the licensed capacity. The manufacturing programme as approved by the licensing authority envisaged the following increases in the indigenous content : 48 6% in the first year, 79 5% in the second year and 100% in the third year. The progress of deletions has, however, been very slow and even by the end of the third year, the indigenous content achieved was hardly 32%.

5.2.2. ESCORTS LTD., FARIDABAD :

5.2.2.1. Escorts was originally incorporated in October, 1944 as a private company at Lahore. After partition in 1947, the registered office of the company was shifted to New Delhi and it was subsequently converted into a public limited company on 21st December, 1959. The activities of Escorts till 1958 centered mainly on import trading. Since its inception, the company has been functioning as a representative of well-known foreign manufacturers like MAN and AEG of West Germany, Westing House Electric International of United States, Massey Ferguson of the United Kingdom and Canada and several others. Import restrictions imposed in 1958 led this company to turn its attention to manufacturing activities and at present Escorts manufactures, besides agricultural tractors, agricultural implements, motor cycles, railway equipment, X-ray equipment, heating elements, etc. Products other than tractors and their, parts constitute about 75 per cent of the total annual turn-over of the company.

5.2.2.2. In March 1966, Escorts received a manufacturing licence for 7,000 agricultural tractors per annum in the range of 25 to 35 draw bar h.p. The two items taken up for manufacture are Escorts-27W (iwo cylinder) and Escorts-37 (three cylinder) diesel agricultural tractor. Escorts had entered into a technical collaboration agreement with Messrs. Motoimport Warszawa of Poland. Escorts-27W is comparable to Ursus 328 tractor manufactured by the Polish collaborators; Escorts-37 on the other hand, differs from the foreign counterpart particularly in respect of the engine which is an indigenous 3-cylinder, air cooled one instead of the foreign 2-cylinder, water cooled one.

5.2.2.3. This unit is managed by the Managing Agents, Harparshad & Co. (P) Ltd., who are entitled to a minimum remuneration of Rs. 50,000 per annum. The managing agency commission payable is on the standard sliding scale starting from 10% on the first Rs. 10 lakhs of the gross profits (i.e. profits before appropriations for reserves, dividends and taxation) and sliding to a minimum rate of 5% on the balance of gross profits exceeding Rs. 75 lakhs. The commission paid to the Managing Agents for 1966 total amounted to Rs. 6 04 lakhs. The authorised capital of the company as on 31st December, 1966 was Rs. 450 lakhs made up of Rs. 250 lakhs of ordinary share capital and Rs. 200 lakhs of cumulative preference share capital. The paid up capital was, however, Rs. 244 8 lakhs of which the share of equity capital was Rs. 193 4 lakhs, the balance being preference share capital. About 6.9 per cent of the shares were held by non-residents as on 22nd May, 1967. Escorts has obtained long term loans from the Industrial Finance Corporation of India and the loan outstanding as on the 31st December, 1966 was Rs. 140.2 lakhs. In addition, short term loans from a Commercial Bank, a subsidiary company and others totalled about Rs. 376.6 lakhs.

5.2.2.4. Escorts commenced assembling out of imports of tractor packs with or without engines during 1964-65. Under the approved manufacturing programme the company is required to obtain its engines indigenously. Accordingly, it has entered into certain arrangements with Kirloskar Oil Engines Ltd., Poona. Since the Kirloskar engine is to be fitted to the Escorts 37 model, the latter has commenced during 1964-65 with high indigenous component of about 50%. In the case of Escorts-27W tractors, the indigenous content is much lower since these are fitted with imported engines from Poland. Escorts has drawn up a deletion programme under which the c.i.f. value of the import content will decline as follows :—

Date of import	Estimated c.i.f. value of import content
	Rs.
January 1967	4669.40
January 1968	4296-63
September 1968	3771.07
January 1969	3068.46
September 1970	1433.68
January 1971	878.47
September 1971	504.27
January 1972	391.20

5.2.3. HINDUSTAN TRACTORS LTD., BARODA :

5.2.3.1. Hindustan Tractors owes its origin to a private company incorporated in September 1946 under the name of Pashabhai Patel & Co. Private Ltd. Although the present name Hindustan, is only about two years old, it has been functioning as a public limited company since January 1964. The predecessor company is reported to have assembled its first tractor from imported components in September 1947. It became a regular producer of agricultural tractors in December 1960, when it entered into a technical collaboration agreement with Motokov, a foreign trade organisation, and Zavody Jana Svermy National enterprise, both of Czechoslovakia for the manufacture in India of 50 horse power Zetor Super tractors. Hindustan has since been licensed for the manufacture of 5,000 tractors of 50 draw bar h.p. and 2,000 tractors of 35 draw bar h.p. The tractors taken up for manufacture in India are the same as the corresponding Zetor tractors manufactured by the foreign collaborators.

5.2.3.2. This company is managed by the Managing Agents, Pashabhai Patel & Co., who are entitled to a remuneration on the same standard sliding scale as described in paragraph 5.2.2.3. The managing agency commission paid for the period ending March 1966 amounted to Rs. 3 lakhs. The authorised and paid-up capital as on 30th April 1967 was Rs. 100 lakhs, made up of Rs. 70 lakhs of equity capital and Rs. 30 lakhs of preference share capital. No debentures or long term loans have been floated by the company so far.

5.2.3.3. Hindustan commenced production during 1963 with an initial installed capacity of 500 tractors of 50 h.p. per annum on a single-shift basis. The production in that year was 485 tractors. During the succeeding years the company gradually raised the installed capacities to reach an annual level of 1800 tractors of 50 h.p. and another 1000 tractors of 35 h.p. by 1967-68. These are far below the licensed capacities of 5000 tractors of 50 h.p. and 2000 tractors of 35 h.p.

5.2.4. INTERNATIONAL TRACTOR CO. OF INDIA LTD., BOMBAY :

5.2.4.1. This company was incorporated as a public limited company on 15th April 1963. It is licensed to manufacture 3,500 tractors of 35 h.p. per year; in addition, a letter of intent has also been issued for an aggregate additional capacity of 6500 tractors to be attained in two stages. The

item taken up for manufacture is Mc Cormick International B-275, 35 h.p. diesel tractor in technical collaboration with M/s. International Harvester Company of the United Kingdom. Tractors manufactured by International are comparable to those produced by its foreign collaborators.

5.2.4.2. The promoter company, namely Mahindra and Mahindra Ltd., Bombay, has been appointed Secretaries and Treasurers of the company with effect from the 21st June 1963, for a period of 10 years. The remuneration to be drawn by them is related to the net profits of the company, starting from 7½ per cent on the first Rs. 10 lakhs and sliding down to a minimum of 3 per cent on profits over Rs. 1 crore; the minimum remuneration not to be less than Rs. 50,000 per annum. The authorised capital of the company is Rs. 400 lakhs and the paid up capital in May 1967 was Rs. 149.8 lakhs. The share capital held by foreign collaborators, amounting to Rs. 25.5 lakhs, represents about 17 per cent of the total paid up capital.

5.2.4.3. International's temporary assembling plants started on 1st January 1965; but the regular manufacturing activities were undertaken only in April 1966, when the licensed capacity was reported to have been fully installed. Production in 1966 was lean and has been attributed largely to non-availability of imported items.

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5.2.5. TRACTORS AND FARM-EQUIPMENT LTD., MADRAS :

5.2.5.1. This company is licensed to manufacture annually 7,000 tractors of 35 h.p. It has entered into financial and technical collaboration with M/s. Massey Ferguson of Canada, and their associates. The tractor produced in India is not comparable with the tractors now being manufactured by the foreign collaborators, the Indian Model MF-1035 based on the now obsolete FE-35 manufactured in the U.K. prior to 1964.

5.2.5.2. TAFE is managed by a Board of five Directors, two of whom are non-Indians. The authorised capital is Rs. 200 lakhs which is fully paid up. Shares to the extent of 49 per cent are held by the Canadian company and its German subsidiary. 5.2.5.3. TAFE's assembling of tractors from C.K.D. packs commenced on 23rd August 1961 and as in the case of Escorts, TAFE also started with a high indigenous content of around 40 per cent on account of an indigenous engine procured from Simpson & Co., Madras. Subsequent progress of deletions, however, has been somewhat slow.

5.2.5.4. Against the licensed capacity of 7,000 tractors per annum, TAFE has so far installed a capacity of 3500 tractors only. Although this capacity is stated to have been achieved at the end of 1963, production levels were very low during the years 1964 and 1965. This has been explained by the company as mainly due to shortage of imported packs.

5.2.5.5. TAFE proposes to implement its licensed programme for 7,000 tractors per annum in two stages as follows:----

- Phase I—Increasing the total tractor production with an increased indigenous content of 88% to an annual level of 5,000 numbers by the end of 1968.
- Phase II—A progressive stepping up of production during 1969, 1970 and 1971 to reach an aggregate level of 7,000 tractors per annum, and at the same time maximising the indigenous content to the approved level of 91%.

5.3. Foreign collaboration agreeements .--- We have examined the collaboration agreements and found these do not encourage and help rapid indigenisation. On the contrary, these are a hindrance. Of the five units, four have entered collaboration agreements which require the payment into of royalty at rates between 2% and 3% for all imported component replaced and in one case at the flat rate of $2\frac{1}{2}$ % on the total cost of the tractor irrespective of its import content. In the majority of cases therefore the quantum of royalty increases in proportion to the increase in the indigenous content. With greater indigenous substitution of components it should be possible to eliminate this recurring charge either by making outright purchase of the specification and drawings or by terminating collaboration agreements and substituting indigenous specifications.

5.4. Installed capacity and production.—The following Table shows the present installed capacity and production of agricultural tractors since 1961 as reported by the manufacturers :—

TABLE	5
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Statemetnt showing installed capacity and production of tractors (In Nos.)

Name of the	H.P. of	Present instal- led ca-		P	roducti	ion		
Unit	Tractor licensed		1961	1962	1963	1964	1965	1966
Eicher	26.5	1200	217	162	179	114	188	172
Escorts	37 } 27 }	7000	it)	<i>(</i> -	-	445	1055	2115
Hindustan	(a) 35	1000	<u>1 H</u>	the second		812	870	800
	(b) 50	1800	التولى	57	485	543	400	1070
International	35	3500	पेव जा	यसे ।		-	225	550
TAFE	35	3500	395	1308	1124	1716	2935	3400
Та	otal .	18000	612	1470	1788	3630	5673	8107

It will be observed that the present installed capacity is 18000 tractors as against the licensed capacity of 26500 as mentioned in Table 4. The production of the industry has registered a rising trend from 612 in 1961 to 8107 tractors in 1966 but it has remained far below the installed capacity. With the exception of TAFE whose output in 1966 at 3400 tractors was near its installed capacity, the output of the other units was far below their respective installed capacities. This has been attributed by the industry mainly to the shortage of imported materials. 5.5. Future production.—The following table indicates anticipated production of agricultural tractors as reported by the producers, for the years 1967 to 1971 :—

TABLE 6

Anticipated production of agricultural tractors in India

					(In Nos.)
Unit	1967	1968	1969	1970	1971
Eicher	1200*	1200*	1200*	1200*	1200*
Escorts	3000	5000	5500	60C 0	7000
Hindustan					
(i) 50 H.P.	1600	1800	2000	2200	3000
(ii) 35 H.P.	600	1200	1400	1500	1800
International	2000	3500	3500*	3500*	35 00*
TAFE	4800	5000	5500	6000	7000
Total	. 13200	17700	19100	20400	23500

*Indicates present installed capacity as reported by producers, since no estimates of anticipated production have been furnished.

Thus, the industry expects to treble its production by 1971 relative to 1966.

6.1. Although licences had been granted to two manufacturers of tractors for making low horse power machines, neither, of them actually started production. On the contrary, they continued to produce the medium
6. Proposal for a range tractors. A proposal for a public sector project for making tractors below 20 h.p. was, however, mooted in 1963 and an agreement with Czechoslovakia for this purpose was signed in May 1964. The draft outline of the Fourth Plan contains an allotment of Rs. 10 crores for this public sector project.

6.2. An Inter-Departmental Committee has been set up to examine the existing facilities at the Heavy Engineering Corporation, Ranchi and the Mining and Allied Machinery Corporation, Durgapur with a view to possible manufacture of agricultural tractors at these units. The Committee will 3-7 T.C.Bom./68 examine the economies of the units with reference to specific level of tractor production and estimate the investment required, and also the probable price at which the tractor thus produced could be offered. The Committee is now at work.

7.1. We have been informed that there are two more projects in regard to the low h.p. tractor production. At present Indian Landsberg Implements Corporation Private

7. Production prospects for small tractors. Ltd., reported to be a subsidiary of Eicher, which is licensed to manufacture agricultural implements appears to be experimenting with a 10 h.p. diesel tractor named

Goodearth made exclusively from indigenous materials. Eight tractors of this make are currently on test in different parts of the country. The future programme will depend on the results of the trials. In any case, as we have pointed out before in the case of Eicher, the principal firm, the paid-up capital is less than Rs. 7 lakhs as against the authorised capital of Rs. 75 lakhs. Moreover, the firm has not yet built up an adequate capacity for production/assembly. In these circumstances, it is strange that the firm should have thought of establishing a subsidiary. Apart from Landsberg, Ghaziahad Engineering Co. Ltd., is reported to have received an offer of foreign collaboration for the manufacture of a Russian model 14 h.p. tractor. If licensed, it expects to attain an annual production of 10,000 such tractors in three stages. Its cost of production is expected to be between Rs. 10,000 and Rs. 11,000 with a Russian engine and about Rs. 12,000 with a Kirloskar engine.

7.2. According to the concensus of opinion expressed at the public inquiry, in the present conditions, a unit producing less than 10,000 tractors a year should be considered uneconomic. Since none of the units now in production is anywhere near the economic size, it is expected that future licensing policy would aim at making units economic and that, if and when there is a revision of this policy, no licenses for the setting up of new units would be granted for the ranges of makes now in production as well as any other ranges that may have to be manufactured.

CHAPTER III

STATE POLICIES REGARDING THE INDUSTRY

8.1. As noted earlier in paragraph 5.1 the industrial licensing policy followed by Government aimed at meeting the domestic requirements for agricultural tractors as assessed from time to time, through the crea-8. Industrial licenstion of indigenous manufacturing capacities. ing policy Further, when additional capacities were licensed during the period, January 1965 to March 1966, preference was given to the expansion of previously licensed units with a view to enabling them to achieve economies of Thus, original licensed capacities scale. of Hindustan. International and TAFE were doubled. Eicher's case for expansion was not considered favourably, in view of the unsatisfactory progress in implementation of its previously licensed scheme. The only new licensee was Escorts, one of the former importers as well as an assembler of agricultural tractors.

8.2. Agricultural tractors have recently been placed on the banned list. Applications for new makes of tractors for indigenous production, in the existing licensed ranges are also not considered.

9.1. Import control policy.—Important changes in the licensing policy governing import of agricultural tractors and
9. Import licensing policy and imports since the year 1951 are briefly reviewed below.

9.1.1. The licensing policy for the years 1951 and 1952 provided for *ad hoc* licenses for tractors other than those (i) having an h.p. less than 15, and, (ii) operating on petrol. The applicants were required to satisfy Government that (a) they were accredited agents of manufacturers of imported tractors; (b) they had adequate workshop facilities and trained engineers to service the imported tractors, and (c) the makes of tractors to be imported by them had obtained specific official Test Certificates. 9.1.2. The licensing policy for the year 1953 made a distinction between the makes of tractors which were imported earlier by established importers on the one hand and new makes of tractors on the other. The licensing policy for the former was based on a quota system and for the latter, applications were to be considered on an *ad hoc* basis and on individual merits. As one of the conditions governing quota licences for established importers, it was stipulated that spare parts should also be imported to the extent of 15 per cent of the value of import licence for tractors.

9.1.3. From 1954 a change was made in the horse power of tractors imports of which were allowed and it was stipulated that the quota licences would not be valid for tractors having draw bar h.p. of less than 10 as against the corresponding draw bar h.p. of less than 15 applicable till then.

9.1.4. An important change was introduced in the licensing policy for July to December, 1956, lifting the prohibition against imports of tractors having a draw bar h.p. below 10, whether operated by diesel or by petrol.

9.1.5. Imports of spare parts for agricultural tractors (other than items like ball bearings, tyres and tubes which were mentioned under separate numbers in the Import Trade Control Schedule), were listed in the Open General Licence upto the end of 1954. From 1955 quota licences for spare parts are being issued in favour of established importers who are, however, required to furnish details regarding their past imports.

9.1.6. In January 1957, the liberal import of tractors through normal trade channels was ended on account of stringent foreign exchange conditions. Imports of agricultural tractors and spare parts for the licensing period January to June 1968 were halved. The tightening of import policy continued for subsequent licensing periods and there was no provision for imports of agricultural tractors, for the periods, July to September, 1957 and October 1957 to March 1958. For the licensing periods, April to September 1958 and October 1958 to March 1959, there was a small provision of about Rs. 30 lakhs for import of some 250 tractors per half year. Thereafter, no quotas have been issued to established importers. 9.1.7. Besides the normal trade channels imports of tractors were made through the State Trading Corporation, largely from Russia and Czechoslovakia during the period, January to June 1957, as also during the subsequent periods.

9.1.8. The import trade control plolicy for the current licensing period, April 1967 to March 1968, states that in the case of wheeled and crawler tractors of above 50 draw bar h.p., actual users' applications will be considered by the Chief Controller of Imports and Exports, New Delhi, for import from available sources, on the recommendation of the concerned sponsoring authorities. Requests form individual tractor owners for special requirements of tractor parts of small values, if not obtainable from established importers, will be considered by the regional licensing authorities.

9.2. Imports:-

9.2.1. Data relating to imports of tractors into India since 1951 are given in the Table below :---

Year	Quantity Nos.	Value (in Rs. lakhs)
1951-55 (Annual average)	3503	325.25
1956	4468	621.05
1957	4792	456.09
1958	3733	237.60
1959	2652	143.44
1960	3843	333.11
1961	3248	178.42
1962	3033	189.73
1963	1523	92.46
1964	2999	162.06
1965	2064	174.30
1966	2884	179.11

TABLE 7

Source: (i) Monthly Statistics of the Foreign Trade of India (for data relating to the years 1951-1966);

(ii) Indusrial Development Programmes; 1961-66 published by the Planning Commission (for the earlier years). 9.2.2. The following table shows the aggregate imports of Russian and Czech tractors for the last six years from 1961 to 1966 as furnished by the importers.

TABLE 8

Consolidated imports of Russian and Czech tractors for the last six years by types of models

SI No.	Country of origin/ Type of Model imported	H.P.	Quantity (in Nos.)	Value (in Rs. lakhs)
A. Ru	ssian			
(i)	DT-14B	14	5732	215
(ii)	DT-28	28	2806	175
(iii)	Byelarus	50	2665	226
	Sub-total of (A)	Braulh	11203	616
B. <i>Cz</i>	echoslovakia	1111	6	
(i)	Zetor 25 A	25	876	59
(ii)	Zetor 3011	35	2840	236
(iii)	Zetor Super 50	50	514	52
Sub-total of (B)			4230	347
	Total (A+B)	15433	963	

Of the above types of tractors, Russian DT-14B and Zetor-3011 models have been imported throughout. Czech Zetor tractors were imported since 1964 exclusively by Hindustan, presumably because it had undertaken the manufacturing programme for this particular make in collaboration with the foreign manufacturers. The Zetor-25A and Zetor Super 50 were imported only during the year 1961 whereas the DT-28 and Nyelaurs were imported till the devaluation of the rupee in June, 1966.

Model		Selling price Ex-Bombay as fixed by the S. T. C.
4 D. I		(R _s .)
A. Russian : (i) $DT-14B$	(-) Due downloodien	
(\mathbf{I}) D1-14B	(a) Pre-devaluation(b) Post-devaluation	5,029
	(b) Post-devaluation	7 ,0 79
(ii) DT-28		9,100
(iii) Byelarus		11,262
B. Czech:	~ E3	
(i) Zetor-25A	A 动能信入	8,500
(ii) Zetor-3011	(a) Pre-devaluation	10,256
	(b) Post-devaluation	15,318
(iii) Zetor-Super 50		13,505

9.2.3. The following selling prices ex-Bombay have been fixed by the State Trading Corporation for Russian and Czech tractors :---

The prices of imported Russian tractors, both absolutely as well as relatively to the h.p. range, are much lower than the corresponding prices of indigenous tractors. The indigenous tractor producers maintain that the import prices are "dumping" prices in India and that actual costs of production of imported tractors would be much higher in the countries of their origin. They argue that cheaper imports are competing with the indigenous tractors and advocate more restrictive import policy. On the other hand, a the Ministry of Food and Agriculture has explained that imports are allowed only when the domestic supply falls short of the domestic requirements; hence the question of competition does not arise. It has further added that although indigenous production even today does not fully meet the country's requirements, imports of tractors within the horse power range of 35 to 50 have been discontinued as soon as indigenous tractors in the corresponding ranges became available in sizeable quantities. Imports of low horse power tractors, for which manufacturing capacity has not so far been created, are being licensed because there is a large demand from consumers requiring low-priced tractors. At the

public inquiry, reference was made to the accumulation of stocks of tractors with the producers during the period November 1966 to March 1967. While the producers attributed it to alleged unhealthy competition from imports of low horse power tractors, the consumers felt that the manufacturers were withholding sales in anticipation of an increase in price. We were informed that subsequent to the fixation of interim prices, the stocks have been cleared. In case increased imports are likely to have an adverse effect on the expansion of output of the tractor industry as a result consequent reduction in the availability of foreign ofa exchange for imports of raw materials and components, some safeguards would be called for. Generally, we think that full account should be taken of the domestic supply potential before entering into any further long-term or substantial commitments regarding import of agricultural tractors.

