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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

WESTERN EUROPEAN TRACTOR AND AGRICULTURAL  
MACHINERY INDUSTRY

June 15, 1954

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DEPARTMENT OF TECHNICAL OPERATIONS

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	<u>Page</u>
Summary and Conclusions	1
I. Development	2 - 5
a. Pre-War	
b. Post-War	
c. General Characteristics	
II. Tractor Production	6 - 9
a. Size of Tractors Produced	
b. Trend of Production	
c. Production Targets and Unused Capacity	
III. Consumption Trends	9 - 10
IV. Foreign Trade	10 - 16
a. Imports	
b. Import Restrictions	
c. Exports	
d. Trends in Overseas Markets	
e. Financial Assistance for Exporters	

## WESTERN EUROPEAN TRACTOR AND AGRICULTURAL MACHINERY INDUSTRY

### Summary and Conclusions

The production of agricultural tractors has expanded considerably in Western Europe. Compared to pre-war production it has multiplied by twelve to 272,686 tractor units in 1952. The United Kingdom, Germany, France and Italy are now the leading producers. Tractor production is concentrated in the hands of a few large producers but agricultural machinery production is largely among small firms. Excluding garden tractors, four sizes of wheel and crawler tractors are being produced, with the largest number of wheel models being produced in the 2-plow size, and 4-plow in the crawlers.

Consumption within the OEEC area is upward. At present the demand for tractors is favorable due to scarcity of farm labor, increased prices, better credit facilities and lower cost of machinery.

Exports are increasing and dollar imports are decreasing. In 1951, some 53% of tractor units produced were exported at an equivalent dollar value approximating 125 million.

In general it can be concluded that the production of tractors in Europe has increased very greatly since the war, and its share of a larger total world output is rising. Moreover, the range and quality of tractors produced has improved markedly since the war. Today one can buy in Europe a good tractor, which will meet the requirements of our agricultural projects, for a reasonable price with good after sales service.

## I. Development

### a. Pre-War

Before the war the production of agricultural tractors in Europe was concentrated mainly in Germany, which supplied the larger part of the total output, and secondly in England.

Of the member countries now producing agricultural machinery, France, Germany, Italy and the United Kingdom have extensive industries covering a wide range of tractors and agricultural equipment.

In 1950 published data indicates that 85% of the European tractor and machinery production by value was shared by four main producing countries; United Kingdom, 31.0 of total output; Germany, 21.8%; Italy, 17.3%; and France, 14.8%. (See Table 1)

### b. Post-War

The importance of the tractor and agricultural machinery industry in Europe can be best judged, in part at least, by the more recently published figures of labor in the industry in 1950. In that year, according to an OEEC publication, <sup>1/</sup> there were approximately 190,000 people engaged in the industry, valued at \$760 million. Some 209,306 tractor units were produced in 1950, valued at \$283 million, or a per unit cost of about \$1,000 per tractor.

In the field of tractor production, Italy has specialized to a large extent in large wheel and crawler tractors; and Germany in medium diesel and semi-diesel wheel tractors, while the United Kingdom accounts for the bulk of wheeled tractor production. In the other producing countries, the industry is quite small and covers a limited range of wheel tractors.

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<sup>1/</sup> Situation of the Agricultural Engineering Industry, OEEC, 1950.

TABLE 1

1950 PRODUCTION BY COUNTRY EXPRESSED AS A PERCENTAGE OF  
TOTAL PRODUCTION

(in value)

<u>Country</u>	<u>Tractors (tracklaying and wheeled)</u>	<u>Agricultural machinery and spare parts</u>	<u>Total agricul- tural machinery, tractors, and hort. tractors</u>
Austria	2.5	2.0	2.2
Belgium	-	2.1	1.3
Denmark	-	2.8	1.7
France	11.3	17.3	14.8
Germany	27.2	18.8	21.8
Greece	-	1.6	1.0
Italy	13.9	19.7	17.3
Netherlands	-	1.5	0.9
Norway	-	0.3	0.2
Sweden	3.6	8.4	6.5
Switzerland	1.7	0.5	1.3
Turkey	-	n.a.	n.a.
United Kingdom	<u>39.8</u>	<u>25.0</u>	<u>31.0</u>
TOTAL	100.0	100.0	100.0

Source: Situation of the Agricultural Engineering Industry, OEEC, 1950.

