

THE
INTERNATIONAL DISTRIBUTION
OF RAW MATERIALS

THE INTERNATIONAL DISTRIBUTION OF RAW MATERIALS

BY

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LONDON:

GEORGE ROUTLEDGE & SONS LTD.,
BROADWAY HOUSE, 68-74, CARTER LANE, E.C.

First published 1873.
Reprinted . . . 1939.

PRINTED IN GREAT BRITAIN BY
MACKAYS LIMITED, CHASMAN

"That resources for war are to be obtained by abstention from ordinary consumption is an old doctrine."

—F. Y. EDGEWORTH,
Papers Relating to Political Economy, III, 218.

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REFERENCES AND SOURCES

1. ANGELL, N. *This Have and Have-Not Business*; London, 1936.
2. ANGELL, N. *The Great Illusion*, 1933; New York, 1933.
3. ANSTEY, V. *The Economic Development of India*; 3rd edition; London, 1936.
4. BARNES, L. *The Future of Colonies*; London, 1936.
5. BASTABLE, C. F. (Ed. T. E. Gregory). *The Commerce of Nations*; 10th edition; London, 1927.
6. BEER, G. L. *The Old Colonial System, 1660-1754* (Part I; 2 vols.); New York, 1914.
7. BIRCH, L. *The Demand for Colonies*; London, 1936.
8. BRADLEY, Ph. *Can We Stay Out of War?* New York, 1936.
- 8a. CROWTHER, S. (editor). *A Basis for Stability*; Boston, 1932.
9. DAS, R. K. *The Industrial Efficiency of India*; London, 1930.
- 9a. DAVENPORT, E. H., and COOKE, S. R. *The Oil-Trusts and Anglo-American Relations*; New York, 1924.
10. *Der Welihandel in wichtigen Nahrungsmitteln und Rohstoffen vor und nach dem Kriege*; Berlin, 1926.
11. *Die Wirtschaft des Auslandes 1900-1927*; Berlin, 1928.
12. EDGEWORTH, F. Y. *Papers Relating to Political Economy*, Vol. III; London, 1925.
13. EMENY, B. *The Strategy of Raw Materials*; New York, 1936.
14. *Encyclopedia Britannica*; 14th edition; 24 vols.; London, 1936.
15. *Encyclopedia of the Social Sciences* (Ed. E. R. SELIGMAN and A. JOHNSON); 15 vols.; New York, 1930-1935.
16. GREAVES, H. R. G. *Raw Materials and International Control*; London, 1936.
17. *Handwörterbuch der Naturwissenschaften*; 10 vols.; Jena, 1912-1915.
18. *Handwörterbuch der Staatswissenschaften*; 4th edition; 9 vols.; Jena, 1923-1929.
19. HOGBEN, L. *The Retreat from Reason*; London, 1936.
20. JOHNSON, C. S., EMBREE, E. R., and ALEXANDER, W. W. *The Collapse of Cotton Tenancy*; Chapel Hill, N.C., 1935.
21. KILLOUGH, H. W., and KILLOUGH, L. B. *Raw Materials of Industrialism*; New York, 1929.
22. KUCZYNSKI, R. R. *Population Movements*; Oxford, 1936.
23. *Landlexikon* (Ed. K. ZU PUTLITZ and L. MEYER); 6 vols.; Stuttgart, 1911-1914.
- 23a. LAWRENCE, J. C. *The World's Struggle with Rubber*; London, 1931.
24. *League of Nations*: "Statistical Year Book"; Geneva, 1926-1936.
25. *League of Nations*: "World Economic Survey"; Geneva, 1933, 1934.
26. LIPPINCOTT, I. *Economic Resources and Industries of the World*; New York, 1929.
27. McDUGALL, F. L. *Sheltered Markets*; London, 1925.
- 27a. MOHR, A. *The Oil War*; New York, 1926.