10.1. According to note (9) to item 72 of the First Schedule to the Indian Customs Tariff, the following articles are exempt from payment of import duty with effect from 5th January, 1963 :--

- (a) Tractors of draw bar horse power exceeding 50, when imported into India solely for agricultural purposes, provided that the importer by the execution of a prescribed bond, binds himself, to pay on demand, in respect of such tractors, as are not proved to the satisfaction of the Collector of Customs to have been used for agricultuaral purposes, an amount equal to the duty normally leviable on such tractors;
- (b) Parts of all tractors when imported into India solely for agricultural purposes provided that the importer executes a similar bond; and
- (c) Tractors of draw bar horse power 50 and below when imported into India, for any purposes.

10.2. Interchangeable spare parts, components and raw materials for use in manufacturing agricultural tractors are assessable to duty on merits under the appropriate item numbers of the Indian Customs Tariff. Non-interchangeable spares for agricultual tractors are allowed duty-free.

10.3. All tractors or parts which satisfy the conditions mentioned in para 10.1 above would qualify for an exemption from the whole of the customs duty; otherwise, they would be classifiable under I.C.T. item 72(a) and assessed to duty at $27\frac{1}{2}$ % plus the countervailing excise duty at 12%.

10.4. According to the provisions of the First Schedule to the Indian Customs Tariff, tractors of 50 draw bar h.p. and below when imported into India for any purpose are exempt from duty. Parts of all tractors when imported into India for agricultural purposes are similarly exempt provided that the importer executes a bond to pay on demand an amount equal to the duty leviable on the part if it is proved to the satisfaction of the Collector of Customs that the part has not been used for agricultural purposes. While this provision is reported to be uniformly operative, in the case of other parts of tractors it has been reported that the Customs duty is levied on hydraulic lift, power take off unit and three point linkage in certain cases, and the practice is not uniform. We recommend that as long as requisite conditions are satisfied, duty should not be levied on any item and the matter may not be left to the discretionary interpretation of the Customs authorities and that the bond so executed may be accepted uniformly in the absence of any evidence to the contrary.

11.1. Apart from the customs duties leviable on interchangeable components and spare parts at the discretion of the 11. Incidence of Collectors of Customs, the following taxation on purchase of farm levies enter into the price paid by the Indian farmer :

- (i) Central Sales Tax at the rate of 3%;
- (ii) State Sales Tax at around a similar rate;
- (iii) Municipal octroi duties varying from place to place; and
- (iv) Excise duty on tyres as well as other components such as fuel injection equipment, electrical equipment and other proprietory items.

We have examined the incidence of these levies on the price of a tractor. It is estimated that in a total investment of about Rs. 35,000 for purchase of tractors and allied implements, over Rs. 4,000 is represented by taxes and other duties mentioned above. Besides, the tractor owner has to pay registration fees and road taxes under the Vehicles Taxation Acts at rates varying from State to State. As against these factors obtaining in India, according to the information received from our High Commissions in Canada and the U.K. the following tax concessions and/or exemptions are available to tractors in those countries :--

- (a) Canada.—No Federal Sales Tax is payable by the purchaser if he produces end-user's certificate. Provincial tax varies from province to province. No registration tax nor any excise duty is charged by the authorities from the producer if the tractor is used for farming purposes in any of the provinces of Canada except British Columbia.
- (b) United Kingdom.—There is no sales tax on tractors in the United Kingdom. No separate charge is made for the registration of tractors; they are automatically registered when first licensed. An excise duty is charged on all the vehicles using public roads, agricultural tractors are, however, taxed at a nominal rate which is even less than one-tenth of the minimum rates leviable on other vehicles with an unladen weight of not exceeding 2 tons (for nonagricutural vehicles with an unladen weight exceeding 2 tons, the corresponding rates of duty rise progressively). Tractors not used on public road or only used for going from one plot of land in the owner's occupation to another in his own occupation and for the distances not exceeding an aggregate of more than six miles in any calendar week, are not at all liable for any excise duty. Further, farmers in the U.K. enjoy tax concessions on fuel oil also. The current tax on fuel oil used by ordinary road vehicles is at the rate of 3 sh. and 7 d. per gallon; the corresponding rate on diesel fuel used in agricultural tractors is only 2.2 d. per gallon.

As the use of tractors has to be popularised to increase agricultural production, it is desirable that the incidence of taxation should be as low as possible and that there should be uniformity of all levies throughout the country.

11.2. As regards customs duties, we are of the view, that interchangeable components and spare parts imported by licensed producers of agricultural tractors and/or by importers of agricultural tractors on beahlf of the State Trading Corporation or any other recognised agency should also be eligible to duty concession/exemption. This should be allowed subject to due safeguards to ensure that the concession is not abused.

11.3. It has also been represented to us that although the Motor Vehicles Taxation Rules in India provide certain exemptions, if the tractors and trailers are used solely for agricultural purposes, in practice varying interpretations have been given in the past by the concerned authorities and purely agricultural operations such as carrying labourers, manure, etc., have been objected to. It is also stated that the farmer has to obtain a Road Permit every five years. All these provisions of Motor Vehicles Taxation are reported to be causing considerable hardship to the farmers. It has, therefore, been suggested that a separate set of simple provisions governing agricultural tractors should be framed. We recommend that Government may give consideration to these suggestions.

CHAPTER IV

ESTIMATES OF DEMAND AND SUPPLY

12.1 The scope for the growth of the agricultural tractor industry in India can be judged from the distribution of operational land holdings. According to the findings of the national Sample Survey (17th round, 1961-62) the distribution of operational land holdings was as follows :---

TABLE 9

Area of holdings	N	umber	Area ope	rated
(Acres)	Million	%	Million acres	%
Less than 1	8.7	17.2	4.2	1.3
1-5	22.6	44.6	59.1	17.9
5-10	10.0	19.7	68.2	20.7
10-20	6.0	11.8	78.4	23.8
20-30	1.8	3.5	41.8	12.7
30-50	1.1	2.2	39.7	12.0
50 and above	0.5	1.0	38.2	11.6
Total	50.7	100.0	329.6	100.0

Distribution of operational land holdings by size

The margin of error in these estimates is not yet known. But from the figures it would be observed that there are 1.6 million holdings of size above 30 acres, with an operated area of about 78 million acres for which high and medium types of tractors in the conventional ranges would be ideal. Assuming that at least one tractor of 35 h.p. or above would be required for one such farm, 1.6 million tractors are needed to cover all farms above 30 acres. Alternatively, if it is assumed that one tractor of 35 h.p. and above, either individually or jointly owned, is required to look after all agricultual operations of an area of 100 acres, 780 thousand tractors would be needed to cover farms of 30 acres and above. To this will have to be added requirements for replacement of old and worn-out machines. British experience puts a tractor's life at rather less than 11 years. However, in India, poorer farmers may probably keep their tractors for several years more. If it is assumed that, on an average, a farm tractor in India will be used for some 15 to 20 years before it is discarded, annual replacements, after an advanced stage of mechanised agriculture, would absorb a minimum of 40,000 to 50,000 tractors.

12.2. The demand forecast for the last five years framed by the Planning Commission and the corresponding supply position are shown in the table below :

TABLE 10

Demand for and supply of agricultural tractors during the years 1962-66 (In Nos.)

	-	CHLAND MALERIN	VODD V	
Year	Demand forecast	Domestic production	Imports	Total domestic supply (3 + 4)
1	2	3	4	5
1962	8,000	1,470	3,033	4,503
1963	8,500	1,788	1,523	3,311
1964	9,000	3,630	2,999	6,629
1965	9,500	5,673	2,064	7,737
1 95 6	10,000	8,107	2,884	10,991

It will be noticed that the domestic availability, which was lagging behind the requirements up to the year 1965, more than caught up with the latter in 1966.

12.3. The Fourth Plan estimates of tractor demand are as under :

TABLE	11	
-		-

Year						Nos.
1966-67	•	•		•		20,000
1967-68						25,000
1968-69						30,000
1969-70			•			35,000
1970-71			•			40,000

Estimates of tractor demand

It will be observed that the estimates envisage a substantial increase in the domestic requirements of agricultural tractors. In fact, during the very first year, there is a big jump and against the previous year's demand estimate of 10,000 tractors and the corresponding supply of about 11,000 tractors, the requirements for the year 1966-67 are placed at almost double the level. The level of 20,000 is to be further doubled over the next four years.

12.4. The tractor manufacturers are of the view that the estimates of the Fourth Plan are on the high side. The estimates furnished by three units are given in the following table :

TABLE J	2

Comparative statement showing estimates of demand

	961		(In Numbers)
Year	Escorts	International	TAFE
1967	16,000	14,000	22,500
1968	20,000	18,000	25,000
1969	25,000	22,000	27,500
1970	30,000	29,000	30,000
1971	30,000	Not indicated	35,000

It will be observed from the above table that there are widening and significant differences from year to year between the estimates made by the tractor industry and those adopted for the Plan. The break-up of the Plan estimates of demand by h.p. ranges is given below :

TABLE 13

Distribution of estimated requirements of tractors by h.p. ranges

		(In Nos.)
1955-66	1956-67	1970-71
3,000	6,000	12,000
5,500	12,000	23,000
1,500	2,000	5,000
10,000	20,000	40,000
	3,000 5,500 1,500	3,000 6,000 5,500 12,000 1,500 2,000

We have examined this divergence and have come to the conclusion that it is attributable principally to the small tractor within the horse power range of 12 to 18 h.p. Whereas the official estimates of the requirements for 12 to 18 h.p. are recknoned at 12,000 tractors for the year 1970-71, the industry maintains that there is no significant demand for such tractors. The estimated requirements for tractors within the range of 20 to 50 h.p. are almost the same according to both.

12.5. The arguments put forward by the tractor industry against recognising any significant demand potential for the low horse power tractor are as follows :—

- (i) It was the experience of established importers in the past that tractors of lower horse power were not much in demand. The general tendency then was for buying a 30 to 35 h.p. tractor in preference to a smaller one.
- (ii) Considering the agronomy of the country and the seasons for ploughing or the pattern of soil particularly, a 35 h.p. tractor is more suited than a 20 h.p. one.
- (iii) The popularity of imported low h.p. tractor which is now in great demand in the country is not because of its low horse power but because of its low price. Since it may not be possible to produce an indigenous low horse power tractor at a substantially lower cost, the same even if manufactured will not sell. In this connection, the industry claimed during the public inquiry that the cost advantage of a low horse power tractor would be hardly Rs. 1,000 to Rs. 1,500 and that no significant cost reductions were likely in the foreseeable future even through economics of scale.

12.6. As against the above arguments, the reasoning in favour of low horse power tractor was as under :

(i) The present demand trend seems to be in favour of low horse power tractor, as is evident from the long waiting list of consumers both with the official agencies and with the importers;

- (ii) The tractor is used not only for ploughing but also for various other agricultural operations such as manuring, sowing, haulage etc. Ploughing is the only operation that requires a higher horse power tractor; for all the other operations a smaller type of tractor would be quite suitable. Further, the lower sizes of operational land holdings in India (which far out weigh the larger sizes) as well as the wet soils would require a lower horse power tractor and these needs should not be overlooked; and
- (iii) It is not correct to say that the cost differential between a 35 h.p. tractor and a 20 h.p. tractor is merely Rs. 1,000 to Rs. 1,500. On the basis of prices prevailing in foreign countries, it could be said that the cost differential would be much larger.

12.7. Besides, the general discussions at the public inquiry and the written evidence received in the replies to our questionnaires, certain technical studies on the scope of mechanisation in India were also made available to us. The Indian Agricultural Research Institute has made an interesting analysis of the extent of power build-up required for Indian agriculture during the Fourth Plan period. This study highlights the fact that out of the total effective horse power inputs available for agricultural operation in India today. horse power provided by tractors constitutes a mere 2.3 per cent. It points out that if the Fourth Plan targets relating to agricultural development are to be achieved, the effective power build-up will have to be stepped up from 42.9 million h.p. units in 1965-66 to 111.0 million in 1970-71. After setting out the limitations of the available human and bullock power and other traditional sources of energy, the study concludes that tractors and power tillers will have to provide additional horse power inputs of about 47.5 million in 1970-71. Commensurate with this power build-up and on the basis of the scientific findings relating to suitability of different types of tractors, the I.A.R.I. indicates the following requirements for agricultural wheeled type tractors during the Fourth Plan period in India.

TABLE 14

Tractor	requirements for	achieving	Forth Plan	targets as
	estima	ted by I.A	.R.I.	-

Horse power range of tractor unit	Numbers required for the Forth Plan period (figures in thousands)
(i) 610	500
(ii) 12-16	500
(iii) 22-24	500
(iv) 28-36	200
(v) 4450	50

12.8. We have examined the various estimates of domestic requirements as well as the arguments advanced by different interests. In the light of the I.A.R.I.'s technical opinion and the demand perspective for agricultural tractors in India mentioned, the Fourth Plan target envisaging an annual demand level of 40,000 tractors for the year 1970-71 appears to be quite modest. We have, therefore, adopted the Fourth Plan targets as given in paragraph 12.3.

12.9. On the basis of the estimates of future production given in paragraph 5.5, the shortfall in the domestic availability of agricultural tractors during the Fourth Plan period, would be as follows:

TABLE 15

Estimated shortfalls in domestic availability of the agricultural tractors during the Fourth Plan period

Year	Estimated requirements for tractors within the range of 20-50 H-P.	Anticipated domestic production of agricul ural tractors wi:hin the range of 20-50 H. P.		Additional requirements for tractors within the ranges of 12-18 H-P.	Total shortfallin s domestic availability of agricul- tural tractors (Col. 4+5)
1	2	3	4	5	6
1957	14,000	13,200	800	6,000	6,8(0
1958	17,500	17,700	()200	7,500	7,300
1959	21,000	19,100	1,900	9,000	10,000
197 0	24,500	20,400	4,100	10,500	14,600
1971	28,000	23,500	4,100	12,000	16,500

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The gaps in domestic requirements indicated by the figures given in column 6 above, will have to be filled either through installation of additional capacities or imports from abroad.



CHAPTER V

SELLING AND DISTRIBUTION SYSTEM

13.1. The selling systems of, and the after-sales services provided by the five producers, as reported by them are briefly described in the following paragraphs.

13.2. Eicher.—Sales of tractors are effected mainly through dealers and the delivery is mostly by road. Aftersales service provided comprises : (a) free installation at the customers' farm; (b) free training for at least one week; and (c) four free services within a period of six months from the date of the delivery. The tractor is guaranteed for six months against any manufacturing defects.

13.3. Escorts.—Sales are made through a net-work of dealers' organisations. Prices are fixed F.O.R. nearest Broad-gauge Railhead. Dealers get tractors either by rail or by road, according to their convenience. Both the producer and the dealers maintain demonstration equipment and a demonstration is arranged for sales promotion at the request of the potential buyer. Tractors carry a 6-months' warranty and are provided six free services within eight months from the date of purchase. Services are rendered through the dealers at the farmer's fields. Even after the warranty period, dealers are required to keep in touch with the tractor owners with a view to ensuring proper maintenance of the tractors supplied.

13.4. Hindustan.—Tractors are delivered on an exfactory basis; and according to the choice of the purchaser, tractors are despatched by train, truck or by road. Tractors are covered by a warranty period of six months in the case of farmers and other general public; in the case of sales to Government projects, the warranty period is extended to one year. After-sales service to Government Departments is provided by the producer directly; to others, it is provided through dealers.

13.5. International.-Vol as Limited of Bombay are the sole distributors of International tractors. Voltas provides distribution facilities through a net-work of branches and dealer points. The producer maintains sales and service supervise field operations and also to investigate staff to complaints. In-service training to the distributors' staff is also provided by the producer. After-sales service facilities are rendered by Voltas and they include : (a) free pre-delivery inspection; (b) four days' installation services; and (c) four one-day inspection visits. Under the four-day free installation service, a senior mechanic stays on the farm for four days to train the client's staff in the correct maintenance and operation of the tractor. Four one-day inspection visits are ariange within the warranty period and during these visits, free servicing of tractors is carried out. Training centres are conducted for the benefit of customers and retaining outpost personnel to ensure efficient after-sales service to the customer. In addition, the Voltas claims that periodic inspections by senior service personnel are conducted to build up good producer-customer relationship and to provide for product Voltas publishes a journal "Mechanised improvement. Farming" which includes, among other things, also a feature entitled 'Kisan Samachar' reviewing events of interest to farmers.

13.6. TAFE.—Sales are arranged through a net-work of dealer organisations covering the entire country. Tractors are delivered free on rail or free by road at the main dealer's destination. These tractors are in turn delivered and installed free of charge on the customer's farm or at the site of operation. Besides free installation, the customer is provided free of charge training for normal operation and maintenance while installing the tractor. Every M.F. tractor sold is accompanied by an "Installation Certificate". This Certificate clearly defines the duties of the engineer sent to instal it so that the buyer knows exactly what services he is entitled to. This system incidentally makes available to the company information regarding the exact location of every tractor sold and installed. In addition to this Certificate, a Fice Service Voucher Book is mailed directly to the buyer of every tractor. This voucher book entitles the buyer to four free services in the first six months. The tractors are covered by a 6-month warranty. TAFE runs a Product Training Centre, near Madras, where representatives of the Company's dealers from all over India, are extensively instructed in tractor maintenance and field operations. The company also maintains a 200-acre farm around this Centre, where the farmers have opportunities to comprehend by means of practical demonstrations, the advantages accruing from mechanisation of agriculture. The company also brings out a Quarterly Bulletin entitled "Farm Progress" which is intended to keep the farmer informed of latest development in farming technology.

13.7. All the five producers have claimed that their distribution arrangements as well as after-sales services are working satisfactorily, but many consumers have offered adverse comments and desired improvements in the aftersales service and repair facilities.

13.8. Availability.—Short supply or delay in deliveries of tractors and spare parts has been generally reported by the dealers. One consumer's association has stated that the delivery period in the case of one of the popular makes is from six months to one year. Delay in delivery has also been reported by other consumers, including the Rehabilitation Reclamation Organisation which had to wait for long for supplies of tractors against Rate Contract. Further, consumers have alleged malpractices indulged in by some of the unscrupulous dealers of diverting genuine spare parts into unauthorised channels. This has not only led to consumers paying exorbitant prices but also to their being vicitimised by sellers of spurious parts which they are compelled to buy from the open market since the genuine parts are rarely available with the dealers. While the remedy for this is increased production, the producers should be able to relieve the situation, during the period of shortages, by obtaining periodical reports from their dealers regarding the supply position, by properly regulating the flow of spare parts and by effective control on their agents and dealers. We, therefore, recommend that appropriate action in this regard should be taken by the tractor manufacturers.

13.9. Workshop facilities .--- We have not received any serious complaints against the quality of the services provided by the existing workshops but most of the consumers have commented on the inadequacy of the number of such workshops. Vast rural tracts have now to be served by a distant workshop and thus, besides the handicap of long haulages of tractors needing repairs, timely repairs are not available. During the busy agricultural season, one is apt to find fleets of tractors in a queue awaiting repairs and not being available during the right season thereby causing considerable hardship to their owner cultivators. We are informed that there is a proposal to establish a network of worksnop facilities for tractors in selected areas where the tractor population is concentrated. This is an urgen'ly needed facility and he proposal should be implemented without any further delay. In addition, it is also necessary that the producers should extend their distribution network and workshop facilities more widely than at present.

13.10. Warranty.-We have received complaints couched in severe terms from consumers on the terms of warranty and their implementation. It has been reported that in certain cases the purchaser has to sign all the after-sales service vouchers at the time of the delivery of the machine. It would be desirable that the producers should ensure that their dealers and other accredited suppliers do not indulge in any malpractices in this respect. TAFE's practice of mailing the free service voucher directly to the buyer of every tractor is commendable. It is necessary that producers of agricultural tractors invariably main ain complete information regarding the exact location of every tractor sold and installed, with a view to verifying from the consumer directly that he is satisfied with the after-sales service and repair facilities. The emphasis placed by the producers on servicing the tractors at the field of operation is also noteworthy. We consider that there is scope for improvement in the present selling and distribution system. It would be desirable if a schedule of repair and after-sales service is provided free of charge by the producer in the form of a "free service voucher" and given directly to the customer as cone now by TAFE. The producers must also ensure that adequate supplies of spare parts are available with the dealer.