Since 1939, there have been radical changes in the pattern of agricultural machinery industry in Europe. Production was reduced to a fraction of pre-war as a result of damage to plants, especially in Germany. Production at the end of the war was reduced to a fraction (3,500 units) of the pre-war level (21,576 units). Secondly, with the increased demand for agricultural machinery and the inability to get adequate supplies of imported equipment in the immediate post-war period, the European countries and notably the United Kingdom, have considerably expanded their production capacity.

As compared to pre-war, the production in Western Europe has been almost multiplied by twelve, amounting to 272,686 units in 1952. The United Kingdom was largely responsible for this increase, production having increased by fourteen times to 141,868 in 1951. The United Kingdom, Germany, France and Italy are now leading producers. The trend in production of tractors by countries can be seen in Table 2.

The data in Table 2 indicates production increasing in all countries for which there are data through 1952 but a decrease in 1953 for Germany and the United Kingdom.

#### c. General Characteristics

In contrast to certain other industries, the agricultural engineering industry in Europe is characterized by a large number and great diversity of its producers, most of which are small and widely distributed throughout the producing countries. Of the 118 firms making tractors in 1950, 22 firms employed 200 workers or more. Tractor production can be said to be concentrated largely in the hands of the large firms, and agricultural machinery production largely in the small firms.

(Table 2 on following page)

TABLE 2

TRACTOR PRODUCTION <sup>1/</sup>

(in units)

<u>Country</u>	<u>1938</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>
Austria	-	407	4,141	4,106	5,659	7,063	9,888	8,650
Belgium	-	-	-	-	-	-	-	-
France	1,515	4,262	12,423	17,275	14,191	16,221	25,308	28,246
Germany <sup>2/</sup>	21,576	3,500	8,000	26,900	52,082	80,543	93,760	74,529
Italy	2,000	2,200	3,300	7,500	7,948	10,200	8,128	10,336
Sweden	300	2,802	4,705	6,058	6,418	6,939	6,550	6,875
Switzerland	1,000	1,500	2,000	1,800	1,600	1,800	1,850	1,680
United Kingdom	10,227	58,949	117,798	91,459	121,408	141,868	127,202	112,661
TOTAL	36,618	73,620	152,367	155,098	209,306	264,634	272,686	242,977

<sup>1/</sup> Unless otherwise stated all tractor figures throughout the report exclude horticultural tractors.

<sup>2/</sup> All the 1938 figures given for Germany in the report relate to Western Germany. Tractor production in 1938 for pre-war Germany was 24,121 units.

## II. Tractor Production

### a. Size of Tractors Produced

Excluding the garden tractors, four sizes of wheel and crawlers are produced with the largest number of wheel models being produced in the 2-plow size, and 4-plow in the crawlers. In 1950, the production of tractors by countries and size are listed in Table 3.

Most of the tractor models produced in Europe today are wheel tractors of the 2-plow size and powered by diesel fuel. According to a survey made by OEEC in 1950, 81 percent of the wheel models and 95 percent of the crawler models were operated by diesel fuel. <sup>1/</sup>

Pre-war tractors were mostly of the 4-wheel fixed track type and very few all-purpose or "row-crop" tractors were manufactured. The chief reason for this was that the tractors were used principally for heavy work of ploughing and for driving threshing machines, the lighter work of the farm being done by horses or by hand. In recent years, owing to the necessity for human food production, horse numbers declined and the need for tractors to meet all farm operations increased, and a great increase in tractor numbers arose, including the inter-row cultivation tractor. To meet this need, manufacturers have produced all-purpose four-wheeled tractors and three-wheeled tractors of a tricycle type with adjustable track. Most important European manufacturers now offer all-purpose tractors. In England this has resulted in becoming the most intensified mechanized country in the world with 1 tractor per 23 hectares of land in 1951, compared to the United States with 1 tractor per 53 hectares in the same year. Statistics are not available but it is estimated that about half of total production is of the all-purpose type.