28. PALGRAVE. *Dictionary of Political Economy*; new edition, ed. H. HIGGS; 3 vols.; London, 1926.
29. PHILLIPS, P. D. and WOOD, G. L. (editors). *The Peopling of Australia*; Melbourne, 1928.
- 29a. PLUMMER, A. *Raw Materials or War Materials?* London, 1937.
30. *Raw Materials and Colonies* (The Royal Institute of International Affairs); London, 1936.
31. REICHWEIN, A. *Die Rohstoffwirtschaft der Erde*; Jena, 1928.
32. RICHARDSON, J. H. *British Economic Foreign Policy*; New York, 1936.
33. ROBBINS, L. *An Essay on the Nature and Significance of Economic Science*; 2nd edition; London, 1935.
34. ROWE, J. W. F. *Markets and Men*; Cambridge, 1936.
- 34a. SARGENT, A. J. *Coal in International Trade*; London, 1922.
35. *Statistical Abstract for the Several British Overseas Dominions* (later: ". . . for the British Empire"); London, 1927 et seq.
36. *Statistical Abstract for British India*; London, 1926 et seq.
37. *Statistical Abstract for the United Kingdom*; London, 1926 et seq.
38. *Statistical Abstract of the United States*; Washington, D.C.; 1926 et seq.
39. *Statistisches Handbuch der Weltwirtschaft*; Berlin, 1936.
40. *Statistisches Jahrbuch für das Deutsche Reich*; Berlin, 1915-1936.
41. *The Cotton Yearbook*; Bradford and London, 1935.
42. *The Mineral Industries of the British Empire and Foreign Countries*; London, 1931 et seq.
43. *The Wheat Situation, 1931* (20th Report of the Imperial Economic Committee); London, 1932.
44. *Vierteljahrshefte zur Konjunkturforschung*; Berlin, 1926 et seq.
45. WALLACE, B. B., and EDMINSTER, L. R. *International Control of Raw Materials*; Washington, D.C., 1930.
46. WOOFER, JR., T. J. *Landlord and Tenant on the Cotton Plantation*; Washington, D.C., 1936.
47. ZIMMERMANN, E. W. *World Resources and Industries*; New York, 1929.

PREFACE

THE purpose of this study is to clear up the facts of an economic problem which are intricate and numerous, though they do not offer particular intellectual difficulties, and to marshal the practical implications of the incongruity of facts with interests and ambitions.

In the course of this study a number of red herrings was found to have been drawn across the trail of truth; these were followed and shown up for what they are; then the hunt returned to the genuine trail.

Opinions on the subject are widely at variance. Authors have written many books on the subject, and the number of articles and speeches reported in the daily and periodical Press, etc., is very large. The books have been mentioned, as far as they seem to me to deserve serious study, in the list of references and sources; but that does not mean that I consider all of them, indiscriminately, as apt reading matter.

I did not find it propitious, after having explained what seems to me to be the truth, to refute other authors who think differently.

The need for brevity forced me to neglect some aspects of the subject. For instance, the position of the Small Powers is scarcely discussed in this essay. But the most sympathetic treatment would have been unable to change the sad truth that they will be victims, not masters, of future developments. There are, it is true, some minor problems in regard to raw materials which they might be able to solve by activities of their own: perhaps only provisionally, but with some alleviation of their present situation. By such action they might give a useful example of what can be done in international matters by good-will and readiness to act with sweet reasonableness; but as I cannot see the slightest traces of such a spirit in them (any more than in the Great Powers) I thought it useless to give much space to a detailed discussion of their positions.

To save space I have left out raw materials which may not be without importance. I have excluded, *e.g.*, leather (a material whose production is widespread and which has many substitutes), tanning materials (now largely superseded by chromium compounds, which are included in my treatment of chromium), iodine (which can be produced, at a pinch, nearly everywhere in the small quantities that are of vital importance), and camphor (for which a satisfactory substitute from coal-tar exists). The only commodity that I should have liked to include, but which I have omitted, is castor oil. It is important not because it was used on a large scale in the civil war in Italy to torture the "enemy," but because it is the best lubricant of quickly-rotating machinery, particularly aeroplane motors; but I was unable to find any reliable source for the facts necessary for a discussion of this commodity.

The figures, although they are not equalled in existing literature in completeness and up-to-dateness, are sadly inadequate. That is not my fault; the sources do not give us all that we need. I have tried to avoid lengthy discussions on points of statistical method; the few exceptions will, I hope, find their explanation in the importance of the conclusions which could be reached only in this way. Part of this study, particularly the first chapter and the Appendix of statistical tables, were finished in manuscript before most of the figures for 1934 and 1935 appeared. I have included those which seemed important when they recently became available, and have modified the text where the new figures seemed to require it. But as I did not intend to make a statistical handbook, and as in any case the figures will no longer be quite up to date a year or so hence, I have left it at that. The chief object was to get the figures as complete as possible for the particular period under consideration, *i.e.*, the business cycle 1928/1929 to 1934/1935/1936. That time is a potent factor in changing facts has been shown in the text explicitly and clearly.