14.1. We have received views on the quality of indigenous tractors from the Tractor Training and Testing Budni, the Central Mechanical Station. 14. Ouality Engineering and Research Institute. Durgapur, the Indian Agricultural Research Institute, New Delhi, the concerned Government departments, dealers and consumers. The general view was that serious complaints regarding manufacturing or mechanical defects have so far been few and far between. It is noteworthy that the D.G.T.D. and the Ministry of Food & Agriculture have not received any complaints regarding the quality of indigenous tractors. We trust the producers will continue to maintain the standards of quality. From the viewpoint of reducing costs, standardisation of ancillary items is of utmost importance; it would make production of standardised items possible on an economic scale. We understand that scope exists for such standardisation in ancillaries like wheels, steering wheels, front axle arrangements, tie rods and thrust rods, three-point linkage, etc. The standardisation could be brought about without any major changes in the mating components and would lead to a significant reduction in costs. We are, therefore, of the view that a technical study should be undertaken of the engineering specifications of all the present makes of indigenous tractors with a view to identifying such items which could immediately be taken up for standrisation particularly in the context of the scope for import substitution.

15.1. The following Table shows the sales and opening stocks of agricultural tractors for each year from 1961.

The figures reveal that the sales have registered a progressive rise, TAFE accounting for the largest share of 42 per cent in

1966. The position of stocks has varied from year to year. While the consumers have complained of delays in obtaining tractors from the manufacturers, the industry had a large stock of 601 tractors as at the beginning of the current year. This has been attributed by the manufacturers to difficulties in obtaining adequate supplies of rubber tyr. s.

SI.	Item	Eicher	Escorts	ΗÌ	Hindustan	International	TAFE	Total for all
ċ			3/ HF.	50 HP.	9. 35 HP.	C/7-Q-1U CC	CCUI	
	2	3	4	S	9	- Aller	ø	6
•	1. Annual Sales		I	िद्धा सन्दर्भ			394	531
	1962	190	I	<u>त</u>			1275	1455
	1963	208	1	356	10		1099	1663
	1964	138	340	582	2 585 1006	3.75	1745 7047	3390 6008
	1966	154	2026	108	2	400	3221	7683
	Opening stock	S						
	1961	82	l	ļ	l	1	-	28
	1962		I]	ι	1	- :	6
	1963		Ì	38	ł	I	F	16
	1964		l	167		I	60	177
	1965		108	128	177	I	0.5	1.54
	1966		601	57	-	ļ		
	1967		198	2	4	150	197	60)

Sales and opening stocks of agricutural tractor

TABLE 16

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CHAPTER VI

REQUIREMENTS OF BASIC EQUIPMENT AND MATERIALS

16.1. It would be convenient to assess the present position in regard to the basic meterials required by the 16. Present supply tractor industry under the following three position broad gourps :

- (i) Capital goods and equipment;
- (ii) Raw materials and semi-processed materials; and
- (iii) Finished and semi-finished components, tools and other consumable stores.

16.2. Capital goods and equipment.—Most of the capital goods required by the tractor industry are being imported at present but the position in this respect may ease in course of time since production of specialised machine tools required by the tractor industry is now being taken up in the country. Foreign currency credits extended by financial institutions such as the Industrial Credit & Investment Corporation of India Ltd. and the Industrial Finance Corporation of India are being availed of, although primary reliance continues to be placed on the assistance of the foreign collaborators as part of their agreements with the indigenous manufacturers. Generally, the supply of mechine tools takes 12 to 18 months from the date of placement of orders.

16.3. Raw materials and semi-processed materials etc.— The principal raw materials and semi-processed materials required by the tractor industry are :—

- (i) Pig iron (Foundry No. 1)
- (ii) iron and steel :
- (a) material for forgings,
- (b) material for castings,
- (c) Sheet metal,

- (d) seamless steel tubes,
- (e) mild steel sections plates and sheets, and
- (f) spring steel sheets and wires etc.,
- (iii) small quantities of brass rods and copper sheets; and
- (iv) Paints;

Of the above, a major portion of steel required is now being imported. Import assistance is given to the manufacturers for import from various countries depending upon the availability of foreign exchange and credits. By and large, requirements of the tractor industry are being adequately licensed. With regard to indigenous steel, no difficulty appears to have been experienced in procurement but the manufacture of special steel and tool and alloy steels within the country and their adequate availability would help in making the tractor industry self-sufficient. With the commissioning of the Alloy Steel Plant at Durgapur, the steel materials required by the tractor industry should be available indigenously.

16.4. Finished and semi-finished components, tools and other consumable stores.-The extent of import content in the industry's requirements relating to semi-finished and finished components, tools and other consumable stores. depends on the terms and conditions governing the foreign collaboration agreements. In other words import requirements of the producers in this respect have no direct bearing on the indigenous production capacities, since the Indian manufacturers are firmly committed to specific manufacturing programmes requiring import of certain specified packs. It may, therefore, happen that producer 'A' may be importing several items which producer 'B' may be manufacturing indigenously in his own plant or which producer "C" may be obtaining from indigenous ancillary industries. This cannot be entirely avoided, since it involves the question of propriespecifications. Imports of semi-finished and finished tory components as also of other spare parts on package basis may therefore have to be continued in accordance with the approved manufacturing programmes.

16.5. Shortage of rubber tyres.—It would be relevant in this context to refer to the problem of supply of tyres to the tractor factories. The common complaint has been a large number of tractors could not be fully assembled and therefore orders could not be fulfilled for want of tyres. This question is discussed further in paragraph 23.4.

16.6. Progress of import substitution.—The phased manufacturing programmes of all the five producers were examined in relation to their past performance as reported by the D.G.T.D. and the anticipated progress of deletions is shown in Table 17. Had the Indian tractor manufacturers been able to adhere to the original phasing of manufacturing programme, the indigenous content would have been of a high order. The progress in this regard has been rather slow, and but for the compulsory restriction on the availability of foreign exchange, it is doubtful if even the present low indigenous content would have been arrived at. We recommed that adherance to the programme of deletion should be more strictly enforced.



TINT	Achievement	Likely	Anticipated Prog and future p	Anticipated Progress on the basis of past achievements and future projections of approved programmes	ast achievements ed programmes
	upto 1956-67	achievement in 1967-68	1968-69	1969-70	1970-71
Eicher	55	70	84	06	06
Escorts 27W	20	Ч а 1	30	37	45
37	54		OL N	80	06
Hindustan'35H.P.	P. 50	65	75	Ού	3 6
50H.P.	P. 62	85	06	95	95
International	60	64	76.5	76-5	76-5
TAFE (U.K. Packs)	68	81	88	06	90

TABLE 17

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CHAPTER VII

COSTS OF PRODUCTION AND FAIR PRICES

17.1. The actual costs of production of (1) Tractors & Farm Equipment Ltd., (2) International Tractor Co. of India Ltd., (3) Hindustan Tractors Ltd., (4) Escorts Ltd., and (5) Eicher Tractors India Ltd., for the 17. Costs of periods viz., year ending December 1966, production ten months ending Januaury 1967, year ending March 1967, year ending December 1966, and year ending June 1966 respectively were examined. The actual costs were with the representatives of the respective units. discussed Having carefully considered the various points raised by them as also the witten memoranda submitted in this behalf we have suitably adjusted actual cost as was necessary. The reports of the Cost Accounts Officers, together with the amendments made after the discussions being confidential. are being sent to the Government as separate enclosures.

17.2. Based on the actual costs we have attempted to forecast the future fair costs for the various categories of tractors manufactured by the different units. In attempting to establish the fair costs we have been confronted with certain difficulties.

17.3. It was found that fresh components are being deleted almost in each fresh consignment of the CKD packs. The deleted components are being repalced either by finished components purchased indigenously or by manufacture in the respective units. In most cases it was found difficult to estimate the cost of manufacture of items anticipated to be deleted in future, where such items are to be manufactured by the respective units. In other cases also where it is proposed to replace the deleted components by indigenous purchased components it is not possible to forecast the prices payable for such components in case firm orders have not yet been placed. Again in certain cases the units are as yet undecided as to which item of the future deletion they should take up for manufacture and which item should be farmed out to other ancillary units. In such circumstances, realistic future estimates would be limited to tractors with such CKD packs only, for which the relevant data, both for the components to be manufactured as also for the indigenous bought out items, were available. Broadly speaking such estimates would relate only to the tractors manufactured out of CKD packs that were already in hand at the time of the visit of the Cost Accounts Officers to the respective units. Only in one case reliable data were available for the manufacture of components expected to be deleted in a subsequent year and it has been possible to estimate reasonable cost for two years.

17.4. It is felt, however, that if on the above basis we were to fix the fair prices for only the packs for which data are available, then the priods for which such prices could be fixed would be too short. By the time our report might be considered by the Government and action taken a large proportion of such tractors would already have been sold out and it might necessitate a fresh inquiry very soon. For these reasons we have attempted to establish a correlation between the c.i.f. cost of components deleted in recent times with the corresponding costs of replacement, either by manufacture by the respective unit or by purchase. Providing for an escalation on the basis of such correlation, we have decided to estimate fair costs and to recommend fair prices for at least two years ending 31st March 1969.

17.5. We have treated selling expenses, distributors' margin, warranty expences, railway freight, packing and forwarding separately and estimated the fair costs excluding these elements. Factors taken into consideration in making forecasts are briefly discussed below :

17.6. The levels of production in the actual period were 3401 Nos. for TAFE, 757 Nos. for International (ten months), 1070 Nos. of 50 h. p. and 800 Nos. of 35 h. p. for Hindustan, 1314 Nos. of 37 h.p. and 801 of 27 h.p. for Escorts and 172 Nos. for Eicher. Taking into consideration the actual production programme of the various units, we have estimated the volume of production for the two years 1967-68 and 1968-69 at the following figures :---

	Name of the company	Н. Р.	1967-68 Nun	1968-69 nbers
1.	TAFE	35	4803	5000
2.	International	35	2500	3000
		-50	1800	2500
3.	Hindustan	35	800	1200
4.	Escorts	$37 \\ 27 \\ \}$	3000	4000
5.	Eicher	27	1200	1200

During the course of discussions with us some of the units felt that the volumes of production originally estimated by them may not be achieved for the following reasons:---

(a) Shortage of supply of the standard tyres and tubes,

(b) Import of complete tractors through State Trading Corporation at considerably cheaper prices, and

(c) Genral conditions of recession in the country. Production in a sector so vital in the context of the imperative need to increase agricultural output cannot be allowed to fall on such a rather tenuous ground of shortage of tyres and tubes. We have also reliable information, that in some cases it is possible to replace the standard types of tyres and tubes by other non-standard ones. We, therefore recommend that Government should take effective steps so that the required quantities of tyres and tubes are made available to the tractor industry. As regards the import of completed tractors by S.T.C., It only high-lights the unfulfilled demand for tractors. On the available evidence we do not find any slackness of demand for tractors and at least for this particular market. any apprehension of a possible recession is not justified. On the other hand, higher prices fixed on the basis of a lower production volume may, in itself, be the cause of a tapering off of the demand. Having considered all aspects of the case we have come to the conclusion that the volumes of production assumed by us for the different producers are reasonable.

17.7. In arriving at the estimated fair costs we have taken into account the latest rates of CKD packs, rawmaterials and bought out components. Wages and salaries have been suitably adjusted to take into account the normal annual increments as also any fresh complement of personnel required. All other expenses have also been similarly adjusted, in accordance with the latest trends and also the increase in volume of production assumed. In estimating the element of depreciation we have allowed for the known additions to fixed assets subsequent to the costed period. In appropriate cases anticipated additions for fresh deletion have also been added. We have also taken into account the effect of devaluation on the outstanding foreign loans as on 5th June 1966 which were utilised for acquiring plant and machinery.

17.8. In view of the recommendation made by us in paragraph 10.4, we have not included the import duty on hydraulic lift, power take off unit and three point linkage in the costs.

17.9. Depreciation has been calculated at normal income-tax rates together with shift allowances where admissible. In the cases of International and Hindustan who are currently manufacturing engine components, the inverstment for dies, jigs and fixtures is considerable. In these cases amounts charged against consumption of these items have been calculated on the basis of number of components that can be produced by each category of dies and jigs as agreed to by the Cost Sub-Committee of the Development council for Automobiles, Automobile Ancillaries and Transport Vehicle Industries, 1963. Royalty has been calculated in terms of the agreements with the collaborators in each case.

17.10. Tafe .—In estimating the fair costs for this unit we have taken as the base, 4803 packs which the company expects to receive from its collaborators in U.K. and Yugoslavia, in the year 1967. These packs are in various stages of deletions. Unlike other units, this unit produces tractors simultaneoulsy out of different packs with different deletions. These packs would be consumed for the production of the year 1967-68 and we have assumed the same pattern of deletions and packs for the subsequent year. The fair cost exhibited in Table 18 is a weighted average for all the packs. For the purpose of ascertaining the c.i.f. value of fresh deletions if any, in the packs received after the number of packs already considered, we have shown in the table below the c.i.f. values of these packs :

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Country of origin	Description of pack	No. of packs	C. i. f. value
			Rs.
Yugoslavia	Cat. III/6	103	9012
Do.	Cat. III/7	1500	7873
Do.	Cat. II/6	510	6003
Do.	Cat. II/7	1140	4 680
U. K.	~ Engla	1550	3938
otal/Weighted Average	4803	5671	

The CKD packs of this unit are exclusive of the Engine which is replaced by engines supplied by Simpsons.

17.11. International.—For estimating the fair costs of this units we have taken as the base the following weighted average of packs at different stages of deletions for the years 1967-68 and 1968-69.

Indent No. सन्त्रमेव न	an No. of packs	C. i. f value
1967-68		Rs.
1260	304	3659
1267	800	3578
1276	1396	3501
Total/Weighted Average	2500	3545
1968-69		
Pack at 1276 (Less Hydraulic lift)	1500	3300
Do. & gears	1500	1872
Total/Weighted Average	3000	2586
Total for 1967-68, 1968-69 and Weighted Average	5500	3022

We do not consider that customs duties should be levied and have therefore excluded them from the fair ex-works price. No indents have as yet been placed for the packs shown against production programme of 1968-69; c. i. f. values for these packs have been estimated after adjusting for the anticipated deletions. In this case the different packs mentioned above are not being handled simultaneously; when the packs for a certain deletion stage are exhausted or nearly exhausted, the packs of the next deletion stage are taken up. The pack values for the year 1968-69 are based on the deletions that the company now expects to make. Besides packs the company also import quite a few components.

The c.i.f. value of such components would amount to Rs. 1254 in 1967-68 and Rs. 1285 in 1968-69 with an average of Rs. 1,271. It may be mentioned the tractors supplied by the unit are without the draw-bar. This unit makes its own engines out of imported and indigenous raw materials, semi-finished and finished components.

17.12. Hindustan.-For 50 h. p. tractors, the estimates are based on the c. i. f. value of 1340 packs, being the balance left out of 1.520 packs already ordered for during the year ended March 1967. C. i. f. value of each pack is Rs. 7323. For the 35 h. p. tractors the c.i. f. value is taken for 343 packs, against the balance of indents already placed during the previous year. The c. i. f. value per pack is Rs. 8733. In this case actully the c. i. f. value of the C. K. D. pack does not represent the real state of deletion. The practice of this company has been so far, on the one hand to delete certain components from the C.K.D. packs, and at the same time to import a proportion of these deleted components separately from their collaborators outside the pack. Thus, out of the original 1,520 packs, for 600 packs components with c. i. f. value of Rs. 633 have been imported outside the pack. We are constrained to say that this is wholly against the spirit of import substitution. It would be proper for the company to realise that import substitution as a concept should be related to the total quantity of imports made and not merely to the deletions made from the c. k. d. pack which are replaced not by domestic production but by importing outside the pack. For the estimates of costs for the 50 h.p. tractors for 1967-68 and 1968-69, we have taken, besides the c. i. f. value

of the pack mentioned above, Rs. 633 for imported components outside the C. K. D. packs for 420 packs (the balance after consumption in 1966-67) and Rs. 183 for the balance of the packs. In adjusting for any variations in the c. i. f. cost of fresh deletions in this case account should be taken not only of the apparent deletions in the C.K.D. pack itself but also of commnents indented outside C.K.D. pack as a original equipment. For 35 h. p. tractors, the company has actually placed certain fresh indents but the management is not yet decided on the manner fresh deletions are to be replaced, i. e., in which the whether by bought out components or by manufacture. The company stated that, after the present batch of 1.340 packs of 50 h. p. are completed the next batch will attract a price increase of 10%. When these packs are actually utilised for production of tractors, necessary adjustments may be made on the basis of escalation clauses provided in paragraph 23. For 50 h. p. the Engine is made by the company out of finished/semifinished components and raw materials both indigenous and foreign. For the 35 h. p. tractors the engine is included in the C. K. D. pack.

17.13. Escorts.—Some of the C. K. D. packs of this unit are inclusive of the original engine which is of 27 h. p. in other cases the engine is replaced by a 37 h. p. engine made by Kirloskar Engines Ltd., Excepting for this difference the packs are identical. The c. i. f. cost of the C. K. D. packs excluding the engine is Rs. 4,707, and including the engine (called P.K.D. packs) is Rs. 8,263. Unlike other units, this unit is engaged in many other activities including manufacture of motor cycles, automobile ancillaries, etc. Though the plants are located in different shops, the accounts have not been maintaned separately for the tractor activity. It is understood that steps are now being taken to maintain separate accounts for the manufacture and sale of tractors.

17.14. Eicher.—The estimated cost for this unit is based on the c. i. f. value of an indent for 200 packs only. The type of packs consumed during costed period was with less deletions. The company is not in a position to indicate details of any fresh deletions they might make in future, and the corresponding replacement costs. The c. i. f. value is Rs. 6,070. The tractors supplied by this company are without batteries and plough lights. The engine which is of 27 h. p. is included in the C. K. D. pack.

17.15. Tables 18 to 24 at the end of this chapter show the estimated costs for the years 1967-68 and 1968-69 and the weighted average for the two years.

17.16. Selling Expenses .- Method adopted for selling the tractors varies widely from unit. to unit. In the case of TAFE the company maintain a regular farm for training the personnel of their agents and distributors. This apart, they also have usual methods of sales promotion such as advertising, distribution of literature etc. The tractors are sold at uniform F.O. R. destination price, the expenses of transportation from the dealer's point to the customer being borne by the dealer. The commission payable to the distributors has now been fixed at Rs. 1,542 per tractor, which is intended to cover besides profit to the dealer the expenses of installation and demonstration at the customer's farm and also free after-sales services 4 times during the period of Warranty of 6 months. The total selling excluding dealer's commission during the costed expenses period amounted to Rs. 309 per tractor after taking credit for the farm receipts. In the case of International, Voltas Ltd. are the sole distributors who purchase tractors from International and the difference between the retail selling price of Voltas and price charged to them by International represents the total of selling expenses, commission to the dealers and freight to destination. Before price control was enforced, the difference amounted to Rs. 2,993. The tractors are sold at the same f. o. r. destination price for all locations in India. Voltas arrange free delivery at the customer's farm and also installation and demonstration at the farm and four free service during the period of Warranty of 6 months. In the case of Hindustan, the tractors are sold at a uniform ex-factory price. the railway freight and forwarding charges being charged separately. The commission to the dealers is fixed at 10 per cent of the retail ex-factory selling price. Here also the Warranty period is 6 months and in the case of non-Government customers the after sales services are provided by the dealers. For Government departments the Warranty is extended to one year and free service is given by the company direct. Other selling

^expenses amounted to Rs. 123 per tractor of 50 h. p. and Rs. 98 per tractor of 35 h. p. during the costed period. Escorts maintain a training school. Demonstrations are arranged for prospective buyers either by the company or by its dealers. The price charged is f. o. r. nearest broad-guage railway station. The company produces and sells also other products, e. g., motor cycles. During the period of costing the accounts were not kept separate and the total selling expense if pro-rated on the the basis of turnover of the different products, the share for the tractors works out to Rs. 443 per unit sold. But the company maintained that most of these expenses were incurred specifically for tractors and on that basis the selling expenses per tractor would amount to Rs. 562. The commission paid to the dealer is a fixed amount of Rs. 1,500 per tractor of 37 h. p. and Rs. 1,350 per tractor of 27 h. p. Though the warranty is for 6 months, it is stated six free services are rendered within eight months of date of purchase. Eicher sells its products on an ex-factory basis. The after-sales services comprise free installation at the customers farm, free training for at least one week and 4 free services during the period of 6 months from the date of delivery. The warranty also extends to the same period of 6 months. The dealer's commission is fixed at 10 per cent of the original selling price. Subsequent increases in price effected by the company from time to time, are termed as surcharges and no commission is paid on them. But it is now proposed to increase the dealer's commission to a rate of 10 per cent on the current selling price. Selling expenses during the costed period amounted to Rs. 94 and the dealer's commission to Rs. 1.517.

