# ESTIMATES COMMITTEE (1971-72)

(FIFTH LOK SABHA)

## FIFTH REPORT

# MINISTRY OF AGRICULTURE

(Department of Agriculture)

Tractors and other Agricultural Machinery and Implements.



# LOK SABHA SECRETARIAT NEW DELHI

August, 1971/Sravana, 1893 (Saha)

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# ESTIMATES COMMITTEE

(1971-72)

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Shri Avtar Singh Rikhy-Joint Secretary.

Shri M. S. Sundaresan-Deputy Secretary.

Shri T. N. Dhar-Under Secretary.

#### INTRODUCTION

- I, the Chairman, Estimates Committee, having been authorised by the Committee to submit the Report on their behalf, present this Fifth Report on the Ministry of Agriculture—Tractors and other Agricultural Machinery and İmplements.
- 2. The subject was examined by the Estimates Committee (1970-71) and necessary information obtained and evidence taken by them. That Committee, however, could not finalise their Report due to the sudden dissolution of the Lok Sabha on the 27th December, 1970. The Estimates Committee (1971-72) have perused the minutes of evidence and have come to their own conclusions which have been embodied in the Report.
- 3. The previous Committee (1970-71) took evidence of the representatives of the then Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture) on the 7th November, 1970. The Committee wish to express their thanks to the Secretary, Department of Agriculture and other officers of the Department for placing before them the material and information they wanted in connection with the examination of the estimates.
- 4. They also wish to express their thanks to Shri H. P. Nanda. President, Messrs Escorts Ltd., New Delhi, Shri V. R. Reddy, Managing Director, Messrs Krishi Engines Private Ltd., Hyderabad and the representatives of Messrs Tractors and Farm Equipment Ltd., Madras, for giving evidence and making valuable suggestions to the Committee.
- 5. The Committee also wish to thank the representatives of Messrs Escorts Ltd., New Delhi, the Agricultural Implements Manufacturers' Organisation, New Delhi, Messrs Krishi Engines Private Ltd., Hyderabad, Messrs Cossul and Company Private Ltd., Kanpur, Punjab Agricultural University, Ludhiana, Haryana Agro-Industries Corporation Ltd., Chandigarh, Agriculture Machinery Dealers and Manufacturers' Association of India, New Delhi, Hindustan Tractors Ltd., Bombay, Eicher Tractors India Ltd., New Faridabad (Haryana), Messrs R. Raikhy Enterprises, Ludhiana, V. S. T. Tillers Tractors Ltd., Bangalore, International Tractor Company of India

Ltd., Bombay, the All India Manufacturers' Organisation, Bombay and the Andhra Pradesh RS-09 Tractor Owners Association for furnishing Memoranda to the Committee.

- 6. The Report was considered and adopted by the Committee (1971-72) on the 7th August, 1971.
- 7. Summary of recommendations/conclusions contained in the Report is appended (Appendix IV).
- 8. A statement showing the analysis of recommendations contained in the Report is also appended to the Report (Appendix V).

KAMAL NATH TEWARI,

Chairman.

Estimates Committee.

NEW DELHI; August 11, 1971

Sravana 20, 1893 (Saka).

#### CHAPTER I

#### INTRODUCTORY

#### A. Historical Background

- 1.1. Agriculture in India which forms the backbone of Indian economy had been deploying bullock power according to age-old traditions which is a very slow process with the result that there had been no appreciable progress in the improvement of the Indian Agriculture. The Post World War II period brought in a shift from the age-old methods of farming through bullock power to the use of mechanical power through use of agricultural machinery as is being practised by most of the progressive countries of the world.
- 1.2. Farm mechanisation has revolutionised agriculture in many countries of the world. It has paid them rich dividends by opening up new vistas of development, commercialisation of agriculture and bringing the agricultural sector closer to other sectors of economy for overall development. Modern equipment and mechanisation has improved operational efficiency, standard of living and working condition of the farm workers, by making the task of agricultural operations easier, reducing the working hours and thereby affording them adequate relief to pay more attention to their domestic chores. It has also increased agricultural production by timely performance of field operations, making the best use of available soil moisture, preparation of proper seed-bed and eliminating. wholly or partially, the draft animals and thereby releasing acreage under feeds and fodders for grain and commercial crops. Better agricultural practices, requiring precision of spacing depth, can be more effectively performed by mechanisation than by other ways. Its introduction, in a large measure, provides a welcome break-through in the traditional cultivation system, by bringing more factors under the control of the operator and thus helping him develop new horizons and dynamic outlook in agricultural profession.
- 1.3. During the last two to three decades, mechanisation of agriculture in India had remained, more or less, a highly controversial issue. While some held the view that the scope for mechanisation of agriculture in our country was extremely limited in view of the smallness and fragmentation of agricultural holding, poverty of the cultivators, low wages, availability of plentiful labour in rural areas,

high cost of machinery, lack of spare parts of machines, inadequate service facilities etc., others felt that in spite of these limitations there was ample scope for partial, if not complete, mechanisation of farming in this country. It has been stated that without machanisation radical transformation of Indian agriculture cannot be easily brought about. With the rapid industrialisation of the country and the improvement of the technical know-how in regard to the scope, usefulness and economies of the working of tractors, power tillers and other types of labour saving agricultural machinery, the opposition to mechanisation is steadily wearing out. In fact, India is already entering into an era of progressively increased mechanisation of agriculture. The use of electricity on farms all country-side is on the increase. The usefulness of tractors in reclaiming and breaking up new lands, soil conservation, and drainage works, terracing slopping lands and eradication pernicious weeds has already been well-established. In spite of the overall adequacy of the manual labour in the rural areas, acute shortage of farm hands in most of the regions is felt during the peak periods of employment for performing such farm operations as sowing, harvesting etc. For carrying out these operations efficiently within the limited period of time, machinery can play an advantageous role. Mechanisation could also be very helpful in intensive farming or multiple cropping, which offers great scope for stepping up agricultural production in the country.

- 1.4. The Government of India acquired a large number of tractors and bull dozers from the U.S. Army Disposals at the end of World War II. The nucleus of the Central Tractor Organisation was formed with these old tractors. The first assignment of C.T.O. was to rehabilitate these machines and make them available to the State Governments for ploughing what are known as Kans infested lands as an integral part of 'Grow More Food' campaign. The Central Tractor Organisation was not, however, concerned with the popularisation of mechanised agriculture nor had it anything to do with the supply of tractors to the State Governments or private parties. It also did not normally undertake cultivation work with the help of tractors.
- 1.5. The Central Tractor Organisation, coupled with the Tractor Training Centre at Budni administered by it, was however, regarded as a repository in a large measure of technical knowledge on tractor mechanism and had its own programme of training students from engineering, agricultural and other institutions with a view to relieving the shortage of tractor mechanics in the country. On 13th October, 1959, it was decided to wind up the Central Tractor

Organisation. Certain matters, such as, settlement of pending audit objections, conduct of court cases, finalisation of recovery cases with States and other Departments, reconciliation of accounts, clearance of old liabilities, however, continued to be dealt with by the nucleus staff of the C.T.O. This staff was also disbanded after 31st July, 1970. Seventh Report of the Estimates Committee (1953-54) interalia deals with the Central Tractor Organisation.

#### B. Organisational set-up

- 1.6. There is a Machinery Division in the Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture) which deals with Tractors, Agricultural Machinery and Implements. The divisional head of the Machinery Division is Joint Secretary (Machinery). He is assisted by a Deputy Secretary and an Under Secretary on the administration side and technical officers like Joint Commissioners—one on the machinery side and another on Agro-Industries side, Director of Agricultural Implements, Specialist (Agricultural Implements) 3 Assistant Commissioners (Machinery), Assistant Director (Machinery) and Law Officer (Agro-Industries) on the technical side. It has been stated that one post of Assistant Commissioner (Machinery) and the post of Deputy Commissioner (Agro-Industries) are held in abeyance pending a final assessment of work load in the Machinery Division.
- 1.7. A Board for Agricultural Machinery and Implements was set up by Government in April, 1963 with the following functions:—
  - to constantly keep under review the programme of indigenous manufacture, servicing and maintenance of tractors, power tillers, implements, plant protection equipment, forestry tools and machinery required for dairies, slaughter houses, fisheries, food processing, poultry, tubewell drilling etc.;
  - to advise Government on the import of agricultural machinery and equipment both for demonstration and trial and to meet the gap between the indigenous production and requirements;
  - to devise measures for fair and equitable distribution of tractors, power tillers, implements and spare parts at reasonable prices;
  - 4. to maintain close liaison with Central Ministries concerned in the matter, State Governments, manufacturers, their

distributors and dealers with a view to ensuring that the needs of farmers are adequately met;

- 5. to devise measures to ensure adequate and timely supply of raw materials required by the manufacturers;
- to advise Government on the measures to be adopted for the popularisation of improved agricultural implements;
- 7. to deal with such other matters as may be referred to it by the Ministry of Food and Agriculture.
- 1.8. The Board had conducted four meetings on 18th/19th February, 1964, 28th September, 1964, 25th September, 1965 and 29th December, 1966.
- 1.9. It has been stated by the Ministry that "the Board had made certain useful recommendations about the programme of manufacture, servicing and maintenance of tractors and other agricultural equipment; etc. and to advise Government on the imports of agricultural machinery for demonstration and for meeting the gap between indigenous production and requirements and measures to be adopted for popularising agricultural implements and machines and also equitable distribution of agricultural machines and spare parts therefore at reasonable prices. However, the Board could not cover the entire scope of its functions largely due to infrequency of its meetings."
- 1.10. While reconstituting the Board, the Government felt it necessary to review the objectives of the reconstituted Board so as to reflect the priorities in the farm mechanisation programme. It has been stated by the Ministry that the Board was accordingly reconstituted with more need-based objectives.
- 1.11. The functions of the Board, which was reconstituted on 11th July, 1969 are as follows:—
  - (i) to review programmes of manufacture, servicing and maintenance of power tillers, tractors, agricultural implements etc.;
  - (ii) to review from time to time availability and distribution arrangements of the above items;
  - (iii) to review the credit requirements for and popularisation of the above equipment; and
  - (iv) any other matter concerning the industry engaged in the manufacture and distribution of the above machinery and implements.

1.12. The Board consists of the representatives of Ministry of Food and Agriculture, Ministry of Finance, Ministry of Industrial Development and Internal Trade, National Cooperative Development Corporation, three representatives of State Governments, eight representatives of State Agro-Industries Corporations, two representatives of tractor manufacturing industry, one representative of Power-tiller manufacturing industry, two representatives of Agricultural Implements manufacturing industry and one representative of the State Farm Corporation.

## C. Training and Testing Centres

- 1.13. Two subordinate offices namely Tractor Training and Testing Station, Budni (Madhya Pradesh) and Tractor Training Centre, Hissar (Haryana) have been set up to deal with the training programmes and to conduct tests on tractors, Agricultural Machinery and Implements.
- 1.14. The Committee note that the Board of Agricultural Machinery and Implements constituted by Government in the year 1963 made some useful recommendations about the programme of manufacture servicing and maintenance of tractors and other agricultural equipment etc., and rendered useful advice to Government in the matter of import of agricultural machinery for demonstration and for meeting the gap between indigenous production and requirements and measures to be adopted for popularising agricultural implements and machinery and also equitable distribution of agricultural machinery and spare parts thereof at reasonable prices. The Committee, however, consider it regrettable that the Board could not cover the entire scope of its functions due to the fact that it met only four times from 1963 to 1966.
- 1.15. The Committee hope that the reconstituted Board will meet more often so that it may be able to review the programmes of manufacture, servicing and maintenance of power-tillers, tractors and other agricultural implements and make constructive suggestions for development of the industry engaged in the manufacture of tractors and other agricultural machinery.

#### CHAPTER II

#### TRACTORS

#### A. Demand

2.1. In the Report of the Working Group for Formulation of Fourth Five Year Plan Proposals on Agricultural Machinery and Implements it was stated that on an earlier occasion, the demand for tractors during 1966-67 to 1970-71 was estimated as follows:—

H.P. Range	-	1966-67	1967-68	1968-69	19 <b>69-7</b> 0	1970-71
12-20 D.B.H.P.		6,000	7,500	9,000	10,500	12,500
21-35 D.B.H.P		12,000	15,000	18,000	21,000	23,000
35 D.B.H.P. and Above		2,000	2,500	3,000	3,500	5,000
TOTAL		20,000	25,000	30,000	35,000	40,500

2.2. It has been stated in the Report of the Working Group that "according to present trends in demand, the above estimates are on the very low side. The demand for tractors and all types of farm machinery has increased manifold on account of several factors; multiple cropping, general shortage of labour during critical periods of agricultural operation, more remunerative prices for agricultural produce and the technological changes taking place in the rural areas. The high yields posible through improved seeds and other intensive farming practices and the general rise in the prices of farm produce have increased the investment capacity of farmers, who are now eager to invest on tractors and other farm equipment for modernising their farms. Further under most farming conditions mechanisation has enabled farmers to economise on cost of cultivation and to increase the intensity of farming. The Board of Economic Enquiry, Punjab which has carried out an exhaustive survey on the economy of tractor cultivation in Punjab during 1955-56 and 1957-58 have observed that farming with tractors is less expensive. A sample survey carried out by the National Productivity Council in 1966-67 has shown that the average per acre cost of cultivation on mechanised farms was Rs. 403 as against Rs. 512.12 on non-mechanised farms with the mechanised farms having an intensity of farming of 1.607 as compared to the non-mechanised farms having only an intensity of 1.34."

2.3. According to the present trends in demand, in the State of U.P. alone, about 10,000 tractors are required every year and the requirements of Punjab, Haryana and other States where tactors have become very popular, are much higher than the previous estimates. During the past few years, availability of tractors from indigenous production and imports has been far below the demand, as a result of which there is a large unsatisfied demand each year resulting in accretion to the estimates of the subsequent year. As on 1st August, 1968, the orders pending with the indigenous manufacturers, agents of imported tractors, Agro-Industries Corporations and the demands that have been received from the State Governments are 72,968 nos. as per the following details:—

2 · 4	Indigenous manufacturers			34,156				
	Agents of Russian Tractors			21,912				
	State Agro-Industries Corporations			1,900				
	Directorate General of Resettlement (Defence Personnel)							
	From State Governments fo. Ayacut areas etc.							
				72,968				

Besides the above large pending demand, orders being registered every month with the tractor manufacturers and distributors etc. are of the order of 4,500 numbers. This is indicative of the new trend in demand. Taking into account such factors as the pending orders, orders being registered every month, replacement requirements, programme for extending credit facilities by Commercial Banks, Agro-Industries Corporations, Land Mortgage Banks etc., the demand is expected to rise from 70,000 tractors from the first year of the Plan to 90,000 numbers towards the end of the Plan period. The estimated requirements of tractors in the different

horse-power	ranges from	the years	1969-70 to	1973-74	are according-
ly estimated	as under:				

H. P. Range	1969-70	1970-71	1971-72	1972-73	1973-74	Total
12-20 H.P	18,000	18,cco	<b>20,c</b> co	22,000	25,000	103,000
21-35 H.P.	36,000	36,000	38,000	40,000	45,000	195,000
36-50 H. P.	14,000	14,000	15,000	16,000	18,000	77,000
51 H.P. and above.	2,000	2,000	2,000	2,000	[2,000	10,000
	70,000	70,000	75,000	80,000	90,000	385,000

- 2.5. It has been stated in the Working Group report that in comparison with the earlier estimate of 1966 there is an increase in the demand for tractors of all horse power ranges. They also hold the view that there would be a distinct demand for tractors of and below 20 horse power which can be more easily and economically operated in small fields and medium size farms.
- 2.6. The Working Group have further stated in their Report "that while the off-take of tractors would be larger in wheat-growing areas where the farms are relatively larger and road communications better, a substantial demand for power-tillers would develop especially in the paddy regions and in the hilly areas."
- 2.7. From the information furnished to the Committee by the Ministry it is seen that the actual pending demand for supply of tractors during 1969-70 was of the order of 83,000 numbers. As against this, the Working Group on Agricultural Machinery and Implements, has assessed the total requirements for tractors during 1969-70 at 70.000 numbers. Explaining the variation in figures, the Ministry have stated in their reply that "the working Group on Agricultural Machinery and Implements had assessed the require-

Giving discount for overlappings and duplicate booking of orders demand of tractors is assessed on year to year basis taking into consideration various factors such as orders pending with indigenous manufacturers. Agro-Industries Corporations, demands of areas. The total gross requirement of tractors for the year 1969-70 was of the order of 1,24,192 as indicated below:—

(a) Orders pending with indigenous manufacturers.	50,825
(b) Orders pending with Agro-Industries Corporations.	63,132
(c) Demand of Defence Personnel	5,235
(d) Demand of State Governments for special areas.	5,000
Тотаг.	. 1,24,192

Giving discount for overlappings and duplicate booking of orders to the extent of 33-1/3 per cent of the total registrations, the net estimated requirement was assessed at 83,000 tractors."

- 2.8. The representative of a tractor manufacturing concern informed the Committee during evidence that large imports of tractors were based on "faulty, purely theoretical and misrepresented demand registered with the State Agro-Industries Corporations." According to a survey made by the Special Tractor Panel set up by the Automobile Council, the demand would be about 50,000 tractors per annum by the end of the last year of the Fourth Five Year Plan.
- 2.9. It has been suggested to the Committee that as in the case of motor cars and scooters, some distributory control over the tractors should be introduced by Government. The cars are booked on the basis of a deposit of Rs. 2,000. The Committee have been informed that before system of deposit was introduced for registration of cars a large number of persons had made demand for Cars. But subsequently when each one had to deposit an amount Rs. 2,000 at the time of registration there was a decline in the registration demand. Similarly for scooters and motor cycles, deposit of Rs. 250 was asked for and the registrations fell. representative of a tractor manufacturing organisation has stated that during the period of shortages persons in the line deposit only Rs. 100 and register their names with Escorts, with Ferguson and with various Agro-Industries Corporations and invest about Rs. 600 or Rs. 700. From all these sources, when the tractors are available, those persons take the advantage of taking delivery and at least 50 per cent of those registrations are not genuine. After taking delivery of those tractors from all the sources they immediately sell them at a premium of Rs. 6,000 or Rs. 7,000 or even Rs. 10,000.
- 2.10. It has also been suggested to the Committee that in order to assess the correct demand for tractors the prospective buyer should be required to make a deposit of Rs. 2,500 or Rs. 3,000 in the Post Office as against the present practice of depositing a sum of Rs. 100 only.

- 2.11. The Committee have been informed by the representative of a non-official organisation that a 20 HP tractor would be in great demand as envisaged by the Government. Every tractor manufacturer in the world started with 18—20 HP tractors and subsequently gave it up in favour of a higher power and today the demand is more for a 50 HP tractor because of the multi-crop pattern. It has been stated that after harvesting one crop, the field has to be prepared for the second crop in 15 to 20 days and this can be achieved only with a higher h.p. tractor.
- 2.12. The representative of another tractor manufacturing concern informed the Committee that 44,000 orders for tractors were pending with the dealers at present. The demand for tractors was greater in the Northern States like Punjab, Haryana, Rajasthan and U.P. as compared to the States in the South. Asked what would be the total demand for tractors in India, the representative stated that somewhere around 70,000 tractors would be needed by 1973-74. He explained that there was a meeting held in the earlier part of 1970 in which Ministry of Food and Agriculture was also represented. The consensus in that meeting was that 70,000 tractors would be needed for the whole country per year. In that meeting no representative of the Planning Commission was present.
- 2.13. Asked whether there would be any demand for small sized tractors in India in view of the fact that the majority of the land holdings ranged between one to two acres, the representative of a manufacturing concern stated that in the final analysis not only smallness but cheapness would count. A small tractor of 14 HP would cost the farmer not less than Rs. 17,000 as compared to the price of Rs. 21,000 of a 36 HP tractor which would prove more useful.
- 2.14. The representative of the Ministry stated during evidence that an assessment of demand was made three years ago. At that time a Working Committee on Agriculture was set up which estimated the demand towards 1971-72 at about 70,000 tractors. As a result of the high yielding varieties and the increase in area put under multiple cropping and also because of the price increase in farm produce and better availability of credit facilities and other factors there was a sudden increase in the demand for tractors. The Department of Agriculture reviewed the earlier estimates and assessed the requirements towards 1973-74 at 90,000 tractors per annum.

- 2.15. The Planning Commission had estimated a requirement of 90,000 tractors in the range of 20 HP and 50HP in the last year of the Fourth Five Year Plan while the survey made by the Special Committee set up by the Development Council for Automobile Industry showed a requirement of 50,000 to 60,000 tractors for the same period in the 25 HP to 55 HP range. Asked what were the reasons for the big variation in figures regarding demand for tractors, the representative of the Ministry stated that with the changes in the Plan strategy towards 1973-74, the Working Group on Agricultural Machinery and Implements has reassessed the demand for tractors. The Secretary, Department of Agriculture, added that the Planning Commission's initial figures were based on the forecast made by the Ministry of Food and Agriculture. "They have revised the forecast and in the light of subsequent discussions in the Working Group there is no difference in the approach of the Agriculture Ministry and the Planning Commission." The representative of the Ministry further stated that the estimates regarding demand for tractors could not be made with absolute precision.
- 2.16. The Committee were informed that the total estimated demand for tractors during the Fourth Plan period would be 3,85,000. Since the indigenous production of tractors was 17,000 and even if 20,000 more were imported, there would be a wide gap between the supply and demand for tractors. Asked what steps had been taken to fill this gap, the Secretary, Department of Agriculture stated that "there is no escape from the position that for some years to come, there will be a big gap between th supply and the demand. There are limits under which we can import even if foreign exchange was made available as is illustrated by the fact that even this year we are finding it difficult to get the entire number of 35,000 tractors. Tractor production is a long gestation project. There is a certain inevitable time gap which will take place between the licensing of a plant and the production coming up in stages up to the full licensed capacity. Lastly, though it is a minor point, but taking into account the fact of shortage, we have to keep some of these old tractors going. We have taken a decision and we are already liberalising on the imports of spare parts and in the next year's programme, we will have a substantial allocation for import of spare parts to keep the old tractors going."
- 2.17. As regards economics of small HP tractors, from the existing population of tractors and the demand trend, it has been stated by the Ministry that low HP tractors are in large demand. For the small farms, low HP tractors have been found to be more economical for possession and for operation.

- 2.18. The Ministry have further stated that the Working Group on Agricultural Machinery and Implements has estimated the demand for small tractors (low HP tractors ) at 25,000 numbers per annum. A Letter of Intent has been issued to M|s. H.M.T., Jinjore for production of 12,000 numbers of 20 HP Zetor tractors. The proposals of M|s. Ghaziabad Engineering Co., for manufacture of 10,000 DT-14B|T-25 tractors and that of M|s. Leyland (Automobile Product of India) for production of 12,000 numbers of BMC-25 HP tractors have also been approved. When these firms go into production, the requirements of small HP tractors are expected to be fully met. The Ministry have added that the Zetor tractors are already being assembled by the U.P. and Haryana Agro-Industries Corporations.
- 2.19. The Committee note that divergent views have been expressed regarding the demand for tractors. While the Working Group on Agricultural Machinery and Implements have estimated the total demand for tractors as 90,000 by 1973-74, the Special Tractor Panel, set up by the Automobile Council, are of the view that not more than 50,000 to 60,000 tractors would be actually needed by the end of the Fourth Plan. This wide gap of 30,000 to 40,000 tractors in assessment of demand would indicate the urgent need for careful, detailed and realistic assessment of the demand survey for tractors. While doing so the Committee hope that Government will keep in view the farmers' preferences, average size of holdings, ceiling on land holdings, capital and running cost of tractors. The demand-survey should also cover power-tillers for paddy regions and in hilly areas.
- 2.20. The Committee further suggest that Government should draw up a long-term perspective plan which may be reviewed annually in the light of actual experience.
- 2.21. The Committee feel that there is imperative need for realising self-sufficiency in the crucial field of manufacture of essential agricultural machinery and implements. The Committee, therefore, emphasise that import should be strictly regulated and permitted only to cover the known gaps in indigenous production to meet the pressing demand. The Committee, however, hope that care will be taken by Government to see that import of agricultural machinery does not hamper the development of indigenous manufacture of tractors etc. to meet in full the existing and anticipated demand.
- 2.22. The Committee suggest that Government should investigate allegations that the same party registers demand simultaneously with a number of suppliers and then sells the tractors at a heavy premium. Government should devise suitable remedial measures keeping in view the regulatory measures.