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<sup>1/</sup> There may be several reasons why Europe prefers diesel or semi-diesel power, but one very good reason is the trend to use higher powered tractors using more fuel increases the importance of economy in fuel and so favors the use of diesel engines.

TABLE 3

EUROPEAN TRACTOR PRODUCTION BY TYPE AND SIZE IN 1950

No. of Firms by Country Manufacturing

	<u>Wheel Tractors</u>				<u>Crawler Tractors</u>			
	<u>1 plow (8-10 HP)</u>	<u>2 plow (18-26 HP)</u>	<u>3 plow (27-36 HP)</u>	<u>4 plow (Over 37 HP)</u>	<u>1 plow (8-10 HP)</u>	<u>2 plow (18-26 HP)</u>	<u>3 plow (27-36 HP)</u>	<u>4 plow (Over 37 HP)</u>
<u>Europe:</u>								
Austria	-	1	-	-	-	-	-	-
Belgium	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	4	9	5	4	2	5	7	13
Germany	4	10	10	2	-	-	-	1
Italy	5	-	1	8	3	-	1	14
Sweden	-	2	1	2	-	-	-	-
Switzerland	1	5	4	5	-	-	-	-
United Kingdom	-	6	7	8	-	1	5	4
<b>TOTAL</b>	<b>14</b>	<b>33</b>	<b>28</b>	<b>29</b>	<b>5</b>	<b>6</b>	<b>13</b>	<b>32</b>

b. Trend of Production

The development of production by country is shown in Table 2, from which it will be seen that in 1950 overall tractor production (in units) was nearly six times the pre-war volume and by 1953 it was nearly seven times. Tractor production in the United Kingdom, the largest producer, has risen to heights of about 14 times the pre-war volume by 1951 and declined slightly to a little over 11 times in 1953. In Germany, the second largest producer, production has risen to a height of about 4-1/2 times pre-war in 1952 but declined to 3-1/2 times in 1953. In France, the third largest producer, production has risen to 18 times pre-war in 1953.

OEEC <sup>1/</sup> reports that these post-war increases in production have been made possible not only by the setting up in many countries of new factories but also by the modernization and expansion of existing plants. In many countries the largest factories capable of mass production have been progressively better equipped and as a result of the large post-war investments in the industry productivity in certain countries is reported to have increased considerably above the pre-war level.

Distribution of Production in 1952

The distribution of tractor production, by units, in the participating countries in 1952 (the highest post-war production year) was as follows:

1952 Production by Country Expressed as a Percentage of  
Total Tractor Production

(in units)

<u>Country</u>	<u>1952</u>
Austria	3.6
Belgium	-
France	9.3
Germany	34.4
Italy	2.9
Sweden	2.4
Switzerland	0.7
United Kingdom	<u>46.7</u>
Total	100.0

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<sup>1/</sup> Situation of the Agricultural Engineering Industry, OEEC, 1950.

The figures above indicate that in 1952, 90.4% of production by units was shared by the three main producing countries, the United Kingdom accounting for 46.7% of total output, Germany 34.4%, and France 9.3%.

### c. Production Targets and Unused Capacity

Estimates submitted to the OEEC Organization in 1948 estimated that tractor output was expected to increase by 100% between 1948 and 1952. However this goal was not met and production in 1952 fell about 25% short of reaching the estimated goal.

With a revival in demand for tractors, part of this unused capacity has since been absorbed and production has been increased to new high outputs.