17.17. It will be seen from the above that during the costed period selling expenses per tractor varied from Rs. 94 to Rs. 562. A considerable proportion of the selling expenses are of a fixed nature such as salaries, establishment, etc. Higher total expenses can only be justified by corresponding increase in the total sales so that the incidence per tractor is reduced. As it is, it will be seen for example, TAFE with a total expense of Rs. 9.96 lakhs could secure a sale of 3,222 Nos. while Escorts with a total outlay of Rs. 11.31 lakhs could secure a sale of 2013 Nos. only No doubt higher commission to the dealer may also act as a spur to making extra efforts. Therefore, to judge the comparative position both selling expenses and dealers commission should be taken together as shown in the following table. The figures for International have been adjusted for the element of freight and forwarding charges:

	Ho. Pov		Selling Expenses	Dealers' Commission	Total
			Rs.	Rs.	Rs.
(i) TAFE	E 35	5	309	1542	1851
ii) Inter-	national 35	i	••	2558	2558
iii) Hind	ustan 50)	123	1885	2008
da	o 35	i	98	1335	1433
iv) Esco	rts 37		562	1500	2062
do	. 27		562	1350	1912
(v) Eiche	r 27	000	94	1517	1611

In the above tabulation the conditions existing before devaluation and tentative price fixation by Government have been taken into account. Taking the 35/37 h. p. units it will be seen that the total amount varies from Rs. 1,433 to Rs. 2,558. of the two 27 h.p. tractors the expense in one case was Rs. 1,611 and in the other case it amounted to Rs. 1912, for the only 50 h.p. unit the expense was Rs. 2,008.

17.18. For purposes of price fixation we do not consider it possible to allow such disparate selling expenses for the different producers. All the units have furnished estimates of future, selling expenses which generally appeared to be too high. In making all these claims one fact is overlooked, that though under free economy sometimes specially heavy expenses are incurred for popularising any particular brand of product, the intention is not to absorb the expenses in the year or years when such expenses are incurred, but to reap the benefit from the increase in sales and output in the future. Further, where the dealers' commission is reckoned as a percentage of the selling prices, the commission will increase along with the prices. As one of the main reasons of the recent price increases is stated to be the devaluation of the Rupee, we consider that any concomitant rise in the dealer's commission is entirely unjustified. As the tractors are compulsorily to be fitted with certain standard equipment, from the consumers point of view, there should be no big difference between one tractor and another with the same horse power. We, therefore, do not propose to make any distinction between one brand of tractor and another of the same horse power in recommending any allowance for selling expenses including dealers' commission. However, as we propose to allow the selling expenses as a fixed sum per tractor, any producer can recover higher total amount by increasing his volume of production and sales. We wish to leave it to the individual producer to decide what proportion he should allow to his distributor as an incentive to secure greater volume of sales and what proportion he should spend himself for the same purpose.

17.19. After carefully considering all aspects of the matter we recommend that the selling expenses including the dealer's commission be fixed at Rs. 2,050 for 50 h. p. tractors, Rs. 1,850 for 35/37 h. p. tractors and Rs. 1,650 for 27 h. p. tractors. Selling expenses are to cover all the usual facilities given to customers such as free delivery from the point where the tractors are sold through the dealer, free installation of the tractors at the farm, demonstration and training as at present provided and also 4 free services during the period of 6 months of warranty from the date of delivery to the customers.

18.1. During the costed period our Cost Accounts Officers could check the actual expenses on warranty in only two instances. For TAFE the actual expenses worked out to Rs. 4 per tractor sold during the year. 18. Warranty case of International In the the amount was Rs. 35 per tractor. In the case of Hindustan there was no account showing warranty expenses separately. The company showed certain issues from their stocks as on account of replacement of parts due to warranty. They claimed that the expenses in this behalf amounted to about Rs. 226 for each 35 h. p. tractor and Rs. 228 for 50 h. p. tractor. In the case of Escorts again the total expenses booked under the head warranty were said tobe on account of tractors only, although the company had a considerable turnover of motor cycles. The Cost Accounts Officer was not in a position to verify the statement. In the case of Eicher the Cost Accounts Officer was not

shown any expense by way of warranty. Claims for warranty depend on two factors, namely, number of tractors sold and the quality of the individual parts assembled in the tractors. Since claims for warranty can arise only within a period of 6 months from the date of delivery of the tractor, the volume of sales achieved during the costed period would be a good guide for assessing the incidence of warranty claims. The other factor is the quality of the components and the care with which they are assembled into the tractor. The lower the quality, the higher would be the claim for warranty. Thus it appears from the case of TAFE which has the largest sale that with reasonable quality of the components supplied, the claims for warranty should not be material. To allow for a higher element on account of the warranty liability will only encourage rather slip-shod manufacture and assembly of the tractors. There in another aspect of the question which is also important. A considerable proportion of the components are either purchased locally or obtained from the collaborators. When any of these parts are found defective the respective producer can claim replacement from their collaborators or vendors as the case may be. For example in the case of Escorts it is stipulated by the collaborators that the deliveries will include warranty parts valued at 1.5% of their total f. o. b. value and the Indian firm is further allowed to claim "extra-ordinary" damages when such damages of a particular component exceed 10% of the delivered quantity. 35 h. p. tractors of Hindustan are largely made out of imported components and bought out components and one would be justified in thinking that a good proportion of the amount of Rs. 226/- claimed would be in respect of these parts for which the company should be compensated by either the collaborators or the vendors. We have considered the several aspects of the case very carefully, and have come to the conclusion that in order to encourage efficiency in manufacture and care in assembly, no allowance for warranty should be specially provided for in the prices recommended.

19.1. The actual average railway freight charges were ascertained for all costed units. In the case of Escorts the other
 19. Railway freight, expenses for packing and forwarding could Packing and for- not be verified. The average railway freight warding charges. during the costed period for Hindustan 50 h.p. tractors was about Rs. 205. For the 35 h. p. tractors it

was Rs. 215 for TAFE, Rs. 128 for Hindustan, Rs. 211 for Escorts and Rs. 157 for International. For 27 h. p. tractors, the average railway freight was Rs. 211 for Escorts and Rs. 130 for Eicher. In the case of Eicher, Escorts and Hindustan a considerable number of tractors were delivered at the gate, which would tend to bring down the incidence of the average railway freight. From the figures of the 1961 census of tractors in India, it appears that the tractors are most popular in the Punjab region, U. P., Rajasthan, M. P., Gujarat, Andhra Pradesh, Bihar and Maharashtra, in that order. The tractor populations in the other regions were not significant. It will be seen that excepting, perhaps, for Bihar there is one or other tractor manufacturing unit within comparatively easy reach of the regions where the tractors appear to be most popular. The only advantage in allowing an estimated amount of average railway freight to arrive at a uniform f. o. r. price for all destinations in India, would be to eliminate locational disadvantages for any prospective or actual user of tractors in the parts of the country remote from any of the manufacturing units. To see what impact the Railway freight charges could make on the ultimate cost to the customer, we have scrutinised the figures of freight charges for distant destinations where the relevant data were available. For dispatches by Escorts, we find that the Railway freight was Rs. 429 per tractor for Trivandrum and Rs. 402 both for Dibrugarh in Assam and for Agartala in Tripura. For despatches by Hindustan, the Railway freight per tractor to Patna and to Coimbatore were Rs. 472 and Rs. 292 respectively for 35 h. p. tractors. For 50 h.p. tractors the freight to Howrah was Rs. 401 and New Jalpaiguri (W. Bengal) was Rs. 522. For Escorts the price fixed recently by Government is Rs. 19,500 per tractor and the freight charge to Trivandrum and Dibrugath work out to 2.2% and 2.1%respectively. For Hindustan as the prices fixed are Rs. 16,110 for 35 h. p. tractors and Rs.21,880 for 50 h.p. tractors the freight charges for the former to Patna and Coimbatore work out to 2.9% and 1.8% respectively; and the freight charges for the 50 h.p. tractors, to Howrah and New Jalpaiguri to 1.8% and 2.4% respectively. We, therefore, do not consider that a customer prepared to pay the price quoted will be discouraged from making the purchase when he is called upon to pay the freight extra. The charges for packing, insurance, etc. were not significant wherever the actuals could be verified. On the other hand

if an element of average freight forwarding and packing charges be included in the prices, then, first, the customer who can take delivery at the gate will be compelled unnecessarily to pay this element though he does not get any advantage out of it. Secondly, the tendency for the manufacturers would be to push the sales as much as possible in the region covered by the average element of freight allowed, so as to make a margin from this element also. The producer will invariably choose between two customers, one who is nearer to the factory, in cases where the supply position is such that he cannot meet the demand of both the customers. Moreover, the practice of at least two units had been in the past to sell the tractors at ex-factory prices. After carefully considering all aspects of the case we recommend that the prices be fixed ex-factory for each of the producers. At present when deliveries are not taken at the gate, the practice of each producer is to despatch the tractors in economic wagon loads to dealers and dealer in his turn makes free delivery to the customer. We, therefore, recommend that the freight to the dealer's point together with packing, forwarding and insurance charges should be charged separately to the customers.

20.1. Although we have taken the latest data of raw mate rials and bought out components and provided for suitable adjustment for the various factors of production on the metits

20. Allowances for contingencies

of each case, we have provided an allowance for contingencies at 2 per cent of the exfactory cost excluding C.K.D. pack, bought out indigenous components and depreciation.

The allowance is intended to cover any increase in the prices of bought out components for which no escalation is provided. The manufacturers should be able to absorb the remaining portion, if any, of the increase in cost, by economies in production.

21.1. The fair requirement of the industry for working capital has been assessed at 4 months' cost of production excluding depreciation, royalty and selling expenses. We consider that a return of 15 per cent on the
21. Return on capical employed comprising the average net fixed assets and the working capital would enable the industry to provide for the outgoings such as

interest on borrowings, minimum bonus under the Bonus Act. Corporation taxes, Managing Agency commission, etc. leaving a residue which should enable the industry to declare reasonable dividends to the equity share-holders and also provide for reserves. In the case of International the net fixed assets are appropriate for a production of 3,500 units. Although we have taken a lower volume of production as reasonable in relation to the past performance, it will not be justifiable to allow return on the entire investment in plant and machinery on the low volume of production. Therefore, for the purposes of return we have calculated the net fixed assets in relation to its capacity. The installed capacity declared by Escorts is 7,000 tractors per annum. In the light of its actual performance it does not appear capable of achieving production anywhere near to its declared capacity and the investment already made does not appear to be commensurate with the installed capacity as reported. In its written memorandum the company envisages a further investment of about Rs. 4.5 crores during the five years ending 1971, without indicating any further increase in capacity. We have, therefore, not accepted the capacity of 7.000 tractors per annum, nor have we adjusted the net fixed assets to the declared capacity. The average net fixed assets for the two years 1967-68 and 1968-69, the average working capital and the absolute return allowed per tractor are exhibited in the following table:

	Company	H. P.	Net fixed assets	Working capital	Capital employed	Return on capital
				Rs.	per Tractor	
(i)	TAFA	35	2,342	5,900	8,242	1,236
(i i)	International	35	5,474	5,224	1 0, 698	1,605
(iii)	Hindustan	50	4,302	6,336	13,665	1,600
(iv)	do.	35	487	4,339	4,826	724
(v)	Escorts	37	550	4,965	5,515	827
(vi)	do.	27	550	4,081	4,631	695
vił)	Eicher	27	894	4,854	5,748	862

Due to the operation of escalation clauses provided for in paragraph 23, the cost of production may alter during the course of next two years which may necessitate corresponding alterations in the working capital as shown above. We recommend, however, that the return provided should be kept fixed at the above figures in spite of the operations of the escalation clauses.

22.1. The fair ex-works retail prices recommended by us 22. Fair ex-works for the two years ending 31st March 1969 prices. for the different units and for different types of tractors are shown below:

I. 50 h.p. tractors

Na	me of the Company	Hindustan
1.	Ex-factory cost	19,632
2.	Selling expesses	2,050
3.	Allowances for contingency	90
4.	Return	1,600
5.	Fair ex-factory selling price	23,372
	or Roundly	23,370

II. 35/37 h.p. tractors

Name of the company		TAFE	Interna- tional	Hindu- stan	Escorts
		Rs.	Rs.	Rs.	Rs.
1.	Ex-factory cost	18,130	16,690	13,096	14,989
2.	Selling expenses	1,850	1,850	1,850	1,850
3.	Allowances for contingency	54	89	12	22
4.	Return	1,236	1,605	724	827
5.	Fair ex-factory selling price	21,270	20,234	15,682	17,688
	or Roundly	21,270	20,230	15,680	17,690

III. 27 h.p. tractors

Na	me of the company	Escorts	Eicher
		Rs	Rs.
1.	Ex-works cost	12,331	14,887
2.	Selling expenses	1,650	1,650
3.	Allowances for contingency	21	80
4.	Return	695	862
5.	Fair ex-factory selling price	14,697	17,479
	or Roundly	14,700	17,480

It may be observed that generally the prices recommended by us are higher for tractors at a more advanced stage of deletions.

22.1.1. The above overall figures have been arrived at on the basis of the primary data made available to us by the units. However, some of the units have not been maintaining their books according to the strict norms of cost accounting in this regard. Where information was not forthcoming in the necessary degree of detail, e.g., in respect of replacement of deleted components, parts and accessories by manufactured or bought out items, approximations and estimates had necessarily to be made by our Cost Accounts Officers. There has been an additional complicating factor in the form of commitments under different clauses of the collaboration agreements of the different units under which they have to conform to specifications laid down by the foreign firms and manufacture of components according to these is often more expensive than the imported cost of the same components. These difficulties are reflected in the diversity of the ex-factory selling prices for tractors of idential horse power in the 27 and 35/37 ranges. On the other hand we need hardly point out that the interest of the consumers in regard to fair price should not be lost sight of. We therefore recommend that the prices we have determined should be treated as ceiling prices.

22.2. The low volume of production is, of course, an important factor in the high cost. The manufacturers have however, been enjoying a sheltered market all along with the result

that there is a certain degree of disincentive to improve the operational efficiency with a view to reducing the high cost of production. This is reflected to a certain extent in the disparity of the costs and consequently in the selling prices of tractors of the same h. p. The range of variation for tractors of 35/37 drawbar h. p. is from Rs. 15,680 to Rs. 21,270 which is fairly wide. It is incumbent therefore upon the higher cost units to reduce the cost of production and bring it on a par with lower cost units. A note of caution needs to be expressed in this respect against any complacency on the part of the high cost units that they would be able to maintain the prices artificially under price control which may be based on the cost plus formula. Since production is below capacity the possibility of competition is very remote. There is all the more reasons therefore to eliminate causes which result in inefficiency leading to increase in costs.

23.1. The value of the C. K. D. packs may alter due to the reasons viz., a change in the rates charged 23. Escalation by the collaborators ad secondly any fresh clauses. deletion effected at any time. In the case of TAFE the average value of C. K. D. packs can also depend upon the ratio between the packs received from U.K. and those received from Yogoslavia on the one hand and on the other ratio 'inter se' between numbers of packs with different deletions from the Yugoslavia, on the other. The total difference has to be carefully segregated between those due to change in the ratio of packs obtained from different sources and those due to fresh deletions only. The total charges to any manufacturing unit comprise c. i. f. price plus charges up to the godowns of the factory. We recommend that for the next two years it will he sufficient if the change in the c. i. f. cost due to either of the above factors be adjusted against the recommended prices. In respect of changes due to fresh deletions only, there will be a further adjustment detailed in the next paragraph.

23.2. We have attempted a correlation between deletions recently effected and the corresponding costs of the replacement either by bought out components or by manufacture wherever it has been possible to do so without any ambiguity. In-as-much as we have already absorbed in the estimated costs of production the total depreciation charges and administrative overheads, the correlation has been established with costs excluding these elements. We have found that for each Rupee of the c. i. f. cost of the deleted items, the costs of the replacement ranged from Re. 0.95 to Rs. 1.62. In one instance, however, it was as Figh as 3.16, but in this case the sample was small and and we do not consider this to be a representative sample. We have also to beat in mind that as a result of devaluation the price advantage of 57.5 per cent is clready available in so far as indigenous manufacture of components previously imported is concerned. A certain amount may be required on the import of raw materials, but from our examination of the ratio of such raw material cost to conversion cost we find that in general the content of the imported raw material cost in the total cost of components indigenously manufactured is comnaratively small and very little, if any, of this cushion would be absorbed by such costs. The escalation of 57.5 per cent already available as a result of devaluation provides therefore an adequate margin to cover the higher cost of the manufacture of indigenous components in comparison with the imported post-devaluation landed costs of the same components. We are therefore of the view that no escalation on account of deletions need be allowed where these deletions are replaced by indigenous bought out or manufactured components. When any item of fieshly deleted components is to be manufactured there would arise some further economy in the factory overheads allocable to the components which were previously deleted; for in the factory overheads also there are fixed elements the incidence of which is likely to decrease with increased activity.

23.3. TAFE and Escorts use locally purchased engines for their 35 h. p. tractors. The value of the engine included in the recommended price is Rs. 5,967 for TAFE and Rs. 5,945 for Escorts including sales tax and freight to factory. The engines are supplied respectively by Simpsons and Kirloskars. It has been represented by the respective units that there is a possibility of further increase in prices by the respective suppliers. Any increase over the values already included in the price, if approved by Government should be adjusted against the recommended prices. 23.4. We have already mentioned in paragraph 17.6 that it is possible in certain cases to replace the standard tyres and tubes used for the tractors by other types. Variations in cost of tyres, tubes and also batteries either due to substitution by alternative types or due to variations in prices for other reasons may be adjusted against the recommended prices, as and when necessary. For this purpose in the following table we indicate the types and values of tyres, tubes and batteries utilised in the various types of tractors:—

	Unit	н. р.	Number and sizes of tyres and tube ^s	Value of tyres & tubes	Value of batteries
			(1993)	Rs.	Rs.
1.	TAFE	35	2 Nos. Front 6.00 ×16	234	195
		8	2 Nos. Rear 10.00 ×28	793	
2.	International	35	2 Nos. Front 5.50 ×16	197	213
			2 Nos. Rear 12.40 ×28	922	
3.	Hindustan	50	2 Nos. Front 6.50 ×20	433	537
			2 Nos. Rear 14.00 ×28	1592	
		35	2 Nos. Front 6.00 ×16	267	267
			2 Nos. Rear 11.00 ×28	1045	
4.	Escorts	37	2 Nos. Front 6.00 ×16	236	300
			2 Nos. Rear 11.00 ×28	931	
		27	2 Nos. Front 6.16 ×16	236	300
			2 Nos. Rear 10.00 ×28	801	
5.	Eicher	27	2 Nos. Front 5.50 ×16	172	
			2 Nos. Rear 11.20 ×28	776	

We find that there is a disparity between the prices paid by the different producers for the same sizes of tyres. In as much as these prices are as per the latest invoices produced to the Cost Accounts Officers, we have allowed them in the price. We, however, recommend that Government should take steps to ensure that there is no discrimination between tractor producers in respect of the prices to be paid by them for the tyres and tubes.

Tractors & Farm Equipment Ltd.

Commission's Estimate of cost of Massey Fergusson 35 HP Tractor

Sl. No.	Particulars	1967-68 1	968-69 A	Verage
	Estimated production (nos.)	4803	5000	••
		Rs.	Rs.	Rs.
I Dire	ct Materials :			
(i)	Deleted CKD pack	5724	5724	5724
(ii)	Imported finished components	••		••
(iii)		9327	9327	9327
(iv)	Imported semi-finished components	••	••	••
(v)	Local semi-finished components	1411	1411	1411
(vi)	Imported raw materials	86	86	86
(vii)	Local raw-materials	26	26	26
	Total materials/cost	16,574	16,574	16,574
II Dire	ct Labour :			•
(i)	Machine shop	63	63	63
(ii)	Assembly shop	34	34	34
	Total Direct Labour	97	97	97
III Fac	tory Overheads :			
(i	Machine shop	563	3 585	574
(ii)	Assembly shop	220) 220	220
	Total factory overheads	78:	3 805	794
IV Dep	reciation :			
	Machine shop	314	265	289
(ii)	Assembly shop	32	20	26
	Total Depreciation	346	285	315
V Wri	te off of jigs & fixtures	51	51	51
	inistration overheads.	132	127	129
VII Roy		170	17 0	17 0
	Total ex-works cos	t 18,15	3 18,109	18,120

International Tractor Company of India Ltd.