# **B.** Indigenous Production

# (i) Licensed capacity and actual production

2.23. The following statement shows the licensed capacity and actual production of tractors in the five existing units in the country:—

SI. No.	Name of Firm		Year of Licens- ing	Make	Type of fuel used	HP range	Licensed capa- city	Present Indige- nous content	1966	1967	1968	1969	1970 upto August
ī	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	M/s Eicher Tractors India Ltd., Faridabad.	Eicher Tractors Corporation.	1959	Eicher	Diesel oi	1 26.5	2,000	Not known	92	204	346	378	307
2.	M/s Escorts Ltd., Mathura Rd., Faridabad (Haryana)	Ursus Tractors	1966	Escorts 27W 37W 47W	,,	28 34·5 48	7,000	"	1427 706	1080 1440 36	1224 2958 1404	250 5772 1811	893 3621 22
3.	M/s. Hindustan Tractors Ltd., Construction House Ballard Estate, Bombay.	Zetor	1966	Hindustan	,,	50 35	5,000 2,000	,,	1093 800	1303 343	1063 1156	1151 514	509 260
4.	M/s. International Tractor Co. of India Ltd., Akurli Rd., Kandivili East, Bombay- 67.	International Mc-Cormic		Mc.Cornick International (B. 275)	١ <b>و</b>	35	7,000	<b>3</b> 7	1301	2901	4001	4403	2069
5.	M/s. Tractors & Farm Equipment Ltd., 202 Mount Rd., Madras	Massey Ferguson	1964	Massey- Ferguson 1035.	**	35	7,000	,,	3397	4087	3275	2818	979
						Тот	AL		8816	11394	15427	17097	8660

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2.24. The Working Group on Agricultural Machinery and Implements have stated in their Report that for meeting the requirements of tractors towards 1973-74 from indigenous production, additional capacities of the following order will have to be created expeditiously:—

H. P. Range.	Present sanctioned capacity	Capacity needed by 1973-74	Additional capacity to be created
12 -2C HP	nil.	25,000	25,000
21-35 HP	25,000	45,000	20,000
36-50 HP	5,000	18,000	13,000
above 50 HP .	nil.	2,000	2,000
	30,0000	90,000	60,000

2.25. The Department of Agriculture have stated that with a view to enabling the existing manufacturers to diversify their production and also enabling the other manufacturers to come in the field of production of tractors, the tractor industry was de-licensed on the 7th February, 1968. As a result of this de-licensing, the following nine new manufacturing programmes had been approved by the Department of Industrial Development:—

	Name of the Party	Proposed location	Make of tractor	Annual capacity Nos.
ı.	Ghaziabad Engg., Co. Ltd., New Delhi.	Loni (U.P.)	DT-14B[T-25 (14 HP)	10,000
2.	Indian Agro-Machines, Bombay.	Hyderabad	RS-09 (20 HP)	10,000
3.	Dr. R. Keymal, Hyderabad.	Hyderabad	Guldner (15-45 HP.)	10,000
4.	Escorts Ltd., Faridabad.	Faridabad	Ford (56 HP)	6,000
5.	Kirloskar Bros	Poona	D-3006,4006, 6006 and 9006 (27-75HP).	10,000
6.	Prem Agro-Engg.—New Delhi.	Hyderabad	U-650/651 (65 HP).	5,000
7.	Perfect Tractors Ltd., Patiala.	Patiala	Hanomag (32 HP)	5,000
8.	Steyr India Ltd.	Hyderabad	Steyr (44 HP).	12,000
9.	International Tractors Co	Bombay	434 Tractors (44 HP)	7,000

- 2.26. It has been further stated that none of the above nine manufacturers has gone into actual production of tractors. The tractor industry was exempted from the licensing provisions of the Industries (Development and Registration) Act, 1951 from 7-2-1968 to 19-2-1970 and with effect from 20-2-1970 the tractor industry was again re-licensed. Two of the nine units with annual capacity of 6,000 and 10,000 tractors had since been approved and licenses had been issued. Letters of Intent, which were valid for a period of six months, had been issued to four units and in respect of the remaining three units the grant of industrial licenses was still under consideration.
- 2.27. The Department of Agriculture have stated that for all the new schemes approved recently or which are being processed, a uniform condition has been imposed that they should achieve 100 per cent indigenous production within 3-4 years by adhering to the following phased manufacturing programme:—

4th year.								•	As nearly 100 per cent as possible
3rd year.	•	•	•	•	•	•	•	•	90 per cent.
2nd year	•							•	75 per cent.
ist vear		•		•	•	•	•	٠	50 per cent.

- 2.28. The Working Group on Agricultural Machinery and Implements have recommended in their Report that Zetor-2011 tractor of Czechoslovakia should be taken up for production in view of its good design features and suitability for medium and small farms in the country. When asked as to what the latest position was with regard to that proposal, the Department of Agriculture have stated that it has since been decided taht Messrs Hindustan Machine Tools should undertake the manufacture of Zetor-2011 tractors by utilising the spare manufacturing capacity available in that unit. The undertaking has been issued a letter of Intent on 27.7.1970 for a capacity of 12,000 numbers per annum and their collaboration agreement has been approved in principle. The Department of Industrial Development has taken a decision not to set up an altogether new unit in the public sector for the manufacture of tractors.
- 2.29. A tractor manufacturing organisation has represented to the Committee as under:—

"Besides the 5 existing tractor manufacturers with a licensed capacity (including expansions requested for) of 45,500

tractors per annum, 10 new collaborations for tractor manufacture from Eastern and Western countries have already been approved and another half a dozen of them are awaiting approval. In the Public Sector, Hindustan Machine Tools proposes to manufacture 12,000 tractors (initially 25 HP) under the licence of Zetor (Czechoslovakia). The Czech tractor is also being made under the name Hindustan in 35 HP and 50 HP at Baroda. We understand that Punjab Government is going to manufacture Swaraj tractors, for which they have obtained the technical know-how from National Research Development Corporation. Rajasthan State Government are planning to produce 5,000 tractors per annum in collaboration with Renault of France. The total licensed capacities sanctioned and approved for tractor manufacture by Foreign Investment Board and the Licensing Committee exceed one hundred eighty thousand tractors per annum, which is twice as much as the Planning Commission has indicated and more than three times than the recommendations and estimates of the Development Council for Automobile Industry."

Regarding indigenous production of tractors, the tractor manufacturing concern have further stated:—

"Although the Indian Tractor Industry is in its infancy and the high tractor demand really started only in 1968, yet the imported content has been brought down to 15 per cent over a period of 5 years from commencement of production. In 1969, 16,000 tractors were produced indigenously and it is expected that nearly 23,000 tractors will be produced in 1970 and there is no doubt, provided the adequate supply of raw materials like steel alloys and flat steel, tyres, tubes, batteries etc. are available, that the five existing Indian tractor manufacturers will be able to deliver more than 30,000 tractors by 1971 and 40,000 by 1972. The additional production by genuine manufacturers, which we believe, will not be more than four or five, will add to this, another 15,000 to 20,000 tractors. Thus, by 1972-73 adequate supply of 50,000 to 60,000 tractors annually would be available from indigenous manufacturers."

2.30. It has been represented to the Committee that the actual production of tractors in 1970-71 would be 23,000 with 85 per cent indigenous content. The indigenous content was expected to rise to 100 per cent or at least 90 per cent by 1972.

- 2.31. The Committee have been informed that licenses have been issued to some "bogus" parties who do not have the capacity to set up their factories.
- 2.32. The representative of a non-official organisation stated that his organisation would be producing 11,500 tractors during 1970. This production was possible because the Government allowed the import of certain components which could not be produced in India either for want of adequate machines or for want of raw-material like steel and rubber.
- 2.33. Asked why the five manufacturers could not produce 30,000 tractors which was the licensed capacity and what were the limiting factors due to which there was a shortfall in production, the representative of the non-official organisation stated that the production could be increased to the licensed capacity if the import of components could be increased from 15 per cent to 25 per cent. In terms of foreign exchange it would mean an increase from Rs. 2,000 to 2,300 for each tractor. When asked if an increase of Rs. 300 per tractor in terms of foreign exchange could increase indigenous production and thereby save foreign exchange spent on the import of complete tractors, the representative of the non-official organisation stated: "I cannot speak for other manufacturers. Speaking for myself, if you increase the amount by Rs. 500 per pack, which is 25 per cent of the cost of the present pack and 10 per cent of the total cost of the imported tractor, we can produce 50,000 tractors."
- 2.34. During evidence the representative of the Department of Industrial Development stated that the existing five units had a licensed capacity of 30,000 tractors. He further stated: "I must frankly admit that the performance of some of these has been very disappointing. I would also mention, Sir, that it is not due to any lack of encouragement or assistance on the part of the Government that production has been lagging in some of these units. The fact is that the tractor industry, as Secretary, Agriculture, mentioned, requires a lot of investment and on rough estimate to establish a tractor industry for the production of one thousand tractors, a capital investment of a crore of rupees is needed. Therefore, to establish nearly 5,000 tractors capacity an investment of five crores of rupees would be needed. Part of components for the tractor industry are

produced in the tractor industry itself and part of these is brought from other ancillary industries. Therefore, it does require a good deal of coordination between the production of the ancillaries and the production of main tractors manufacturers if successful manufacture is to be established."

- 2.35. The representative of the Department of Industrial Development further stated: "The oldest unit is about 12-13 years old, the manufacturers of Massey Forguson tractors. They have today a licensed capacity of 7,000 tractors, but despite the best efforts, their production per month has been varying between 250 and 300. The next unit is International Tractors. They have also got a licensed capacity of 7,000. I am glad to say that they are doing far better. Their monthly production has been between 400 and 450. We expect them to produce six thousand tractors per year after some time.
- 2.36. Another unit is at Baroda, Messers Hindustan Tractors Ltd. Their licensed capacity is 7,000. They had a few problems. Their production built up has not been satisfactory.
- 2.37. Messrs Escorts have a licensed capacity of 7,000 and I am glad to say that they have exceeded their capacity. They have come up for their expansion. We are going to encourage them."
- 2.38. The Committee have been informed that Government was following a liberal licensing policy. Some of the earlier approved units in the course of 3 or 4 years might be able to produce upto 50 per cent or 75 per cent of their licensed capacity provided they were able to raise all the financial resources and were able to procure all the ancillaries. In view of the highest priority assigned to the tractor industry, it is being treated as a 'core industry' which means that Government would ensure the entrepreneur all foreign exhange and other facilities not only for import of parts but also for capital goods imports and for financing the Project.
- 2.39. In order to meet the increasing demand for tractors the Committee desired to know during evidence whether the production of tractors could be taken up in the public sector on a mass scale, as this fight bring down the cost of production and might also help industrial growth in the country. The representative of the Department of Industrial Development stated that to start with, Hindustan Machine Tools has taken up the production of tractors. The Punjab Industrial Development Corporation is also willing to take up the production in the Public Sector and a Letter of Intent has been issued to them. It has, however, been stated that the

suggestion merited serious consideration and it has to be examined whether the proposition would be feasible from the technical and economic points of view.

- 2.40. The Committee desired to know whether it would be possible for the Government to standardise the different makes of tractors in particular horse power range so that licences for the same horse power range are not issued to a large number of units. The representative of the Department of Agriculture has stated that the most popular tractors are those which are in the small horse power range from 20 to 35. But for different zones and different kinds of jobs even 50 to 60 horse power tractors are required. If any standardisation is done on the lines suggested by the Committee that will virtually mean giving monoply to one or two manufacturers to produce tractors in a patricular horse power range.
- 2.41. Regarding the economic viability of a tractor manufacturing unit, the representative of the Ministry of Agriculture has stated "On this question of capacity I rather think that there is an expert opinion that anywhere between 10 to 15 thousand tractor is a viable economic unit....."
- 2.42. Asked whether it was feasible to provide some more foreign exchange to tractor manufacturers so as to increase the import content in the Indian made tractors instead of spending money on the import of complete tractors from abroad, the representative of the Department of Industrial Development stated: "In fact, before we agree upon what should be the imported content, detailed discussions are held between the tractor manufacturers and D.G.T.D." It was, however, stated that the matter would be examined agian.
- 2.43. The Committee have no doubt that Government would bear in mind the need for ensuring that firms which have been issued licences, translate them in terms of production. Government should keep close watch and take strict action. The Committee feel that Government should ensure that manufacture of those tractors only whose capability and suitability to Indian conditions have been proved, beyond doubt, are licenced for manufacture. While doing so, the Committee hope that Government will bear in mind the capital and running cost of tractors so as not to burden the agricultural sector with heavy investment. The Committee need hardly emphasise the benefits of standardisation of tractors which would result in economics of scale in manufacture and lower inventories for servicing etc.

- 2.44. While every effort should be made to increase the indigenous content in the production of tractors, the Committee suggest that it should be invariably ensured by Government that production programmes are not retarded for want of foreign exchange for purchasing a small percentage of components, as foreign exchange has otherwise to be spent on a much larger scale for the import of complete tractors.
- 2.45. The Committee trust that Hindustan Machine Tools, which has recently taken up the production of tractors, would spare no efforts to establish manufacture of tractors upto the licensed capacity, in the minimum time possible. The Committee expect Hindustan Machine Tools, a premier public undertaking, to take the lead in providing tractors of proven capacity, competitive prices and efficient and dependable "after sales" service etc.

## (ii) Fixing of Price

- 2.46. Explaining the procedure for fixing prices of indigenously manufactured tractors in India, the Department of Agriculture have stated:
  - "Agricultural tractor has been declared as an Essential Commodity and brought under the ambit of Essential Commodities Act, 1959. Under this Act, the Tractors (Price Control) Order, 1967 has been promulgated on 30.3.1967 and the selling prices of indigenous tractors have been fixed by a resolution on 3.6.1968. This resolution was issued after examining a report submitted by the Tariff Commission in October, 1967. The prices recommended were to be ceiling prices valid upto 31.3.1969. At present the ceiling prices have been fixed as F.O.R. destination (nearest Rail head). The prices are applicable throughout the country, after taking into account the average cost of freight. The charges so fixed include packing insurance. freight charges. This is to avoid any complaint from a farmer having a land in the remotest corner of the country. The charges for the transport of tractor from nearest rail head to the Agricultural Farm are, however, to be borne by the customer himself. According to this procedure the dealer/agent cannot charge freight rate and charges as per his their will. This has also been done to avoid different prices being charged by the dealers in the

different areas in the country. Following repeated representations from the tractor manufacturers for price increase on account of various factors, the Cost Accounts Branch of the Ministry of Finance was asked in December, 1969, to arrange for a cost examination of the tractor manufacturing units with a view to ascertaining whether any revision in the notified prices of the tractors was called for after 31.3.1969. On receipt and examination of the report of Cost Accounts Branch, it was found that there was no case for any price increase on account of increase in the price of CKD packs. Taking note of the other points which in the report of the Cost Accounts Branch, the recommendations of the Tariff Commission and requests from the tractor manufacturers, it has now been decided that the Bureau of Industrial Costs and Prices may undertake an investigation into the cost structure of the five units manufacturing Agricultural tractors in the country with a view to advising Government on the fair selling prices at which the tractors should be sold to the The Bureau has been requested in September, 1970 to undertake an enquiry and suggest fair selling prices of tractors. Their report is awaited."

- 2.47. During evidence, the representative of a tractor manufacturing organisation stated that the price fixation policy of the Government with regard to indigenous tractors was defective. He further stated that the present formulae were based on cost plus. If the manufacturer had a large production base so as to produce 70 per cent of the components for the tractors, the manufacturer was allowed 12 per cent return on the capital. But if those 70 per cent components were procured from the small scale industries in the country, the manufacturer was not allowed any return on the capital.
- 2.48. The representative of the organisation pointed out, that at the present level of prices fixed by Government in June, 1968, the firm was losing Rs. 10 to 15 lakhs per month. As such, the firm had informed the Government that they would be compelled to stop production of tractors. The Government had referred the whole case to the new organisation called the Bureau of Industrial Prices and Costs. As the Bureau might take 5 to 6 months to examine the price formula, the witness suggested fixing of interim prices for the tractors being manufactured in India so that the production programme would not be hampered.

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- 2.49. The representative of another tractor manufacturing firm stated that the prices of tractors were fixed in 1967 but since then the cost of power and steel had gone up and the margin of profit had been reduced to just Rs. 100|- for a tractor. He suggested that Government should either decontrol the tractor industry and allow open competition or give effect to the Tariff Commission's recommendation that tractor manufacturers should be allowed a return of 15 per cent on the capital employed.
- 2.50. Regarding fixing the prices of tractors, representation to the Committee is reproduced in Appendix I.
- 2.51. The prices of 35 HP tractors notified by Government of India in June, 1968 and which were still prevalent were as follows:—

MASSEY FERGUSON —Rs. 21,140
INTERNATIONAL —Rs. 19,750
ESCORT —Rs. 17,910

- 2.52. Regarding the need for revision of prices of tractors, it has been represented to the Committee "According to Tariff Commission recommendations, the prices were valid only upto March, 31, 1969, and they needed a revision thereafter. At the request of the tractor Industry, two cost examinations were made by the Accountants of the Finance Ministry under the directions of Ministry of Industrial Development—one in April May, 1969 and the other in February March, 1970. While both enquiries conclusively proved that the costs had considerably increased and that the ratio was progressively going up with import substitution, the Ministry of Industrial Development has taken no action but, instead, referred the matter to the Bureau of Industrial Costs and Prices for a de novo examination. It will require at least 3 to 4 months for the Bureau to arrive at their recommendations and yet another 6 to 8 months perhaps for the Ministry of Industrial Development to arrive at a decision on the revision in the prices.
- 2.53. In the meantime, by selling tractors at prices fixed on the basis of Tariff Commission findings in early 1967, the manufacturers are incurring heavy losses—in fact, going out of pocket on account of import substitution and increases in the prices of raw materials and indigenous components. Also with the International prices of steel going up, the tractor prices in Europe have increased by 15 to 20 per cent during the last three years. Even East European countries have lately quoted higher prices for tractors. There has naturally been a

corresponding increase in the price of imported packs which at present constitutes 15 to 20 per cent of the cost of indigenous tractors."

- 2.54. It has also been represented that "Since the Tariff Commission enquiry, substantial import substitution has taken place at much higher indigenous costs for which the Government has not allowed any price revision."
- 2.55. The Committee note that the question of fixing prices of tractors is under examination by the Bureau of Industrial Prices and Costs and their Report is awaited. While considering the matter in its various aspects on the basis of that Report, the Committee have no doubt that Government would bear in mind that tractors of the same horse power, though of different makes should have comparable prices. In any case, the difference in their prices should be as narrow as possible.
- 2.56. The Committee further suggest that prices of tractors should be kept under close watch and procedures should be devised for getting the prices reviewed periodically.
- 2.57. The Committee are distressed to note the complaint of manufacturers that they cannot produce tractors according to their capacity because of the shortage of raw materials particularly steel. The Committee recommend that Government should ensure that the production of tractors does not suffer for want of raw materials.

#### (iii) Price reduction

- 2.58. The Planning Commission in their Report (1966) have observed that the imported tractors are much cheaper than the Indian ones within the same range of Horse Power. Explaining the position the Ministry have stated in their note that the prices of indigenous tractors are comparatively higher than the prices of similar models if imported from abroad for a number of reasons such as high cost of imported and indigeously bought components, high cost of raw materials, higher over heads and other charges on account of the low volume of production, incidence of customs/excise duty on certain components/raw materials, etc.
- 2.59. Asked what steps were being taken by the Government to reduce the cost of indigenous tractors, the Ministry have, in their note, stated that the only way to reduce the cost of the indigenous tractors is to increase production so that economies of scale can be achieved. With this end in view the indigenous tractors manufacturers are being given all reasonable facilities to augment production

upto their maximum installed capacity. They are also being encouraged to expand their installed capacities. The Ministry have further stated that in addition to this a large number of ancillary units have been licenced or are being approved. They expect that this will help the tractor manufacturers to obtain their requirements of bought out components from the ancillary manufacturers at competitive rates.

- 2.60. The Committee feel that if farm mechanisation is to be successfully extended in the interest of increasing agricultural production, it is essential that indigenous tractors should be competitive in quality, performance and price with the best available in the world.
- 2.61. The Committee further suggest that full advantage should be taken of economies of scale, intensive utilisation of manufacturing equipment and machinery by introducing multiple shifts, strict cost accounting and vigilance to bring down the cost.

## (iv) Ancillary Industries

- 2.62. A tractor manufacturing firm represented to the Committee that the tractor manufacturers had to depend on the ancillary industry which was very erratic. Government had no control over production by the ancillary Industries. It was further stated that the foundry capacity was so inadequate that the firm was unable to get enough material even for the production of 600 tractors. As such, there was a lack of confidence in the ancillary suppliers. At one time about 200 tractors were lying useless because steering wheels and bonnets were not available.
- 2.63. In reply to a question as to why ancillary industries had not been delicensed to enable them to augment production and meet the increasing demands of the tractor Industry, the Department of Agriculture have stated in a note:—
  - "There are already a large number of units in the large, medium and small-scale sectors manufacturing ancillary for automobiles, tractors etc. In order to give fillip to the rapid development of this industry and to enable it to meet the increase in demand, during the Fourth Five Year Plan, the ban on creation of additional capacity in the field was removed in September, 1969. Proposals were invited till 31st January, 1970 and a large number of applications have been received which are being processed by the Department of Industrial Development. It is expected that the capacity installed in the existing units and the new units

which have been approved recently or are likely to be approved shortly, would be adequate to meet the requirements of the automobile and tractor industries."

- 2.64. The Committee need hardly stress the importance of ancillary industries to meet the increasing demand of components for tractors. They note that in order to give fillip to the rapid development of Industries manufacturing ancillaries for tractors, automobiles, etc. ban on creation of additional capacity in such industries was removed in September, 1969. Government should ensure that ancillary industries to feed the requisite components to the tractor and automobile industries etc. are developed without any delay. In particular, a detailed analysis should be carried out of the requirements of components for the tractor industry to attain their annual and Five Year Plan programme and concrete measures taken to see that the ancillary industries have the requisite manufacturing capacity to supply these components on assured and regular basis to match the tractor manufacturing programme.
- 2.65. The Committee feel that unless there is proper coordination between the production programme of tractor manufacturing units and the ancillary units producing components, the production programme for tractors would continue to suffer.
- 2.66. In the interest of achieving import substitution to the maximum extent possible, the Committee suggest that all possible encouragement should be given to the ancillary industries to produce those components which are still being imported from abroad.
- 2.67. The Committee hope that Government will ensure that steel and other raw materials needed by the ancillary units for production of components are made available to them on reasonable prices and on regular basis.

# (v) After-Sales Service

2.68. It has been represented to the Committee by a tractor manufacturing firm that the system of after-sales-service to tractors by the Agro-Industries Corporations is faulty. It has been stated that after-sales-service should be left to tractor manufacturers as the various models of tractors require specialised skill for maintenance. It has been further stated that out of the imported tractors only those are in running condition for which a net work of after-sales-service Centres have been established in the country.

- 2.69. The representative of a tractor manufacturing firm has stated that their main dealers were responsible for providing after-sales-service to the tractors sold through them. At the time of sale, a free service voucher book was sent to the purchaser which entitled him to four free services during the warranty period which was six months. After the warranty period was over the farmer could avail of post-warranty service schemes by entering into a contract with the dealer to provide further services on a nominal payment. It has further been stated that efforts are made to keep the distance between the tractor and the service outlet at 30 or 40 miles. In case the tractors are far away from the workshop, the servicing is done with the help of service vans which are equipped with special tools and spare parts.
- 2.70. The Committee desired to know the position about aftersales-service to tractors in so far as the Agro-Industries Corporations were concerned. The representative of the Department of Agriculture has stated during evidence that a number of technical officers in the Machinery Division visited the service centres of the corporations from time to time. However, regarding the inadequacy of the Agroindustries Corporations to service the various kinds of tractors, the representative of the Department of Agriculture has stated, "There is a great deal of genuineners in this complaint and things really ought to be different." Explaining the reasons why Agro-Industries Corporations are not able to render adequate after-sales-service to tractors, the representative of the Department of Agriculture has stated that those Corporations have come into existence only recently and they are entitled to get a little time to organise service facilities. has been further stated that the private manufacturers have better arrangements for servicing tractors because they have been in the field much longer The representative of the Department of Agriculture has further stated that "What is really needed is that the responsibility for servicing will have to be formed out and allocated suitably as between the respective Corporations and the private manufacturers in order that the needs of the farmers for servicing do not suffer."
- 2.71. As regards servicing of tractors which are under indigenous production, the representative of the Department of Agriculture has stated that Government should not really take the blame that the production programme of any particular tractor has been affected because the servicing for that tractor is insufficient. It has been further stated that there is a scheme of setting up several thousand agroservice centres under the Fourth Plan with a view to providing employment to Engineers, technicians etc. Those agro-service centres

would become multipurpose service agencies and their work content would be repairs and over-hauling.