### III. Consumption Trends

During the immediate post-war years, there was a renewed drive towards mechanization of agriculture in many European countries. The shortage of agricultural labor in many countries and its rising cost plus the demand for increased efficiency in agriculture, created a demand for labor-saving machinery. This demand increased until 1948, declined in 1949, increased again in 1950 through 1952. Data is incomplete for 1953 but, if it were available, or if the same demand was maintained in 1953 that existed in 1952, the total tractors consumed in the area as a whole in 1953 would exceed the demand in 1952. See Table 4. The data in Table 4 indicates for the area as a whole that the trend of consumption is upward.

In the United Kingdom, consumption in 1949 declined below 1948. Consumption of tractors in that year amounted to 27,353 units, compared with 51,183 units in 1948. Sales revived in 1950 after which they declined through 1953. Western Europe is not the main market for British tractors; the bulk of its exports is outside of the member countries.

TABLE 4  
CONSUMPTION OF TRACTORS  
(in units)

<u>Country</u>	<u>1938</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>
Austria	100	453	4,055	2,560	4,241	4,261	n.a.	n.a.
Belgium	n.a.	n.a.	2,409	2,042	3,202	4,000	4,693	4,620
Denmark <sup>1/</sup>	456	1,984	6,333	5,919	6,473	9,613	11,800	10,958
France	n.a.	n.a.	26,000	24,500	21,000	20,611	30,503	33,258
Germany	10,000	3,500	7,249	24,667	40,181	59,802	70,829	54,023
Greece	174	354	634	1,519	1,385	n.a.	n.a.	n.a.
Italy <sup>1/</sup>	1,903	2,289	2,615	3,150	6,289	9,064	n.a.	n.a.
Netherlands <sup>1/</sup>	452	2,032	6,480	4,653	3,800	n.a.	n.a.	n.a.
Norway	664	1,476	2,242	1,231	1,412	4,117	n.a.	n.a.
Sweden	4,347	7,500	13,379	11,214	14,799	14,735	19,534	16,469
Switzerland	684	1,654	2,623	2,429	2,378	2,575	2,400	2,300
Turkey	3,625	1,117	2,815	4,784	4,362	10,320	n.a.	n.a.
United Kingdom	7,180	43,314	51,183	27,353	39,051	34,399	35,782	32,350
TOTAL	--	--	128,017	116,021	148,573	173,497 <sup>2/</sup>	175,541 <sup>2/</sup>	153,978 <sup>2/</sup>

<sup>1/</sup> Including horticultural tractors.  
<sup>2/</sup> Preliminary.

In Germany, consumption rose steadily from 1947 and exceeded pre-war in 1949 and continued to increase through 1952. The main outlet for the German export trade is in Europe.

The French tractor demand declined from 1948 steadily to 1951 and increased to a high in 1953. The French industry was largely concentrated on petrol-driven wheel tractors and was hard hit by the new demand for diesel and semi-diesel powered units. It was obliged to intensify and search for new markets abroad and at the same time modify its manufacturing programs so as to meet the demand for a cheaper fuel powered tractor.

The favorable trend in demand in consumption of tractors may be due to a number of causes; a scarcity of farm labor, increased prices for farm products, better farmer credit facilities and others. However, it might be a reasonably safe statement to indicate that the demand for future tractors and certain types of equipment might generally be slowing down and that henceforth supply would be mainly a replacement problem. This is best illustrated when one considers the density of tractor population per hectare in 1930 for the European area as a whole was 1,277 <sup>1</sup>/<sub>1</sub> hectares per tractor and in 1951 had fallen to 171 hectares per tractor. In 1951, the United Kingdom had 23 hectares; Netherlands 58 hectares; and Sweden 62 hectares per tractor. With the exception of Spain, Portugal, and Greece, the point of economic saturation must be near and future demand must be largely replacement.

#### IV. Foreign Trade

An attempt will be made to give a brief picture of foreign trade in tractors. One can imagine that the post-war period has brought about important changes in the pattern and volume of trade in this sector. Development broadly would be: (1) a steady increase in the volume of intra-European trade; (2) a lessening dependence on dollar imports; and (3) a rapid expansion of exports, especially to countries outside of the participating area.