What is the possible use of such a study? To influence politicians and statesmen? I hope they read books, though I sometimes think that they do not read many. The impact of reason has become very small nowadays. To show, *e.g.*, the objective futility of the endeavours to get access to more raw

materials by conquest is one thing ; to show that, though this is an irrational thing, it is a potent factor in modern politics, is a second thing ; to recommend better means of attaining the same end is a third thing ; and to estimate the chances of the reasonable thing being done, against advice inspired by jealousy and the desire for prestige, or by the hankering of orators for spectacular formulas and a gushing phraseology, is a fourth, and again a quite different, thing.

So I fear that this study will have to look for its public elsewhere : to the few politicians who want to know what they and the others are speaking about, to the educated layman and journalist, and to those many people in the middle and the working class who seriously want to instruct themselves in a matter which is attracting the spotlights in so spectacular a way. I think particularly of my many friends in the Workers' Educational Association, in the Fabian Society, in some Trade Unions and Co-operative Guilds with whom for nearly three years I had the pleasure of studying the economic questions of the day.

In the meantime the enquiry of the League of Nations, proposed in the autumn of 1935 by the then Foreign Minister of Great Britain, Sir Samuel HOARE, has begun. The League has appointed a committee for the study of the raw materials problem. The first meeting was on March 8th, 1937, Mr. W. STUCKI (Switzerland) being in the chair. Non-members of the League were represented by Mr. Y. SHUDO for Japan and Mr. H. F. GRADY for the U.S. Germany and, among the members of the League, Italy were not represented. The British delegate, Sir Frederick LEITH-ROSS, declared that the raw materials problem cannot be solved by the transfer of territory (so far, so good), that the open-door policy would sometimes be harmful to the colonies themselves (but the open-door policy and preference for the Mother Country are not the only possibilities !), etc., etc. In short, he seems in a particularly encouraging way to have said that nothing can be done. Similarly with others. A not very hopeful beginning. But perhaps this only meant that the speakers were clearing their throats, and that sweet advice will come later. Let us hope that the future meetings of the committee will endeavour more

seriously to find out what can be done, why and how it can be done, and to show that it should be done !

The book by Mr. Plummer, I am sorry to say, came too late into my hands to be taken into consideration ; the only thing I could do was to include its title in the list of references and sources.

April 5th, 1937.

Now I am reading the proofs I cannot find that the result of the deliberations of the committee of the League of Nations has contributed anything new to the subject. But I have seen what Mrs. Vera Anstey, D.Sc. (Econ.), our dear friend, has done for the book when she undertook to supervise the smoothing-out of the numerous germanisms of my manuscript. I hope she feels the deep gratitude which I feel for this, as for so many acts of friendship and kindness of hers.

HERMAN KRANOLD.

Talladega College,
Talladega, Ala., U.S.A.

November 5th, 1937.

APPENDIX

STATISTICAL TABLES

Most of the figures in these tables have been taken either from the German Statistical Abstract, or from the Statistical Year Book of the League of Nations, or from *The Mineral Industry of the British Empire and Foreign Countries*.

In some cases conversions of data given in various measures have been converted into one system of units by the author, and additions and computations of percentages added.

When figures from several sources have been combined into one table or when figures have been taken from other sources this is stated.

A.—METALS

I.—IRON.

(1) WORLD PRODUCTION.

	In Million Metric Tons.												
	1913	1922	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Iron ore ...	177	105	153	154	173	176	203	181	119	76	89	119	?
Pig iron ...	79	56	77	79	87	89	99	81	56	39	49	62	74
Raw steel	80	70	92	95	103	111	122	96	70	51	68	82	99

(2) LODES OF IRON ORE.

Only countries where the lodes comprise more than 1,000 million metric tons.)
(a) According to a German Compilation of 1913¹.

Continents. Countries.	In Million Metric Tons.			Possible Further Lodes.
	Certain Lodes.			
	Iron Ore.	Percentage of Metal.	Content of Metallic Iron.	
Europe	22,598	41	9,307	16,818
Asia	4,402	62	2,734	20,855
Africa	1,344	50	678	10,000
America	26,866	53	14,249	119,947
Oceania	2,602	54	1,403	43
TOTALS, WORLD ...	57,812	49	28,371	167,663
France	8,164	39	3,184	4,090
Germany	1,317	39	517	2,843
Great Britain	5,970	33	1,986	6,199
Sweden	2,203	63	1,387	674
Spain	1,216	51	571	273
U.S.S.R.	2,057	49	1,009	617 ²
India	3,326	65	2,170	20,500
Union of South Africa	1,095	50	544	2,000
Brazil	7,000	66	4,620	?
Cuba	3,159	41	1,308	12,000
Newfoundland	4,000	53	2,120	4,000
U.S.	10,452	47	4,949	83,728

¹ Following a compilation of the *Verein für die bergbauischen Interessen* at Essen, 1913.