Commission's estimate of cost of B-275 International 35 HP Tractor

SI. No.	Particulars	1967-68	1968-69	Average
	Estimated Production (Nos.)	2500	3000	
		Rs.	Rs.	Rs.
I Di	rect Materials :			
(i) Deleted CKD pack	3,625	2,645	3,091
(ii) Imported finished components	1,346	1,378	1,363
•) Local finished components	6,226	6,619	6,440
) Imported semi-finished components	486	92	271
(v) Local semi-finished components	1,103	2,122	1,659
•	i) Imported raw-material	239	239	239
(vi	i) Local raw material	31	33	32
	Total material cost	13,056	13,128	13,695
II D	irect Labour			
(i) Machine shop	146	166	157
(ii	i) Assembly shop	154	152	153
	Total Direct Labour	300	318	310
ш	Factory overheads			
(i	i) Machine shop	1,132	1,134	1,133
(i	i) Assembly shop	397	361	377
	Total factory overheads	1,529	1,495	1,510
IV I	Depreciation			
(i) Machine shop	796	687	737
(i	i) Assembly shop	21	15	18
	Total Depreciation	817	702	75
v	Write off of jigs & fixtures	580	632	608
٧I	Administration overheads.	64	54	59
VII	Royalty	332	371	353
	Total ex-works cost	16,678	16,700	16,69

Hindustan Tractors Ltd.

Commission's estimate of cost of Hindustan 50 H.P. Tractor

51. Particulars No.	1967-68	1968-69	Aveire
Estimated Production (Nos.)	1800	2500	
	Rs.	Rs.	Rs.
I Direct Materials :		7 602	7.59
(i) Deleted CKD pack	7,593	7,593 196	250
(ii) Imported finished components	326	6,574	6,41
(iii) Local finished components	6,189	0,574	0,41.
(iv) Imported semi-finished components	1 224	1,234	1,234
(v) Local semi-finished components	1,234	841	841
(vi) Imported raw-materials	673	673	67
(vii) Local raw-materials	¥		
Total material cost	16,856	17,111	17.00
II Direct Labour	264	258	26
(i) Machine shop	133	130	13
(ii) Assembly shop	<u>k</u>		
Total Direct labour	397	388	39
III Factory overheds :	5(7	497	52
(i) Machine shop	567	336	35
(ii) Assembly shop	386		
Total factory overheads	953	833	88
IV Depreciation :		331	41
(i) Machine shop	524 29	18	-
(ii) Assembly shop			
Total Depreciation	553	349	4
V Write off of jigs & fixtures	452	452	4
s i s s s s s s s s s s s s s s s s s s	307	239	2
	196	201	19
VII Royalty Totalex-works cost	19,714	19,573	19,6

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Hindustan Tractors Ltd.

Commission's estimate of cost of Hindustan 35 HP Tractors

SI. No.	Particulars	1967-68	1968-69	Average
	Estimated production (Nos.)	800	1200	
		Rs.	Rs.	Rs.
I Dire	ect Materials :			
(i)	Deleted CKD pack	9,035	9,036	9,036
(ii)	Imported finished components	477	477	477
(iii)	Local finished components	2,890	2,890	2,890
(iv)	Imported semi-finished components	2 -		-
(v)	Local semi-finished components	8	8	8
(vi)	Imported raw-materials	161	161	161
(vii)	Local raw-materials	31	31	31
	Total material cost	12,603	12,603	12,603
II Di	rect Lahour :			
(i)) Machine shop	36	34	35
(ii)	Assembly shop	48	45	46
	Total Direct Labour	84	79	81
TIL F	ictory overheads:	[
) Machine shop	78	64	70
) Assembly shop	160	128	140
,	Total factory overheads	238	192	210
IV D	epreciation :			
) Machne shop	80	46	60
•) Assembly shop	16	9	12
	Total Depreciation	96	55	72
v	Write off of jigs & fixtures	45	45	45
VT -	Administration overheads	80	58	67
VIT	Royalty	18	18	18
	Total ex-works cost	13,164	13,050	13,096

Escorts Ltd.

Commission's estimate of cost of Escorts 37 HP Tractor

SI. No	Particulars	1967-68	1968-69	Average
	Estimated Production	1860	2480	
		Rs.	Rs.	Rs.
I	Direct Materials :			
	(i) Deleted CKD pack	4,905	4,905	4,905
	(ii) Imported finished components	••	••	• •
	(iii) Local finished components	8,900	8,900	8,900
	(iv) Imported semi-finished components	2		••
	(v) Local semi-finished components	23.		••
	(v ⁱ) Imported raw-materials	S	••	
	(vii) Local raw-materials	275	275	275
	Total materials cost	14,080	14,080	14.0(0)
п	Direct Labour :			
	(i) Machine shop	mated Production 1860 2480 Rs.Rs.Rs.terials :ad CKD pack $4,905$ $4,905$ ad CKD pack $4,905$ $4,905$ $4,905$ ted finished componentsfinished componentssemi-finishedonentssemi-finishedraw-materialsraw-materialsraw-materialsraw-materials2222ly shop7575Total direct labour9797verheads :e shop2222ly shop472446Total factory overheads542509ion :e shop3833obly shop4631Total Depreciation8464of jigs & fixtures1818ation overheads173143	22	
	(ii) Assembly shop	75	75	75
	Total direct labour	97	97	97
III	Factory overheads : Heading Ha	đ		
	(i) Machine shop	70	63	66
	(ii) Assembly shop	472	446	457
	Total factory overheads	542	509	523
IV	Depreciation :			
	(i) Machine shop	.38	33	35
	(ii) Assembly shop	46	31	37
	Total Depreciation	84	64	72
v	Write off of jigs & fixtures	. 18	18	18
٧I	Administration overheads	173	143	156
vn	Amortisation of the cost of	43	43	43
	drawings Total ex-works cost	15,037	14,954	14,989

Escorts Ltd.

Commission's estimate of cost of Escorts 27 HP Tractor

· No·	Particulars	1967-68	1968-69	Average
I.	Estimated Production (Nos.)	1140	1520	••
		Rs.	Rs.	Rs.
I Dir	ect Materials :			
(i) I	Deleted PKD pack	8,573	8,573	8,573
(ii) I	mported finished components	••	••	••
	local finished components	2,619	2,619	2,619
(iv) [mported semi-finished components		•••	
(v)]	Local semi-finished components			••
(vi) I	mported raw-materials	ta.	••	••
(vii) I	Local raw-materials	257	257	257
	Total material cost	11,449	11,449	11,449
II Di	rect Labour :			
(i)]	Machine shop	18	18	18
(ii)	Assembly shop	75	75	75
	Total direct Labour	93	93	93
111 Fa	ctory overheads :	9		
(i)	Machine shop	57	52	54
(ii)	Assembly shop	465	441	451
	Total factory overheads	522	493	505
IV D	epreciation :			
	Machine shop	33	28	30
• • •	Assembly shop	46	31	37
•	Total Depreciation	79	59	67
v W	/ri te off of jigs & fixtures	18	18	18
		-	-	150
VI A	dministration overheads	173	143	
VII A	mortisation of the cost of drawings	43	43	43
	Total ex-works cost	12,377	12,298	12,33

Eicher Tractors India Ltd.

Commission's estimate of cost of Eicher 27 H.P. Tractor

Si. No-	Parti	culars	1967-68	1968-69	Average
	Estimated	Production (Nos.)	1200	1200	-
			Rs.	Rs.	Rs.
	ect Materials :				
	Deleted CKD p		6,672	6,672	6,672
(ii) I	mported finishe	ed components	· •	••	••
	local finished c		3,988	3,988	3,988
(iv) f	mponted sami-f	inished components		••	••
(v) I	local semi-finis	hed components	3	• •	• •
(vi) fi	mported raw-m	aterials	34		
(vii) L	.ocal raw-mate	rials	:,285	1,285	1,285
		Total material cost	11,945	11,945	11,945
II Di	rect Labour :	2018848			
	fachine shop	Child Links	691	732	712
• •	ssembly shop	1.51	130	137	133
	-	rotal direct labour	821	869	845
III Fa	actory overhea	. सयमेव जयते	p		
	fachine shop		788	801	794
	ssembly shop		353	357	355
(II) A		l factory overheads	1,141	1,158	1,149
	1010				
IV De	epreciation :			<i></i>	
	lachine shop		198	147	173
(ii) A	ssembly shop		9	7	
		Total Depreciation	207	154	181
v W	Vrite off of jigs	& fixtures	20	15	17
	dministration		518	533	526
• •	loyalty		224	224	224
	• •	Total ex-vorks cost	14,876	14,898	14,887

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CHAPTER VIII

SOME ANCILLARY ISSUES

24.1 Current thinking is generally in favour of mechanisation and tractorisation of Indian agriculture. We would like to refer in this connection to a compara-24. Impact of tractorisation on tive study of mechanised farm versus nonfarm output in mechanised farm conducted by the national India Productivity Council during 1966-67. Ten farms around Delhi in both the categories were selected for the sample study. Apart from the basic difference regarding mechanisation, the selected farms were comparable in regard to methods of farming practised by them as far as seed, fertilizers and chemicals were concerned. The findings are summarised below:

- Sector - S	Mechanised farm	Non-mechanisea farm
Samples taken	10	10
Average area per farm	39.35 acres	22.5 acres
Average cultivated area	37.90 ,,	18.9 ,,
Area utilization	96.3%	84%
Area irrigated	84.5%	59.8%
Intensity of farming	1.60%	1.34%
werage investment per acre	Rs. 636.82	Rs. 171.14
Cost of cultivation per acre:		
Wheat	Rs. 537.28	Rs. 800 . 8
Maize	Rs. 409.82	Rs. 363.7
Bajra	Rs. 244.99	Rs. 285.8
Average cost of cultivation per acre	Rs. 403.00	Rs. 515.12

24.2 The Union Ministry of Food and Agriculture is also of the view that tractors have succeeded in making a significant impact on agriculture. There are many operations which cannot be performed by available man and animal power. Deep tractor ploughing of 'kans' and other weed infested areas has shown an increase in yield of 25% to 40% over three to five years. Apart from the general benefits, tractorisation leads to more efficient utilisation of other inputs and tractor owners readily take to improved farming techniques. Experts are inclined to agree that other things remaining the same, a 30 acre farm would be in a position to recover fully its initial investments in a 35 h. p. tractor and implements in about ten to twelve years. Where mechanisation helps to grow an extra crop, the recovery can be made even within seven years.

25.1 Although the benefits of mechanisation in agriculture are generally recognised some of the users and also dea-

25. Price range within the reach of an average Indian farmer

lers of tractors, have pointed out that the initial capital investments involved are very high, if not prohibitive in relation to the resources of an average farmer. Out of 35 dealers who have expressed their views in this regard, 25 consider a price-range below Rs. 15,000 as within the reach of the Indian farmer. Of these, 14 dealers have suggested a ceiling of Rs. 10,000. Only 10 dealers have supported a price near to the prevailing prices of indigenous tractors. A large number of consumers as well as three of the consumers' associations are of the view that tractors to be

within the reach of an average Indian farmer, should be priced below Rs. 10,000. The Indian Agricultural Research Institute has also emphasised the need for producing low priced tractors, on a mass scale.

25.2 It is thus clear that the average Indian farmer who is generally a farmer with a small holding cannot afford more than about Rs. 10,000 by way of initial investment in mechanisation of his cultivation operations. To meet his requirements either a small tractor or a power tiller in much grater numbers than available at present are urgently needed. As far the conventional types of indigenous tractors within the range of 20 to 50 h. p. we feel that unless the purchasing power of the farmer increases they may remain beyond the reach of the average Indian farmer for quite some time to come.

26.1 The Fourth Plan requirements assessed by the I.A. R.I. (vide Table 14) show that there is ample scope for different sizes and types of tractors in India. 26. Size of the tractor appropriate Low h.p. trac.ors cannot therefore be said to Indian condito be competing with high h.p. tractors, tions since the two categories cater to different types of demand. However, the basic underdevelopment of the rural economy and the low per capita income which greatly affect the farmers' capacity to pay is a major handicap. Even though the size of their operational land holdings or the magnitude of agricultural operations involved may require a 35 h. p. (or saill higher h.p.) tractor, the farmers tend to buy low priced, hence lower h.p. tractors. As financial and other practical considerations thus seem to override the operational needs in this case the question arises of the feasible size of tractors appropriate to present Indian conditions. Although it may not be possible to state precisely what particular size of agricultural tractor should receive priority at the present juncture, it may be possible to draw the broad conclusions that unless the manufacturers diversify their production (by undertaking production of low h.p. tractors) the off takes of the present tractors may not permit any significant reduction in their cost of production. This may in turn further retard their growth and development...

27.1 All the manufacturers were asked to indicate if they are capable of manufacturing low h. p. (i. e. below 20) tractors and if so, what their requirements 27. Canability of present producof additional capital equipment will be and ers to manufachow this would affect or alter their present ture low h. p. manufacturing programmes. From the refractors plies received, the major units with some minor modifications to their existing plants appear to be capable of undertaking manufacture of low h. p. tractors without affecting their existing manufacturing programmes. The main issue, however, is not whether the existing producers can or cannot manufacture of low h. p. tractor but whether they are capable of producing it with substantial reduction in costs, resulting in the lowering of prices of indigenous tractors. On this aspect, the manufacturers are of the view that it is not possible to produce a much cheaper tractor and that the cost differential between a 35 h. p. tractor and a 18 to 20 h. p. tractor would be only of the order of Rs. 1.000/-

to Rs. 1,500/- as mentioned earlier. This view is not shared by the other interests who maintain that the prices prevailing abroad are suggestive of a corresponding cost differential of the order of 25 to 30 per cent. Since there is a great demand for low h. p. tractors which is now met from imports, it would be in the national interest if Government divert a part of the import demand for low h. p. tractors to the five indigenous producers of high h. p. tractors by placing bulk orders with them, thus assuring them of demand for low h. p. tractors. The low h. p. tractors purchased by Government may be sold or rented to the farmers at moderate rates.

28.1 At present, Land Mortgage Banks give loan assistance to purchasers of tractors. The following table shows the cumulative amounts of such loans advanced by Land Mortgage Banks upto the end of December 1966 :

TABLE 25

Loans advanced by Co-operative Land Mortgage Banks for purchase of tractors

	Name of the State	Amount of loans advanced upic 31-12-66 (Rupees in lakhs)	
	1	<u>यमेव जयत</u> 2	
i	Andhra Pradesh	116.8	
2	Assam		
3	Bihar	15.2	
4	Delhi	2.0	
5	Gujarat	260.0	
6	Haryana	2.7	
7	Himachal Pradesh	0.9	
8	Jammu & Kashmir	1.6	
9	Kerala	••	

	1	2
10	Madhya Pradesh	24.2
11	Madras	24.0
12	Maharashtra	101.3
13	Mysore	1.0
14	Orissa	
15	Pondicherry	~ 53
16	Punjab	;86 0
17	Rajasthan	3.0
18	Uttar Pradesh	110.0
19	West Bongal	32.0
		Total . 880.7

TABLE 25 -- contd.

In a few States, loan assistance for agricultural tractors is given directly by the State Department of Agriculture. In some other States such as Madhya Pradesh, loans for purchase of tractors are given by both the State Department of Agriculture and the Land Mortgage Bank. However, loans granted by the State Departments of Agriculture for purchase of tractors have remained at relatively modest levels since the loanable funds appear to have so far been utilised largely for other agricultural purposes. It is therefore necessary that the Land Mortgage Banks should be encouraged to advance funds to the farmers for purchase of tractors.

28.2 Upto the end of 1966, an aggregate amount of Rs. 8.8 crores has been advanced for purchase of tractors by all the Land Martgage Banks put together; this would have

hardly financed purchase of 5,000 tractors. The terms and conditions governing loan assistance from Land Mortgage Banks are briefly described below :

TABLE 26

Principal terms and conditions governing loans by Land Mortgage Development Banks for purchase of tractors

Bank	Maximum amount of loan permissiable (in rupces)	Rate of interes charged from the lonees (% per annum	Terms of repayment
Andhra	20,000 (proposed to be raised to 25,000)	8.50	Period of repayment to be fixed on markets, subject to a maxi- mum of 15 years.
Bihar	Not indicated	9.25	15 equated annual instalments.
Bombay	45,000	9.25	7 annual equated instalments.
Gujarat	Not indicated	8.75	10, 12 or 15 yearly instalments.
Himachal Pradesh	10,000 (proposed to be raised to 20,000)	9 to 10.5	15 annual equated instalments.
Jammu & Kashmin	Not indicated	managed and	Within 10 to 15 years.
Madhya Pradesh	Not indicated	9	10 equated yearly instalments.
Madras	25,000	8.25	Within a period of 10 years.
Mysore	15,000	9	15 equal annual instalments.
Punjab	50% of value of hypothecated land	7.75 I	10 yearly equated instalments; (borrower has to purchase bank shares equal to 5% of the loan)

It will be noticed from the above table that the rate of interest is generally about 8 to 9 per cent per annum. This rate seems to be high for the poor farmer and we suggest that the Agricultural Credit Department of the Reserve Bank of India may look into this matter with a view to bringing about an early reduction in the interest charges. The procedural formalities involved in obtaining loans through Land Mortgage Banks are reported to be cumbersome and time-consuming and these need to be simplified.

28.3 It was stated at the public inquiry that a major portion of sales of agricultural tractors are financed through borrowed funds and that credit facilities available for purchase of tractors would considerably influence the offtake of tractors in India. The Union Ministry of Food and Agriculture has informed us that Agro-Industrial Corporations have recently been set up in the States of Assam, Bihar, Madras, Maharashtra, Punjab and Uttar Pradesh, which would supply tractors on hirepurchase terms. This is indeed an encouraging development and is likely to prove beneficial to the farmers as well as to the industry. Adequate funds should be provided to these Cotporations. The producers of agricultural tractors have not shown much interest in offering credit facilities to their potential customers. As State-aid alone may not be enough, producers in their own interest may have to formulate a scheme for improving their sales performance which should, inter-alia, include provison of credit facilities to potential buyers.

29.1 For carrying out agricultural operations, besides the en tractor additional implements such as tiller, 29. Vigilance prices of tractor plough, pulley, disc, harrow, ridger, trailer, etc. are indispensable. Fixation of the price of implements the tractor alone would not be meaningful unless the prices of matching accessories/implements are also regulated. Actually some users and even official representatives who attended the public inquiry went so far as to suggest that the dealers in spare parts, implements and accessories should be approved beforehand although ultimately the manufacturers would be responsible for the quantities and prices. A proposal was made by one of the State Government representatives that the tractor producers should consider if and how the manufacture of the tractor parts and implements could be rationalised with a view to effecting overall economies which would enable the parts to be sold at lower prices than at present. We suggest that Government may periodically review the prices, along with the availability and quality of the tractor implements and accessories which are needed for replacement frequently.

CHAPTER IX

SUMMARY

(i) With greater indigenous substitution of imported components it should be possible to eliminate the recurring charge by way of payment of royalty to foreign collaborators either by making outright purchase of the specifications and drawings or by terminating collaboration agreements and substituting indigenous specifications.

[Paragraph 5.3]

(ii) Since none of the units now in production is anywhere near the economic size, it is expected that future licensing policy would aim at making these units economic and that, if and when there is a revision of this policy, no licences for setting up of new units would be granted for the ranges of tractors now in production as well as any other ranges that may have to be manufactured in the country.

[Paragraph 7.2]

(iii) Generally, full account should be taken of the domestic supply potential before entering into any further long-term or substantial commitments regarding import of agricultural tractors.

[Paragraph 9.2.3]

(iv) As long as requisite conditions are satisfied, customs duty should not be levied on hydraulic lift, power take off unit and three point linkage and the question of levy of the duty may not be left to the discretionary interpretation of the customs authorities; the bond executed by the importing party may be accepted uniformly in the absence of any evidence to the contrary.

[Paragraph 10.4]

(v) It is desirable that the incidence of taxation on agricultural tractors should be as low as possible and that there should be uniformity of all levies throughout the country.

[Paragraph 11.1]

(vi) Government may give consideration to the suggestions for framing of a separate set of simple rules governing agricultural tractors as the existing provisions of Motor Vehicles Taxation are reported to be causing considerable hardship to the farmers.

[Paragraph 11.3]

(vii) The domestic demand for agricultural tractors may be estimated at 25,000 Nos. for 1967-68 rising annually by 5000 Nos. to 40,000 by 1970-71.

[Paragraph 12.8]

(viii) Appropriate action should be taken by the tractor manufacturers to ensure that genuinc parts of their tractors are available to consumers from the dealers.

[Paragraph 13.8]

(ix) The proposal to establish a net work of workshop facilities for tractors in selected areas where tractor population is concentrated should be implemented without any further delay as this is an urgently needed facility. In addition, it is also necessary that the tractor producers should extend their distribution network and workshop facilities more widely than at present.