##### a. Imports

In the immediate post-war period, European manufacturers were not in a position to satisfy the pent-up demand for tractors and there was a heavy demand on the United States and Canada for tractors, especially crawler tractors, and light and heavy-wheeled tractors.

The expansion of production in Western Europe has since made it possible for European manufacturers to supply an increasing part of the tractor demand within the area.

The development of tractor imports by country is shown in Tables 5 and 6. In units, the trend for the area as a whole was generally upward from 1947 to 1951, after which it declined. By value the trend was upward to 1952, afterward it declined.

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<sup>1</sup>/<sub>1</sub> Source: The European Tractor Industry in the Setting of the World Market, February, 1952.

France and Sweden are the largest importers of this type of machinery and in 1953 accounted for 58% by value of total imports from all sources into Western Europe, with dollar expenditures slightly in favor of France.

Imports into Denmark, which was the third largest importer both by number of tractors and value, increased their demand sharply after 1950, to multiply their 1953 imports by value two-fold.

Tractor imports into the United Kingdom declined steadily from 1947 to 1951. In 1952, there was a slight increase but declined again in 1953. Increased manufacture of tractors in the United Kingdom had made importation almost unnecessary.

TABLE 5

IMPORTS OF TRACTORS FROM ALL SOURCES  
(in Units)

<u>Country</u>	<u>1938</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>
Austria	101 <sup>1/</sup>	52	208	183	181	275	n.a.	n.a.
Belgium	-	86	2,409	2,042	3,202	4,347	4,753	4,661
Denmark <sup>2/</sup>	457	1,987	6,334	5,927	6,473	9,613	11,800	10,958
France	n.a.	12,274	15,755	12,182	13,075	9,980	9,403	8,119
Germany	27	n.a.	n.a.	11	177	218	704	482
Greece	174	354	634	1,519	1,385	n.a.	n.a.	n.a.
Italy <sup>2/</sup>	50	58	223	1,002	1,489	2,877	n.a.	n.a.
Netherlands <sup>2/</sup>	452	2,032	6,480	4,653	3,800	n.a.	n.a.	n.a.
Norway	664	1,476	2,242	1,231	1,412	4,117	n.a.	n.a.
Sweden	4,112	5,167	9,539	5,818	9,305	9,530	14,721	11,253
Switzerland	84	554	1,023	729	778	775	620	650
Turkey	3,633	1,117	2,815	4,784	4,362	11,823	n.a.	n.a.
United Kingdom	2,855	1,739	1,989	1,179	189	185	566	263
TOTAL	12,609	26,893	49,651	41,260	45,828	53,740 <sup>3/</sup>	42,567 <sup>3/</sup>	36,386 <sup>3/</sup>

<sup>1/</sup> 1937.

<sup>2/</sup> Figures include horticultural tractors.

<sup>3/</sup> Preliminary.

TABLE 6

VALUE OF TRACTOR IMPORTS FROM ALL SOURCES  
(1,000 dollars)

<u>Country</u>	<u>1938</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>
Austria	117 <sup>1/</sup>	291	354	424	319	591	n.a.	n.a.
Belgium	-	74	3,525	2,828	4,100	6,111	7,054	6,786
Denmark <sup>2/</sup>	279	2,536	7,898	6,865	6,249	9,674	13,284	12,865
France	1,947	16,552	14,939	11,923	16,349	12,130	14,814	15,747
Germany	9	n.a.	n.a.	15	167	298	782	624
Greece	824	1,285	1,872	5,173	4,994	n.a.	n.a.	n.a.
Italy <sup>2/</sup>	558	51	371	1,700	3,138	5,234	n.a.	n.a.
Netherlands <sup>2/</sup>	449	3,037	8,030	6,562	4,098	n.a.	n.a.	n.a.
Norway	453	1,785	2,929	1,787	2,375	4,860	n.a.	n.a.
Sweden	2,760	6,121	12,379	7,664	9,810	11,753	17,300	15,400
Switzerland	n.a.	n.a.	n.a.	n.a.	1,167	1,160	1,240	1,300
Turkey	1,218	770	2,571	6,888	8,539	24,000	20,864	n.a.
United Kingdom	2,860	2,390	3,759	3,569	700	718	3,757	717
TOTAL	11,474	34,892	58,627	55,398	61,824	76,529	79,095	53,439

<sup>1/</sup> For 1937.