- 2.72. The Committee feel that it is high time that the functions of Agro-Industries Corporations are clearly defined in so far as aftersales-service to tractors is concerned. As far as indigenous tractors are concerned, the responsibility for rendering after-sales-service should by and large be of the tractor manufacturers themselves. The Committee, are however, of the view that Agro-Industries Corporations must take full responsibility for arranging adequate facilities for servicing the tractors which are being imported by State Trading Corporation from foreign countries to meet the present shortages as they are the sole agents for distribution and sale of those imported tractors. The Committee stress the need for having adequate number of service outlets in the interior of the country so as to ensure that the maintenance and running of tractors do not suffer for want of maintenance facilities.
- 2.73. The Committee recommend that Agro-Industries Corporations should also undertake efficient servicing of tractors through mobile workshops which should be fully equipped with tools and spare parts so as to put the tractors back into working condition without any loss of time.

#### CHAPTER III

### Import of Tractors

### (i) General

3.1. The following statement shows the position of import/shipment of tractors from foreign countries during the period 1966 to 1979 (upto 27th October, 1970):—

Mana af the access	Make of	H.P	No. of tractors imported.							
Name of the country	Make of Tractor	H.P	1966	1967	1968	1969	1970(unto 27-10-70)			
USSR .	D.T. 28	28	190							
Do	D.T. 14-B	14	1358	3156	} 826*	57 <b>87</b> 1	* 1303*			
Do	Byelarus	50		445	5 828	3/0/	1303			
Czechoslovakia ,	Zetor 3011	30	150	••	••	••				
Do	Zetor 2011	20		1000	1000	3000	] [ 1600·			
Do	Zetor 5511	55					) 1000			
German Democratic Republic	RS-09	20				1152	846			
Rumania	U-500	50				1000				
Rumania	U-650	65					1007			
Rumania	U-651	65					200			
Poland	URSUS-335	35					1500			

<sup>\*</sup>Make-wise details not immediately available with the State Trading Corporation.

3.2. Department of Agriculture have stated that though indigenous production is picking up, it is not yet sufficient to meet the total requirements of tractors in the country. Accordingly import of tractors particularly from the rupee payment areas is being allowed to the extent possible. Import is arranged by the Department of Agriculture after taking into account the overall demand and the estimated indigenous production. This is done from year to year in consultation with the Department of Industrial Development, Ministry of Foreign Trade and Supply and Ministry of Finance.

3.3. It has been further stated that import c. tractors in the past was generally of the order of 2,000 to 3,000 numbers. With a view to ensuring accelerated development of farm mechanisation, the programme for the import of tractors has been greatly intensified. It has been stated that during 1968-69, it was decided to import 15,500 tractors of the following makes:—

Name of the Country	Make of tractor.	Number	Remarks
U.S.S.R	Byelarus DT—14P	500 6000	
Czechoslovakia	Zetor 2011	5000	
G. D. R.	RS-09	3000	1000 Nos. have not
Rumania	Super UTOS .	1000	yet been imported
		15500	

- 3.4. Similarly during 1969-70, a substantially larger programme for the import of 35,000 tractors was agreed to.
- 3.5. Giving the latest position regarding import of 35,000 tractors during 1969-70, Department of Agriculture have state:

"So far contracts for the import of 27,000 tractors have already been concluded, between the S.T.C. and the foreign suppliers as indicated below:—

Name of the Country	Make of Tractor.	No. of Tractors.	
German Democratic Republic	RS-09	7, 00	
Czechosłovakia	Zetor-2011 (SKD) Zetor-2011 (SKD) Rice Special Zetor-2011 (ully built) Rice Special Zetor-5511 (tully built)	2,500 1,000 2,500 1,000	
Rumania	U-650 U-651	3,250 750	
USSR	Byclarus	2,500	
Poland .	URSUS-328 (PKD) URSUS-335	3,000 2,000	
Yugoslavia	IMT-555	650	
U.S.A.	Ford-3000	850	
	Total.	27,999	

3.6. "Negotiations for the import of balance 8,000 tractors are in advanced stages. As prices have to be determined based on the quantities offered, it is not possible to furnish details of tractors likely to be imported makewise until the negotiations have been completed.

The tractors have already started arriving in the country and supplies are expected to be completed by the middle of 1971 excepting in the case of RS-09 tractors. Further import of RS-09 tractors has been suspended in view of the complaints received from various corporations."

- 3.7. It has been represented to the Committee that the indiscriminate import of tractors as currently being done is very harmful to the country's economy and it should be stopped. In this connection, the Department of Agriculture have stated:—
  - "On account of varied soil topography and crops cultivated in different parts of the country, the need for the type and horse-power range of tractors varies, and one or two makes of tractors cannot cope with the varied requirements. Moreover the requirements of the country cannot be effectively met by any one or two manufacturers. Hence Government of India has subject to the availability of foreign exchange allowed import of (i) such make/makes as have a manufacturing programme approved by the Ministry of Industrial Development and Internal Trade and/or those whose manufacture is likely to be established in the country in the foreseeable future, (ii) Tractors which had either been tested at Tractor Training and Testing Station, Budni and found satisfactory or, alternatively which had been imported in the past and we have had sufficient experience of their satisfactory performance under Indian conditions. This policy has been formulated to ensure satisfactory performance of tractors under Indian conditions and also keeping in view the problems of spare parts and repairing of tractors."
- 3.8. During evidence the representative of a tractor manufacturing firm stated that many persons were getting licences because of the import policy followed by the Government. Under the present policy, only such tractors could be imported which had been tested at the Budni Tractor Testing Station and for which industrial licences for collaboration had been approved. As such, certain persons were getting licences with the sole motive of importing tractors. "The test instrument" was being used to permit import of these tractors.

It has further been stated that the import of too many varieties of tractors should be curtailed and imports should be allowed to genuine manufacturers and not to the holders of letters of Intent only. It has been stated that the five existing tractor manufacturers were producing 85 per cent of the tractors required in India and trained personnel and spare parts were available for maintenance of such type of tractors and, therefore, there would be no continuous drain of foreign exchange on import of spare parts.

- 3.9. The representative of the Tractor manufacturing firm also questioned the wisdom in importing tractors duty-free. According to him, it was only in the case of tractor Industry that shortages were being met by importing tractors on which there were no customs duty and tariffs.
- 3.10. The Representative of another Tractor manufacturing firm has stated that they have been representing to the Government of India that they should import only those tractors for which there was manufacturing programme in India. Instead of importing all kinds of tractors from different countries, Government should allow increased import of such tractors for which there was maximum demand in the country.
- 3.11. The representative of the Department of Agriculture stated during evidence that in order to meet the increasing demand for tractors, the import programme for tractors had to be stepped up. As the availability was limited, the import of tractors had to be spread over to a large number of makes. However, it was stated that "these makes are related to the capacity of the licences which have been given for indigenous fabrication because we cannot think of having to depend on imported tractors for all the time."
- 3.12. While the Committee agree that on account of varied soil topography and crops cultivated in different parts of the country the imports cannot be restricted to one or two makes of tractors, the Committee are of the view that indiscriminate import of various types of tractors for which there are no firm programmes for indigenous manufacture may in the long run cause harm to the country's economy. Government should ordinarily limit the import to those makes of tractors which are being manufactured in India or for which concrete plans are well on the way of implementation for manufacture of the tractors in India by a specified date and according to approved programme. The Committee would also like to be assured that the tractors being imported are of proven suitability to Indian conditions.

- 3.13. The Committee are of the view that if import of a large variety of tractors continues, a stage might come when for want of vital spares appreciable number of tractors would become inoperative resulting in the blocking of hard earned capital of farmers. This would retard not only the pace of the green revolution but would also tend to develop resistance to farm mechanisation.
- 3.14. The Committee further suggest that the policy of importing tractors free of customs duty may be reviewed having regard to the fact that imported tractors sell at a cheaper price than the indigenously manufactured tractors and this naturally has adverse repercussions on the demand and development programme of tractor industry in the country.

#### (ii) RS-09 Tractors

- 3.15. The RS-09 tractor had been tested at Tractor Training and Testing Station, Budni (Madhya Pradesh) in 1965 and was recommended to be a suitable machine. The Test Report refers to RS-09 machine as an "Implement carrier" and states that "the Implement carrier is an advanced design and comes under the classification 'Row Crop Tractors'. It would be an ideal unit on farms where agronomic practices are modified for an efficient mechanical cultivation.
- 3.16. On the 13th August, 1970, it was stated in Parliament in reply to a Calling Attention Notice that "during 1968-69, it was decided to import 15,500 tractors. Of these, 3,000 nos. of RS-09 were to be imported from German Democratic Republic. But actually only 1998 have been imported at a total cost of 212 lakhs.
- 3.17. "Czechoslovakia agreed to supply 5000 nos. of Zetor-2011, Russian 6000 DT-14B and 500 Byelarus totalling 11,500. There was thus a gap of 4000. In the meantime, certain internal developments took place in Czechoslovakia with the result that production programmes in that country received a serious set-back and the chances of getting even 5000 tractors became quite bleak. As there was a large unsatisfied demand, it was decided to import 3000 nos. of RS-09 tractors, and the contract was concluded by STC in December, 1968.
- 3.18. The tractor had been tested at the Testing Station at Budni and found suitable for Indian conditions. In December, 1969 certain complaints about its defective working were received from Andhra Pradesh. By then nearly 1000 tractors had already been received and another 1000 were on the high seas. Immediately further import was

suspended and a Committee of Technical Experts was appointed to make an on-the-spot study of the performance of these tractors in various States. Recommendations made by this Committee have been generally accepted by the G.D.R. Supplier and are being implemented by them. The G.D.R. Suppliers have also supplied five modified tractors which are currently being tested at various places in the country. One more modified tractor is being flown from G.D.R. for test at Budni.

- 3.19. Agro-Industries Corporation, Punjab has received a total of 600 tractors against their requirement of 1600 and their actual demand of 1000. Prior to November, 1969, the Corporation received 250 tractors and the balance in the subsequent months. Out of the total 600 tractors, nearly 500 have been sold to the farmers none of which has been returned to the Corporation. From the reports received from Punjab Agro-Industries Corporation recently, it appears that there were some complaints about defects in the electrical system, reported principally at Jullundur which is one of the five repair stations set up by the Corporation. Of the 218 tractors repaired, 150 were repaired at Jullundur, 90 of which came to the workshop only once. The number repaired at the other four workshops varied from 5 to 25. All this is within the warranty period.
- 3.20. Pre-sale and after-sale service of these tractors is the responsibility of the Punjab Agro-Industries Corporation, which had set up a system of mobile workshops. Possibly due to heavy demands for repair of different types and increasing number of tractors by the mobile vans, there have been some gaps and shortcomings in the service rendered. Farmers particularly at the time of Khariff sowing were put to a certain amount of hardship but the Corporation offered to do custom service on reduced rates in genuine cases. There was, however, very little response to this offer. The G.D.R. Suppliers having accepted the recommendations of the Committee of Technical Experts have undertaken to replace all defective parts free of cost, to pay for the modifications to be made to all the 2000 tractors distributed to farmers in the country and have extended the warranty period.
- 3.21. Earlier, they brought a plane-load of spare parts and another similar consignment is expected here on 20th August, in order to give free replacements. For Punjab alone the Suppliers have already fulfilled warranty claims amounting to Rs. 2,11,788 worth of spare parts. They have also agreed to place at the disposal of the Punjab (and other) Agro-Industries Corporation fifteen additional G.D.R. Service

Engineers plus ten Indian Engineers for carrying out replacements and modifications.

3.22. It will thus be seen that only a certain percentage of tractors supplied in Punjab have shown defects, mainly electrical, and that adequate arrangements have been made by the G.D.R. Suppliers and Punjab Agro-Industries Corporation which is responsible for presale and after-sale service, to replace the defective parts and to make such modifications, on the basis of the test currently being conducted in Punjab and other places, to the tractors already sold to the farmers as may be found necessary free of cost.

As mentioned earlier the import of these tractors from G.D.R. has been suspended."

- 3.23. The Test Report by the Tractor Training and Testing Station, Budni submitted in October, 1965 indicates that the Implement carrier Model RS-09-2 was fitted with a two cylinder 18.4 h.p. air cooled diesel engine, Model FD22. The Report points out that "the engine power for puddling operation is considered to be inadequate. The firm states that another engine developing 25 h.p. is offered by the manufacturers as optional prime-mover. This engine fits on the same mounting. The Implement carrier fitted with 25 h.p. engine would be suitably powered limit for puddling operation Specially designed would also implements wheels as well as if the Implement Carrier is to be adopted for wet paddy cultivation. The Implement carrier with spraying and dusting units is ideal for field and orchard spraying and dusting operations. One of the striking features of the Implement Carrier is its operation in either direction with similar speeds which is suitable for which and combined loader and loading stage operations. The Implement Carrier is also suitable for such allied agricultural operations as road sweeping, generation of electricity, harvesting of root crops, loading, transport and unloading of farm produce, and many other applications. These features would make the Implement Carrier an economic proposition for medium size farms, Cooperative organisations, plant protection services and municipalities and Corporations. The Implement Carrier is easy to maintain and gave trouble free service during the period of test. The mounting and dismounting of implements and attachments, considering its design and application is generally easy. The visibility of the implement carrier for all the operations is good."
- 3.24. The Report also mentions that "the operator seat being located at comparatively higher position is not easily accessible. All controls are located near the steering wheel and look to be crowded but are within the easy reach of the operator."

- 3.25. The contract entered into by State Trading Corporation with he supplier firm indicates that RS-09 tractors imported from G.D.R. are fitted with 4-cylinder 20 h.p. engines.
- 3.26. In reply to a question whether RS-09 tractor of 18.4 h.p. with 2 cylinders which was tested at Budni in 1965 is different from RS-09 tractors imported from East Germany, Department of Agriculture have stated:
  - "Following receipt of complaints from Andhra Pradesh Agro-Industries Corporation, the Technical Teams which visited Andhra Pradesh and other States to which the tractors had been distributed, observed the following differences between the tractors tested at Budni and those supplied:—
    - (1) The tractor tested was fitted with a 2-cylinder engine whereas the tractor supplied is fitted with a four-cylinder engine.
    - (2) The tractor tested at Budni had a pre-combustion chamber which enabled quick starting of the tractor even by pushing in the event the starter motor and other electrical components failed. The engines of the tractors presently supplied does not have pre-combustion chamber which calls for use of starting aid such as heater plugs and also prolonged cranking.
    - (3) The tractor tested at Budni was provided with a starting handle so that the tractor could be started by hand cranking without use of electrical aids. The tractor supplied is not provided with starting handle or provision to use a starting handle.
    - (4) In order to permit turning of the tractor in small fields and also for inter-cultivation and other operations, the tractor tested at Budni had a provision by which the wheel base or distance between the rear and front wheels could be reduced according to requirements. The tractors supplied do not have arrangements for changing of the wheel base.
    - (5) For adapting the tractor for different land and crop conditions, the ground clearance of the tractor could be adjusted as in the case of any other row crop tractors by changing the position of the exle. In the tractors supplied the frame is fixed to rear axle without permitting adjustment of ground clearance.

- (6) As against the 300 mm clutch provided to the tractor tested as Budni, the tractors supplied have only a clutch of 200 mm as against 235 mm indicated in the instruction manual.
- (7) Clutch linings have also been found to be thinner resulting in repid wear and pre-mature failures.
- (8) The tractors tested had a telescopic steering linkage with a universal joint to match the wheel base. This provision does not exist in the tractors supplied.
- (9) Besides the changes as indicated above, the components used in the manufacture of tractors that have been supplied especially of electricals have been found to be of poor quality and finish which cause premature failures. Also, in as much as water and sludge were found in the engine and transmission and some of the components were partly rusted, it could be assumed that the components were in long storage before they were assembled, and the tractors were not properly inspected and test run before despatch.
- (10) The packing was also defective. As a result of the examination of the tractors supplied, it was also observed that sound production techniques were not followed inasmuch as there were variations between the tractors supplied with respect to arrangements for lubrication of the clutch bearing and the final finish, quality of tyres fitted to the tractors supplied, etc. fitment of bushings and spacers in the differential of the tractors etc."
- 3.27. Explaining the latest position of the case, the Ministry have stated:—
  - "The G.D.R. suppliers have agreed to replace free of cost defective components by new/modified components in all the tractors sold to the farmers or held in stocks by the Corporations. They have also agreed to extend the warranty period. Five modified tractors are already under field tests at different places with a view to assessing the overall utility of the tractor for Indian conditions. One more modified tractor has already been sent to the Budni Station for test. The G.D.R. suppliers have also brought in three plane loads of spare parts and new modified components

for immediate supply on demand to the State-Agro Industries Corporations. They have also augmented the Team of their technicians by another fifteen qualified persons thus raising the total number of technicians to about 30. Besides, a large number of Indian Technicians are employed with the approval of Agro-Industries Corporations concerned in order to expedite process of modifications."

- 3.28. When asked as to how even after the test report, the G.D.R. tractors were found defective after practical use in the country, the Ministry in their post evidence replies have stated that it has since been decided to constitute a Committee of Technical Experts to verify and inspect the records relating to the test conducted on RS-09 tractors in 1965. The terms of reference of the Committee are:—
  - (a) Whether the tractors had been tested according to the prescribed procedures and norms;
  - (b) How far the Committee agree with the findings in the test Report given by the Budni Station;
  - (c) In what respects the procedure and drill observed by the Station should be improved or modified and the technical facilities available augmented;
  - (d) to find out to what extent the G.D.R. tractors supplied in 1969 conform in quality to that subjected to tests in 1965; and
  - (e) to find out how far the modifications in the design of the tractors supplied in 1969 is likely to result in better performance
- 3.29. Government have further stated that further action will be taken in the light of the findings of the Committee.
- 3.30. In the agreements signed with the foreign suppliers, the clauses relating to Quality Control, guarantee of the product and after sale service to tractors are reproduced in Appendix II.
- 3.31. Regarding RS-09 tractors, the representative of a Tractor Manufacturing firm stated during evidence:
  - "It is not a tractor. It is a specialised agricultural tool. It is a very sophisticated machine. How the Agro-Industries Corporations can hand over that machine to a farmer without training him is beyond my understanding." It was further stated that "it is a special agricultural tool

meant for inter-row cultivation, for orchards, for compressor work etc. It can also be used for ploughing but it is not the best machine to do it. Trained staff is necessary for operating it. If you sit on it, it is like the cockpit of an aeroplane. There are 50 different levers to operate."

3.32. During evidence, the Committee desired to know whether the RS-09 tractors which were imported from German Democratic Republic were the same as were tested earlier at the Budni Testing Centre. The representative of the Ministry stated that a Technical Committee had been appointed to go into the question whether "the manner of testing these tractors at Budni was all right and whether there was any discernible lapse in conducting tests." Asked what was the need to appoint another Committee to go into the question de-novo, when a high level committee had already submitted a report in that connection, the representative of the Ministry stated that "the first technical Committee went into the question of what the performance of these tractors was under different States and different conditions and for different crops. We did act on that. We did take a note of the report in the sense that thereafter there was intensification of efforts by a large number of engineers coming and trying to rectify, check and test the tractors.....". It was further stated that there was an allegation that the basic test carried out at Budni in 1965 was not upto the mark and it was felt that the matter might be gone into specifically by appointing a Committee. The point of enquiry for the new Committee was limited as to whether in carrying out the tests the usual norms and procedures were followed or not and after seeing the records the Committee would come to a conclusion whether the tests carried out at Budni was a proper one. In justification of the appointment of the Technical Committee, it was further stated:

"The main concern of the Ministry in appointing this Technical Committee has been that if the bonafides of Testing Laboratory itself is called into question then we will find ourselves in considerable difficulties. We will have to fix responsibility on people who at that time cleared these tractors on inadequate testing and inadequate material. It is really the integrity of an an organisation to whom we are assigning this responsible work which we would like to feel sure about."

3.33. The Committee pointed out that the RS-09 tractors imported from East Germany were found to be not according to specifications laid down. Although there was a provision in the agreement entered into between the STC and GDR that the tractors could be

inspected during the process of manufacture, no steps were taken by the S.T.C. Government to depute some representatives to G.D.R. to a inspect the tractors at the stage of manufacture. In reply to a specific question whether any official had visited G.D.R., the representative of the Department of Agriculture admitted that nobody had gone to G.D.R. to inspect the tractors. It was further stated "The agreement as it stands has the standard clause for inspection by the buyer. We did not inspect in this case as we have not inspected in other cases too. I suppose the lack of inspection in other cases has not brought out the kind of flaws which this tractor has shown. The reasons why we did not find it necessary for the inspection are that these tractors came from a large number of countries. They are shipped in small lots and it is not practicable to arrange for a pre-inspection."

- 3.34. The Committee pointed out that the liability of the supplier of RS-09 tractors was limited under the terms of the agreement and only essential parts would be replaced by the firm.
- 3.35. The Committee desired to know what remedy would be available to the farmer who had purchased RS-09 tractor if it did not give satisfactory performance even after replacement of certain parts. The representative of the Ministry stated:
  - "In respect of a warranty, normally the manufacturers give warranty for a certain period of time. In the case of other tractors, it is one year after it has arrived and has been in use. In this particular case, there have been a large number of complaints. They have agreed to extend the period of warranty. In the case of tractors which are under breakdown, they have agreed to treat the warranty period to commence after the repairs are carried out to the tractors. As the Secretary has explained they have also extended the period of warranty for the major assemblies which would give every protection to the farmers, which extend to 3000 hours in the case of transmission hydraulics and other components."
- 3.36 The Committee desired to know whether the warranty applied only to defective parts or to the tractor as a whole which should be replaced if it was not in workable condition. The representative of the Ministry stated:—
  - "The position of the Government of India is that the tractors having been accepted after due test of course, we are now getting them further looked into—the suppliers have not

shown a great deal of keenness to make these tractors workable. We would like to wait for a while and see as to what happens with regard to those tractors. I would not really like to go on to this question of controversy. The reports that have come from various Agro-Industries Corporations about the working of these tractors are not uniform. In some places there are very strong feelings voiced; in other places we find that it is felt that the tractors can still be made workable."

3.37. In reply to another question whether the G.D.R. suppliers had taken a stand that the machines supplied by them were not "Tractors" but "implement carriers", the representative of the Ministry stated:

"We have not seen any authorised publication on behalf of the G.D.R. suppliers that these were sold as implement carriers. But, as you know, there has been publicity and counter publicity. We had reports that at certain places agitations have been organised against these tractors by interested people. We have also had copies of rejoinders. Therefore, what we are really trying to do is really to see that when they did clear these tractors, did they clear them for purposes in the fields, or did they clear them as general haulage equipment."

- 3.38. When the Committee enquired as to what remedial measures had been taken to set right the defective tractors, the representative of the Ministry stated that "no receipt of the Report of the Technical Team there had been a number of technical and high level consultations with the suppliers. In response to it they were going round the country with their improved parts and trying to replace them. They want an opportunity to be able to establish that these tractors would be made worthy of the jobs for which they have been bought. So we are going to give them an opportunity to make necessary changes and modifications."
- 3.39. When asked as to who was responsible for miscarriage of the contract the representative of the Ministry stated during evidence that "The responsibility will be placed if we find (i) that our testing was improper....(ii) within a reasonable time these suppliers cannot put the tractors in proper condition." After these processes have been gone through, this question will inevitably be taken up with the suppliers that what has been supplied to us is something so totally unsuitable that some arrangement has to be made whereby to make good this loss."

- 3.40. When the Committee desired to know whether the tractors on which modifications had been done were working or not, the representative of the Ministry stated that only one report had been received from Punjab that the modifications had not served the purpose but Government were unable to take a firm view because it seemed that the whole transaction with regard to the tractors had got "clouded with controversy."
- 3.41. In reply to Starred Question No. 245 dated the 3rd June, 1971, Government have stated that the State Trading Corporation has signed a protocol (Appendix III) with the G.D.R. Suppliers on 21-2-71 which provides that "tractors modified upto the date of signing the protocol would be taken back. The tractors modified after this date would be offered to the farmers and they would be given an opportunity to use the tractors for 2-3 months. In case these tractors which are not found suitable would also be taken back on terms mutually agreed upon. The tractors will be taken back on the basis of the C&F price at Bombay Port after deducting 8 per cent depreciation."
- 3.42. Subsequently in reply to Unstarred Question No. 5605 dated the 22nd July, 1971 Government have stated in Lok Sabha that the question of return of unmodified and unsold tractors is still under negotiations.
- 3.43. In reply to Unstarred Question No. 5614 dated the 22nd July, 1971 Government have stated in Lok Sabha that while agreeing to the return of the modified RS-09 tractors, the various State Agro-Industries Corporations have also expressed their desire to return unmodified tractors, tractors modified after 21-2-1971, unsold and cannibalised tractors, implements, tyres and tubes and spare parts. A high-level meeting was held on 8th June, 1971, to review the matter in the context of the terms of the Protocol. It was agreed that the Projects and Equipment Corporation may negotiate the above issues and also to extend the validity period of the Protocol for another three months, with the GDR representatives. It was also agreed that a time-limit of 2-3 months should be fixed for the GDR Suppliers to make payment to the Corporations after all formalities were completed. The Projects and Equipment Corporation is, however, negotiating the various issues with the GDR representatives and the outcome is awaited.
- 3.44. It has been further stated in reply to Unstarred Question No. 5601 dated the 22nd July, 1971 in Lok Sabha that a Delegation representing the manufacturers and exporters of RS-09 tractors, has arrived in India to discuss and settle on-the-spot problems which

have arisen while implementing the Protocol signed on 21st February, 1971. Inspection of RS-09 tractors offered for return in Gujarat has already been conducted. The State Agro-Industries Corporation has confirmed that it has already received Rs. 7.50 lakhs from the GDR Authorities, covering the cost of 84 modified RS-09 tractors returned to them. The Rajasthan State Agro-Industries Corporation has also intimated that 52 numbers of RS-09 tractors were modified upto 21st February, 1971. However, 24 farmers only have offered to return their tractors. The inspection of these tractors has already been carried out and these are being returned to the GDR Suppliers' Representative. The money is expected to be refunded to the farmers shortly. The GDR Suppliers' Representative has sent a cheque of Rs. 84,401.78 as an advance towards the cost of returned tractors to the Corporation, and has also promised to remit the balance amount immediately after receiving the formal bill from the Corporation.