[Paragraph 13.9]

(x) The producers of agricultural tractors should ensure that their dealers and other accredited suppliers do not indulge in any malpractices in regard to the implementation of the terms of warranty.

[Paragraph 13.10]

(xi) It would be desirable if a schedule of repair and aftersales service is provided free of charge by the tractor producers in the form of a "free service voucher" and given directly to the customers as done now by Tractors and Farm Equipment Ltd.

[Paragraph 13.10]

(xii) A technical study should be undertaken of the engineering specifications of all the present makes of indigenous tractors with a view to identifying such items which could immediately be taken up for standardisation, particularly in the context of the scope for import substitution.

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[Paragraph 14]

(xiii) Adherence to the programme of deletions by the indigenous tractor producers should be more strictly enforced.

[Paragraph 16.6]

(xiv) Government should take effective steps so that the required quantities of rubber tyres and tubes are made available to the tractor industry.

[Paragraph 17.6]

(xv) The practice of importing components outside the c.k.d. pack is against the spirit of import substitution. Import substitution, as a concept, should be related to the total quantity of imports made and not merely to the deletions made from the c.k.d. pack which are replaced not by domestic production but by importing outside the pack.

[Paragraph 17.12]

(xvi) The selling expenses including dealers' commission should be fixed at Rs. 2,050 for 50. h.p. tractors, Rs. 1,850 for 35/37 h. p. tractors and Rs. 1,650 for 27 h.p. tractors. [Paragraph 17.19]

(xvii) No allowance for warranty has been provided for in the selling prices of tractors, in consideration of the fact that adequate allowances for wastages have been made in the cost estimations.

[Paragraph 18]

(xviii) The selling prices of tractors should be fixed exfactory for each of the producers. Freight to the dealer's point together with packing, forwarding and insurance charges should be charged separately to the customers.

[Paragraph 19]

7---7 T. C. Bom./6)

(xix) The return on capital employed should be kept fixed at the levels indicated in paragraph 21 inspite of the operations of the escalation clauses referred to in paragraph 23.

[Paragraph 21]

(xx) The fair ex-works retail prices recommended for two years ending 31st March, 1969 are shown in paragraph 22.1. These prices should be treated as ceiling prices.

[Paragraph 22.1]

(xxi) The tractor manufacturers should eliminate causes which result in inefficiency leading to increase in costs.

[Paragraph 22.2]

(xxii) It will be sufficient if, for the next two years, the change in the c. i. f. cost of c. k. d. packs due to the factors indicated in paragraph 23.1 is adjusted against the recommended prices of tractors.

[Paragraph 23.1]

(xxiii) The escalation of 57.5% together with other elements constituting the landed cost already available to the industry as a result of devaluation provide an adequate margin to cover the higher cost of manufacture of indigenous components in comparison with the imported post-devaluation landed costs of the same components. Therefore no escalation on account of deletion need be allowed where such deletions are replaced by indigenous bought out or manufactured components.

[Paragraph 23.2]

(xxiv) Any increase in the prices of engines locally purchased by TAFE and Escorts over the values already included in the costs, if approved by Government, should be adjusted against the recommended prices of tractors.

[Paragraph 23.3]

(xxv) Variations in the costs of tyres, tubes and also batteries either due to substitution by alternative types or due to variations in prices for other reasons may be adjusted against the recommended prices of tractors, as and when necessary. [Paragraph 23.4] (xxvi) Steps should be taken to ensure that there is no discrimination between tractor producers in respect of the prices to be paid by them for tyres and tubes.

[Paragraph 23.4]

(xxvii) To meet the requirements of the average Indian farmer either small tractors or power tillers in much greater numbers than available at present are urgently needed. As for the conventional types within the range of 20 to 50 h. p. unless the purchasing power of the farmer increases they may remain beyond the reach of the average Indian farmer for quite some time to come.

[Paragraph 25.2]

(xxviii) Unless the manufacturers diversify their production (by undertaking production of low h. p. tractors) the offtakes of the present tractors may not permit any significant reduction in their cost of production. This may in turn further retard their growth and development.

[Paragraph 26]

(xxix) Since there is a great demand for low h. p. tractors which is now met from imports, it would be in the national interest if Government divert a part of the import demand for such low h. p. tractors to the five indigenous producers by placing bulk orders with them, thus assuring them of demand for low h. p. tractors. The low h. p. tractors purchased by Government may be sold or rented to the farmers at moderate rates.

[Paragraph 27]

(xxx) It is necessary that the Land Mortgage Banks should be encouraged to advance funds to the farmers for purchase of tractors.

[Paragraph 28.1]

(xxxi) The rates of interest charged by the Land Mortgage Banks seem to be high for poor farmers. The Agricultural Credit Department of the Reserve Bank of India may look into this matter with a view to bringing about an early reduction in the interest charges.

[Paragraph 28.2]

(xxxii) The establishment of Agro-Industrial Corporations recently in some of the States for supply of tractors on hirepurchase terms is an encouraging development and is likely to prove beneficial to the farmer as well as to the tractor industry. Adequate funds should be provided to these Corporations.

[Paragraph 28.3]

(xxxiii) As State-aid may not be enough, tractor producers in their own interest may have to formulate a scheme for improving their sales performance which should, *inter-alia*, include provision of credit facilities to potential buyers.

[Paragraph 28.3]

(xxxiv) Government may periodically review the prices along with the availability and quality of the tractors implements and accessories which are needed for replacement frequently.



[Paragraph 29]

31. Acknowledgements

We wish to express our thanks to the producers of agricultural tractors and engines dealers, importers, consumers and their associations, Land Mortgage Banks, the Reserve Bank of India and the various State and Central Government departments as well as research and testing institutes for their co-operation in the conduct of this inquiry.

> M. ZAHEER Chairman

K. T. MERCHANT Member

S. SUBRAMANIAN Member



BOMBAY, 18th October, 1967.



APPENDIX I

(Vide Paragraph 1) Government of India MINISTRY OF COMMERCE

New Delhi, 6th February, 1967

No. 20(1)-Tar/67.

The Secretary, Tariff Commission, C. G. O. Building, BOMBAY-1.

Subject :--Inquiry into the fixation of selling prices of different makes of Agricultural Tractors of indigenous manufacture---Reference to the Tariff Commission for

Sir,

I am directed to say that it has been decided to institute a regular enquiry with a view to fix the reasonable selling prices of the different makes of agricultural tractors of indigenous manufacture.

I am accordingly to request the Tariff Commission under Section 12(d) of the Tariff Commission Act, 1951 (50 of 1951), to undertake an enquiry into the matter and submit its Report to Government within about four to five months.

Pending receipt of the Tariff Commission's Report it has been decided, as the matter is urgent, to fix interim prices for the various makes of tractors on the basis of a cost examination recently carried out by the Cost Accounts Branch of the Ministry of Finance and to notify the *interim* prices under the Essential Commonities Act and the manufacturers will be told that these prices would be subject to adjustment on the basis of the Tariff Commission's Report.

Yours faithfully,

(Sd.) S. BANERJEE

Deputy Secretary to the Govt. of India

9th February, 1967.

APPENDIX II

(Vide Paragraph 1.3)

The Tractors (Price Control) Order, 1967*

1. Short title, extent and commencement.—(1) This order may be called the Tractors (Price Control) Order, 1967.

- (2) It extends to the whole of India except the State of Jammu and Kashmir.
- (3) It shall come into force at once.
- 2. Definitions. -In this order, unless the context otherwise requires.
- (a) "Controller' means a person appointed by the Central Governmont to be the Controller of Tractors for the purposes of this order;
- (b) "dealer" means any person, who carries on the business of buying or selling tractors, whether or not in conjunction with other business and includes a manufacturer;
- (c) "manufacturer" means any person who manufactures or assembles tractors;
- (d) "sale price" means the amount payable to a manufacturer or dealer as consideration for the sale of a tractor inclusive of any charges for cost of freight or delivery by exclusive of any sum charged as tax on the tractor as a finished product;
- (c) "tractor" means an agricultural machinery known by that name and fitted with a dieselengine of a capacity not exceeding filly horse power.

3. Control of sale price.—No manufacturer or dealer or other person shall sell or agree to sell or otherwise dispose of a tractor manufactured or assembled in India for a sale price exceeding the sale price fixed in pursuance of clause 4.

4. Fixation of sale price.—(1) The Central Government or the Controller, having regard to the estimated cost of production of tractors manufactured or assembled in India may, from time to time, by notification in the Official Gazette, fix the sale price of tractors so manufactured or assembled, and different sale prices may be fixed

^{*}Notified on the 30th March, 1967.

in respect of tractors of different types manufactured or assembled in India or in respect of tractors manufactured or assembled in different areas or different factories.

5. Price list to be displayed at place of business.—Every dealer shall display at a conspicuous part of the premises where he carries on his business in tractors a list of sale prices of the tractors kept for sale, in such a manner as to be easily accessible for committee by any customer visiting the premises.

6. Manufacturer and dealer not to withhold sale.—No manufacturer or dealer shall withhold from sale any tractor manufactured or assembled in India and ordinarily kept for sale.

7. Powers to give directions, call for information etc.—The Controller, or such office: of the Central Government or of the State Government as may be authorised by the Central Government in this behalf may, by order,

- (a) direct any person who manufactures or assembles tractors in India or any dealer, to maintain such records relating to the manufacture or assemblage of, or purchase or sale or other transaction, as the case may be, of tractors as the Controller or the authorised officer may specify in the order;
- (b) Specify the manner in which a manufacturer or dealer shall keep accounts of any manufacture, assemblage, purchase, sale or other transaction, as the case may be, in tractors;
- (c) require any person who manufactures or assembles tractors in India or any dealer, to furnish within such period or at such intervals, such information, returns or reports relating to the manufacture or assemblage of or purchase or sale or other transaction, as the case may be of tractors, in such forms as may be specified in the order.

8. *Powers of inspection, entry and search.*—The Controller, or such officer of the Central Government or of the State Government as may be authorised by the Central Government in this behalf, may,—

- (a) Inspect or authorise any person to inspect-
 - (i) any books, accounts or records relating to the manufacture or assemblage of tractors and belonging to or under the control of a person who manufactures or assembles tractors in India;
 - (ii) any books, accounts or records relating to the purchase, sale or other transaction in tractors and belonging to or under the control of a dealer, or

- (iii) any stocks of tractors belonging to or under the control of such person or dealer;
- (b) enter or search or authorise any person to enter or search any premises where the tractors are manufactured or assembled or sold or where the Controller or the authorised efficer has reason to believe that a contravention of this order in respect of the tractors has been, is being or is about to be committed

9. Compliance of orders.—Every manufacturer or dealer or other person to whom any order or direction is issued uncer any powers conferred by or under this Order, shall comply with such order or direction.



APPENDIX III

[Vide Paragraph 3.1]

List of parties to whom Commission's Questionnaires/Letters were sent

*Indicates those who have replied.

mIndicates those who are not interested.

1(A) : Government Departments-CENTRAL

*1. The Directorate General of Technical Development. Agro Industries Directorate, Udyog Bhavan, Moulana Azad Road, New Delhi.

*2. Planning Commission, Yojana Bhavan, Parliament Street, New Delhi.

*3. Ministry of Food & Agriculture, Krishi Bhavan, New Delhi.

*4. The Collector of Customs, Madras.

*5. The Collector of Customs, Bombay.

*6. The Collector of Customs, Calcutta.

*7. The Director General, Indian Agricultural Research Institute, Pusa Institute, New Delhi.

*8. The Director, Directorate Tractor Testing & Training Section, Budni, Bhopal (M.P.).

*9. The Director. Central Mechanical & Engineering Research Institute, Durgapur.

*10. The Secretary, Ministry of Industrial Development & Company Affairs, Udyog Bhavan. New Delhi.

*11. The Development Commissioner, Small Scale Industries, New Delhi.

*12. The Collector of Customs, Jamnagar.

*13. The Collector of Customs, Kandla.

*14. The Collector of Customs, Cochin.

*15. The Third Secretary (Commercial), Embassy of India, Valcstejnska, 6, Mala Strana, Prague, Czechoslovakia.

*16. The First Secretary (Commercial), Embassy of India, 16, Niegobwskings, Warsaw (Poland).

17. The First Secretary (Commercial) & Deputy Consul General, Consulate General of India, 3, East, 64th Street, New York, U.S.A.

*18. The Second Secretary (Commercial), High Commission of India, 200, Maclaren Street, Ottawa-4, Canada.

19. The Counsellor (Commercial), 262, Koblenzor-Strasse, Bonn, West Germany.

*20. The First Secretary (Commercial), High Commission of India in U.K., Aldwyche, London, W.C.2. U.K.

21. The Counsellor (Commercial), Embassy of India, 6 and 8, Ulitisa Obukha, Moscow.

I(B) : State Governments

1. The Director, Department of Agriculture, Government of Andhra Pradesh, Hyderabad.

2. The Director, Department of Agriculture, Government of Assam, Shillong.

3. The Director, Department of Agriculture, Government of Bihar.

4. The Director, Department of Agriculture, Government of West Bengal, Calcutta.

*5. The Director, Department of Agriculture, Government of Gujara:, Ahmedabad.

*6. The Director, Department of Agriculture, Government of Jammu and Kashmir, Srinagar.

7. The Director, Department of Agriculture, Government of Kerala, Trivandrum.

*3. The Director, Department of Agriculture, Government of Madhya Pradesh, Bhopal.

*9. The Director, Department of Agriculture, Government of Madras, Madras.

10. The Director, Department of Agriculture, Government of Maharashira, Bombay.

11. The Director, Department of Agriculture, Government of Mysore, Bangalore.

12. The Director, Department of Agriculture, Government of Orissa, Bhubaneshwar.

13. The Director, Department of Agriculture, Government of Haryana, Chandigarh.

14. The Director, Department of Agriculture, Government of Punjab, Chandigarh.

15. The Director, Department of Agriculture, Government of Rajasthan, Jaipur.

16. The Director, Department of Agriculture, Government of Uttar Pradesh, Lucknow.

17. The Director, Department of Agriculture, Delhi Administration, Delhi.

18. The Director, Department of Agriculture, Government of Humachal Pradesh, Simla.

I(C) : Registrar of Co-operative Societies

1. The Registrar of Co-operative Societies, Andhra Pradesh, Hyderabad.

2. The Registrar of Co-operative Societies, Assam, Shillong.

*3. The Registrar of Co-operative Societies, Bihar, Patna.

*4. The Registrar of Co-operative Societies, Gujarat, Ahmedabad.

*5. The Registrar of Co-operative Societies, Haryana, Chandigarh.

*£6. The Registrar of Co-operative Societies, Jammu & Kashmir, Srinagar/Jammu.

*£7. The Registrar of Co-operative Societies, Kerala, Trivandrum.

*£8. The Registrar of Co-operative Societies, Madhya Pradesh. Bhopal.

*9. The Registrar of Co-operative Societies, Madras, Madras-5

*10. The Registrar of Co-operative Societies, Maharashtra, Poona.

*11. The Registrar of Co-operative Societies, Mysore, Bangalore.

*£12. The Registrar of Co-operative Societies, Orissa, Bhubaneswar.

*13. The Registrar of Co-operative Societies, Punjab, Chandigarh.

*14. The Registrar of Co-operative Societies, Rajasthan, Jaipur.

*£15. The Registrar of Co-operative Societies, Uttar Pradesh, Lucknow.

£Reply received after the completion of the inquiry. Too late to be utilised.

*£16. The Registrar of Co-operative Societies, West Bengal, Calcutta.

17. The Registrar of Co-operative Societies, Delhi Administration, Delhi-6.

*18. The Registrar of Co-operative Societies. Goa, Daman & Diu, Panaji.

19. The Registrar of Co-operative Societies, Himachal Pradesh, Simla.

20. The Registrar of Co-operative Societies, Manipur, Imphal.

*21. The Registrar of Co-operative Societies, Pondicherry, Pondicherry.

*22. The Registrar of Co-operative Societies, Tripura, Agartala. Tripura.

*23. The Registrar of Co-operative Societies, Andaman and Nicobar Islands, Port Blair.

II (A) : Producers

*1. M/s. Eicher Tractors India Ltd., Industrial Estate, Faridabad.

*2. M/s. Escores Ltd., 6-Pratap Buildings, Connaught Circus, New Delhi.

*3. M/s. Hindustan Tractors & Bulldozers Ltd., Construction House, Ballard Estate, Bombay.

*4. M/J. International Tractor Co. of (I) Ltd., Gateway Building, Appello Bunder, Fort, Bombay-1.

*5. M/s. Tractors & Farm Equipment Ltd., 202, Mount Road. Madras.

II (B) : Prospective Producer

31. M/s. Indian Landsberg Implements Corporation (P) Ltd., 16-A Atafali Road, Post Box No. 672, New Delhi.

II (C) : Engine Manufacturers

1. M/s. Simpson & Co., 202/203, Mount Road, Madras.

*2. M/s. Kirloskar Engines Ltd., Kirkee, Poona.

[£]Reply received after the completion of the inquiry. Too late to be utilised.

III : Dealers

1. Hindustan Tractors, G. T. Road, Karnal, Haryana State.

2. Tractor Trader & Co., Roorkee Road, Muzaffarnagar (U.P.).

3. Rameshwardas Fatechand, Rice Mills Owners, Raigarh, (M.P.).

*4. South Indian Export Co. Ltd., Diesel House, 20, General Patters Road, Madras-2.

*5. Bharat Krishak Samaj, Krishak Bhavan, Navi Peth, Jalgaon, Maharashtra.

*6. Marsury Motor Finance Corporation (P) Ltd., Nehru Gardens Road, Jullundur City, Punjab.

7. Narendra Tractors, P. L. Sharma Road, Meerul (U.P.).

*8. Rewa Tractors, Shiva Sadan, Rewa (M.P.).

*9. Sri Radha Vittal Engineering Works, Jurvalapalam Road, Bhimavaram (W. G. District), Andhra Pradesh.

10. Hissar Agricultural Machinery Corporation, Hissar, Haryana,

*11. Vijay Tractors Narvana, Sangrur District, Haryana State

*12. Rajesh Tractor, Jhaffar Road, Rohtak, Haryana State.

*13. Janatha Tractor Co., Sunam, District Sangrur, Haryana.

14. Sardar Singh Jagar Singh, Inside Nagori Gate, Hissar, Haryana,

15. Satdar Singh Jagar Singh, 84, Gurdwara Road, Sri Ganganagar, Rajasthan.

*16. Badhu Tractor Traders, Chandpur Road, Bijneer (U.P.).

17. Sardar Singh Jegat Singh, Ganganagar District, Bhatinda. Punjab.

18. Sardar Singh Jegat Singh, Ganganagar District, Mohindergarh, Punjab.

*19. Vishal Financers (P) Ltd., District Gurgaon. New De!hi.

*20. Agarwal Sons, Opp. Govt. Hospital, G. T. Road, Gaziabad, Distt. Meerut (U.P.).

@21. L. Col. Atma Singh & Sono, Hari Iswar Farm. P.O. Chankhandi, Kashapur (U.P.).

*22. L. B. Auto Corporation, Behind Pipal Tree, Belaganj, Agra.

*23. Goel & Goel, C/o. M/s. Kashmirilai Jeevanlal, Patiala, Punjab.

*24. Ramane Corporation, C/o. M/s. Instruments Enterprises, 3-5, 926/19, Himayath Nagar, Hyderabad (A.P.).

25. Surya Tractor Agencies, Edarapalli, Amlapuram (East Godavari).

*26. Rao's Tractor Agency, 8/936, J. P. Road, Warangal.

*27. Imphal Garage and Tractors, 55-A, Thangal Bazar, P.O. 'mphal. Manipur.

*28. Pull Motors & Tractors, Patram Nagar, Narwana, District Sangrur, Haryana.

*29. Haryana Tractors, Rao Sardar Nagar, Bewari, District Gurgaon, Haryana.

30. Vijaya Service Station, Kalpetta, Wynaad, Kerala.

31. Manoranjan Ganguli & Sons (P) Ltd., Pondicherry.

32. Achwal Agricultural Works, Fort, Bina.

33. Tractor & Motor Co., Morsi Road, Amaravati.

*34. The Amala Machinery Co., Ferguson Park, Agra Road, Dhulia, Maharashtra.

35. R. B. Shirke Brothers, Opp. Collectorate, Ratnagiri, Maharashtra.

*36. Ghatge & Patil, Post Box No. 108, Rajaram Road, Kolhapur-

*37. The Premier Garage, Llyod Bridge, Poona-5.

38. Rao and Rao, Maidan Road, Mangalore, South Kanara.

39. Orissa Motors & Machinery, P.O. Kesinga, Distt. Kalahandi.

*40. Naveen Barat Motors & Tractors, Jullundur Road, Hoshiarpur,

*41. Verma Vyas & Co., Imperial Road, Ajmer.