<sup>2/</sup> Figures include horticultural tractors.

Imports of tractors into Turkey increased sharply to 1951; data is not available for 1952 and 1953. In 1951, about 25% of the total imports in the area countries went to Turkey. The remaining 75% of the increased imports into Turkey came from non-member countries, principally the United States.

In 1953, the situation in Western Europe is today one of virtually self-supporting in tractors of every type. With the expansion of the industry in the area there has been a tendency on the part of the producing countries to satisfy an increasing part of their domestic requirements for agricultural power through local manufacture, and in recent years, a lessening dependence on outside sources of supply.

b. Import Restrictions

The importation of farm machinery (and farm tractors) is fully liberalized with the OEEC countries. There are no import restrictions other than those imposed by the availability of foreign currency. Import duties are moderate and average about 15% ad valorem. They compare favorably with those of other European countries.

c. Exports

Tractor units exported increased after the war until 1951, after which they declined. In 1951 some 54% of all tractor units manufactured were exported. The development of tractor exports by country as shown in Table 7, shows the important factor in the increase of agricultural tractor exports since the war. This was due to the steep rise in the United Kingdom export trade and the recovery of Germany as an exporting country.

The rise in exports from the United Kingdom has been remarkable. It is to be noted that tractor exports of 17,374 units in 1947 (valued at \$18 million) increased to 107,654 units in 1951 (valued at \$120 million). That year the United Kingdom contributed 75% of the tractor units exported from member countries to all destinations.

TABLE 7

EXPORTS OF TRACTORS TO ALL DESTINATIONS  
(in Units)

<u>Country</u>	<u>1938</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>
Austria	1 <u>1/</u>	6	294	1,729	1,599	3,077	n.a.	n.a.
Belgium	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	60	41
Denmark <u>3/</u>	1	-	1	8	20	n.a.	n.a.	n.a.
France	n.a.	n.a.	n.a.	2,695	3,166	5,590	4,208	3,107
Germany	3,300 <u>2/</u>	n.a.	751	2,244	12,078	20,959	23,635	20,988
Italy <u>3/</u>	97	9	958	1,204	1,421	2,974	n.a.	n.a.
Sweden	65	469	865	662	924	1,734	1,737	1,659
Switzerland	400	400	400	100	n.a.	n.a.	70	30
United Kingdom	5,802	17,374	68,604	65,285	82,546	107,654	91,986	80,574
TOTAL				73,927	101,754	141,988	121,696	106,399

1/ 1937.

2/ Figures for Western Germany. Total exports from pre-war Germany amounted to 3,738 units.

3/ Including horticultural tractors.

TABLE 8

VALUE OF EXPORTS OF TRACTORS TO ALL DESTINATIONS  
(1,000 dollars)

<u>Country</u>	<u>1938</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>
Austria	5 <u>1/</u>	3	618	3,674	1,930	4,495	n.a.	n.a.
Belgium	127	68	202	90	100	n.a.	92	87
Denmark <u>3/</u>	1	-	3	3	4	n.a.	n.a.	n.a.
France	n.a.	n.a.	n.a.	8,523	6,558	12,514	12,685	9,858
Germany	4,955	n.a.	n.a.	5,314	20,927	44,825	55,891	41,750
Italy <u>3/</u>	5	30	5,854	6,636	6,678	14,837	n.a.	n.a.
Sweden	134	1,446	2,590	1,613	1,333	2,929	3,500	3,800
Switzerland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	175	75
United Kingdom	2,569	18,071	77,739	75,683	83,507 <u>2/</u>	120,646	124,128	107,436
TOTAL				101,536	121,037	200,246	196,471	163,006

1/ 1937.