The Delegation is currently visiting other States, including Punjab, and progress will be known after some time.

- 3.45. In reply to Starred Question No. 1306 dated the 22nd July, 1971 Government have also stated that "it was reported to the Ministry of Agriculture that the GDR representatives had put a precondition for the deduction of Rs. 6,500 each RS-09 tractor besides 8 per cent depreciation on the C&F value before undertaking inspection of tractors at Jullundur. With a view to resolving the problem, a meeting was held in Projects and Equipment Corporation with GDR Trade representatives, Punjab Agro-Industries Corporation and the Ministry on the 6th July, 1971. The GDR Engineers had agreed to make inspection of the first lot of RS-09 tractors on 20th July, 1971 at Jullundur without any condition. The price of the tractor to be paid would be arrived at after inspection has been done. The GDR Representatives have also agreed to take back the tractors after inspection and make payments immediately as per the price to be mutually agreed upon."
- 3.46. Regarding import of spare parts for RS-09 tractors Government have stated in reply to Unstarred Question No. 5662 dated the 22nd July, 1971 that spare parts of the value of Rs. 21.19.081 had been imported along with RS-09 tractors. It was further stated that negotiations were in progress for the return of these spare parts.
- 3.47. It has however, been stated that the licence to a firm for manufacture of RS-09 tractors in India has not been cleared in view of the defects noticed.

3.48. The Committee note that the Test Report on Implement Carrier RS-0902 fitted with 18.4 horse power engine which was tested at the Tractor Training and Testing Station, Budni, to assess its suitability and performance characteristics under general farming conditions in the country, inter-alia high lighted the follwing deficiencies in the tractor:—

"The operator seat being located at comparatively higher position is not easily accessible. All controls are located near the steering wheel and look to be crowded but are within the easy reach of the operator.

The engine power for puddling operation is considered to be inadequate. The firm states that another engine developing 25 horse power is offered by the manufacturers as optional prime-mover. This engine fits on the same mounting. The Implement Carrier fitted with 25 horse power engine would be suitably powered unit for puddling operation."

3.50. The Committee are distressed to note that RS-09 tractor power with 2 cylinders which was tested at Budni Tractor Training and Testing Station in 1965 is different from RS-09 tractors imported from the German Democratic Republic. The differences between the tractors tested at Budni and those actually imported as pointed out by the Technical Team who undertook the inspection of these tractors are reproduced in para 3.26 of the Report.

3.50. The Committee are distressed to note that RS-09 tractor which was tested at Budni Tractor Training and Testing Station is different from RS-09 tractor imported from the German Democratic Republic. The Committee consider this as a very serious matter as the import and licensing policy was decided on the basis of these tests. It passes the comprehension of the Committee as to how such large scale imports of the modified tractors, with a number of short-comings/defects as listed above, and without an established manufacturing programme within the country, were allowed to be imported without conducting full and thorough trials. The Committee, therefore, urge that Government should investigate the whole matter and fix responsibility as to why thorough tests were not carried out on the modified RS-09 tractors and why tractors with different specifications were allowed to be imported in the country.

3.51. The Committee feel that in view of the findings of the Test Report of 1965 on the Implement Carrier RS-09, Government should have been extremely cautious in selecting a sophisticated machine

for sue by the ordinary farmers in India who do not ordinarily have any technical background or training to operate such machines. In the Committee's view Government after having taken a decision to import RS-09 tractors should have at least made adequate arrangements for after sale service and for imparting proper training to the farmers for operating such complicated machines.

- 3.52. Further even after carrying out the modifications on RS-09 tractors by the technicians of the supplier firm the reports about their working have not been encouraging. The Committee, however, note that the State Trading Corporation have recently signed a protocol with the G.D.R. suppliers which provides inter alia that tractors modified upto the date of signing the protocol would be taken back by the supplier firm on the basis of the C. & F price at Bombay Port after deducting 8 per cent depreciation. The Committee trust that in this process Government would fully safeguard the interests of the farmers who have purchased the tractors in good faith from the Agro-Industries Corporations and would provide adequate facilities to them to return their tractors. The period of operation of the Agreement may be got suitably extended so that farmers spread alf over the villages get adequate opportunity to avail of it and get full refund for the tractors which they do not want.
- 3.53. The Committee note that GDR representatives during their visit to Jullundur had demanded ad-hoc deduction of Rs. 6,500 per tractor besides 8 per cent depreciation on the C & F value before undertaking inspection of the tractors. The Committee are surprised that any suggestion for making an ad hoc deduction should have been made after an agreement had been reached and a Protocol signed laying down the terms of the Agreement.
- 3.54. Government should ensure implementation in letter and spirit of the Agreement and also see that the farmers who purchased the tractors are paid the due amount without delay. In settling the amount the Committee have no doubt that the Government would keep in mind the fact that the farmers who invested their precious money in these tractors suffered as they were not able to put these tractors to productive use.
- 3.55. Government should also ensure that spare parts of RS-09 tractors which were imported at a cost of Rs. 21 lakhs and which are surplus to requirement are returned along with tractors and necessary refund is obtained from the GDR Suppliers.

3.56. The Committee trust that suitable remedial measures would be taken in the light of the findings of the Technical Committee appointed by Government to go into the question as to whether the manner of testing these tractors at Budni Centre was proper and whether there was any discernible lapse in conducting the tests.

### (iii) Loan from World Bank

- 3.57. Regarding import of tractors under the various world bank projects, Department of Agriculture have stated that of late the World Bank (which includes its soft loan affiliate the International Development Association) has shown interest in financing integrated agricultural projects in India. These projects involve various aspects of agricultural development, such as development of land, minor irrigation facilities, farm mechanisation etc. Only such schemes as are eligible for refinancing from Agricultural Refinance Corporation are considered and processed for World Bank financing. A Project proposal revolving around such schemes in a particular State is drawn up and then processed with the World Bank for financing. In case after appraisal of the proposal and further discussions with the Government of India, State Government and other agencies concerned with the financing arrangements, the World Bank finds the proposal economically sound, it agrees to finance a part of the total cost. However, it has been stated that World Bank loan is not available for importing tractors to meet the demands in the various States. The imports of tractors under World Bank/IDA assistance are related to specific Projects which are a part of the integrated agricultural development Projects.
- 3.58. In respect of the following projects, agreements have been signed with the World Bank/IDA to cover the foreign exchange cost of the import of agricultural tractors:
  - (i) Tarai Seeds Project (World Bank Loan) 750 tractors (over one year).
  - (ii) Gujarat Agricultural Credit Project (IDA Credit) 2200 tractors (over 3 years).
  - (iii) Punjab Agricultural Credit Project (IDA Credit) 8000 Tractors (over two years).
- 3.59. The Committee note that loan assistance from World Bank/International Development Association is available at present for importing tractors only in relation to specific Projects which are a part of integrated agricultural development Projects. In view of the wide gap between the demand and indigenous production of

tractors in India, the Committee would like Government to explore the possibility of getting assistance from any other International financing agency for import of tractors for supplying to the farmers till such time the indigenous production of tractors in India is sufficient to meet the total demand of the country. The Committee hope that it would be possible to utilise the loan to get tractors best suited to the requirements of the country at most competitive rates.

#### CHAPTER IV

## OTHER AGRICULTURAL MACHINERY AND IMPLEMENTS

## (i) Power Tillers

- 4.1. The Working Group on Agricultural Machinery and Implements constituted in 1968 for formulation of Fourth Five Year Plan proposals have stated in their Report that the demand for power-tillers would mostly be from farmers with small holdings, particularly in paddy-growing areas and hilly areas. While the off-take of tractors would be larger in wheat-growing areas where the farms are relatively larger and road communications better a substantial demand for power-tillers would develop especially in the paddy regions and in the hilly areas.
- 4.2. It has been mentioned in the Report of the Working Group that consolidation of holdings which largely determines the nature of the farm mechanisation programme has not progressed significantly in paddy-growing regions and this, together with the special conditions characteristic of paddy cultivation such as the small fields and inadequate communication facilities in these areas would account for a relative preference for a power-tiller. There is a proposal to introduce about 6 lakh diesel engine pump sets during the Fourth Plan period. Power-tiller being an excellent form of mobile power unit, alongwith mounted pump sets will also be used for irrigation in the areas where diesel pump sets are becoming popular. Further, in the intensively farmed areas where farmers have taken to tractor farming, in an effort to further intensify the farm operations, power tillers will be used as a suppliementary power unit for intercultivation, earthing up, spraying and other inter row operations especially in corps like potatoes, cotton, maize etc. for which general purpose wheeled tractors are difficult to be used. It is estimated that there are more than 7 million operational holdings with areas varying between 4.047 to 10.113 hectares comprising a total area of about 53.5 million hectares\* and the estimate of demand calculated by the Working Group would serve only about 2 per cent of the area at the end of the Fourth Plan.

<sup>\*</sup>Source—Seventeenth round of National Sample Survey.

- 4.3. The Working Group is further of the view that there is a demand for light weight power-tillers. These would particularly be needed in hilly areas where either roads do not exist or are inadequate and the fields generally comprise small parcels of land in hill terraces; this often necessitates physically moving the power-tillers and implements from field to field. In these areas there is a general shortage of man and animal power and introduction of power-tiller with suitable attachments is required. This is a new demand that has developed in these areas.
- 4.4. The Working Group has suggested manufacture of Power-Tillers in three ranges viz. (a) 3-4 H.P., (b) around 5 H.P. and (c) 8—12 H.P. and in the first and second ranges fitment of patrol/kerosene engines has been recommended.
- 4.5. Planning Commission in their Report on Tractors and Power-Tillers (1966) have stated that the Power-tiller is specially suited to small holdings and for paddy areas and there is a great demand for this multipurpose machine. The requirements during the Fourth Five Year Plan are moderately estimated at 40,000 to 50,000 units in the first two years rising to one lakh units per annum by the end of the Fourth Plan.
- 4.6. The Working Group on Agricultural Machinery and Implements have assessed the demand for power-tillers as shown below:—

1969-70		20,000
1970-71		30,000
1971-72		40,000
1972-73		60,000
1973-74		80,000
	TOTAL	2,30,000

4.7. The representative of the Department of Industrial Development stated during evidence that there was conflict of interest between the tractor and Power-tiller manufacturers. The Ministry had adopted a policy of liberalised licensing but the fact was that while a large number of schemes had been received in regard to tractor manufacture, a relatively smaller number of schemes had been received for Power-tiller manufacture. Industrial licences had been issued for 3 schemes and letters of intent had been issued for three more schemes. Applications for another two schemes were awaiting

approval. The total capacity for all the schemes taken together would be 77,000 power-tillers.

- 4.8. The representative of a firm manufacturing Power-tillers stated during evidence that power-tiller was not yet known to the Indian farmer. Steps would have to be taken to create a primary demand for it.
- 4.9. It has been represented to the Committee that Government would have to do promotional work so as to convince the farmer about the usefulness of power-tillers. Power-tiller could be made popular by giving demonstrations and by setting up hiring centres. It was also suggested that the Power-tiller was ideally suited for small to medium sized farms and particularly for intercultivation and in paddy fields The Rice Research Institute at Cuttack had conducted research using the tractor, power-tiller and bullock plough and came to the conclusion that the most economic way of preparing the soil was by the use of the power-tiller. The quality of tilling was better with the power-tiller because of the 'rotavating and churning action. The power-tiller was also superior to a tractor in intercultivation in cotton, sugarcane etc. and also in banana plantations and orchards because of its manoveurability and churning action. But there was one condition that the land must have optimum moisture conditions. Power tiller was thus useful for irrigated crops and not just rainfed crops. The representative of the firm manufacturing Power-Tillers suggested that Power-Tiller should be exempted from Central and State Sales tax to make it cheaper. A certain amount of loan with a low rate of interest should be made available to farmers to enable them to purchase power-tillers.
- 4.10. It has been stated in the Report of the Working Group on Agricultural Machinery and Implements that for maximum utilisation of the Power-tillers for a wide-range of operations, it should be incumbent upon the manufacturers, to arrange supply of a complete range of matching implements for the tillers. These, besides rotavators, shall include pleughs, cultivators ridgers, seed drills and planters, trailers, mounted sprayers and dusters, pump-sets and other attachments.

4.11. It has been stated by the Ministry that Industrial licences have so far been given to the under-mentioned firms for manufacture of Power-Tillers:—

Name of Unit	λ	lake of Power Tiller	Sanctioned capacity
M/s. V.S.T. Tillers Private Ltd., Bangalore		Mitsubishi	5,000 nos.
M/s J. K. Cotton Spinning & Weaving Mills Co Kanpur	Ltd,	Satoh	6,000 nos
M/s. F. W. Heligers and Co Pvt. Ltd., Calcutta		Kubota	12,000 nos.
M/s. Krishi Engines Ltd., Hydrabad		Krishi	3,000 nos.
M/s. Indequip Engg. Co., Ahmedabad		Iseki	4,000 nos.
M/s. Beegee Corporation Pvt. Ltd., Patiala.		Hako	

4.12. At present Power-tillers are being manufactured by Messrs Krishi Engines Private Ltd. at Hyderabad and 'Mitsubishi' Power-tillers are being manufactured by Messrs. V. S. T. Tillers Private Ltd. at Bangalore. Their production has been as under:

#### (i) Messrs Krishi Engines Private Ltd.

196	5.	•	•							266
1966		•	•	•	•	•				561
1967	•			•		•				264
1968	3.		•	•	•	•	•		•	228
1969				•				•	•	278
						Total	•	•	•	1597

## (ii) V.S.T. Tillers Private Ltd.

1969-70 . . . . . . . . . . . . . . . . . . 500 (Import of 500 packs have already been cleared. Clearance of additional packs is under the consideration of the Government.)

4.13. The Department of Agriculture have in a written note stated that Power-Tillers are not well-known to the farmers in India and the Power-Tillers produced in the country have no demand. The demand for power-tillers is, therefore, being re-assessed.

- 4.14. The representative of the Ministry stated during evidence that the Power-Tillers were in use in six or seven States but its use had not gone up. As such, "a close look will be needed at the targets which have been fixed in regard to the total requirement of Power-tillers at the end of the Fourth Plan period."
- 4.15. It has been further stated that Kerala Agro-Industries Corporation has been allowed an import of 700 power-tillers (Kunota) with 20 per cent deletion. Indequip Engineering Company and Maharash'ra Cooperative Engineering Society have been allowed import of 100 and 500 nos. of 'Iseki' and 'Yanmar' power-tillers respectively. All these firms have made arrangements for assembly with some deletion and are likely to go into production shortly.
- 4.16. The import of Power-titlers during the last three years was as follows:—

1967-68	•	•	•	•	•	•	•	•	•	1,291
1968-69		•	•	•	•	•	•	•	•	2,438
1969-70	•	•	•	•	•	•	•	•		3,150

- 4.17. The prices of imported Power-tillers were fixed by the State Trading Corporation.
- 4.18. It has been represented to the Committee by a firm manufacturing power-tillers that a large number of Power-tillers are being imported and certain firms are taking licences merely to earn profit on the imported power-tillers without actually starting production of Power-tillers. The representative of the Department of Industrial Development has stated, during evidence, that as the production of power-tillers is limited, Government has to allow some imports. But the imports are small because foreign exchange resources are limited. It has also been stated that power-tillers are imported mostly from Japan and Germany.
- 4.19. The representative of a tractor manufacturing firm has stated during evidence that the manufacture of Power-tillers with diesel engine is not correct policy. In Japan, 90 per cent of the power tillers are run with petrol because production of petrol engine was cheaper and moreover it was lighter in weight. As the cost of petrol is high in India, it was suggested that petrol might be made available to the farmer at subsidised rate of Rs. 2 per gallon. The Committee desired to know whether there was any alternative fuel which could be used in place of petrol. They were informed that

power kerosene could be used in petrol driven power tillers by attaching a very small pre-heating chamber. It was, however, admitted that at the prevailing prices of petrol in the country it would not be economical for the farmer to use the pertol driven power tiller.

- 4.20. The representative of a firm manufacturing power tillers stated during evidence that the diesel engine was more rugged than petrol or kerosene engine. According to him kerosene was not very useful as it created carbon deposits. If petrol could be made available to the farmer at lesser cost, petrol driven power tiller would be ideal for use. But in view of the high cost of petrol in India, diesel power tillers would be preferable.
- 4.21. The representative of the Department of Agriculture stated during evidence that in ivew of the high cost of pertol in India, the petrol-driven power tillers would not be feasible. The engine for the power tillers was required to be very light. Of late some firms had taken up production of light diesel engines in the low horse power range and thus the problem of having a light diesel engine had been almost solved.
- 4.22. It has been represented to the Committee that imported power tiller is cheaper than the indigenously manufactured power tiller because there is no customs duty on it; the raw material is cheaper in foreign countries and the production is on a large scale. The imported power tillers are, however, mostly in 8—10 horse power range. It has been represented to the Committee that there is a feeling in the Ministry that high power machines are more suitable but this approach is not correct in as much as a high horse power machine is bound to be heavy, more expensive and having less manoeuvrability.
- 4.23. The representative of a firm manufacturing power tillers stated during evidence that there was difficulty in getting the raw material, particularly alloy steels and thin gauge steel sheets. The quota sanctioned on Hindustan Steel Ltd. through the Joint Plant Committee more than a year ago had not been received.
- 4.24. The Committee regret to note that the targets, which have been fixed in regard to the total requirement of power tillers at the

end of the Fourth Plan are being revised and reduced by the Government. The fact that only one or two firms have so far gone into production and that the number of power-tillers produced by them is small bears sufficient testimony to the fact that the production of power tillers has not been given the serious consideration that it The Committee would, therefore, urge that Government as well as extension agencies and firms manufacturing power tillers should intensify promotional work so as to convince the farmer about the usefulness of power tiller. The Committee would also stress that import of power tillers should be strictly linked to indigenous manufacturing programme. Side by side Government should reasons for small off take of indigenous power tillers. The Government should also make concerted efforts to improve design, reduce cost of running and maintenance and encourage manufacture power tillers of proven suitability.

4.25. The Committee note that the Planning Commission in their Report on Tractors and Power Tillers (1916) had observed that the Power Tiller was specially suited to Small holdings and paddy areas and that there was a great demand for this multipurpose machine. The requirements for the Fourth Five Year Plan were estimated at 40,000 to 50,000 units in the first two years rising to one lakh units per annum by the end of the Fourth Plan. Similarly the Working Group on Agricultural Machinery and Implements had assessed the total demand for power tillers at 2,30,000 units by the end of 1973-74 rising from 20,000 in 1969-70 to 80,000 units in 1973-74. Research Institute at Cuttack, who had conducted research using the tractor power tiller and bullock plough, had also come to the conclusion that the most economic way of preparing the Soil was by the use of power tiller. The Committee regret to note that in spite of the recommendations/observations of these bodies about the usefulness and suitability of power tillers to farmers with small holdings particularly in paddy growing and hilly areas where communication facilities are inadequate, Government have not given any serious consideration to the indigenous manufacture of power-tillers.

4.26. The Committee feel that power-tiller is going to play a useful role in the agricultural economy of the country in view of its suitability for small agricultural holdings particularly in the paddygrowing and hilly areas. They, therefore, suggest that Government should make concerted efforts to make the power-tillers known to the common farmer through practical demonstrations and other publicity measures so that it may become popular on its merits of manoeuvrability, utility and suitability. Cooperation of bodies such as Indian

Council of Agricultural Research, Agricultural Universities, Demonstration Blocks etc. might be colicited with a view to intensifying efforts to demonstrate the usefulness of the power-tillers.

4.27. The Committee would also recommend that as suggested by the Working Group on Agricultural Machinery and Implements, Government should make it incumbent upon the manufacturers of power-tillers to arrange supply of complete sets of matching implements to enable the farmers to use them for a wide range of operations.

#### (ii) Disc Harrows

- 4.28. It has been stated that 80,000 numbers of discs have been imported for the manufacture of Disc Harrows and ploughs. Taking into consideration the increased demand for discs, the Ministry have arranged for further import of 3,00,000 discs.
- 4.29. The Committee have been informed that adequate capacity for production of all conventional implements exists. Components such as discs are also being manufactured by a large number of firms in India and that the engineering capacity in the country is adequate to meet the requirements of general purpose implements.
- 4.30. In reply to a question why discs are being imported on such a large scale when these are being manufactured indigenously, the Ministry have stated in a written note that there are 9 firms known to the Director General of Technical Development who are manufacturing agricultural discs in the country. The following statement shows the capacity, foreign exchange allocation and actual production of discs by the 9 units during the years 1969 and 1970:

SI. No.	Name of the Firm	Capacity	Foreign Exc allocation		Production		
			1969	1970	1969	1970	
			(Rs. in la				
1	2	3	4	5	6	7	
	M's. Gromore Tools Corporation Ltd.	1,50,000	9·90 (W.G.)	18.96	28714 (for 9 months.)	18112 (3 months).	
2 (	M/s. Agricultural Discs India) Limited Bombay.	1.00,000	11·30 (U.K.)		Not in Production.	15985 (7 months).	

1	2	3	4	5	6	7
3	M/s. Dates Discs. Pvt. Limited, New Delhi.	2,00,000	12·00 (W.G.)	••	12213	28073 (4 months.)
			12·60 (U.S. Aid, U. K.)			
4	M's. Tractors and Implements, Delhi.	2,00,000	• •		••	
5	M/s. Agro-Industrial Corporation, Faridabad.	2,00,000	9·21 (U.K. Yen)	• •	••	
.6	M/s. Watkins Mayor Co., Jullundur.	30,000	2·00 (W.G.)	• •	••	••
7	M/s. Beegee Corporation Pvt. Limited., Patiala.	50,000	5.00 (U.K., Yen)	••		
8	M/s. Murarka Engg., Delhi.	30,000	3·45 (U.K.)	••	•,•	••
9	M/s. Modern Farm Aids, Delhi.	1,50,000	5.75 (U.K.)/ India 4.25 (Yen)			
	-	11,10,000	91 · 96	18.96	40927	62170

4.31. Of the above mentioned 9 units, M/s. Agricultural Discs India Ltd., Bombay are having foreign collaboration with M/s. Tyzacks of U.K. Foreign Collaboration in this case was approved several years ago. This is the only firm which has taken up the manufacture of cut-away discs. Their present capacity is 1,00,000 discs per annum. The D.G.T.D. are recommending for raising the capacity of this firm to 2,00,000 numbers per annum on double shift basis.

4.32. The Ministry have stated in a written note dated the 23rd July, 1971 that the licensed capacity of the various units which are borne on the D.G.T.D. list for manufacture of agricultural discs is 3,60,000 per annum while the total capacity of the various units in the small scale sector comes to 9.50 lakhs. Out of 57 units in the small scale sector only 9 units have so far gone into production and their total capacity would come to only 1.2 lakhs. It has been further stated that the D.G.T.D. have estimated that the indigenous manu-

facturers would be in a position to produce about 4 to 4.5 lakhs discs during 1971. Thus, according to Government, the capacity available in the country for manufacture of discs is more than the assessed requirement.