42. Rajasthan Machinery & Tractor Co., Bhilwara.

43. Porwal Motors & Engineering Stores, Neemuch Cantt.

*44. Tractors & Machinery (P) Ltd., 25, Ganesh Chandra Avenue, Calcutta-13.

*45. Mittal & Company, Station Road, Sharanpur.

46. Krishna Tractors, Provincial Road, Orai.

*47. Ultar Pradesh Tractors, Court Road, Muzaffarnagar.

*48. Navin Tractors, Station Road, Post Box No. 99, Moradabad-

*49. Punjab Motor Works, 166, Bridge Street, Meerut.

*50. Balrampur Engineering Corporation, 23, Ashok Marg, Lucknow.

*51. Kashipur Tractors, Station Road, Kashipur.

*52. United Tractors, Gole Ghar, Gorakhpur.

*53. Tractor Automobiles, Civil Lines, Bulandshahr.

*54. Vijay Tractors Corporation, Civil Lines, Bijnor.

*55. Kamna Private Ltd., 165, Civil Lines, Bareilly (U.P.).

*56. Greenlands (Agri. & Mech.) Corporation, 20, Mahatma Gandhi Marg, Allahabad.

*57. Anil Tractors, 2-A, Taj Road, Agra.

*58. Bharat Motors, Sriganganagar.

59. Sainiks Motors, Sojati Gate, Jodhpur.

*60. Soodsons Tractors, The Mall, Patiala.

*61. National Agricultural & Tractors Corporation, Jagraon Road, Ludhiana.

*62. Punjab Tractors Co-operative Multi-Purpose Society Ltd., Wazirali Building, Church Road, Ferozepur Cantt.

*63. Beegee Motors & Tractors, Goniana Road, Bhatinda.

*64. Jaycee Engineers, Railway Road, Amritsar.

*65. Orissa Machinery (P) Ltd., Cantonment Road, Post Box No. 18, Cuttack.

66. Raj Agriculture Machinery Co., Station Road, Raichur.

67. Desai & Company, Koppikar Road, Hubli.

*68. Khemka Motors, 5, Residency Road, Nagpur-1.

*69. Ajay Engineering & Agricultural Equipment Co., 1439/1, Ko:ala Rao, Rambha, Adalat Road, Aurangabad.

*70. Satna Motor & Tractors, Rewa Road, Satna (M.P.)

*71. Raipur Motor Engineering Works, Fafadih, Raipur.

*72. Modi Brothers, Gandhi Road, Gwalior.

*73. Noshirwan Tractors, Imami Gate, Bhopal.

*74. T. V. Sundram Iyengar & Sons (P) Ltd., T. V. S. Building. West Veli Street, Madurai. *75. Stanes Motors (South India) Ltd., Post Box No. 284, Trichy Road, Coimbatore.

76. Punjab Tractors, Hissar Road, Rohtak.

*77. Globe Tractors, G. T. Road, Karnal.

*78. National Tractor Traders, Station Road, Surat.

*79. Vicas Tractors, Gangajalia Talav, Bhavnagar.

*80 Lalichandra Maganbhai Patel & Co., Lokmanya Tilak Road, P.O. Box No. 111, Baroda.

*81. Bihar Tractors Private Ltd., P.O. Dhansar, Dhanhad.

*82. Tirhut Farm Machinery, Lal Bazar, P.O. Bettiah, District Champaran.

*83. Phoenik Automobile Sales & Service (P) Limited, Dibrugarh-

*84. M. G. Farm Equipment, P.O. No. 13, Kurnool.

*85. Bharat Tractors, Quilla Road, Rohtak, Punjab.

86. P. S. Jain Motors, Grand Trunk Road, Jullundur City.

87. Rajasthan Tractors, Bhagwati Bhavan, M. I. Road, Jaipur.

*88. Asiatic Trade Combine, Bhubaneshwar Marg, Bhubaneshwar.

89. Dass Motors Private Ltd., Pearely Lal Building, Kashmere Gate, Delhi-6.

*90. Allied Traders, G. T. Road, Nathani Bhawan, Raipur.

*91. Agricultural & Engineering Equipments, Gole Bazar, Jabalpur.

92. Navnit Brothers, 30, Palasia, Bombay-Agra Road, Indore.

*93. U. P. Motor Company, Shahnajaf Road, Lucknow.

94. Bhavani Trading Company, Near S. T. Stand, Municipal New Shop No. 1, Ahmedabad.

95. Gujarat Tractor Corporation, Vinoba Bhave Road, Nagarwada, Baroda.

*96. Tractor Trading Corporation, Station Road, Delhi Gate, Surat.

*97. Metro Motors (Kathiawar) (P) Ltd., Gondal Road, Rajkot.

98. Nav Hind Motor Agency, Laxmipur, Kolhapur.

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*100. Dadajee Dhackjee & Co. Pvt. Ltd., Shree Pant Bhavan, Sandhurst Bridge, Bombay-7.

101. Panduronga Timblo Industries, Gaixa Posta No. 242, Margao, Goa.

102. Autofin Limited, 8573, Rashtrapathi Road, Secunderabad (A.P.).

*103. Mount Mechanical Works Pvt. Ltd., 33, Errabhi Chetty Street, Madras.

*104. Arasan & Company, P. B. No. 30, Tirunelveli.

*105. Gajraj & Company, Jail Road, P.B. No. 1349, Coimbatore.

*106. James Warren & Co. Ltd., 31, Chowringhee Road, Calcutta.

*107. Omsun Engineering Co., 21/2, Jayachamarajendra Road Bangalore.

*108. Padmaja Commercial Corporation, Covernorpet, P.B. No. 349, Andhra Pradesh.

@109. C. V. & Co., Mahatma Gandhi Road, Ernakulam, Kerala,

110. India Machinery Stores Pvt. Ltd., Exhibition Road, Patna.

111. Aruna Auto & Tractor Corporation, 8/8-A, Almospet, Cuddapah.

112. Agro Private Limited, P.B. No. 127, 15, St. Mark's Road, Bangalore-1.

*113. Arashangi Nadkishore, Sath Kacheri Road, Raichur.

114. Farm Supplies & Agencies, Spencer Road, Chickmaglur.

*115. Harvestgold, 22, Church Street, Karaikal.

116. Sanco Trans, P.B. No. 2, Kudithangi, Nelikuppam (South Arcot).

117. Khivraj Motors (P) Ltd., 123, Mount Road, Madras-6.

118. Marikar (Motors) Ltd., P.B. No. 9, Main Road, Trivandrum-1.

119. Nana Automobiles, Una Pani Road, Lal Darwaja, Surat-3 120. India Automobiles, Juna Rasta, Anand.

121. Amrik Singh & Sons, Burhanpur.

*122. Hind Auto-Tractors, Jeevan Colony, West Niward Ganj, Jabalpur.

123. Agricultural & Engineering Corporation, Janardha Peth' Amraoti.

124. Krishi Machinery Corporation, High School Road, Sangli.

*125. Farm-O-Road Corporation, 1243/79, Shivaji Udyamnagar, Kolhapur.

*126. Nanded Dist. Sahakari Kharedi Vikri Sangh Ltd., Prabhani.

*127. Tractor Centre, Donald House, 2nd Floor, Barrow Road, Bombay-1.

128. Gulam Hasen Abdul Kayum, P.B. No. 3, Yeola.

129. Bharat Tractor Works, Opp. Bus Stand, Kotkapura.

*130. Prem Narain Company, G. T. Road, Ludhiana.

131. Karnal Tractors & Motors, G. T. Road, Karnal.

132. S. D. Trading Corporation, Hospital Road, Ambala City.

*133. Krishi Yantralaya, Gurudwara Road, Sriganganagar.

*134. Doon Tractors, New Astley Hall, Dehradoon.

135. Bombay Motor Company, Tr. Motor Cycle Division, Chopasni Road, Jodhpur.

136. Chawla Automobiles, Near Ashok Hotel, Civil Lines, Jhansi.

137. Daya Ghand Nathu Ram, Khurai, District Sagar.

138. Green Fields, Gole Ghar, Gorakhpur.

139. Tractors & Auto Corporation, Kotkapura Road, Muktsar.

*140. Yadav Tractors, Delhi Road, Gurgaon.

141. Punjab Tractors, Mall Road, Sirsa.

142. Chaubey Motor Works, Etawah.

*143. Metha Tractor & Auto Corporation, Ambala Road, Saharanpur.

*144. Rastogi Tractor & Auto Corporation, Civil Lines, Bijnor.

*145. N. B. Tractors, Naya Tola, Muzaffarnagar.

146. Voltas Limited, EMA Division, Dr. Ambedkar Road, "Voltasagar", Bombay-33.

147. Voltas Limited, EMA Division, No. 21, Kasturta Road P.O. Box No. 125, Bangalore-1.

148. Voltas Limited, EMA Division, 7/1, Asaf Ali Road, P.B. No. 385, New Delhi-1.

149. Voltas Limited, EMA Division, 10, Mahatma Gandhi Marg P.B. No. 190, Hazratganj, Lucknow.

*150. Voltas Limited, 19, Graham Road, Ballard Estate, Bombay-1.

*151. Tractors Trading Corporation, Station Road, Anand (Gujarat).

*152. Tractors Trading Corporation, Victoria Garden, Ahmedalad.

*153. Elite Engineering Co., 5, Panchangath Road, Near Haveli, Rajkot.

*154. Subraya & Co. (P) Ltd., Station Road, Margao, Goa.

*155. Gulati Tractor Equipment Co., Civil Road, Rohak.

*156. Bhai Shamsher Singh & Sons, Malout Road, Muktsar, District Ferozepur.

157. Vindhya Cycle Stores, Chowk Bazar, Satna (M.P.).

158. Paras Nath Rai, Halchal Sahitya Mandir, Krishi Udyog Bhandar, Bakshipur, Gorakhpur.

159. Vyespee & Co., Bhavani Peth, Jalgaon.

160. Narain Motors, Railway Road, Amritsar.

*161. Patel Tractor Co., Station Road, Anand (Gujarat).

*162. Vidarbha Tractors, Jatharpeth Road, Akola.

*163. Shreekant Tractors, 317-A, Napier Town, Near Pagoda Hotel, Jabalpur (M.P.).

**164. Noshirwan & Co. (P) Ltd., Bombay-Agra Road, Indore.

IV. Importers

*1. Voltas Ltd., EMA Division, Graham Road, Bombay-1.

*2. Larsen & Toubro Ltd., Ballard Estate, Bombay-1.

*3. Ghaziabad Engineering Co. (P) Ltd., 42, Janpeth, New Delhi.

4. Tractors (I) Ltd., 1, Taratolla Road, Garden Reach, Calcutta-24.

5. Willcox Buckwell (India) Ltd., Nazafgarh Road, New Delhi.

6. Bharat Earth Movers Ltd., Hindustan Aircraft P.O., Bangalore-17.

7. The Director General of Supplies & Disposals, Parliament Street, New Delhi.

8. Prem Agro Industrial Engineering Co. Pvt. L1d., 4-1/17, Model Town, New Delhi.

9. Nizam Sugar Factory Ltd., Fateh Mainder Road, Kharatabad, Hyderabad.

10. Tractors & Bulldozers Ltd., Construction House, Nicol Road, Ballard Estate, Bombay.

11. Escorts Ltd., 6-Pratap Building, Connaught Circus, New Delhi.

12. Deputy Chief Conservators of Forests (Planning), Lucknow (U.P.).

13. The National Engineering Co. (P) Ltd., 379, N. S. C. Bose Road, Madras-1.

*14. The State Trading Corporation of India, Express Building, New Delhi.

15. Indian Engineering & Commercial Corporation (P) Ltd., L.I.C. Building, The Mall, Kanpur.

V. Consumers Associations

1. National Tourage Club of Farmers, 4 West Patel Nagar, New Delhi.

*2. Gujerat Yantrik Krushikar Samaj, Malrina Road, Rajkot.

3. Bharat Krishak Samaj, G-44, Nizamuddin West, New Delhi-14.

4. Agricultural Machinery Association of India, H-I Nizamuddin West, New Delhi-14.

*5. The Rehabilitation Reclamation Organisation. Department of Rehabilitation, Ministry of Labour, Employment & Rehabilitation, Government of India, New Delhi.

*6. Punjab Food Growers' Association, Krishi Bhavan, Milap Chowk, Jullundur City.

7. Panchayat Board, Pattanam P.O., Rasipuram, Salem.

8. National Dairy Research Institute (Indian Council of Agricultutural Research), Karnal (Haryana).

9. President, Multi purpose Co-operative Society, No. C. 852 Narayana Kuppam, (Via) Tiruvannmalai.

10. Dhulia Dist. Central Co-operative Purchase Sale Sangh Ltd., Dhulia (Maharashtra S.ate).

11. Ujani Co-operative Collective Farming Society Ltd., Bhir, Maharashtra.

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12. Deyanand Co-operative Collective Farming Society Ltd., Apsinga, Osmanabad, Maharashtra.

13. Sahayadri Co-operative Joint Farming Society Ltd., Arli, Osmanabad, Maharashtra.

14. Hipparge Chikhli Farming Society Ltd., Tupshelgaon, Nanded, Maharashtra.

15. Shivaji Chikhli Farming Society Ltd., Tupshelgaon, Nanded, Maharashtra.

16. Pimpri Raja Chikhli Joint Farming Society Ltd., Aurangabad, Maharashtra.

17. Charthans Phasepardhi Farming Society Ltd., Jalgaon, Maharashtra.

18. Vasant Phasepardhi Farming Society Ltd., Waigul, Akola, Maharashtra.

@19. Yeshwant Phasepardhi Farming Society Ltd., Pohradwi, Akola, Maharashtra.

20. Narasinh Co-operative Joint Farming Society Ltd., Kandalgaon, Kolhapur.

21. Mahatmaji Co-operative Joint Farming Society Ltd., Kolambe, Kolhapur.

22. Gurudeo Bhagodya Co-operative Farming Society Ltd., Sirsoli, Wardha.

23. Anakwade Co-operative Farming Society Ltd., Nasik.

24. Pimpalgaon Co-operative Farming Society Ltd., Nasik.

25. Kurli Co-operative Collective Farming Society Ltd., Yeotmal, Maharashtra.

26. Panchsheel Co-operative Collective Farming Society Ltd., Bangaon, Yeotmal, Maharashtra.

27. Brahmangaon Phalbang Co-operative Collective Society Ltd., Ahmednagar.

28. Satara Co-operative Joint Farming Society Ltd., Satara.

29. Khadhari Bagayat Co-operative Joint Farming Society Ltd., Phaltan, Satara.

30. Subhash Co-operative Collective Society Ltd., Manjri, Poona.

31. Ashok Co-operative Collective Society Ltd., Talegaon, Dabha, Poona.

@32. Anand Co-operative Collective Farming Society Ltd., Nehrunagar, Sholapur.

33. Aherwadi Co-operative Collective Farming Society Ltd., Kadabu, Sholapur.

34. Sane Guruji Co-operative Joint Society Ltd., Morani, Dhulia, Maharashtra.

35. Vishvanath Co-operative Joint Society Ltd., Vishvanath Dhulia, Maharashtra.

36. Jai Ambika Co-operative Joint Society Ltd., Nyhalod, Dhulia, Maharashtra.

37. Nawara Co-operative Joint Society Ltd., Nawara, Dhulia, Maharashtra.

38. Wadhadha Co-operative Collective Farming Society Ltd., Warora, Chanda, Maharashtra.

@39. Amdapur Co-operative Collective Farming Society Ltd., Amdapur, Buldhana, Maharashtra.

40. Babhangawa Joint Farming Co-operative Societies, Village Babhangawa, P.O. Saraiya, Dist. Shahabad.

41. Dhandiha Joint Farming Co-operative Society Ltd., Village Dhandiba, P.O. Koilbar, Dist. Shahabad.

42. Amnarbirpur Joint Farming Co-operative Society, P.O. Narhi. Chandi, Koilbar, Dist. Shahabad.

*43. Kataria Joint Farming Co-operative Society Ltd., At & P.O. Kataria, Via Naughachia, Dist. Purnea.

44. Pelwal Jonit Farming Co-operative Society, P.O. Khunti, Ranchi.

45. Mashina Joint Farming Co-operative Society, P.O. Jahangirpur, Kothia, P.O. Barisanagar, District Darbhanga.

46. Ankewalia Co-operative Farming Society Ltd., Ankelwalia, District-Dhandhuka, (Ahmedabad), Gujarat State.

47. Pipli Co-operatifve Farming Society Ltd., Village Pipli, District-Dhandhuka, (Ahmedabad).

48. Loliawaghri Co-operative Farming Society Ltd., Village Lolia, District-Dhoika, (Ahmedabad).

49. Bela Co-operative Farming Society Ltd., Village Bela, District-Dhandhuka, (Ahmedabad).

50. Balapur Co-operative Farming Society Ltd., Village Balapur, District-Ameli, Gujarat State.

51. Munjiyasar Co-operative Farming Society Ltd., Village Bagasra, District-Vadia, (Amreli), Gujarat State.

52. Vidh Sarvodaya Co-operative Farming Society Ltd., Village Vidh, District-Mandvi, (Kutch) Gujarat State.

53. Kodai Co-operative Farming Society Ltd., Village Kodai, District-Mandvi, (Kutch), Gujarat State.

54. Kalamsar Co-operative Farming Society Ltd., Village Kamalsar, District-Kambay, (Kheda), Gujarat State.

55. Kosinda Co-operative Farming Society Ltd., Kosinda Village, District-Borsad, (Kheda), Gujarat State.

56. Adarah Co-operative Farming Society Ltd., Village Raningpura, District-Keshod, (Junagadh), Gujarat State.

57. Madhavpur Co-operative Farming Society Ltd., Madavpur Village, District Porbundur, (Junagadh), Gujarat State.

58. Jawahar Anna Utpadak Co-operative Farming Society Ltd., Village Balambha, District Jodia, (Jamnagar), Gujarat State.

59. Amiapur Co-operative Farming Society Ltd., Village Satalpur, District Banaskantha, Gujarat State.

60. Bhadam Backward Class Co-operative Society Ltd., Village Bhadam, District Nandod, (Broach), Gujarat State.

61. Nawatwara Co-operative Farming Society Ltd., Village Nawatwara, District Broach, Gujarat State.

62. Gajera Co-operative Farming Society Ltd., Village Gajera, District-Jambusar, (Broach), Gujarat State.

63. Malpur Co-operative Farming Society Ltd., Village Malpur, Distric:-Ghogha, (Bhavnagar), Gujarat State.

64. Fifad Co-operative Farming Society Ltd., Village Fifad, District-Vijapur, (Bhavnagar), Gujarat State.

65. Aglod Co-operative Farming Society Ltd., Village Aglod, District-Vijapur, (Mahewana), Gujarat State.

66. Pahchasar Pashapalan Co-operative Farming Society, Village Panchasal, District-Sami, (Mahesana), Gujarat State.

67. Sarvodaya Co-operative Farming Society Ltd., Village Mevu, District-Mahesana, Gujarat State.

68. Rupwati Co-operative Farming Society Ltd., Village Vankaner, District-Rajkot, Gujarat State.

69. Manjrol Co-operative Farming Society Ltd., Village Manjrol, District-Sakheda, (Baroda), Gujarat State.

70. Prabhat Co-operative Farming Society Ltd., Village Mahommedpura, District Padra. (Baroda), Gujarat State. 71. Muwal Aadivasi Co-operative Farming Society Ltd., Village Muwal, District-Sawli, (Baroda), Gujarat State.

72. Ashoknagar Co-operative Farming Society Ltd., Village Ashoknagar, District Malpur, (Sabarkantha), Gujarat State.

73. Pardi Kambri Co-operative Farming Society Ltd., Village Pardi Bankri, District Olpaad, (Surat) Gujarat State.

74. Balethi Co-operative Farming Society Ltd., Village Mandvi, District-Surat, Gujarat State.

75. Ambika Co-operative Farming Society Ltd., Village Sirohi, District-Halwad, (Surendranagar), Gujarat State.

76. Kanpur Co-operative Farming Society Ltd., Village Kanpur, District-Saila, Surendranagar, Gujarat State.

77. 8 APD Yantric Sanyukt Krishi Sahkari Samiti Ltd., P. S Raisinghnagar District, Ganganagar.

78. 9 BLD Sanyukt Krishi Sahkari Samiti Ltd., P. S. Raisinghnagar, Rajasthan.

79. Janhit Sanyukt Krishi Sahkari Samiti Ltd., P. S. Raisinghnagar, Rajasthan.

80. Meherwala Sanyukt Krishi Sahkari Samiti Ltd., P. S. Hanumangaih, Rajasthan.

*81. Mundh Co-operative Farming Society, Tejso; Malpdar, Distric: Jullundur, Punjab State.

82. Chimna Large-sized Agricultural Service Co-operative Society Ltd., Tehsil Jagraon, District-Ludhiana.

*83. Bahour Large-sized Co-operative Society, Pondicherry.