2/ f.o.b. value.

3/ Including horticultural tractors.

Distribution of exports between member and non-member countries in 1950 is shown in Table 9. Of the total exports of machinery and tractors, 47% of the total value went to participating countries and 53% went to non-member countries. Germany in 1950 was a heavy contributor, to other participating countries, with about 67.8% of the value of exports to members and 32.2% of the value to non-member countries. No data are available for the more recent years of 1952 and 1953.

It is interesting to note from Table 9 that for the United Kingdom the principal market is not Western Europe as over 65% of British exports in 1950 were sent to non-member countries and to the British Commonwealth. The main outlet for German machinery and tractor exports is in Europe.

d. Trends in Overseas Market

It is reasonable to assume that with increased production in Europe a much larger share of this production will find its way abroad. Since the war, European manufacturers' products in some of these markets have grown considerably. United Kingdom exports have increased rapidly to Australia and New Zealand, South Africa and Canada. France has become an important supplier to North Africa.

The large increase in United Kingdom exports has been due in large part to the competitive prices quoted. Devaluation in Britain has favored British manufacture. Mr. Connors reports that presently the prices of agricultural tractors and equipment are somewhat less costly (10 to 20%) than the comparable machinery in the USA. Increase in farmers' incomes has improved the demand for agricultural machinery. If farm income remains stable, and production for export is not curtailed by raw materials, expansion for export may increase unless there is a new source of foreign competition or an increase in local manufacture.

Australia and New Zealand are both very important markets for British machinery exports. Before the war, the main supplier was the United States.

TABLE 9

DISTRIBUTION OF EXPORTS BETWEEN MEMBER AND NON-MEMBER COUNTRIES, BY VALUE

1950

AGRICULTURAL MACHINERY AND TRACTORS

<u>Country</u>	<u>Total</u> <u>(\$1,000)</u>	<u>To</u> <u>Member</u> <u>Countries</u> <u>(% of total)</u>	<u>To Non-</u> <u>Member</u> <u>Countries</u>
Austria	2,058	80.0	20.0
Belgium	1,885	85.5	14.5
Denmark	2,252	34.0	66.0
France	18,598	73.6	26.4
Germany	40,570	67.8	32.2
Italy	8,079	21.1	78.9
Netherlands	815	26.3	73.7
Norway	29	n.a.	n.a.
Sweden	13,533	59.2	40.8
Switzerland	923	n.a.	n.a.
United Kingdom	112,572	34.4	65.6
<b>TOTAL</b>	<b>201,314</b>	<b>47.0%</b>	<b>53.0%</b>

Source: Situation of the Agricultural Engineering Industry, OEEC, 1950.

Since the war they have switched to the United Kingdom as the main source of supply. In South Africa also they have switched from dollar sources to non-dollar sources of supply.

In both Australia and South Africa local production is increasing. Australia is already meeting about 50% of her machinery requirements from home manufacture and is now developing tractor production.

In Latin America, American manufacturers dominate and the European share in these markets up to the present has been very small.

e. Financial Assistance for Exporters

Various financial measures have been taken to assist exporters in various countries. In the United Kingdom, Mr. Connors reports, the Government Export Credits Guarantee Department, offers exporters, on a purely commercial basis, insurance against certain risks in export business. Once the insurance policy is in force, the manufacturer, if he desires, can borrow from a confirming house 90% of the principal at a rate of 6% per annum, and make an extension of credit to the dealers.

In France, exports to all countries are exempt from taxation directly affecting all selling prices. In addition, exporters and the industry to which they belong are allowed to retain a proportion of the foreign currency which they earn (10 to 15%) to purchase capital needs and raw materials outside the normal import controls.

There are many other measures taken in other countries to assist exporters but are not treated in detail in this paper.

Source: (Tables 2, 4 through 8) Situation of the Agricultural Engineering Industry, OEEC, 1950, plus Supplementary Data from its Secretary, Paris, April, 1954.

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