- 4.33. In October, 1969, the then Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture) assessed the requirements of discs for 1969-70 at 5.17 lakh numbers as under:
  - 1. For tractors to be produced or imported during the year . 3,52,000 nos.
- 4.34. In their note dated the 23rd July, 1971, the Ministry have clarified that the requirement of discs for 1969-70 at 5.17 lakhs was based on the formula evolved by DGTD for assessing the requirements of discs in the country. The Ministry have further stated that the estimated requirement of discs by the end of the Fourth Plan i.e. 1973-74 wou'd be around 16 to 18 lakh numbers.
- 4.35. As the indigenous production of discs was only 40,927 during 1969, it was not considered sufficient to meet the overall requirements of discs. Discs are essential requisites for tractors and as such it was considered necessary to import at least 3 lakh discs against the requirements for 1969-70.
- 4.36. It has been further stated that the Ministry of Industrial Development and Internal Trade has reported that the availability of steel for manufacture of discs in the country has been increased and as such the import of at least 1½ lakh discs may be suspended till a review is made of the overall need for discs.
- 4.37. In a subsequent note dated the 23rd July, 1971 the Ministry have stated that the import of discs was reviewed at an inter-Ministerial meeting held in the room of Secretary (Heavy Industries) on the 13th October, 1970 and at this meeting it was decided that the import should be curtailed to the number for which State Trading Corporation had already entered into irrevocable commitments. No letters of credit were established after the decision not to import further discs was taken on 13.10.1970. Discs for which irrevocable commitments had been made prior to 13.10.1970 continued to arrive till the end of June, 1971.

4.38. On the question of import duty on imported discs and raw material (High carbon steel plates), the Ministry have stated in their note dated the 23rd July, 1971 that "The import duty on discs was 15 per cent prior to the new budget proposals for 1971-72 announced on 28.5.71. According to the new budget it is 30 per cent. There was no Customs Duty on steel sheets import for the manufacture of agricultural discs. However, most indigenous manufacturers imported steel plates which were subject to an import duty of 27½ per cent. According to the new budget this has been raised to 30 per cent. There is some counter-veiling Excise Duty on the import of steel plates."

The Ministry have, however, expressed the view that the above anomaly is not likely to seriously affect indigenous production of discs.

- 4.39. The representative of the Agricultural Implements Manufacturer's Organisation, New Delhi stated during evidence that their organisation had been importing discs from abroad for distribution to its members through the State Trading Corporation since 1966. Till 1967, discs to the value of Rs. 15,35,625 were distributed to their members on "no profit no loss" basis and after 1967, the import of discs had been banned as the distribution work of imported discs has been entrusted to the different Agro-Industries Corporations established in the courty. Asked what was the total requirement of discs in the country, the representative of the organisation stated that 8,72,000 discs would be needed per year.
- 4.40. The representative of the organisation informed the Committee that no quota of steel was made available to the implements manufacturers and that they had to buy steel from the open market at a price 67 per cent more than the controlled price.
- 4.41. It was further stated that the ban on the import of discs was imposed by the Government on the assurance of Hindustan Steel Ltd., that they would be supplying E.N. 42 type high carbon steel sheets in bulk quantity. But unfortunately production of steel sheets by Hindustan Steel Ltd. had not materialised.
- 4.42. In a later note dated the 23rd July, 1971 the Ministry of Agriculture have stated that the prices of indigenous discs vary from Rs. 65 to Rs. 80, according to the various makes. There is wide variation of prices of indigenous discs and some of these indigenous manufacturers are charging very high prices. The high cost of indigenous discs was due to the import duty and counterveiling duty on high carbon sheets used for manufacture of discs. According to

the new budget proposals there would be a duty of 30 per cent on the C.I.F. price of discs. With the imposition of this duty, the gap between the price of indigenous discs and the imported discs would be further reduced.

- 4.43. The Ministry of Agriculture have stated in their note dated 23.7.71 that it has been decided that the cost structure of the following three firms may be undertaken in respect of discs manufactured by them with a view to finding out whether the prices charged by them are reasonable:—
  - (i) M/s. Grow More Tools Corporation, Meerut.
  - (ii) M/s. Agricultural Discs (India) Ltd., Nasik.
  - (iii) M/s. Agricultural Discs, Karnal.

The idea is to evolve a pool price at which dies would be bought by State Agro-Industries Corporations.

- 4.44. When asked during evidence whether the small scale sector could not produce discs which were imported from abroad, the representative of the Ministry of Agriculture stated that the Director General Technical Development normally applied a very strict standard with regard to imports to ensure utilisation of indigenous capacity. But when it was found that the discs could not be fabricated by the time the tractors were put into commission, imports of certain number of discs were cleared by the DGTD.
- 4.45. On the question of delay in issuing permits for import of steel or in allotting indigenous steel to the disc manufacturers, the representative of the Department of Industrial Development stated that if their requirements of steel had been met by Hindustan Steel Ltd. or if more liberalised imports of steel had been allowed to them, a much larger proportion of disc requirements would have been met by the disc manufacturers. But the indigenous availability of steel did not materialise.
- 4.46. The Committee have been informed during evidence that the discs are imported by the State Trading Corporation who distribute them now through the Agro-Industries Corporations and import licences are not given to any private party.
- 4.47. On the question of requirement of raw material for manufacture of discs, the Ministry have stated in their note dated the 23rd July, 1971 that the requirement of raw material during 1973-74 for manufacture of discs would be in the neighbourhood of 24,000 tonnes of high carbon steel plates.

- 4.48. Regarding the performance of indigenous discs the Ministry have stated in their note dated the 23rd July, 1971 that "for enabling the disc manufacturers to assess the quality of their products and also for official certification of discs for quality etc., it was considered desirable that they should get their discs tested at the Tractor Training and Testing Station, Budni. Accordingly, we suggested to the Development Commissioner (Small Scale Industries) that the disc manufacturers may be encouraged to get their discs tested and certified by the Station and thereafter get these discs ISI marked. Some units have already got their discs tested. The ISI has also brought out a standard No. IS-4366-1967 for agricultural discs. The testing at Budni is undertaken according to the standards laid down by the ISI.
- 4.49. The Committee note that the discs are imported through the S.T.C. who distribute them through the Agro-Industries Corporations and in view of the liberalised policy in regard to import of steel, the number of discs to be imported are being reduced. The Committee also note that due to shortage of steel, the implement manufacturers are obliged to buy steel from the open market at a higher price with the result that the cost of the discs manufactured in India is much higher than the cost of the imported discs. The Committee recommend that Government should take necessary steps to ensure that the steel requirements of the implement manufacturers are adequately met so that they may be able to produce discs in larger numbers and at lesser price.
- 4.50. The Committee note that the indigenous manufacturers of discs had produced 40,927 units during the year 1969 and 62,170 units during the year 1970 against the capacity of 11,10,000 units. The shortfall in production was primarily due to non-availability of raw material notably the steel sheets.
- 4.51. The Committee are convinced that had the requirement of steel of the disc manufacturers been met by the Hindustan Steel Limited or had more liberalised import of steel been allowed in time to them, a much larger proportion of disc requirements would have been met by the disc manufacturers. It is regrettable that there was unusual delay in issuing permits for import of steel or in allotting and supplying indigenous steel to the disc manufacturers.
- 4.52. The Committee are disappointed that Hindustan Steel has not been able to meet even a fraction of the requirements of steel sheets of disc manufacturers with the result that they could not put their production capacity to use. One of the main objectives in setting up the Hindustan Steel in the public sector was to ensure ade-

- quate supply of raw materials for our industries. The Committee would like Government to give a high priority to the manufacture and supply in time of steel sheets by the Steel Plants to the disc manufacturers so that the latter can meet in full the demand for discs and other agricultural implements by the agricultural sector and thereby save precious foreign exchange expended at present on the avoidable import of discs.
- 4.53. The Committee have no doubt that keeping in view the general policy of Government to attain self-reliance and encouraging indigenous production particularly in the key industry of agricultural machinery and equipment. Government would ensure that raw materials for discs manufacture are made available on assured basis either from indigenous resources or by import.
- 1.4.54. Government should also ensure that the raw materials are given to the manufacturers at competitive rates so that the end product can also be sold to the agriculturists at competitive rates. The admitted anomaly that the raw materials for indigenous manufactured of discs should have borne a heavier duty than manufactured discs needs to be examined without delay and rectified in the interest of the indigenous industry.
- 4.55. The Committee note that Government have already taken action to do cost analysis of a few manufacturers and they hope that effective action would be taken to ensure that discs of proven quality and dependable performance are made available to the agriculturists at most competitive rates.

# (iii) Other Tools and Implements

- 4.56. It has been stated that Regional Research-cum-Training Centres established in the different States concentrate on the development and evaluation of small tools and implements required by the cultivators, for, intensive farming. Bullock-drawn levellers, scrappers, manually operated and bullock drawn seed-cum-fertiliser drills and planters, bullock-drawn disc harrows, weeders, puddlers, and other improved implements suitable for farming conditions in the different regions have been developed.
- 4.57. Design and development of more sophisticated equipment such as bullock drawn reapers, potato planters and diggers, sugarcane planters etc. have been taken up and are at various stages of development and introduction.
- 4.58. It has been suggested to the Committee that manufacture of Agricultural implements should be restricted to the small scale sector where sufficient production capacity exists and tractor manu-

facturers and Agro-industries Corporations should not be allowed to manufacture and sell agricultural implements. In this connection, the Ministry have stated in their note that at present most of the manufacturers of agricultural implements in the country can be classified as Small Scale manufacturers and there is a wide gap between the facilities available and the capital invested between small manufacturers in the rural areas and other manufacturers located in the urban areas. All the traditional implement are mostly manufactured and supplied by the artisans in the rural areas. In some States they have also undertaken the manufacture of improved animal drawn implements as well as tractor drawn implements and power threshers. These manufacturers have been mostly looking after the needs of local farmers. Other small scale manufacturers with a capital investment of one lakh to 8 lakhs are mostly located in the mofussil towns and urban areas. Most of these manufacturers in the past were producing animal-drawn improved implements that were purchased by Government agencies for distribution to the farmers.

- 4.59. With the rapid growth of tractor population many of these firms started producing tractor drawn implements. These implements are either sold directly to the farmers or supplied to tractor manufacturers who market these implements under their own brand names.
- 4.60. The Ministry have further stated that most of the small manufacturers have limited resources of finance, manpower, technical know-how and production techniques with the result that the quality of implements spplied by these firms is not upto the mark. These manufacturers do not have any facility to undertake design and development work on new implements. They are content to supply only traditional implements that are simple to fabricate. This fact has retarded the growth and supply of new implements to the farmers and the present implement to tractor ratio is considered very low. Any new implement to be introduced in the market requires 2 to 3 years for development and another 2 to 3 years for its field revaluation testing and market survey prior to its production.
- 4.61. It has been further stated that without adequate volume of production it is difficult to ensure supply of goods quality implements, reduction of prices and standardisation of fast moving parts.
- 4.62. The Ministry's note points out that while tractor manufacturers or their dealers and Agro-industries Corporations should not force spply of implements alongwith the tractor, it would not be appropriate to debar them from manufacturing their own implements. These organisations have resources to undertake design and

development and introduction of new implements in the country. They will be able to manufacture and market sophisticated machines which a small scale manufacturer is not able to do. The small scale manufacturers should be given all assistance to procure raw material, product designs and quality inspection and allowed to compete with bigger manufacturers in the local market but restricting Agroindustries Corporations and Tractor manufacturers alone will not solve the difficulties of small scale manufacturers but will retard the growth of farm equipment Industry.

- 4.63. The Committee desired to know during evidence whether the agricultural implements purchased from the ancillary industries were sold by Tractor manufacturers at higher prices after putting their own trade mark on them. The repesentative of a tractor manufacturing firm stated that they were not manufacturing any agricultural implements. The implements were got manufactured from the small scale manufacturers after providing them the necessary drawings and technical know-how. There was a profit element both for the manufacturer and the purchasing firm and there was a margin of 30 per cent on the cost of production.
- 4.64. The representative of an agricultural implements manufacturer's organisation stated during evidence that the tractor manufacturers were getting 100 per cent implements from the manufacturers in the small scale sector and after placing their own trade mark on those implements they sold them at exorbitant prices. They were able to sell the implements at higher prices because the tractors were in short supply. If tractors were easily available, the tractor manufacturers would not have been able to sell those implements at higher prices. It was further stated that a harrow which was sold for Rs. 1800 by a small scale manufacturer was sold by the tractor manufacturers for an amount ranging between Rs. 3000 and Rs. 4000. Similarly an implement costing Rs. 1500 was sold by the tractor manufacturers to the farmer for Rs. 2500 or Rs. 3000.
- 4.65. In this connection, the representative of the Department of Industrial Development stated during evidence that production of agricultural implements was reserved for the small scale sector and tractor manufacturers were strictly forbidden to manufacture the implements. However, it was not feasible to have any sort of formal control over the prices of those implements. The only possible way would be to have a sort of collective organisation of the small scale implement manufacturers so that they could have better terms from the tractor manufacturers.
- 4.66. The Committee were informed during evidence that in U.P. and Rajasthan the Agro-Industries Corporations were producing

agricultural implements which were sold at higher prices along with the imported tractors.

- 4.67. It has been represented to the Committee that manufacturers of agricultural implements should be allowed to import prototypes of latest agricultural implements from abroad to enable them to manufacture those implements in India. It takes 2-3 years to get an import licence for a prototype and a manufacturer cannot afford to wait for so long.
- 4.68. It has also been stated that if raw material is available in abundance to the Implement manufacturers, there is enough scope to increase production and export implements to Iran, Beirut and countries in the middle east.
- 4.69. The Working Group on Agricultural Machinery and Implements have observed that 'while the capacity for the production of different types of tillage implements exists in the organised small scale sectors, availability of equipment for seeding and inter-cultivation and those needed for harvesting of different crops etc. is extremely unsatisfactory'. In this connection, the Department of Agriculture have stated in their note that there has been considerable improvement in the availability of equipment for seeding and planting. Quite a number of farmers are using a seeding attachment on their tillers for sowing of grain crops. Seed-cum-fertiliser drills that enable simultaneous application of fertiliser and seed have also been introduced in the country and are now increasingly available because quite a large number of manufacturers have already gone into production of this implement.
- 4.70. It has further been stated in the note that in addition to seeding attachment and seed-cum-fertiliser drills planters for maize, cotton and ground nut are also now available from indigenous production. As regards harvesting equipment, it is stated, that considerable efforts have already been initiated to develop and introduce the equipment.
- 4.71. It has further been stated that import of 75 Harvestor Combines was cleared recently and 300 more are proposed to be imported from various countries including small combines from Japan. One firm that imported 25 side mounted combines has been licensed for indigenous production. It is also proposed to issue an industrial licence for a self propelled combine which has already been tested.
- 4.72. It has been represented to the Committee that the animal drawn agricultural implements industries are running much below their capacity particularly for want of orders within the country. When asked about the steps Government propose to take to utilise the idle capacity of the agricultural implements industry and to

create a demand for such implements in the country, the Department of Agriculture have stated in their note that most manufacturers of animal drawn equipment particularly in the urban areas in the past were depending upon Government agencies for sale of improved agricultural implements. The State Governments after effecting purchases were supplying these implements on subsidized rates to the farmers in the Second and Third Five Year Plan periods.

- 4.73. The note further states that as the subsidy scheme did not create the desired impact in generating the demand it was decided to discontinue this scheme and give greater attention in popularising the use of improved implements through demonstration programmes.
- 4.74. The State Governments have already been advised to strengthen extension set up to demonstrate the use of improved implements and educate the farmers on selection, use and repair of implements.
- 4.75. The Indian Council of Agricultural Research is also planning to establish units for demonstration on improved implements in 100 demonstration blocks that have been selected in the country to educate the farmers on new technology.
- 4.76. The State Agro-Industries Corporations in several States have initiated marketing of implements manufactured by small scale manufacturers.
- 4.77. The Committee note that the representative of the Department of Industrial Development has stated during evidence that production of agricultural implments is reserved for the small scale sector and Tractor manufacturers are strictly forbidden to manufacture the implements. It has also been stated during evidence that in U.P. and Rajasthan, the Agro-Industries Corporations are producing agricultural implements which are sold at higher prices along with the imported tractors. The Committee would like Government to examine the whole matter afresh and lay down a definite policy with regard to the manufacture of agricultural implements.
- 4.78. The Committee also suggest that Government should immediately examine the desirability of allowing manufacturers to import proto-types of latest agricultural implements from abroad, so that they may be able to produce improved implements indigenously. The Committee would also urge the need for intensification of research and development and also the need for ensuring that farmers get implements at most competitive rates to encourage their use.

4.79. The Committee note that considerable efforts have already been initiated to develop and introduce harvesting equipment for which the availability had been unsatisfactory. The Committee also note that harvestor combines are being imported from abroad and one firm has been licensed for production of mounted combines. The Committee trust that indigenous production of harvestor combines will be stepped up to obviate imports. The Committee are glad to note that in several States, State Agro-Industries Corporations have initiated marketing of implements manufactured by small scale manufacturers. The Committee suggest that Agro-Industries Corporations should simultaneously undertake demonstration of improved implements for the benefit of the farmers.

#### CHAPTER V

1

# AGRO-INDUSTRIES CORPORATIONS

- 5.1. Visualising the extreme urgency in increasing the agricultural production through efficient supply of inputs at reasonable prices and utilisation of various agricultural products, it was decided by the Government to set up Agro-Industries Corporations in each State. The principal objectives of the Corporations are as under:—
  - (i) Distribution of agricultural machinery and implements as well as equipment pertaining to processing, dairy, poultry, fishery and other industries connected with agriculture;
  - (ii) enabling persons engaged in agricultural and allied pursuits to own the means of modernising their operations;
  - (iii) undertaking and assisting in the efficient distribution of inputs for agriculture;
  - (iv) promotion and execution of industries having a bearing on production, preservation and supply of food; and
  - (v) providing technical guidance to farmers and persons concerned with Agro-Industries with a view to enabling efficient conduct of their enterprise.
- 5.2. It has also been stated that Agro-Industries Corporations have been set up in all States excepting Nagaland and Meghalaya. A Corporation was also proposed to be set up in Himachal Pradesh.\*
- 5.3. These Corporations are Government undertakings and the participation of the Central Government is limited to nearly half the share of the equity capital. The authorised and issued capital

<sup>\*</sup>At the time of factual verification, the Ministry of Agriculture have stated that the corporation in Himschal Pradesh has been set up on 24-9-1970.

of the different corporations and the contributions made by the Central and State Governments as on 1st June, 1970 is as under:—

(Rs. in lakhs.)

	Don of Autorial		Paid-up Capital		
Name of the Corporation.	Date of Au incorpora- tion	thorised – capital.	Contribu- ted by State Govt.	Contribute ted by Central Govt.	Total paid dup capi- tal
Andhra Pradesh .	5-3-68	400.00	153.000	147.000	300.000
Assam	25-1-67	200.00	87.000	87.000	174 -000
Bihar .	. 28-3-67	400.00	153.000*	196.000	349 000
Haryana	30-3-67	200.00	64 • 630	64 · 630	129 · 260
Kerala	22-3-68	200.00	76.510	73 · 490	150.000
Madhya Pradesh	21-3-69	250.00	30.000	30.000	60 000
Tamil Nadu .	5-7-66	200.00	100.000	100.000	200.000
Maharashtra .	. 15-12-65	500.00	100.000	100.000	200.000
Mysore	1-9-67	300.00	102 - 000	98.000	200.000
Oriesa .	7-2-68	150 00	38 · 845	36 · 155	75.000
Punjab .	11-2-66	200 · 00	50.000	50.000	100.000
Rajasthan .	25-7-69	500.00	45.000	45.000	90.000
Uttar Pradesh	29-3-67	500.00	210.000	210.000	420.000
West Bengal	16-8-68	300 ⋅ 000	102 -000	98.000	200.000
Gujarat	19-5-69	200 · 00	100.000	100.000	200 · 000
Jammu & Kashmir ,	. 5-2-70	200.00	50.000	50.000	100.000
		4700 · 00	1461.985	1485 · 275	2947 · 260

5.4. It has been stated that Government of India has been taking active interest in the formation and development of these Corporations in all States. This being a new venture, a lot of pioneering work has had to be done in the initial stages. Besides contributing towards their share capital, Ministry of Food and Agriculture also renders technical advice to these Corporations on various projects undertaken/proposed to be undertaken by them. Government of India is also represented on the Board of Directors and in most of

<sup>\*</sup>The State Government have yet to pay Rs. 51 lakhs towards its matching contribution and they have promised to make this payment during the current financial year.

the Corporations, there are three Directors representing the Ministry. every effort is made to induct experts on the Board of Directors depending upon the various schemes to be implemented these Corporations. The Ministry also maintains effective liaison between the Corporations on the one hand and other agencies like State Trading Corporation; Director General Technical Development, Chief Controller of Imports and Exports and other concerned organisations on the other hand. It also operates as a kind of intelligence cell and clearing house of information for all the Corporations. It has been suggested to the Corporations that they may initially concentrate on supply of tractors, power tillers, pump sets etc., on cash and hire-purchase terms and also take up other activities related to the promotion of agro-idustrial work. With a view to checking black-market in the tractors and also to ensure supply of imported tractors at reasonable prices to farmers, Government of India has also decided that the distribution of all imported tractors would be entrusted to these Corporations who would also make necessary arrangements for after-sale service and maintenance, where necessary.

- 5.5. It has been further stated that these Corporations are in various stages of development and activity. The progress made by some of them has been quite impressive although it is difficult to make a critical appreciation of their performance as the period for which they have been in existence is too short.
- 5.6. It has been stated that in the early stages, all Corporations like any other public undertaking have to undergo a lot of difficulties, organisational, executive and commercial before they could embark upon any major scheme, nevertheless they have been able even during the short period of their existence to make an impact on the cultivators in their respective States.
- 5.7. It has been stated that distribution of tractors, agricultural implements, pesticides and other inputs through these Corporations have gone a long way in helping the needy farmers who were victims of black-market and other malpractices at the hand of private dealers. Similarly, the Hire-Purchase Schemes and the Agricultural Machinery Hiring Schemes introduced by most of the Corporations have also proved to be a great blessing for a small farmer with limited resources as they would enable him to use improved agricultural machinery and other inputs for his small farm.
- 5.8. The Ministry have stated that Agro-Industries Corporations could be called the pioneers in the field of hire-purchase system. While all kinds of agricultural machinery, such as tractors, pump sets

(diesel and electric), power tillers, threshers, power sprayers, dustors etc. could be included under the hire-purchase scheme, the items initially taken up by the State Agro-Industries Corporations are restricted to tractors, pump-sets, diesel engines, power tillers and other essential agricultural implements. The hire-purchase programme taken up on massive scale by some of the Corporations has brought acquisition and use of costly and new equipment within the reach of small farmers.

- 5.9. It has been stated that the hire purchase issue of machinery through the Corporations by availing refinancing facilities from State Bank of India, Commercial Banks etc. would involve a total cumulative credit flow of about Rs. 270 crores.
- 5.10. However it has been clarified by the Ministry that the primary role of these Corporations is not financing the farmer for purchase of tractor implements etc. No doubt there are certain provisions in the Articles of Association of these Corporations enabling them to grant loans or advance to companies, associations, individuals etc. for such purposes, but it is not considered desirable that the Corporations should spend their limited resources by granting loans to other parties. The Agro-Industries Corporations are not to be considered as financial institutions.
- 5.11. The Agro-Industries Corporations are concentrating on providing after-sale service on imported tractors and for supply of spare parts for them. They also cater to the spare part requirements of old models of imported tractors for which the past importers are defunct.
- 5.12. The Corporations give considerable emphasis to programmes for improvement in repairs and maintenance of agricultural equipment possessed by the farmers in the rural areas through establishment of workshops and by assisting private organisations by organising repair facilities. The different Agro-Industries Corporations are also using mobile vans for repair and maintenance of agricultural implements to the farms of cultivators. These mobile vans are equipped with necessary tools for taking up on the spot repairs of agricultural equipment along with supplies of parts and lubricants.
- 5.13. It has also been stated that a Conference of the Chairmen and Managing Directors of the State Agro-Industries Corporations was held in July, 1969 to review the activities of the various Corporations and to discuss problems of common interest. The Conference was held under the auspices of the Ministry of Food and

Agriculture. The Conference laid special emphasis on supply of inputs to farmers on reasonable rates, setting up of agricultural machinery service centres and provision of exployment opportunities to unemployed engineers, agricultural graduates and other technical personnel. The conference also welcome a proposal for the setting up of a Central Agro-Industries Corporation.