84. Nettapakkam Large-sized Co-operative Society, Pondicherry.

85. Thirubuvanai Large-sized Co-operative Society, Pondicherry.

86. Udayagiri Co-operative Collective Farming Society Ltd., Udayagiri, Devanahalli, District Bangalore.

87. Bapur Agricultural Colony Co-operative Joint Farming. Society Lⁱd., Mannehadalu, Chitradura, District-Chitradurga.

88. Madure Kanive Co-operative Collective Farming Society Ltd., Madurekanive, Bramhavidyanagar, Hosadurga, District-Chitradurga.

89. Govardan Co-operative Joint Farming Society Ltd. Chamarajanagar, District-Mysore.

90. Kumbeshwra Co-operative Joint Farming Society Ltd., Ayanapur Colony, Chamarajanagar, District-Mysore. 91. Krishnarajendra Co-operative Joint Farming Society Ltd., Colony II Thonnurkot, Chamarajanagar, District Mysore.

92. Pudukote Evergreen Co-operative Joint Farming Society Ltd., Higgadadevanakote, District Mysore.

93. Kakanur Janatha Co-operative Joint Farming Society Ltd., Kakanur, Chamnagiri, District Shimoga.

94. Malligere Veerabhadraswamy Co-operative Society Ltd., Chamnagiri, District Shimoga.

95. Basaveswara Co-operative Joint Farming Society Ltd., Bazavapura, Chamnagiri, District Shimoga.

96. Guddada Arakere Co-operative Joint Farming Society Ltd., Chamnagiri, District Shimoga.

97. Mallikamba Co-operative Joint Farming Society Ltd., Giriyapura, Kadur, District Chikkamagalore.

98. Sri Kodimalleswara Co-operative Joint Farming Society Ltd., Chandlihiriyur, Kadur, District Chikkamagalore.

99. Fingadahalli Multipurpose Co-operative Rehabilitation Project Joint Farming Society Ltd., Tarikere, District Chikkamagalore.

100. Buramki Co-operative Collective Farming Society, Khanapura, District Belgaum.

101. Sri Ramakrishna Sahakari Samyukta Besaya Sanga Niyamit, Mantrodi, Shiggon, District Dharwar.

102. Bardol Co-operative Joint Farming Society Ltd., Bardol, Indi, District Bijapur.

103. Sri Khandewara Co-operative Joint Farming Society Ltd., Madanahippiriga, Alland, District Gulbarga.

104. Mahatma Gandhi Co-operative Joint Farming Society Ltd., Gotur, Chittapura, District Gulbarga.

105. Sri Amareswara Co-operative Joint Farming Society Ltd., Haratunur, District Raichur.

106. Kamadenu Co-operative Collective Farming Society, Jawalagere Camp, Sindanur, District Raichur.

107. Jaikisan Co-operative Joint Farming Society Ltd., Siddapur Camp, Gangavathi, District Raichur.

V1. Individual Consumers

1. Shri J. Nabi Sahib, Yemmiganur, District Kurnool, Andhra Pradesh.

2. Shri Bhagwat Prasad Chandrakar, Village Arjunda, District Durg, Madhya Pradesh.

3. Shri Bhagat Singh, Village Lakhot, Near Parinale Rajanandgaon, District Durg, Madhya Pradesh.

4. Shri D. A. Naik, Village Silli, Taluka Umrer, District Nagpur, Maharashtra.

5. Shri A. K. Nirgudhkar, Village Mandhal, District Nagpur, Maharashtra.

*6. Shri M. Gonganna, P.O. Yemmiganur, District Kurnool, Andhra Pradesh.

7. Shri Sevakram Dhaniram Borka, Village Pathari, District Bhandara, Maharashtra.

*8. Shri K. Lila Singh, Village Pallel, B.P.O. Pallel, Manipur.

9. Shri Bhatubhai Nanubhai, Village Sukhabari, Taluk Banada, District Bulsar, Gujarat.

*10. Shri N. Seetharam Iyer, Village & P.O. Tiruppayanam, Block Tiruvaiyru, District Thanjavur, Madras.

*11. Shri M. M. Fakhi, Village Varvatan, Taluka Mhasa'a District Kolaba, Maharashtra.

12. Shri K. K. Gounder, Village Irumbu Palam, Block Paramathi, Taluk Namakhal, District Salem, (Madras).

13. Shri Kans Raj, Village Dalachak, District Gurdaspur.

14. Shri Thiyam Narain Singh, Maskha Kiyam, Manipur.

15. Shri V. Arjuna Udaiya, P.O. Telungu Polayam, District Coimbatore, (Madras).

16. Shri Prafulla Kumar Mishra, Abhanpur, District Raipur, (Madhya Pradesh).

17. Shri Darbara Singh, Village Pindi Chattaurgarh, District Gurdaspur.

18. Shri Benoy Bh. Pandey, Village Raghunathpur, P.O. Jafarganj, District Murshidabad, (West Bengal).

19. Shri Ram Dhani, Village Austinabad, South Andaman.

20. Shri Ram Nand Ponoria, Village Kasturaba, District Raipur, Madhya Pradesh.

21. Shri Prahlad Singh, House No. D. 33/120, Khalishpura Varanasi (City), (U.P.).

*22. Shri Jammadas D. Kabre, B.Sc., Tar-Smriti, 6, Jilha Path, Jalgaon.

23. Shri Paras Nath Rai, Balchal Sahitya Mandir, Krishi Udyog Bhandar, Bakhsipur, Gorakhpur (U.P.).

24. Shri Jaganath Prasad Gupta, P.O.& Village Rahimpur, District Dewariya (U.P.).

25. Shri Uday Singhji Ramsinghji, Vadgamwala, Khari Kuin, Cambay (District Khasa).

26. Shri Sitaram Yeshwant Patil, Village & Post Bavachi, Taluka Valva, District Sangli.

27. Shri P. P. Modi, Mineral & Suppliers, Madhupur, Behar.

28. Shri Dalichand Bastimal Jain, C/o. M/s. Sagaamal Sankhla, Jalgaon.

*29. Shri Udai Narayan Singh, M.A., M.A.S., Village Tire, P.O. Kanta, Varanasi.

30. Shri Hafiz Mohammed Aslam, Village Bhaspur, P.O. & District Sharanpur (U.P.).

31. Shri Rasewari Pratap Singh, Molichak, Dewariya (U.P.).

*32. Shri Bishwanath Prasad, Medical Department, India Government Mint, Alipore, Calcutta.

*33. Shri T. G. Muthu, No. C. 852, Narayanakuppam, (Via) Tiruvannamali.

34. Shri R. Doraiswamy, M.A., Pattanam P.O. Rasipuram, Salem, Madras.

*35. Shri R. D. Nalwad, Annageri Tal Navalgund, District Dharwar, Mysore State.

36. Shri K. Ramaswami, 142-West C.I.T. Nagar, Madras-35.

*37. Shri B. N. Shetty, P.O. Kolagir (Via Kallianpur), Udipi Taluk, Mysore State.

*48. Shri Vasant Krishnaji Desai, Valaval, Kundal, District Ratnagiri, Maharashtra.

49. Shri Ram Palat Singh, Village Bhumari, Post Tighara, District Faizabad (U.P.).

50. Shri Ramachandra Prasad Chaudhury, At past Parasoni Khurd, Nautanawa Bagar, P.O. Nautanawa Bagar, District Gorakhpur (U.P.).

VII. Land Mortgage Banks

*1. The President, Kerala Co-operative Central Land Mortgage Bank Ltd., Post Box No. 56, Trivandrum.

2. The President, The Bombay State Co-operative Land Mortgage Bank L^{}d., J. K. Building, Dougall Road, Ballard Estate, Bombay-1.

3. The President, Uttar Pradesh State Co-operative Land Development Bank Ltd., 5, Forsythe Road, Lalbagh, Lucknow.

*4. The President, Orissa State Co-operative Land Mortgage Bank Ltd., Post Box No. 18, Berhampur (Ganjam).

5. The Chairman, West Bengal Central Co-operative Land Mortgage Bank Ltd., 60A, Calootala Street, 2nd Floor, Calcutta-1.

*6. The President, The Punjab State Co-operative Land Mortgage Bank Ltd., Chandigarh.

*7. The President, Huryana State Co-operative Land Mortgage Bank Ltd., Chandigarh.

*8. The President, Madras State Co-operative Central Land Mortgage Bank Ltd., Post Box No. 609, Luz, Mylapore, Madras-4

*9. The President, Madhya Pradesh State Co-operative Land Mortgage Bank L'd., Sahakari Sadan, Wright Town, Jabalpur.

*10. The Chairman, Gujarat State Co-operative Land Development Bank L¹d., 489, Ashram Road, Navrangpura, Ahmedabad-9.

*11. The President Andhra Pradesh Co-operative Central Land Mortgage Bank Ltd., Barkatpura, Hyderabad-27.

*12. The Chairman, Bihar State Land Mortgage Bank Ltd., Ashokrajpath, Patna-4.

13. The Chairman, Rujasthan Central Co-operative Land Mortgage Bank Ltd., Moti Doongri Road, Jaipur.

*14. The Chairman, Jammu & Kashmir Co-operative Central Land Mortgage Bank Ltd., Srinagar.

@15. The Clairman, Assam Co-operative Central Land Mortgage Bank L'd., Gauhati.

*16. The President, Mysore Central Co-operative Land Development Bank Ltd., Bangalore-18.

17. The President, Tripura Co-operative Land Mortgage Bank Ltd., Agartala, Tripura.

*18. The President, Himachal Pradesh Central Co-operative Land Mortgage Bank Ltd., P.O. Dhali (Dist. Mahasu), Himachal Pradesh.

19. The President, Pondicherry State Co-operative Land Mortgage Bank Ltd., No. P. 106, Pondicherry.

*20. The President, All India Land Mortgage Banks Co-operative Union, Barkatpura, Hyderabad-27 (A.P.).

APPENDIX IV

(Vide paragraph 3.2)

List of factories visited by the Commission and its Officers

SI. No.	Name of the Factory	By whom visited J	Date of visit
1	2	3	4
	A. Visits by	, the Commission	
1	International Tractor Co., Bombay.	Shri M. P. Pai, Chairman, Prof. K. T. Merchant, Member.	} 17-2-67
2	Escorts Ltd., Faridabad	Prof. K. T. Merchant, Member.	10-4-67
3	Eicher Tractors, Faridabad	Prof. K. T. Merchant, Member.	11-4-67
4	Hindustan Tractors, Baroda	Prof. K. T. Merchant, Member.	20-5-67
5	Tractors and Farm Equip- ment, Madras.	Prof. K. T. Merchant, Member	1-6-67
6		Shri S. Subramanian, Member.	18-7-67
7	Eicher Tractors, Faridabad	Shri S. Subramanian, Member.	18-7 -67
8	Escorts Tractors, Faridabad	Shri M. Zaheer, Chairman	8-8-67
9	Eicher Tractors, Faridabad	Shri M. Zaheer, Chairman	8-8-67
10	Hindustan Tractors, Baroda	Shri M. Zaheer, Chairman	a 31-8-67
	B. List of Factorie	es visited by Officers	
1	International Tractor Co., Bombay.	Shri N. Das, T.D. (E&M)	17-2-67

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APPENDIX IV-contd.

(Vide paragraph 3.2)

List of factories visited by the Commission and its Officers

	1 2	3	4
	B. List of Factories	visited by Officers—contd.	
2	Hindustan Tractor, Baroda	Shri N. Das, T.D. (E&M)	20-5-67
3	Tractor and Farm Equip- ment, Madras.	Shri N. Das, T.D. (E&M)	1-6-67
4		Dr. P. V. Gunishastri, Secretary.	- 18-7-67
5	VERSE S	Shri M. Z. Mogri, A.D.	
	C. Cost Exa	mination Programme	
1	Eicher Tractors, Faridabad	Shri M. V. Ratnam, (C.A.O.)	4-4-67 to 13-4-67
2	Escorts Ltd., Faridabad .	Shri [*] A. R. Srinivasan, (C.A.O.)	15-4-67 to 30-4-67
3	International Tractors, Bombay.	Shri A. R. Srinivasan, (C.A.O.)	2-5-67 to 17-5-67
4	Tractor and Farm Equip- ment, Madras.	Shri M. V. Ratnam (C.A.O.)	3-5-67 to 20-5-67
5	Hindustan Tractor, Baroda	Shri A. R. Srinivasan (C.A.O.)	19-5-67 to 14-6-67

APPENDIX V

(Vide paragraph 3.3)

List of persons/parties who attended the Public Inquiry held on 25-7-67

SI. No.	Name of person	Interest represented			
1	2		3		
	А.	Produc	ers		
1	Shri M. M. Lal	•	Eicher Tractors India Ltd.,		
2	Shri A. C. Mehta .	22	Industrial Estate, Faridabad.		
3	Shri H. P. Nanda				
4	Shri W. R. Fermie		Escorts Ltd., 6-Pratap Building		
5	Shri S. N. Chadha		Delhi.		
6	Shri K. N. Mehli .	77	1 hours		
7	Shri Pashabhai Patel	(c)			
8	Shri Chandrakant Patel	मोव ज	Hindustan Tractors & Bull		
9	Shri Indrakant Patel .	·	<pre>dozers Ltd., Construction House, Ballard Estate, Bom</pre>		
10	Shri Damanwala R. J.	•	bay.		
11	Shri R. C. Shah	•			
12	Shri Keshub Mahindra .	•) International Tractor Co. o		
13	Shri I. J. Syer	•	India) Ltd., Gateway Build ing, Apollo Bunder, For		
14	Shri A. Chatterjee .		Bombay.		
15	Shri K. V. Sardesai .		}		

APPENDIX V---contd.

(*Vide* paragraph 3.3)

List of persons/parties who attended the Public Inquiry held on 25-7-67

1	2	3
	A. Pr	oducers—contd.
16	Shri A. Sivasailam	•••]
17	Shri M. Ramaswamy	
18	Shri D. P. Lalwani	Tractors & Farm Equipment
19	Shri M. Narasimhan	Ltd., 202, Mount Road, Madras.
20	Shri D. J. Curran	- Carlo
21	Shri P. S. Pathana	j . 6
	В. Еп	gine Manufacturers
22	Shri S. Anantharam	• Simpson & Co. Ltd., 202/203, Mount Road, Madras.
23 24	Shri V. B. Kirtane Shri Gaitonde ,	.) Kirloskar Engines Ltd., Kirkee,
	С. Ац	ntomobile Manufacturers
25	Mr. Murthy Rao .	Association of Indian Auto- mobile Manufacturers, Army Navy Building, M.G. Road, Bombay-1.
	D.	Consumers (Individual)
26	Shri B. D. Shetty	· Bombay.
	E. Co	nsumers' Association
27	Shri M. V. Anbikar	Bharat Krishak Samaj, G-44,
28	Shri Y. S. Patel .	Nizamuddin West, New Delhi-14.
29	Shr G. C. Parekh	. Gujarat Yantrik Krushikar Samaj, Malrina Road, Rajkot.

APPENDIX V-contd.

(Vide paragraph 3•3)

List of persons/parties who attended the Public Inquiry held on 25-7-67

1	2			3
	F.	Dec	alers	
30	Mr. R. V. Leyden	•	ر .	
31	Shri B. K. S. Jain	•	•	Voltas Limited, EME Division, Dr. Ambedkar Road,
32	Shri A. B. Parekh	•	·	'Voltasagar', Bombay-33.
33	Shri P. C. Cherian	• ,	1000	}
34	Shri K. S. Barodawalla	N	23) Dadajec Dhackjee Co. (P) Ltd.,
35	Shri P. M. Rane	•	•	Shree Pant Bhavan, Sand- hurst Bridge, Bombay-7.
36	Shri D. G. Pali	•		
37	Shri B. V. Nagaraj	1		Omsun Engineering Co., 21/2, Jayachamarajendra Road, Bangalore.
38	Shri R. S. Karnik	Y		Ghatage & Patil, Post Box No. 108, Rajaram Road, Kolhapur.
39	Shri J. M. Gandhi	सन्य	मव ज	Ajay Engineering & Agricul- tural Equipment Co., 1439/1, Kotala Road, Rambha, Adalat Road, Aurangabad.
40	Shri K. J. Patel .	•	•	National Tractor Traders, Station Road, Surat.
41	Shri L. M. Patel .	•	•	Lalichandra Maganbhai Patel & Co., Lokmanya Tilak Road, P.O. Box No. 111, Baroda.
	G.	De	alers'	Association
42	Shri B. Gupta .	•	•	Tractor Earthmoving & Cons- truction Equipment Distri- butors' Association, Bombay.

APPENDIX V-contd.

(Vide paragraph 3.3)

List of persons/parties who attended the Public Inquiry held on 25-7-67

1	2		3
	G. Deale	rs, A	ssociation—contd.
43	Shri R. Ramaswamy	•	· Federation of Automobile Dealers Association, Bom- bay.
44	Shri Gurcharan Singh	•	Agriculture Machinery Dealers '& Manufacturers Associa- tion, New Delhi.
		н, 1	mporters
45	Shri J. P. Dalal		Lafsen & Toubro Ltd., Ballard Estate, Bombay-1.
46	Shri S. L. Seth	SHE I	Ghaziabad Engineering Co., 42, Janpath, New Delhi.
47	Shri S. B. Lal .	IA.	. Indian Engineering & Com- mercial Corporation (P) Ltd., Bombay.
48	Shri M. B. L. Gupta	ins!	•]
49	Shri S. B. Mathur	सन्दर्भ	Indian Engineering & Com- mercial Corporation (P) Ltd., The Mall, Kanpur.
50	Shri V. G. S. V. Prasa	ad	 National Engineering Co. Pvt, Ltd., 379, N.S.C. Bose Road, Madras-1.
	I.	Land	i Mortgage Bank
51	Shri H. H. Trivedi	•	All India Central Land Deve-
52	Shri P. V. Prabhu	•	> lopment Bank Ltd., Hy- derabad.
	J.	Gove	ernment Departments
53	Shri K. S. Prabhakar	•	Directorate General of Tech- nical Development, New Delhi.

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APPENDIX V—concld.

(Vide paragraph 3.3)

List of persons/parties who attended the Public Inquiry held on 25-7-67

1	2		3			
	J. Governmen	t Dep	pariments—contd.			
54	Shri R. Rath .	•	• Ministry of Food & Agriculture,			
55	Shri P. J. Zachariah	•	Krishi Bhavan, New Delhi.			
56	Shri J. A. Nazareth	•	• Collector of Customs, Bombay.			
57	Dr. S. E. Roy	-E	• Indian Agricultural Research Institute, New Delhi.			
58	Shri C. Mohan	•	· Central Mechanical Engineer- ing Research Institute, Durgapur.			
59	Shri N. Radhakrishnan	IA	Ministry of Industrial Deve- lopment & Company Affairs, New Delhi.			
60	Shri Venkata Rao		Small Industries Service Insti- tute, New Delhi.			
61	Shri K. J. Shenoy	सन्ध	Director General of Supplies & Disposals, New Delhi.			
62	Shri C. S. Iyer .	•	• Department of Agriculture, Bhopal.			
63	Shri N. S. Reddy	•	• Department of Agriculture,			
64	Shri P. K. Radhakanth	t	. J Madras.			
65	Shri H. R. Ramekar	•	• Department of Agriculture, Bombay.			
6 6	Shri S. C. Bhatnaga.	•	. Department of Agriculture, Lucknow.			
		к.	. Others			
67	Shri A. K. Banerji	•	. National Dairy Research Insti- tute, Karnal.			

APPENDIX VI

(Vide paragraph 4.2)

Statewise Distribution of Tractors in India

							(Numbers)
St	1961 Census	1966 Census						
		(1)					(2)	(3)
Andhra Pradesh				•	•	•	1,762	2,691
Assam .					•		489	N.A.
Bihar .				•		•	1,520	2,132
Gujarat .	•	•				•	2,005	3,248
Jammu and Kas	hmir	• 83	~E	33	~	•	132	N.A.
Kerala .		·6	1533	21			276	418
Madhya Pradesh					88	•	2,025	2,513
Madras .	•		6.2		29	•	1,387	2,245
Maharashtra	•		N.	111	Υ.		1,427	2,929
Mysore .		•	11	(1)	i.	•	981	2,591
Orissa .		- 1	15/	T	22.	•	194	673
Punjab (Erstwhil	le)	3	in all	92	21	•	7,866	15,766
Rajasthan .	•		मधा	जि.ज	ग्रने	•	3,196	4,195
Uttar Pradesh	•	•		•	•	•	7,139	10,788
West Bengal		•	•		•	•	330	N.A.
Delhi .	•			•	•		258	665
Himachal Prade	sh (E	rstwł	nile)	•		•	4	23
Other Union Te	erritor	ies	•	•	•	,	25	67
	1		А	LL IN	IDIA		31.016	50,944

*Incomplete.

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