- 5.14. During evidence the representative of a tractor manufacturing firm stated that the Agro-Industries Corporations were created to arrange customs service for the small farmer and sell the tractors on hire purchase. The total number of tractors sold by the Corporations upto May, 1970 was 9,000. Out of that, not even 10 per cent had been sold on hire purchase. It was alleged that instead of rendering these services to the farmer, the Corporations had diverted all their attention to making money by selling imported tractors. It was further stated that the Corporations were not servicing the tractors. The total number of service outlets of 16 Corporations was less than 45 while the tractor manufacturing firm had as many as 210 selling and servicing points.
- 5.15. The representative of another tractor manufacturing firm stated that the State Agro-Industries Corporations did not have adequate machinery to provide service to the imported tractors. In Andhra Pradesh the Corporation had only two workshops while in small State like Punjab, the tractor manufacturing firm had 30 outlets for providing servicing facilities. Agro-Industries Corporations could not possibly take care of so many models of tractors which were being imported from East Germany, Poland, Yugoslavia, Hungary and Russia.
- 5.16. The Committee were informed during evidence by the representative of a non-official organisations that only influential people were able to get imported tractors through the Agro-Industries Corporations. The tractors were not issued on first-come first-served basis. It was alleged that only the big farmers were being helped by alloting them imported tractors which were received free of custom duty. The difference in the price of imported tractor and the one produced indigenously was Rs. 5,000 or Rs. 6,000. The question was as to why a person who had influence should be allowed to have the benefit of buying an imported tractor at lesser price and why a small farmer should be asked to wait and patronise the indigenous industry by paying a higher price.
- 5.17. The Committee desired to know whether the State Trading Corporation who entered into agreement with the foreign suppliers executed similar agreement with the Agro-Industries Corporation.

porations which supplied the tractors to the farmers and whether those corporations in turn entered into any agreement with the actual user. The representative of State Trading Corporation stated that "S.T.C. concludes agreements with the foreign suppliers where all the conditions are included. The S.T.C. enters into similar agreements with the Agro-Industries Corporation. The distribution is being done by the Agro-Industries Corporations. We are not aware, whether they are entering into any agreement with the actual user or the farmer or not but they do give guarantee for one year. If during one year some spare part goes out of order due to manufacturing defect, they are entitled to get replacement."

- 5.18. The representative of the Department of Agriculture stated: "The Agro-Industries Corporations are entering into certain agreements with the farmers. General conditions are included for service after sale. Besides, the agreement with the farmer is not to sell the tractor. Even bonds are taken by the Agro-Industries Corporations. Such agreements do exist between the farmers and the Agro-Industries Corporation, but they do not exist universally in all the Corporations."
- 5.19. In reply to a specific question whether the farmer could enforce his right to get replacement of defective parts from the foreign firm which supplied the tractors, the representative of the Department of Agriculture stated that the warranty was a part of the sale contract and the terms and conditions of the sale were enforceable against the Agro-Industries Corporations during the period of warranty. It was further stated that the defects due to utter negligence on the part of the user were not covered by the terms of the warranty.
- 5.20. Asked whether it would be useful to have one Central Agro-Industries Corporation which should be responsible for coordinating the work of various Agro-Industries Corporations in the States, the representative of the Department of Agriculture stated during evidence that there was one such proposal and there had been some thinking on that subject. But the proposal was somewhat in the cold storage for want of adequate work content. It was further stated that Government of India were adequately represented on the Board of Directors of each Corporation.
- 5.21. It has ben stated that the growing unemployment amongst the engineers and other technically trained personnel has developed into a national problem. At the same time rural areas badly lack the essential technical supporting services for agricultural

production programme. A scheme has been drawn up for setting up of 5,000 Agro-service Centres during the Plan period with the following objectives:—

- (1) To provide self-employment opportunities for engineers, diploma holders, other technical personnel, agricultural graduates etc. and to encourage them to settle in rural areas.
- (2) To provide the following support facilities in the rural areas:
  - (i) On-the-farm reliable maintenance and repair facility for all types of agricultural machinery and implements.
  - (ii) An assured machinery hire-service and management assistance especially to cater to mechanisation needs of small and medium farmers.
  - (iii) An easily accessible source of supply for spare parts, fuel oils, lubricants and other engineering stores.
  - (iv) Supply of agricultural inputs such as seeds, fertilisers, pesticides etc.
  - (v) Soil and water analysis service.
- 5.22. Initially about 500 centres are to be set up on pilot basis and based on the experience gained, additional centres would be established. It is further stated that the scheme envisages grant of loans by the State Bank of India and other nationalised banks. Agro-Industries Corporations etc. for acquiring agricultural machinery, workshop, equipment etc. The scheme when fully implemented would provide self-employment opportunities to about 50,000 unemployed engineers, agricultural graduates, diploma holders etc. addition to the above, it is expected that the establishment of Agro-Service Centres would provide further employment in related activities for 30,000 to 50,000 persons. Besides providing employment, the scheme would also attract youngmen to stay in villages and help to develop the rural economy. Each centre could cater to the machinery hiring and repair input requirements, within a radius of 10-15 miles and the impact on the agricultural production of the areas. served by the centres would thus be considerable.
- 5.23. Giving the latest position, the Ministry have stated that the scheme has been concurred in recently by the Planning Commission and the Banking Department of the Ministry of Finance. The concurrence of the Ministry of Finance is still awaited. However, advance action has been taken by the Ministry by addressing the State

Government/Agro-Industries Corporations on the following lines to provide some immedite relief:—

- (i) to accord over-riding priority in the allotment of imported tractors required for setting up hiring centres to the unemployed engineers;
- (ii) to obviate the difficulty of raising the initial deposition tractors and other machinery needed for equipping hiring and servicing centres, the initial deposit on supply of machinery on hire-purchase terms to be reduced to 10 per cent in case of unemployed engineers as against the usual 20 per cent to 25 per cent in other cases;
- (iii) the Corporations may use the workshops and the hiring centres set up by the unemployed engineers as their agents for handling servicing and sale of spare parts etc.;
- (iv) to provide attachment/Apprentice training to engineers and diploma holders.
- 5.24. It has been stated by the Ministry in a written note that no Agro-Industries Corporation has expressed any difficulty with regard to availability of finance. The difficulty is, however, in respect of recovery of dues from the farmers as a sizeable amount of share capital has been invested in hire purchase activities by Corporations like Bihar, U.P., Mysore and Tamilnadu. Efforts are however being made by the Corporations to recover the instalments due.
- 5.25. In this connection, it has been suggested by the Working Group for formulation of Fourth Five Year Plan proposals that the 'State Governments may consider providing for the recovery of dues of the Agro-Industries Corporations as arrears of land revenue/Public debt so that defaulters in repayment of loans are suitably dealt with. The States may also provide the necessary guarantee in respect of re-financing facilities offered by banks.' In this connection the Ministry of Food and Agriculture have stated that the question whether the State Governments should not have a residuary right to collect from the cultivators loans given to them by Cooperatives or Corporations which carry a Government Guarantee for repayment, was considered some time back in consultation with the Ministries of Finance and Law. The Ministry of Law had advised that the loans advanced by Agro-Industries Corporations could be recovered by amendments to the Revenue Recovery Act or Public Debt Recovery They suggested that the State Governments Act of the States. could make necessary amendments in their laws. Accordingly State Governments were requested to examine the problems and make

suitable amendments to the law so as to make defaults of the dues of Agro-Industries Corporations recoverable as arrears of land revenue/public debt. Replies have been received from most of the State Governments. The Government of Kerala have intimated that it is not necessary to amend their Act as the recovery can be effected under their existing laws. The State Governments of Madras, Maharashtra, Orissa, Andhra Pradesh and Punjab have informed that the proposal is being examined by them. The Bihar and U.P. Governments are considering to introduce a Bill to amend the existing Land Revenue Act for this purpose. Madhya Pradesh Government have recently promulgated the Madhya Pradesh Land Revenue Code (Amendment) Ordinance, 1969 (No. 24 of 1969) making necessary provision in the code for recovery of the dues of Agro-Industries Corporations in the State.

- 5.26. As regards distribution of imported tractors through the Agro-Industries Corporations the Committee suggest that this should be done on first-come-first-served basis so as to inspire confidence and obviate chances of complaints of favouritism, discrimination, etc. in the matter of allotment of imported tractors.
- 5.27. The Committee hope that the question of recovery of dues from the defaulters will be vigorously followed up with all State Governments so that necessary legislation in this behalf is enacted at the earliest and the money due to various State Agro-Industries Corporations is not allowed to go into arrears. If sound and strict financial management are introduced in the initial stages it would inst'l in the farmers the healthy habit of honouring promptly the commitments made under the hire-purchase scheme.
- 5.28. The Committee note that some Corporations enter into an agreement with the farmer at the time of sale of the tractors but this practice is not uniformly followed by all Corporations. The Committee suggest that a uniform procedure should be laid down in this regard so that the farmer has a written guarantee for assured after-sales service.
- 5.29. The Committee note that some Corporations have developed workshops to provide after-sales service and some of them have also pressed into service mobile vans to render repair and maintenance service in the field. The Corporations are also making arrangements with other organisations including those in the private sector to facilitate repair and maintenance of imported tractors. It is imperative that tractors and other agricultural machinery are kept in good and efficient working condition so as to render maximum

service and benefits to the agriculturist purchasers. The Committee, therefore, stress that maintenance and repair facilities for tractors and other agricultural machinery should be provided 88 close to the place of their utilisation as possible. The Committee have no doubt that keeping in view the above objective and growing extensive use of agricultural machinery and equipment, Government/Corporations would make a coordinated effort, along with other organisations engaged in the same work, to ensure development of adequate number of servicing and repair outlets, as the place of utilisation of tractors and agricultural machinery as possible. The Committee would suggest in this context that encouragement may be extended to unemployed engineers to set up servicing centres in rural areas, which in course of time are bound to develop into centres for Agro-Industries.

5.30. The Committee need hardly stress that the Agro-Industries Corporations should make available adequate quantities of spare parts for imported machinery to facilitate repairs.

## CHAPTER VI

# RESEARCH, TRAINING AND TESTING

## A. Tractor Training and Testing Station, Budni

# (i) Training

- 6.1. In order to help the Indian farmers to derive benefits from agricultural machinery and to encourage them to take to mechanised farming, Government started a pilot project for training farmers in the selection, operation and improved farming techniques. Accordingly, the first Centre for Agricultural Machinery Utilisation Training which was a unique one of its type in the country was established at Budni in 1955 under T.C.M. (U.S.A.) Air Programme. Tractors and implements of different types and other agricultural machinery worth Rs. 5.00 lakhs used in mechanised farming were also made available for the establishment of the training Centre. The services of an expert for establishment of the Centre were also made available. The objectives of the Tractor Training Centre are stated to be as under:—
  - (i) To train tractor owners, progressive farmers and nominees of the Government departments in the proper selection, operation and maintenance of tractors and other power machinery used in agriculture and in improved farming techniques.
  - (ii) To train tractor operators and mechanics in the selection, maintenance, adjustments and repairs of agricultural machinery.
  - (iii) To demonstrate mechanical equipment which has been successful in a similar condition in other countries of the world.
  - (iv) To provide a trained pool of personnel to operate, maintain and do minor repairs on tractors and other farm machinery to meet the increasing demand for mechanisation of farming, land development, improvement projects etc.
- 6.2. Regarding schedule of courses (it has been stated that originally four short-term courses of three months each and two long

term courses of 5-2/3 months each were offered. The duration of courses were subsequently changed and at present the following courses are offered at the training Centre:

(i) Three courses each of three months duration:

The courses are meant for the owners of tractors and progressive farmers. Admission is also given to the nominess of the State Governments, Agro-Industries Corporations, Cooperative Farming Societies etc.

(ii) Two refresher courses each of three weeks duration:

These are designed to give training on special aspects of mechanisation such as machines for land levelling, development, harvesting and threshing, inter-row cultivation and usage of new equipment to the supervisory staff of the State Governments, State Agro-Industries Corporations etc.

(iii) Five courses each of 1½ months duration:

These are intended for middle level and supervisory technical personnel of State Agro-Industries Corporations, Cooperative Institutions, State Governments, State Farms etc. on operation and servicing and overhaul of agricultural machinery.

(iv) Two courses of one month duration:

For Agricultural Engineering and Agricultural Graduates who desire to supplement their theoretical knowledge by practical experience.

- 6.3. It has also been stated that originally the target was to train 112 trainees per year which was subsequently raised to 120. With the introduction of new schedule of courses as indicated above the target has been raised to 400 trainees per year. It has, however, not been possible to achieve this target for want of additional staff. Accordingly several additional posts have been sanctioned for the Centre.
- 6.4. The trainces excluding the nominees of the Government Departments are given a stipend of Rs. 70-per month for the duration of regular courses of three months. Trainees of all courses are offered free lodging facilities.
- 6.5. It has been stated that the total personnel trained since inception up to 31st March, 1970 is 1907 including four trainees from Philippines and one each from Thailand and Ceylon.

## (ii) Testing of Equipment

- 6.6. It has been stated that with the increased use of tractors and agricultural machinery by Indian farmers, the import of different types of tractors and agricultural machinery increased. It has further been stated by the Ministry that in order to avoid import of unsuitable machinery and drain on foreign exchange resources, it is essential that there should be some agency who could advise the Government regarding suitability of tractors and agricultural machinery to be imported and for progressive manufacture indigenously.
- 6.7. The Government of India, therefore, felt the need of an organisation which would test tractors, tractor drawn implements and other power-driven machinery used in agriculture. With this end in view, the services of Mr. S. J. Wright, a former Director of National Institute of Agricultural Engineering, U.K. were obtained to advise the Government of India and based on his report, a Tractor Testing Station was set up at New Delhi in 1955 which was transferred to Nagpur in 1956 and finally in 1959 it was amalgamated with the Agricultural Machinery Training Centre, which was already functioning at Budni.
- 6.8. Major items of testing equipment worth Rs. 2.00 lakhs were supplied by the Government of the U.K. under Colombo Plan Aid.
- 6.9. Equipment worth over Rs. 8 lakhs have been purchased by the Centre both from abroad and from within the country from their own resources. A Test Laboratory at a cost of Rs. 2.5 lakhs has also been constructed.
- 6.10. The objectives of the Testing Station are stated to be as under:—
  - (i) To test tractors, tractor operated implements, stationary engines, power operated pumps and other power driven agricultural machinery manufactured within the country and those imported with a view to assessing their durability, functional suitability and performance characteristics under different operating conditions so that the published test results would:—
    - (a) serve as a basis to decide the make and type of machine best suited for Indian conditions which may be encouraged for import, production and popularisation in the country.

- (b) help the purchaser in determining the comparative worth and capabilities of machines that are available in the market.
- (c) provide the engineers and extension workers the basic material for giving guidance to farmers and other purchasers in the proper selection of equipment.
- (d) from the basis for standard specifications to be used by manufacturers and distributors in sales and technical literature.
- (ii) To carry out trials on machines and implements which have proved successful in other regions of the world with a view to examining possibilities of their introduction into India.
- (iii) To carry out research and development on agricultural machinery and implements.
- 6.11. It has been stated that the following three types of tests are carried out at the Testing Station:
  - (a) Commercial tests of machines that are in or ready for commercial production;
  - (b) Confidential tests  $t_0$  provide confidential information on performance of machines whether ready for commercial production or not or to provide any special data that may be required; and
  - (c) Series testing of threshers, seed processing equipment, combines etc. for comparative performance.
- 6.12. While equipment were taken up for tests from 1961 onwards, regular testing was taken up from 1966 onwards, when the Test Laboratory and the test track were constructed and the specialised equipment for testing received from U.K. under the Colombo Plan were put to use. Sixty three equipments of various types have been tested at the Station during the period 1961 to 1970. Thirty two equipments are currently under test at the Station.
- 6.13. It has been stated that R<sub>2</sub>. 12.45 lakhs have been provided by Government for intensification of Training activities and 25 lakhs for testing activities at the Budni Centre during the Fourth Plan period.
- 6.14. The Planning Commission in their Report on Tractors and Power Tillers have observed that 'the time taken at the testing Wing

(Budni) is rather very long and it usually takes 4-5 months to complete one test with the result that the applicant has often to wait for a pretty long time to pursue further negotiations with the foreign collaborators for the manufacturing programme.'

- 6.15. Asked what steps had been taken to improve the position, the Ministry have stated in a written note that the Testing Wing at the Budni Station was equipped towards the end of 1966 and the Station being in the initial stages of establishment, there have been lack of facilities by way of staff and equipment. Under the Fourth Plan, the facilities at the Budni Station have been expanded. Since the demand for testing is very large, it is proposed to further augment the facilities at Budni and establishment of sub-centres.
- 6.16. It has further been stated that at the Budni Station, apart from the routine tests carried out by other National Testing Stations, additional field trials and special tests are also carried out for assessing the performance and suitability of the machines under Indian conditions. This normally takes a few months time to complete the tests in all respects depending upon the season of the year.
- 6.17. The Committee are distressed to note that it usually takes a very long time to complete even one test at the Tractor Training and Testing Station at Budni. There is, urgent need for improving testing facilities at Budni so as to facilitate expeditious evaluation of tractors and other agricultural implements. The Committee hope that with the expansion of facilities at Budni and with the opening of sub-centres, the time taken for tests will be reduced appreciably.
- 6.18. The Committee would like that Budni should give a lead in selecting agricultural machines which are best suited to the country's needs and are most economical to operate. The Committee would also stress the need for standardisation and would urge that olethora of makes and design; should be avoided.
- 6.19. The Committee hope that the Tractor Training Centre at Budni will make every endeavour to achieve its objectives early and provide a trained pool of personnel to operate, maintain and repair tractors and other agricultural implements to meet the increasing demand for machanisation of farming.
- 6.20. The Committee would also like that training facilities available are properly publicised. The Government should also endeavour to set up training and demonstration centres at least one in each State if not in each division.

## B. Tractor Training Centre, Hissar

- 6.21. As the number of farmers using tractors and Agricultural machinery increased considerably the Budni Training Centre was not in a position to cope with the growing demand. To cope with the increased demand, Government of India set up another training Centre at Hissar (Haryana) in 1963 as a Third Five Year Plan Project.
- 6.22. The Centre was started in July, 1963 on 400 acres undeveloped, undulated land infested with bushes, trees etc. The land is gradually being developed, depending on the limited resources. It has been stated that water supply is a limiting factor in Hissar District and has affected the development programme of the farm attached to the Hissar Centre and also the cropping pattern. Ateempts were made to install tubewells, but the results have not been encouraging.
- 6.23. Further attempts are being made to augment the irrigation water supply from the canal on enhanced water supply basis and by getting the new channel constructed.
  - 6.24. To teach owner and operators how to obtain more efficient use and how to extend the service life of farm equipment.
    - (ii) To train tractor drivers and mechanics in the selection, maintenance, adjustment and repair of the agricultural machinery;
    - (iii) to demonstrate mechanical implements, which have proved successful in similar situations in other countries;
    - (iv) To train and demonstrate to the trainees and other agriculturists, methods for the conservation of water and erosion control by contour bunding, terracing and contour plowing.
    - (v) To teach methods of weed eradication and pest control.
    - (vi) To provide trained pool of tractor drivers and mechanics.
    - (vii) To demonstrate the reclamation of fallow lands.
- 6.25. It has been stated that this Centre is conducting practical training courses in the maintenance, operation, repair and overhauling of Tractors and other agricultural equipment for the farmers, owner operators, agriculture/agricultural engineering graduates and technical personnel working in Agro-Industries Corporations Undertakings under State Governments. In addition to the above, field trials on Tractors and agricultural equipment are also being conducted from time to time. Hybrid seeds are also being grown at the Tractor Training Centre farm.

6.26. However, practical training is the main activity of the Centre and the following number of trainees have been trained during the period 1967-68 to 1969-70:

Year			Farmers	Graduate Engineers	Personnel of Agro- Industries Corporations & othe s	Total
1967-68 .		•	119	23	19	161
1968-69 .	•		119	44	216	379
1969-70 .			195	57	163	415
				TOTAL .		955

- 6.27. The Centre has trained 1,422 trainees up to 31st May, 1970 since its inception.
- 6.28. It has also been stated that to meet the urgent needs of the Green Revolution especially from the mechanical cultivation point of view as well as the non-availability of trained personnel to handle the complicated tractors and mechines, the training facilities at the Centre have been expanded in order to train 480 persons instead of 180 per annum.
- 6.29. Additional staff has also been sanctioned for this centre to achieve the revised targets.
- 6.30. The schedule of courses has been changed to enable the Centre for increasing the turnover as follows:—

	Existing Courses	Proposed Courses
(i)	Two regular courses of 5 months duration each for progressive farmers having 60 candidates in each batch.	Three regular courses of 3 months duration each for progressive farmers having 70 candidates in each batch.
(ii)	One special course of one month each for agricultural engineering graduates having about 30 candidates.	One special course of one month duration for agricultural engineering rgraduates having 60 candidates.
(iii)	One three-weak course for Government officials executives with a capicity of 30 candidates.	Two 3-week refresher courses for Government, officials, executives, supervisory staff in specialised subjects like use of Harvester Combines, Power Tiller, Plan Protection Equipment etc. having a capacity of about 30 each.
(iv)	_	Five trainers Training Courses for technician of 112 months duration with a capacity of 30 candidates per batch.

- 6.31. It has also been stated the demand for obtaining practical training in the maintenance, repair, operation and over-hauling of tractors and allied equipment is increasing day by day due to popularisation of mechanised farming.
- 6.32. The Centre is also conducting field trials on different typer and makes of tractors and equipment to find their suitability in different conditions. 55 field trials on matching equipment for Zetor-2011 tractor were conducted during 1967-68. About a dozen trials were conducted on Bolgar TL-30 tractor and other matching equipment during 1968-69. About two dozen trials were conducted on RS-09 tractor with its matching equipment during 1969-70 and about a dozen trials were conducted on Till Matic Power Tillers during 1970-71. It has stated that Field trial reports regarding the miscellaneous equipment especially regarding the combine Harvestors and Threshers have also been prepared in addition to the above trials. Series testing of Threshers was also organised at the Hissar Centre in collaboration with the Tractor Training and Testing Station, Budni.
- 6.33. The following three new equipments have been designed for the benefit of farmers and to boost up mechanised farming:
  - (a) Tractor Mounted P.T.O. Operated Multi-purpose Thresher;
  - (b) Tractor Mounted P.T.O. Operated centrifugal Pump;
  - (c) Farmers Tractor Garrage in economical design which canbe adopted by the farmers to store their tractors and POL
- 6.34. The Committee note that field trials on tractors and other matching equipment have been carried out at the Hissar Centre. The Committee, however, suggest that the testing facilities should be augmented at the Hissar Centre so that the testing of equipment may be undertaken at this Centre also with a view to reduce the burden on the budni Centre. The Committee are glad to note that new equipments had been designed for the benefit of farmers and to boost up mechanised farming. The Committee would like that these activities are intensified to enhance the benefits to the farmer.
- 6.35. It has been stated during evidence that the resources available at the Budni and Hissar Centres are inadequate to cope with the testing programme which has devolved on them.

- 6.36. The Ministry have further stated that the Fourth Five Year Plan envisages the setting up of a Third Training Centre and it has been decided to establish this Centre in the southern region. The State Governments of Andhra Pradesh, Tamil Nadu, Mysore and Kerala have been addressed to intimate whether it would be possible for them to provide necessary land and other facilities for the establishment of the Centre. The Mysore Government has already offered land in Tungbhadra Project area and an offer has also been received from the Andhra Pradesh Government. A final decision regarding the selection of the site would be taken after examining the suitability of the various sites offered and availability of the required facilities.
- 6.37. It is further stated that a provision of Rs. 35 lakhs has been set apart in the Fourth Plain for the establishment of this Centre.
- 6.38. While deciding the location of the Third Training and Testing Centre to be set up during the Fourth Five Year Plan, Government should explore the possibility of setting it up in Rice growing area to test tractors and other Agricultural equipment required for paddy farming. The Committee hope that the Government will also ensure that water will be available in plenty at the site of the new centre so that the difficulties encountered at the Hissar Centre due to short supply of water may be obviated.
- 6.39. The Committee further suggest that Government should ensure that the new Centre renders effective service and is able to share the functions and responsibilities of the existing two centres.

## C. Research Centres

- 6.40. It has been stated by the Ministry that the research and development on agricultural implements has been undertaken by Indian Council of Agricultural Research under Research Testing Centres in all the States. There are 17 Research-cum-Testing Centres in the country, one in each State. In addition there are also supporting research and development activities in various Agricultural Universities. There is a proposal to strengthen two centres at Indian Agricultural Research Institute and at Coimbatore for more intensive research and development work on small farm machinery.
- 6.41. The Ministry have further stated that in the last few years, studies have been carried out on various field equipment required for (a) Soil Working and tillage; (b) Sowing and fertilising;

- (c) Harvesting and (d) Threshing and as a result of those studies various kinds of machines have been developed.
- 6.42. It has also been stated that the designs and drawings of equipment which as a result of evaluation have proved to be useful are released to the manufacturers for production and they are also assisted in organising production. As a result of assistance provided, a few firms in Punjab could organise production of reapers, seed-cum-fertilizer drilles, paddy threshers etc. Institutions such as Tractor Training and Testing Station, Budni also make available samples of equipment found useful to Indian conditions for development purposes to prospective manufacturers.
- 6.43. Seminars on Agricultural Machinery and equipment are also arranged periodically for promoting exchange of information between research institutions, Government agencies and manufacturers.
- 6.44. The Committee hope that the research efforts at the various research centres will be continued vigrously and there will be greater emphasis on the development of agricultural machinery and implements which would help the farmer to increase production.
- 6.45. The Committee suggest that Government should give due consideration to bringing about full coordination among the various Research Centres in the country  $s_0$  that the results of experiments carried out on a particular equipment at one centre are transmitted to other centres automatically.
- 6.46. The Committee need hardly stress that it should be ensured that useful information available at these research centres is made available to the manufacturers of agricultural machinery without difficulty so that improved types of machines and implements are produced in the country simultaneously. The Committee would also stress the need for intensifying research especially in small farm machinery and also for co-ordinating activities of Research Institution/Universities/Extension. Services to avoid unnecessary overlapping. Steps should also be taken towards standardisation of machinery and equipment and only those should be selected which are most suited to Indian agricultural conditions and are economic in operation.

#### CHAPTER VII

# PROBLEMS OF AGRICULTURAL MACHINERY INDUSTRY,

## A. Financial Assistance

7.1. The Working Group for formulation of Fourth Five Year Plan proposals on Agricultural Machinery and Implements have observed that major problem of organising manufacture of improved agricultural implements appear to be the lack of institutional support for financing. In this connection the Ministry have in written note stated that with the nationalisation of the banks, it is hoped that the situation will improve considerably. The Agro-Indusries Corporations are already availing of the credit facilities offered by these banks for financing their projects. At present only the commercial banks and cooperative banks are eligible to get reimbursement from the Agricultural Refinance Corporation for loans granted by such institutions. The Ministry recommended that Agro-Industries Corporations should also be included in the list of 'Eligible Institutions' for refinancing facilities by amending Section 2(f) of the Agricultural Refinance Corporation Act, 1963, The Agricultural Refinance Corporation had indicated that Agro-Industries Corporations etc., should borrow from the primary lending institutions and the latter should go to the Corporation for refinancing to the extent necessary. The Agricultural Refinance Corporation had also pointed out that the programme of minor irrigation, land development and storage and other more conventional schemes financed by the Land Development Banks and other financial institutions are likely to absorb a very large part of the resources of the Corporation and as such the Agro-Industries Corporations should obtain finance from the commercial banks primarily and the latter should go to the Corporation for refinance. It has also been stated that direct lending to these bodies by the Agricultural Refinance Corporation would entail a close supervision over field activities dispersed over a large area for which the Corporation is not equipped as a primary lender would be. The Corporation, therefore, did not consider the Agro-Industries Corporations eligible for refinance facilities. The Ministry have, however, stressed the need for refinance facilities to the Agro-Industries Corporations by the Agricultural Refinance Corporation. The

question of inclusion of these Corporations as eligible finance institutions is stated to be under examination of the Department of Banking.

- 7.2. When asked whether the commercial banks have evolved realistic procedures of sanction of credit with a view to participating actively in the programme of agricultural development, the Ministry have stated that the direct finance from Commercial Banks have increased from Rs. 44 crores as on 30.6.69 to Rs. 150 crores by 31.3.70. Similarly indirect finance from Commercial Banks for agriculture increased from Rs. 24 crores to Rs. 29 crores during this period. However, it has been stated that it is not known as to how far these finances from commercial Banks have helped Agro-Industries specifically.
- 7.3. It has been stated that the Agricultural Finance Corporation is conducting a study on the loan procedures adopted by the Commercial Banks for agriculture.
- 7.4. In this connection, the Ministry have stated that from the latest information received from the Agricultural Finance Corporation Ltd., the simplification and standardisation of documents which has already been carried out to some extent is under further examination of that Corporation and is expected to be finalised shortly.
- .7.5. The Committee hope that the Study undertaken by the Agricultural Finance Corporation regarding loan procedures adopted by the Commercial Banks for agriculture will be completed expeditiously so that the commercial banks may be able to play an effective role in helping the agricultural machinery and implements industry in securing adequate credit facilities.

## B. Raw Materials

- 7.6. It has been represented to the Committee that the main problem of the tractor and agriculture industry in India is non-availability of raw material particularly iron and steel. Inspite of these industries have been declared as priority industries and inspite of their large export potential they face lot of difficulties in getting their requirements of raw materials.
- 7.7. During tour of the Study Group I of the Estimates Committee to the Eastern Zone in June/July, 1970, the representatives of a private firm at Kanpur dealing in agricultural and industrial equipments stated that they had exported agricultural implements of the value of about Rs. 3 lakhs in 1965-66 to some markets like

East Africa where highly industrialised countries like West Germany had monopoly for these items. It was further stated that the firm was exporting 65 per cent of their total production of agricultural implements. But on account of the shortage of iron and steel, the company was unable to execute the export orders in hand. It was also alleged that the company had to purchase their requirements of iron and steel from the open market at exhorbitantly high prices.

- 7.8. The Committee have been informed that if raw material is made available in abundance to the agricultural implements manufacturers, there is enough scope for exporting agricultural implements to Iran, Beirut and countries in the middle East.
- 7.9. In this connection, the Ministry have in a written note stated that it is not only with reference to industry relating to tractor and other agricultural implements but in general all the industries in the recent past have been hard put on account of non-availability of steel. Many categories of steal could not be made available from indigenous sources and the import policy was also restrictive. Because of this it so happened that steel could not be made available in time through imports also. The situation has been corrected now inasmuch as import policy of steel has been liberalised. Consequently, the industry is not henceforward likely to suffer on account of non-availability of steel.
- 7.10. It has been represented to the Committee that "steel available in different stockyards of producers is being allocated to non-actual users in disguise of actual users and the same is brought in the open market for resale and in this way, the actual users are compelled to meet their requirements from the open market at very high rates." In this connection, the Ministry of Food and Agriculture have stated:

"The Ministry of Steel and Heavy Engineering who are concerned with the matter were addressed to furnish the necessary information on the subject. It has new informed us that at present about 90—95 per cent of the production of almost all categories of steel are being supplied only to actual users. Complaints were being received that some of the materials supplied to so called actual users were finding their way into the open market. Discussions have been held with the various sponsoring authorities and it has been impressed upon them that utmost care and scrutiny should be exercised in sponsoring priority requisitions."

- 7.11. It has been further stated that where it comes to the notice of the Steel Priority Committee that a particular indentor having obtained materials on priority basis for a specific purpose has not used it for the same, the Steel Priority Committee may suspend further priority despatches to him and may also not consider further requests of priority from him. Some organisation is also proposed to be set up in the office of the Iron and Steel Controller to keep a watch on the utilisation of the materials allocated to actual users on priority basis.
- 7.12. The Committee regret to note that raw materials particularly iron and steel were not made available in sufficient quantities to the agricultural implements manufacturers and they were compelled to purchase their requirements in the open market at exhorbitant prices. The short supply of essential raw materials is also bound to affect the exports of these implements to foreign markets. The Committee would like Government to ensure that iron and steel of requisite quality is supplied to the manufacturers of agricultural implements in sufficient quantity and in time and to give the highest priority to it so that the country may become self-reliant in this crucial sector.
- 7.13. The Committee note that Government have taken steps to liberalise the import of steel so that industry may not suffer on account of non-availability of such raw materials. The Committee, however, need hardly stress the desirability of increasing indigenous production of iron and steel as dependence on imports for a long time to meet the shortage of iron and steel would not be in the best interests of the country. They, therefore, suggest that vigorous efforts should be made by Government to step up the production of all types of steel needed by different industries in the country.

## C. Tyres and Tubes

- 7.14. During evidence when the Committee pointed out that some tractor units had been facing difficulties about steel shortage and non-availability of tyres and wheels, the representative of the Department of Industrial Development stated that there had been temporary shortages for these items from time to time but as and when assistance was needed by the tractor manufacturers or by the ancillary industries, Government had helped them by way of import of raw material.
- 7.15. The Ministry have stated in their note that "in order to increase the production of tractor tyres and tubes, the automobile

tyre manufacturers have been issued licences for the import of balancing equipments, presses, moulds etc. As a result of this, the production of tractor tyres and tubes has increased by about 100 per cent relative to the production in 1966. The note further states that "steps have also been taken to create additional capacity for automobile tyres and tubes, including tractor tyres and tubes. Industrial licences/letters of intent have been issued to six existing units and also to a new unit for a total capacity of 18.37 lakhs numbers each of automobile tyres and tubes. CG licences for the import of machinery have also been issued to four units. These units are taking steps to increase the production of automobile tyres and tubes, including tractor tyres. When these schemes materialise, the production of tractor tyres is likely to increase further."

7.16. It has been represented to the Committee that the tractor manufacturers are facing a real difficulty in securing tyres and tubes for the tractors that they are manufacturing. The Committee note that Government have recently taken steps to increase the production of tyres and tubes and industrial licences letters of intent have been issued to a number of manufacturing units for a total capacity of 18.37 lakh number each of automobile tyres and tubes including tractor tyres and tubes. However, in view of the fact that it would take some time to achieve higher production of tyres and tubes the Committee suggest that Government should streamline the procedure for distribution of tyres and tubes to ensure that the genuine demands of tractor manufacturers and tractor owners are met.

## D. Spare Parts

- 7.71. The Ministry have stated that with a view to ensuring smooth running of tractors, it is necessary that sufficient spare parts are also imported. For that purpose, the Ministry has been arranging import of spare parts to the extent of 10-15 per cent along with the tractors. It has also been stated that in order to prevent blackmarketing in spare parts, the Ministry has been taking steps to import and arrange distribution of spare parts through various State Agro-Industries Corporations and other organisations of repute.
- 7.18. The Committee desired to know as to what was the percentage of tractors lying unused for want of spare parts. They were informed during evidence that the import of spare parts for tractors was being stepped up in order to increase the utilisation of the imported tractors. When asked whether it was a fact that spare parts were not available in respect of DT14B tractors imported from USSR

as that model had become obsolete in Russia, the representative of the Department of Agriculture stated. 'So far as spare parts are concerned, the manufacturers have a plan to supply spares for ten years after the termination of manufacture of the tractor in their country. I may mention that for DT14B the Bihar Agro-Industries Corporation is getting spare parts worth 20 lakhs. The Punjab Agro-Industries Corporation has placed order for 43 lakhs out of which spares worth 4.3 lakhs are on the highseas. Lists are being drawn up for 12 lakhs in the case of Maharashtra and 19 lakhs in the case of Andhra. As soon as lists are ready, letters of credit will be established. There will be no difficulty."

- 7.19. The Committee pointed out during evidence that the cost of spare parts for the tractors manufactured in India was high as compared to the cost of spares for the imported tractors. The representative of the Department of Industrial Development stated that so far as indigenous tractors were concerned the production was picking up relatively slowly and the only solution of reducing the price was to increase the volume of production.
- 7.20. The Committee hope that with the increased imports of spare parts from foreign countries, it would be possible to keep the imported tractors in good running condition. The Committee need hardly stress the desirability of doing advance planning for the import of spares for various types of tractors so that no variety of tractors goes off the road for want of spares.
- 7.21. After taking into account the annual requirements of spare parts, the Committee suggest that Government should review whether more spare parts should be allowed to be imported along with tractors.
- 7.22. The Committee would like the Government to examine the feasibility and economic viability of manufacturing the spare parts of different imported tractors so that the import of spare parts for these tractors can be eliminated as early as possible. The Committee is of the view that there is great need for standardisation to reduce the problem of spares.

New Delhi;

KAMAL NATH TEWARI,

August 11, 1971 Sravana 20, 1896 (Saka). 1901 RS—7.

Chairman, Estimates Committee.

## APPENDIX I

(Vide para 2.50 of the Report)

Procedure regarding fixing of price of indigenously manufactured tractors

The selling prices of agricultural tractors are notified by the Government of India, Ministry of Industrial Development under Essential Commodities Act. In arriving at the selling prices, according to current practice, all costs in manufacturing a tractor, such as, materials, overheads etc. are included excepting expenses such bonuses, interest on borrowings, entertainment etc. To these costs is added an amount of Rs. 2050, Rs. 1850 or Rs. 1650, according to the horse powers being 50, 35 or 25 respectively, as selling expenses to cover dealer margins and other selling costs, (which are supposed to include expenses on publicity, sales and service literature, free after sale services, training of farmers' operators in the best use of tractors and implements, installation at the farmers' premises, warranties, extension services etc.) Whereas the Tariff Commission recommended the prices to be fixed ex-manufacturers factory, the Ministry of Industrial Development has changed the same to ex-dealer destination. For this purpose an amount of equalised freight, namely weighted average of the freight and other expenses applicable to various destinations, is added to the ex-works cost. A return on capital employed in the manufacture of tractors is added to arrive at the retail selling price. Tariff Commission, for very cogent reasons, as described in its report, recommended a rate of 15 per cent on capital employed which the Ministry of Industrial Development has arbitrarily reduced to 12 per cent.

#### APPENDIX II

## (Vide para 3.30 of the Report

Article IV (Inspection and Certification) Quality Control.

- (i) The Buyer has the option to inspect and check through his authorised representative (s) during the process of manufacture and or after completion of the manufacture of the goods the quality of the material and parts used in the goods. Such inspection and checking may, with prior arrangement, be carried out at the place of manufacture of the goods. The Seller shall give to the Buyer sufficient notice of Schedule of manufacture to enable the buyer's representative(s) to attend and inspect and shall allow and afford him them opportunity and facility for such inspection.
- (ii) The Seller shall bear all expenses of the Tests/Inspections carried out in his works except the personal expenses of the buyer's representative(s).

The Buyer's option to inspect the goods under this contract will be without the rights and remedies available to him under Article VI.

(iii) The Seller will arrange with the manufacturers the inspection of the goods before shipment and shall furnish alongwith the shipping documents a certificate from the manufacturer to the effect that the goods conform to the exporting State Standards and with the technical conditions of the manufacturing works, and are new and free from any latent or patent defect.

## ARTICLE VI-GUARANTEE

Each tractor shall carry the Seller's guarantee (for 12 months from the time of Sale to the first actual user or for 16 months from the date of bill of lading whichever date falls earlier). This guarantee shall be against defective and faulty material or workmanship of the goods.

Should the tractor or any part thereof within the guarantee period-prove to be defective or fail to comply with the specification stipulated in the Agreement the Seller shall replace the faulty parts

at his own cost.

For the period of guarantee the liability of the Seller is restricted to free replacement of the defective parts.

The Buyer/its nominees should put forward the claim for the defective goods at the latest within 60 (sixty) days after having found the defect or having made the repair.

Claims for defects of the goods can be put forward within 60 (sixty) days after the expiry of the guarantee period at the latest provided the defect was found during the guarantee period. The seller is not responsible for:

- -normal wear and tear of the goods or of their parts.
- —defects and damages caused by abnormal use of the goods or their use for a purpose for which they are not  $t_0$  be used.
- —defects arising due to lack of technical care and maintenance shown in the Driver's Manual to be supplied by the Seller with the goods including proper storage.
- —defects caused due to insufficient ability of the attending personnel, their neglect or their lack of experience in driving and maintaining the goods.
- —defects arising due to overloading the goods, even if not of a lasting character.
- —defects arising due to neglecting first symptoms of the defects of the goods.

The claim to guarantee is forfeited:

- —if the goods were involved in an accident (so far as the accident was not caused by a proved manufacturing fault).
- —if there were changes or repairs made on the goods or parts replaced outside authorised repair shops.
- —if some part of the goods has been replaced by a non-standard part.

The Seller is not responsible for any losses arising either in direct or indirect relation to the ascertained defect of the goods, particularly not for lost profits. The Seller does not carry out and pay the maintenance work needed for the use of the goods e.g. cleaning of the goods and its parts, exchange and refilling of oil and grease.

# ARTICLE—VII DISTRIBUTION AND AFTER SALE SERVICE

The goods mentioned in the contract shall be sold and distributed in the Indian territory only through the consignee(s) to be nominated later by the Buyer and the Buyer shall enter into agreement with them so that necessary facilities for after sale service and replacement of defective components/complete tractors can be provided to the actual users.

The Buyer shall intimate to the Seller the names of various consignee(s) to whom the goods are to be shipped alongwith quantity and the port of disembarkation in Indian simultaneously with the opening of the Letter of credit. The goods shall be consigned and the shipping documents as specified in Article VIII except the bill of lading, shall be made out by the seller in the name of Buyer's account the name of consignee(s) indicated separately for each consignee. The bill of lading shall be prepared as indicated in Article II and VIII of this contract.

In order to ensure optimum of conditions of aftersale service, the Seller agrees to help the distributor by sending three G.D.R. experts to stay in India for the whole guarantee period.

The Seller will ensure the training in the G.D.R. at their works of three Indian technicians for a period of three months each. The transport costs as well as expenses in connection with the accommodation of the Indian technicians in the G.D.R. will be borne by the Seller and the travelling expenses from India to G.D.R. and back will be borne by the Buyer."

## APPENDIX III

(Vide para 2.41 of the Report)

#### Protocol

A meeting was convened with the GDR Delegation to consider the proposals contained in their letter dated 24th December, 1970 and 12th February, 1971 about taking back the modified RS-09 tractors and to arrive at mutually agreed decisions.

After protracted negotiations and persuations from both sides it was agreed as under:—

- 1. Tractors modified upto the date of signing the protocol would be taken back. The tractors modified after this date would be offered to the farmers and they would be given an opportunity to use the tractors for 2|3 months. In case these tractors which are not found suitable would also be taken back on terms mutually agreed upon.
- 2. The tractors will be taken back on the basis of the C & F price at Bombay Port after deducting 8 per cent depreciation.
- 3. A Technical Committee consisting of representatives of GDR Suppliers and manufacturers, Ministry of Food & Agriculture and the State Agro-Industries Corporation concerned would be constituted. They will consider the technical aspects and the value of all shortages of equipment and or accessories to be deducted from the C & F price less depreciation on the basis of the original prices of equipments only. In case the fast moving parts which were supplied alongwith the tractors have been utilised by the farmers the question of returning these will not be insisted upon. The problems of the accessories and spares would be discussed between the GDR Suppliers representatives and the Agro-Industries Corporations but the cases involving the values of more than Rs. 1200 for accessories would be referred to the Technical Committee.
- 4. For the tractors to be returned the Agro-Industries Corporations, after signing of this protocol, would furnish to Messrs Transport-Maschinen latest within three months, Motor number, chasis no., district and the State in which the tractor was operating, date

of modifications, dates of three free cost services rendered by Agros within the guarantee period.

- 5. Before returning tractors, the Agro-Industries Corporation concerned will ensure they have clear title and ownership of the returned tractor.
- 6. The GDR suppliers will nominate one or two collecting centres in each State. The tractors would be delivered to the collecting centres by the concerned Agro-Industries Corporations and the expenses would be borne by them. Any expenses after that would be to the GDR Suppliers' account. Damaged tractors will not be taken back. In the case of dispute the matter would be referred to the Technical Committee.
- 7. There would be no objection in permitting re-sale of RS-09 tractors in India directly or indirectly through the distributing selling organisations of GDR suppliers subject to the following conditions:—
  - (i) Prior approval about the name of the distributing selling organisation would be obtained from the State Trading Corporation Ministry of Food and Agriculture.
  - (ii) GDR suppliers would be assisted in the import of spare parts for the required value taking into consideration the number of tractors involved.
- 8. In respect of sales to be effected after receiving the Test Report from Tractor Training Centres, Budhi, where the tractor is already under test, further changes would be incorporated in the RS-09 tractor as may be mutually agreed upon between the representatives of the manufacturers of the tractors and the Director of Training Centre.

for S.T.C.

for Transport-

for Traktorenwere Schenebeck

Sd.

maschinen Berlin Sd.

Sd.

Maj. Genl. S. P. Vohra 21/2/71 KOWALCZYK

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# APPENDIX IV

Statement showing summary of Recommendations/Conclusions

Reference to

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S. No.	Para No. of	Summary of Recommendations
	the Report	Conclusions
1	2	3
1.	1.14.	The Committee note that the Board of Agricultural Machinery and Implements constituted by Government in the year 1963 made some useful recommendations about the programme of manufacture servicing and maintenance of tractors and other agricultural equipment etc., and rendered useful advice to Government in the matter of import of agricultural machinery for demonstration and for meeting the gap between indigenous production and requirements and measures to be adopted for popularising agricultural implements and machinery and also equitable distribution of agricultural machinery and spare parts thereof at reasonable prices. The Committee, however, consider it regrettable that the Board could not cover the entire scope of its functions due to the fact that it met only four times from 1963 to 1966.
2.	1.15.	The Committee hope that the reconstituted Board will meet more often so that it may be able to review the programmes of manufacture; servicing and maintenance of power-tillers, tractors and other agricultural implements and make constructive suggestions for development of the industry engaged in the manufacture of tractors and other agricultural machinery.
3.	2.19.	The Committee note that divergent views have been expressed regarding the demand for

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tractors. While the Working Group on Agricuitural Machinery and Implements have estimated the total demand for tractors as 90,000 by 1973-74. the Special Tractor Panel, set up by the Automobile Council, are of the view that not more than 50,000 to 60,000 tractors would be actually needed by the end of the Fourth Plan. wide gap of 30,000 to 40,000 tractors in assessment of demand would indicate the urgent need for careful, detailed and realistic assessment of the demand survey for tractors. While doing so the Committee hope that Government will keep in view the farmers' preferences, average size of holdings, ceiling on land holdings, capital and running cost of tractors. The demand-survey should also cover power-tillers for paddy regions and in hilly areas.

- 4. 2.20. The Committee further suggest that Government should draw up a long-term perspective plan which may be reviewed annually in the light of actual experience.
- 2.21. 5. The Committee feel that there is imperative need for realising self-sufficiency in the crucial field of manufacture of essential agricultural machinery and implements. The Committee. therefore, emphasise that import should be strictly regulated and permitted only to cover the known gaps in indigenous production to meet the The Committee, however, pressing demand. hope that care will be taken by Government to see that import of agricultural machinery does not hamper the development of indigenous manufacture of tractors etc. to meet in full the existing and anticipated demand.
  - 6. 2.22. The Committee suggest that Government should investigate allegations that the same party registers demand simultaneously with a number of suppliers and then sells the tractors at a heavy premium. Government should devise suitable

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remedial measures keeping in view the regulatory measures.

- 7. 2.43.
- The Committee have no doubt that Government would bear in mind the need for ensuring that firms which have been issued licences, translate them in terms of production. Government should keep close watch and take strict action. The Committee feel that Government ensure that manufacture of those tractors whose capability and suitability to Indian conditions have been proved, beyond doubt, are licenced for manufacture. While doing so, the Committee hope that Government will bear in mind the capital and running cost of tractors so as burden the agricultural sector with heavy investment. The Committee need hardly emphasise the benefits of standardisation of tractors which would result in economies of scale in manufacture and lower inventories for servicing etc.
- 8. 2.44

While every effort should be made to increase the indigenous content in the production of tractors, the Committee suggest that it should be invariably ensured by Government that production programmes are not retarded for want of foreign exchange for purchasing a small percentage of components, as foreign exchange has otherwise to be spent on a much larger scale for the import of complete tractors.

9. 2.45

The Committee trust that Hindustan Machine Tools, which has recently taken up the production of tractors, would spare no efforts to establish manufacture of tractors upto the licenced capacity, in the minimum time possible. The Committee expect Hindustan Machine Tools, a premier public undertaking, to take the lead in providing tractors of proven capacity, competitive prices and efficient and dependable "after sales" service etc.

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10.	2.55	The Committee note that the question of fixing prices of tractors is under examination by the Bureau of Industrial Prices and Costs and their Report is awaited. While considering the matter in its various aspects on the basis of that Report, the Committee have no doubt that Government would bear in mind that tractors of the same horse power, though of different makes should have comparable prices. In any case, the difference in their prices should be as narrow as possible.
11.	2.56	The Committee further suggest that prices of tractors should be kept under close watch and procedures should be devised for getting the prices reviewed periodically.
12.	2.57	The Committee are distressed to note the complaint of manufacturers that they cannot produce tractors according to their capacity because of the shortage of raw materials particularly steel. The Committee recommend that Government should ensure that the production of tractors does not suffer for want of raw materials.
13.	2.60	The Committee feel that if farm mechanisation is to be successfully extended in the interest of increasing agricultural production, it is essential that indigenous tractors should be competitively in quality, performance and price with the best available in the world.
14.	2.61	The Committee further suggest that full advantage should be taken of economies of scale, intensive utilisation of manufacturing equipment and machinery by introducing multiple shifts, strict cost accounting and vigilance to bring down the cost.
15.	2.64	The Committee need hardly stress the importance of ancillary industries to meet the increasing demand of components for tractors.

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They note that in order to give fillip to the rapid development of industries manufacturing ancillaries for tractors, automobiles, etc. ban on creation of additional capacity in such industries was removed in September, 1969. Government should ensure that ancillary industries to feed the requisite components to the tractor and automobile industries etc. are developed without any delay. In particular, a detailed analysis should be carried out of the requirements of components for the tractor industry to attain their annual and Five Year Plan programme and concrete measures taken to see that the ancillary industries have the requisite manufacturing capacity to supply these components on assured and regular basis to match the tractor manufacturing programme.

16. 2.65 The Committee feel that unless there is proper coordination between the production programme of tractor manufacturing units and the ancillary units producing components, the production programme for tractors would continue

to suffer.

- 17. 2.66 In the interest of achieving import substitution to the maximum extent possible, the Committee suggest that all possible encouragement should be given to the ancillary industries to produce those components which are still being imported from abroad.
- 18. 2.67 The Committee hope that Government will ensure that steel and other raw materials needed by the ancillary units for production of components are made available to them on reasonable prices and on regular basis.
- 19. 2.72. The Committee feel that it is high time that the functions of Agro-Industries Corporations are clearly defined in so far as after-sales-service to tractors is concerned. As far as indigenous trac-

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tors are concerned, the responsibility for rendering after-sales-service should by and large be of the tractor manufacturers themselves. The Committee, are however, of the view that Agro-Industries Corporations must take full responsibility for arranging adequate facilities for servicing the tractors which are being imported by State Trading Corporation from foreign countries to meet the present shortages as they are the sole agents for distribution and sale of those imported tractors. The Committee stress the need for having adequate number of service outlets in the interior of the country so as to ensure that the maintenance and running of tractors do not suffer for want of maintenance facilities.

20. 2.73

The Committee recommend that Agro- Industries Corporations should also undertake efficient servicing of tractors through mobile workshops which should be fully equipped with tools and spare parts so as to put the tractors back into working condition without any loss of time.

21. 3.12

While the Committee agree that on account of varied soil topography and crops cultivated in different parts of the country the imports cannot be restricted to one or two makes of tractors, the Committee are of the view that indiscriminate import of various types of tractors for which there are no firm programmes for indigenous manufacture may in the long run cause harm to the country's economy. Government should ordinarily limit the import to those makes of tractors which are being manufactured in India or for which concrete plans are well on the way of implementation for manufacture of the tractors in India by a specified date and according to approved programme. The Committee would also like to be assured that the tractors being imported are of proven suitability to Indian conditions.

22. 3.13 The Committee are of the view that if import of a large variety of tractors continues, a stage might come when for want of vital spares appreciable number of tractors would become inoperative resulting in the blocking of hard earned capital of farmers. This would retard not only the pace of the green revolution but would also tend to develop resistance to farm mechanisation.

23. 3.14 The Committee further suggest that the

2. 3.14 The Committee further suggest that the policy of importing tractors free of customs duty may be reviewed having regard to the fact that imported tractors sell at a cheaper price than the indigenously manufactured tractors and this naturally has adverse repercussions on the demand and development programme of tractor industry in the country.

24. 3.48 The Committee note that the Test Report on Implement Carrier RS-0902 fitted with 18.4 h.p. engine which was tested at the Tractor Training and Testing Station, Budni, to assess its suitability and performance characteristics under general farming conditions in the country, interalia highlighted the following deficiencies in the tractor:—

"The operator seat being located at comparatively higher position is not easily accessible. All controls are located near the steering wheel and look to be crowded but are within the easy reach of the operator.

The engine power for puddling operation is considered to be inadequate. The firm states that another engine developing 25 h.p. is offered by the manufacturers as optional prime-mover. This engine fits on the same mounting. The Implement Carrier fitted with 25 h.p. engine would be suitably powered unit for puddling operation."

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25. 3.49 The Committee also note that RS-09 tractor of 18.4 h.p. with 2 cylinders which was tested at Budni Tractor Training and Testing Station in 1965 is different from RS-09 tractors imported from the German Democratic Republic. The differences between the tractors tested at Budni and those actually imported as pointed out by the Technical Team who undertook the inspection of these tractors are reproduced in para 3.26 of the

The Committee are distressed to note that 26. 3.50 RS-09 tractor which was tested at Budni Tractor Training and Testing Station is different from RS-09 tractor imported from the German Democratic Republic. The Committee consider this as a very serious matter as the import and licensing policy was decided on the basis of these tests. It passes the comprehension of the Committee as to how such large scale imports of the modified tractors, with a number of shortcomings/defects as listed above, and without an established manufacturing programme within the country, were allowed to be imported without conducting full and thorough trials. The Committee, therefore, urge that Government should investigate the whole matter and fix responsibility as to why thorough tests were not carried out on the modi-

27. 3.51 The Committee feel that in view of the findings of the Test Report of 1965 on the Implement Carrier RS-09, Government should have been extremely cautious in selecting a sophisticated machine for use by the ordinary farmers in India who do not ordinarily have any technical background or training to operate such machines. In the Committee's view Government after having taken a decision to import RS-09 tractors should

the country.

fied RS-09 tractors and why tractors with different specifications were allowed to be imported in 2.

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have at least made adequate arrangements for after sale service and for imparting proper training to the farmers for operating such complicated machines.

28. 3.52

Further even after carrying out the modifications on RS-09 tractors by the technicians of the supplier firm the reports about their working have not been encouraging. The Committee. however, note that the State Trading Corporation have recently signed a protocol with the G.D.R. suppliers which provides inter alia that tractors modified upto the date of signing the protocol would be taken back by the supplier firm on the basis of the C. & F. price at Bombay Port after deducting 8 per cent depreciation. The Committee trust that in this process Government would fully safeguard the interests of the farmers who have purchased the tractors in good faith from the Agro-Industries Corporations and would provide adequate facilities to them to return their tractors. The period operation of the Agreement may be got suitably extended so that farmers spread all over the villages get adequate opportunity to avail of it and get full refund for the tractors which they do not want.

**29**. **3.53** 

The Committee note that GDR representatives during their visit to Jullundur had demanded ad-hoc deduction of Rs. 6,500 per tractor besides 8 per cent depreciation on the C. & F. value before undertaking inspection of the tractors. The Committee are surprised that any suggestion for making an ad-hoc deduction should have been made after an agreement had been reached and a Protocol signed laying down the terms of the Agreement.

30. 3.54

Government should ensure implementation in letter and spirit of the Agreement and also see that the farmers who purchased the tractors

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are paid the due amount without delay. In settling the amount the Committee have no doubt that the Government would keep in mind the fact that the farmers who invested their precious money in these tractors suffered as they were not able to put these tractors to productive use.

- 31. 3.55 Government should also ensure that spare parts of RS-09 tractors which were imported at a cost of Rs. 21 lakhs and which are surplus to requirement are returned along with tractors and necessary refund is obtained from the G.D.R. Suppliers.
- 32. 3.56 The Committee trust that suitable remedial measures would be taken in the light of the findings of the Technical Committee appointed by Government to go into the question as to whether the manner of testing these tractors at Budni Centre was proper and whether there was any discernible lapse in conducting the tests.
- The Committee note that loan assistance from 3.59 33. World Bank/International Development Association is available at present for importing tractors only in relation to specific Projects which are a part of integrated agricultural development Projects. In view of the wide gap between the demand and indigenous production of tractors in India, the Committee would like Government to explore the possibility of getting assistance from any other International financing agency for import of tractors for supplying to the farmers till such time the indigenous production of tractors in India is sufficient to meet the total demand of the country. The Committee hope that it would be possible to utilise the loan to get tractors best suited to the requirements of the country at most competitive rates.
- 34. 4.24 The Committee regret to note that the targets, which have been fixed in regard to the

total requirement of power tillers at the end of the Fourth Plan are being revised and reduced by the Government. The fact that only one or two firms have so far gone into production and that the number of power-tillers produced by them is small bears sufficient testimony to the fact that the production of power tillers has not been given the serious consideration that it deserves. Committee would, therefore, urge that Government as well as extension agencies and firms manufacturing power tillers should promotional work so as to convince the farmer about the usefulness of power tiller. mittee would also stress that import of power tillers should be strictly linked to indigenous manufacturing programme. Side by side Government should analyse reasons for small off take The Government of indigenous power tillers. should also make concerted efforts to improve design, reduce cost of running and maintenance and encourage manufacture of power tillers of proven suitability.

**35**. **4.25**.

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The Committee note that the Planning Commission in their Report on Tractors and Power Tillers (1966) had observed that the Power Tiller was specially suited to Small holdings and paddy areas and that there was a great demand for this multipurpose machine. The requirements for the Fourth Five Year Plan were estimated at 40,000 to 50,000 units in the first two years rising to one lakh units per annum by the end of the Fourth Similarly the Working Group on Agricultural Machinery and Implements had assessed the total demand for power tillers at units by the end of 1973-74 rising from 20,000 in 1969-70 to 80.000 units in 1973-74. The Rice Research Institute at Cuttack, who had conducted research using the tractor, power tiller and bullock plough, had also come to the conclusion that the most economic way of preparing the Soil

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was by the use of power tiller. The Committee regret to note that in spite of the recommendations/observations of these bodies about the usefulness and suitability of power tillers to farmers with small holdings particularly in paddy growing and hilly areas where communication facilities are inadequate, Government have not given any serious consideration to the indigenous manufacture of power-tillers.

4.26.

The Committee feel that power-tiller is going to play a useful role in the agricultural economy of the country in view of its suitability for small agricultural holdings particularly in the paddygrowing and hilly areas. They, therefore, suggest that Government should make concerted efforts to make the power-tiller known to the common farmer through practical demonstrations and other publicity measures so that it may become popular on its merits of manoeuvrability, utility and suitability. Cooperation of bodies such as Indian Council of Agricultural Research, Agricultural Universities, Demonstration Blocks etc. might be solicited with a view to intensifying efforts to demonstrate the usefulness of the power-tillers.

**3**7. **4.2**7.

The Committee would also recommend that as suggested by the Working Group on Agricultural Machinery and Implements, Government should make it incumbent upon the manufacturers of power-tillers to arrange supply of complete sets of matching implements to enable the farmers to use them for a wide range of operations.

**38 4**.49.

44.

The Committee note that the discs are imported through the S.T.C. who distribute them through the Agro-Industries Corporations and in view of the liberalised policy in regard to import of steel, the number of discs to be imported are being reduced. The Committee also note that

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due to shortage of steel, the implement manufacturers are obliged to buy steel from the open market at a higher price with the result that the cost of the discs manufactured in India is much higher than the cost of the imported discs. The Committee recommend that Government should take necessary steps to ensure that the steel requirements of the implement manufacturers are adequately met so that they may be able to produce discs in larger numbers and at lesser price.

- 39. 4.50. The Committee note that the indigenous manufacturers of discs had produced 40,927 units during the year 1970 against the capacity of 11,10,00 units. The shortfall in production was primarily due to non-availability of raw material notably the steel sheets.
- 40. 4.51. The Committee are convinced that had the requirement of steel of the disc manufacturers been met by the Hindustan Steel Limited or had more liberalised import of steel been allowed in time to them, a much larger proportion of disc requirements would have been met by the disc manufacturers. It is regrettable that there was unusual delay in issuing permits for import of steel or in allotting and supplying indigenous steel to the disc manufacturers.
- The Committee are disappointed that Hindu-4.52. 41. stan Steel has not been able to meet even a fraction of the requirements of steel sheets of disc manufacturers with the result that they could not put their production capacity to use. One of the main objectives in setting up the Hindustan Steel in the public sector was to ensure adequate supply of raw materials for our industries. The Committee would like Government to give a high priority to the manufacture and supply in time of steel sheets by the Steel Plants to the disc manufacturers so that the latter can meet in full the demand for discs and other agricultural im-7.

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plements by the agricultural sector and thereby save precious foreign exchange expended at present on the avoidable import of discs.

- 42. 4.53. The Committee have no doubt that keeping in view the general policy of Government to attain self-reliance and encouraging indigenous production particularly in the key industry of agricultural machinery and equipment, Government would ensure that raw materials for discs manufacture are made available on assured basis either from indigenous resources or by import.
- 43. 4.54. Government should also ensure that the raw materials are given to the manufacturers of competitive rates so that the end product can also be sold to the agriculturists at competitive rates. The admitted anomaly that the raw materials for indigenous manufacture of discs should have borne a heavier duty than manufactured discs needs to be examined without delay and rectified in the interest of the indigenous industry.
- 44. 4.55. The Committee note that Government have already taken action to do cost analysis of a few manufacturers and they hope that effective action would be taken to ensure that discs of proven quality and dependable performance are made available to the agriculturists at most competitive rates.
- of the Department of Industrial Development has stated during evidence that production of agricultural implements is reserved for the small scale sector and Tractor manufacturers are strictly forbidden to manufacture the implements. It has also been stated during evidence that in U.P. and Rajasthan, the Agro-Industries Corporations are producing agricultural implements which are sold at higher prices along with the imported tractors. The Committee would like

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Government to examine the whole matter afresh and lay down a definite policy with regard to the manufacture of agricultural implements.

46. 4.78

The Committee also suggest that Government should immediately examine the desirability of allowing manufacturers to import prototypes of latest agricultural implements from abroad, so that they may be able to produce improved implements indigenously. The Committee would also urge the need for intensification of research and development and also the need for ensuring that farmers get implements at most competitive rates to encourage their use.

**4**7. **4.79**.

Committee note that considerable efforts have already been initiated to develop and introduce harvesting equipment for which the availability had been unsatisfactory. The Committee also note that harvestor combines are being imported from abroad and one firm has licensed for production of been combines. The Committee trust that indigenous production of harvestor combines will be stepped up to obviate imports. The Committee are glad to note that in several States, State Agro-Industries Corporations have initiated marketing of implements manufactured by small scale manufacturers. The Committee suggest that Agro-Industries Corporations should simultaneously undertake demonstration of improved implements for the benefit of the farmers.

**48. 5.26**.

As regards distribution of imported tractors through the Agro-Industries Corporations the Committee suggest that this should be done on first-come-first-served basis so as to inspire confidence and obviate chances of complaints of favouritism, discrimination, etc. in the matter of allotment of imported tractors.

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49. 5.27. The Committee hope that the question or recovery of dues from the defaulters will be vigorously followed up with all State Governments so that necessary legislation in this behalf is enacted at the earliest and the money due to various State Agro-Industries Corporations is not allowed to go into arrears. If sound and strict financial management is introduced in the initial stages it would instil in the farmers the healthy habit of honouring promptly the commitments made under the hire-purchase scheme.

The Committee note that some Corporations enter into an agreement with the farmer at the time of sale of the tractors but this practice is not uniformly followed by all Corporations. The Committee suggest that a uniform procedure should be laid down in this regard so that the farmer has a written guarantee for assured aftersales service.

The Committee note that some Corporations have developed workshops to provide after-sales service and some of them have also pressed into service mobile vans to render repair and maintenance service in the field. The Corporations are also making arrangements with other organisations including those in the private sector to facilitate repair and maintenance of imported tractors. It is imperative that tractors and other agricultural machinery are kept in good and efficient working condition so as to render maximum service and benefits to the agriculturist The Committee, therefore, stress purchasers. that maintenance and repair facilities for tractors and other agricultural machinery should be provided as close to the place of their utilisation as possible. The Committee have no doubt that keeping in view the above objective and growing extensive use of agricultural machinery and equipment, Government/Corporations would make a coordinated effort, along with other organisations engaged in the same work, to ensure

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development of adequate number of servicing and repair outlets as close to the place of utilisation of tractors and agricultural machinery as possible. The Committee would suggest in this context that encouragement may be extended to unemployed engineers to set up servicing centres in rural areas, which is course of time are bound to develop into centres for Agro-Industries.

**52. 5.30**.

The Committee need hardly stress that the Agro-Industries Corporations should make available adequate quantities of spare parts for imported machinery to facilitate repairs.

**53**. **6**.17.

The Committee are distressed to note that it usually takes a very long time to complete even one test at the Tractor Training and Testing Station at Budni. There is, urgent need for improving testing facilities at Budni so as to facilitate expeditious evaluation of tractors and other agricultural implements. The Committee hope that with the expansion of facilities at Budni and with the opening of sub-centres, the time taken for tests will be reduced appreciably.

**54**. **6**.18

The Committee would like that Budni should give a lead in selecting agricultural machines which are best suited to the country's needs and are most economical to operate. The Committee would also stress the need for standardisation and would urge that plethora of makes and designs should be avoided.

**55**. **6.19**.

The Committee hope that the Tractor Training Centre at Budni will make every endeavour to achieve its objectives early and provide a trained pool of personnel to operate, maintain and repair tractors and other agricultural implements to meet the increasing demand for mechanisation of farming.

**56**. **6**.20

The Committee would also like that training facilities available are properly publicised. The Government should also endeavour to set up

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training and demonstration centres at least one in each State if not in each division.

57. 6.34 The Committee note that field trials on tractors and other matching equipment been carried out at the Hissar Centre. The Committee, however, suggest that the testing facilities should be augmented at the Hissar Centre so that the testing of equipment may be undertaken at this Centre also with a view to reduce the burden on the Budni Centre. Committee are glad to note that new equipments had been designed for the benefit of farmers and to boost up mechanised farming. The Committee would like that these activities are intensified to

enhance the benefits to the farmer.

58. 6.38. While deciding the location of the Third Training and Testing Centre to be set up during the Fourth Five Year Plan, Government should explore the possibility of setting it up in Rice growing area to test tractors and other Agricultural equipment required for paddy farming. The Committee hope that the Government will also ensure that water will be available in plenty at the site of the new centres so that the difficulties encountered at the Hissar Centre due to short supply of water may be obviated.

59. 8.39. The Committee further suggest that Government should ensure that the new Centre renders effective service and is able to share the functions and responsibilities of the existing two centres.

60. 6.44. The Committee hope that the research effort at the various research centres will be continued vigorously and there will be greater emphasis on the development of agricultural machinery and implements which would help the farmer to increase production.

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61. 6.45. The Committee suggest that Government should give due consideration to bringing about full coordination among the various Research Centres in the country so that the results of experiments carried out on a particular equipment at one centre are transmitted to other centres automatically.

6.46. 62. The Committee need hardly stress should be ensured that useful information available at these research centres is made available. to the manufacturers of agricultural machinery without difficulty so that improved types of machines and implements are produced in the country simultaneously. The Committee would also stress the need for intensifying research especially in small farm machinery and also for coordinating activities of Research Institutions Universities Extension Services to avoid unnecessary overlapping. Steps should also be taken towards standardisation of machinery and equipment and only those should be selected which are most suited to Indian agricultural conditions and are economic in operation.

The Committee hope that the Study undertaken by the Agricultural Finance Corporation regarding loan procedures adopted by the Commercial Banks for agriculture will be completed expeditiously so that the commercial banks may be able to play an effective role in helping the agricultural machinery and implements industry in securing adequate credit facilities.

The Committee regret to note that raw materials particularly iron and steel were not made available in sufficient quantities to the agricultural implements manufacturers and they were compelled to purchase their requirements in the open market at exhorbitant prices. The short supply of essential raw materials is also

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bound to affect the exports of these implements to foreign markets. The Committee would like Government to ensure that iron and steel of requisite quality is supplied to the manufacturers of agricultural implements in sufficient quantity and in time and to give the highest priority to it so that the country may become self-reliant in this crucial sector.

**65**. **7**.13.

The Committee note that Government have taken steps to liberalise the import of steel so that industry may not suffer on account of non-availability of such raw materials. The Committee, however, need hardly stress the desirability of increasing indigenous production of iron and steel as dependence on imports for a long time to meet the shortage of iron and steel would not be in the best interests of the country. They therefore, suggest that vigorous efforts should be made by Government to step up the production of all types of steel needed by different industries in the country.

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has been represented to the Committee that the tractor manufacturers are facing a real difficulty in securing tyres and tubes for the tractors that they are manufacturing. The Committee note that Government have recently taken steps to increase the production of tyres and tubes and industrial licences letters of intent have been issued to a number of manufacturing units for a total capacity of 18.37 lakh numbers each of automobile tyres and tubes including tractor tyres and tubes. However, in view of the fact that it would take some time to achieve higher production of tyres and tubes the Committee suggest that the Government should streamline the procedure for distribution of tyres and tubes to ensure that the genuine demands of tractor manufacturers and tractor owners are met.

2. 1. 3. 7.20. The Committee hope that with the increased 67. imports of spare parts from foreign countries, it would be possible to keep the imported tractors in good running conditions. The Committee need hardly stress the desirability of doing advance planning for the import of spares for various types of tractors so that no variety of tractors goes off the road for want of spares. 68. 7.21. After taking into account the annual requirements of spare parts, the Committee suggest that Government should review whether spare parts should be allowed to be imported along with tractors. The Committee would like the Government 7.22. 469. to examine the feasibility and economic viability of manufacturing the spare parts of different imported tractors so that the import of spare parts for these tractors can be eliminated as early as possible. Committee is of the view that there is great need for standardisation to reduce the pro-

blem of spares.

#### APPENDIX V

# Analysis of Recommendations contained in the Report Classification of Recommendations

### A. Recommendations for Improving the Organisation and Working

Serial Nos. 1,2,5,6,7,8,9,10,11,12,13,14,15,16,19,20,21,22,23,26,27,28,29,30,31,32,33,34,35,36,37,38.39,40,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68 & 69.

- B. Recommendations for Effecting Beonomy. Serial No. 41.
- C. Miscellaneous Recommendations. Serial Nos. 3,4,17,18,24 & 25.

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- quate supply of raw materials for our industries. The Committee would like Government to give a high priority to the manufacture and supply in time of steel sheets by the Steel Plants to the disc manufacturers so that the latter can meet in full the demand for discs and other agricultural implements by the agricultural sector and thereby save precious foreign exchange expended at present on the avoidable import of discs.
- 4.53. The Committee have no doubt that keeping in view the general policy of Government to attain self-reliance and encouraging indigenous production particularly in the key industry of agricultural machinery and equipment. Government would ensure that raw materials for discs manufacture are made available on assured basis either from indigenous resources or by import.
- 4.54. Government should also ensure that the raw materials are given to the manufacturers at competitive rates so that the end product can also be sold to the agriculturists at competitive rates. The admitted anomaly that the raw materials for indigenous manufacture of discs should have borne a heavier duty than manufactured discs needs to be examined without delay and rectified in the interest of the indigenous industry.
- 4.55. The Committee note that Government have already taken action to do cost analysis of a few manufacturers and they hope that effective action would be taken to ensure that discs of proven quality and dependable performance are made available to the agriculturists at most competitive rates.

## (iii) Other Tools and Implements

- 4.56. It has been stated that Regional Research-cum-Training Centres established in the different States concentrate on the development and evaluation of small tools and implements required by the cultivators for intensive farming. Bullock-drawn levellers, scrappers, manually operated and bullock drawn seed-cum-fertiliser drills and planters, bullock-drawn disc harrows, weeders, puddlers and other improved implements suitable for farming conditions in the different regions have been developed.
- 4.57. Design and development of more sophisticated equipment such as bullock drawn reapers, potato planters and diggers, sugareane planters etc. have been taken up and are at various stages of development and introduction.
- 4.58. It has been suggested to the Committee that manufacture of Agricultural implements should be restricted to the small scale sector where sufficient production capacity exists and tractor manu-

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- 4.58. It has been suggested to the Committee that manufacture of Agricultural implements should be restricted to the small scale sector where sufficient production capacity exists and tractor manu-

facturers and Agro-industries Corporations should not be allowed to manufacture and sell agricultural implements. In this connection, the Ministry have stated in their note that at present most of the manufacturers of agricultural implements in the country can be classified as Small Scale manufacturers and there is a wide gap between the facilities available and the capital invested between small manufacturers in the rural areas and other manufacturers located in the urban areas. All the traditional implement are mostly manufactured and supplied by the artisans in the rural areas. In some States they have also undertaken the manufacture of improved animal drawn implements as well as tractor drawn implements and power threshers. These manufacturers have been mostly looking after the needs of local farmers. Other small scale manufacturers with a capital investment of one lakh to 8 lakhs are mostly located in the mofussil towns and urban areas. Most of these manufacturers in the past were producing animal-drawn improved implements that were purchased by Government agencies for distribution to the farmers.

- 4.59. With the rapid growth of tractor population many of these firms started producing tractor drawn implements. These implements are either sold directly to the farmers or supplied to tractor manufacturers who market these implements under their own brand names.
- 4.60. The Ministry have further stated that most of the small manufacturers have limited resources of finance, manpower, technical know-how and production techniques with the result that the quality of implements spplied by these firms is not upto the mark. These manufacturers do not have any facility to undertake design and development work on new implements. They are content to supply only traditional implements that are simple to fabricate. This fact has retarded the growth and supply of new implements to the farmers and the present implement to tractor ratio is considered very low. Any new implement to be introduced in the market requires 2 to 3 years for development and another 2 to 3 years for its field revaluation testing and market survey prior to its production.
- 4.61. It has been further stated that without adequate volume of production it is difficult to ensure supply of goods quality implements, reduction of prices and standardisation of fast moving parts.
- 4.62. The Ministry's note points out that while tractor manufacturers or their dealers and Agro-industries Corporations should not force spply of implements alongwith the tractor, it would not be appropriate to debar them from manufacturing their own implements. These organisations have resources to undertake design and