² Excluding new lodes found in the district of Kursk of between 15 and 40 thousand million metric tons of a content of iron between 30 and 50 per cent.

(b) According to an American Estimate¹

Known Iron Ores.	In Million Metric Tons.	In Per Cent. of World Totals.
France	1,790	18
U.K.	317	3
Sweden	442	4
Germany... ..	255	3
Spain	353	4
U.S.S.R.	263	3
Total, Europe	3,735	30
U.S.	4,700	40
Brazil	3,000	24
Cuba	1,000	8
TOTALS, WORLD	10,000 and more	

¹ Quoted from *Lippincott*, who follows *M. Roessler*, Bulletin No. 706, U.S. Geological Survey, 1921. *Roessler* mentions a possible further 424 thousand million tons reserves of iron ores.

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(3) PRODUCTION OF IRON ORES BY COUNTRIES, 1913-1935.

	In Million Metric Tons.					
	1913.	1928.	1932.	1933.	1934.	1935.
Germany	36.9 ¹	6.3	1.3	2.6	4.3	6
Luxemburg	7.3	7	3.2	3.4	3.8	4.1
Austria	3.1	1.9	.3	.3	.5	.8
Hungary	2.1 ¹	.2	.1	.1	.1	.2
Czechoslovakia	—	1.8	.6	.4	.5	
Great Britain	16.2	11.4	7.4	7.6	10.8	11.1
France	21.9 ¹	49.2	27.6	30.2	32	32.3
Spain	9.9	5.8	1.8	1.8	2.1	2.6
Italy ... ..	.6	.6	.4	.5	.5	.6
Sweden	7.5	4.7	3.3	2.7	5.3	7.9
U.S.S.R.	9.2	6	12.2	14.5	21.7	27.1
U.S.	63	63.2	10	17.8	25	31
Newfoundland	1.5	1.5	.3	.3	.5	.7
Cuba	1.6	.4	.1	.2	.2	
Chile ... ..	.01	1.5	.2	.6	1	.8
India ... ..	.4	2.1	1.8	1.2	1.9	
China	1	2	2.3	2.1		
Algeria	1.3	2	.5	.8	1.3	1.7
Spanish Morocco	—	1	.2	.4	.8	1

¹ Pre-war area. Only those countries have been included (with the exception of Italy) where at least one figure was bigger than 1.0.

(4) PRODUCTION OF PIG IRON AND RAW STEEL, BY COUNTRIES.

	In Million Metric Tons.							
	Pig Iron.				Raw Steel.			
	1913.	1929.	1934.	1935.	1929.	1934.	1935.	1913.
Germany, (incl. Saar)	20.7 ¹	15.3	10.6	13.1	20.8	18.3	13.7	16.4
Luxemburg	2.5	2.9	2	1.9	1.3	2.7	1.9	1.8
U.K.	10.4	7.7	6.1	6.5	9	10.1	9	10.2
France	5.2	10.4	6.2	5.8	5.1	9.8	6.2	6.3
Belgium	2.5	4	2.9	3.1	2.6	4.1	2.9	3
Spain ... ..	.4	.8	.4	.4	.2	1	.6	.6
Italy ... ..	.4	.7	.6	.7	1	2.3	1.9	2.3
U.S.S.R.	4.6 ¹	4.3	10.5	12.5	.5 ¹	5	9.5	12.4
Poland	—	.7	.4	.4	—	1.4	.9	.9
Czechoslovakia	—	1.6	.6	.8	—	2.2	.9	1.2
U.S.	31.5	45.3	16.4	21.7	31.8	57.3	26.4	34.6
Canada	1	1.2	.4	.7	1.1	1.4	.8	1
India ... ..	.2	1.4	1.4	?	.06	.6	.8	.9
Japan (incl. Korea and Manchuria) ... ..	.2	1.5	2.4	2.7	.2	2.3	3.7	4.4

¹ See note ¹ at the foot of Table (3).

(5) IRON IN INTERNATIONAL COMMERCE; EXPORTS OF ALL COUNTRIES.

	In 1,000 Metric Tons.				
	1929.	1930.	1931.	1932.	1933.
Iron ores, including pyrites	50,149	44,306	29,268	20,535	24,631
Scrap iron, scrap steel ...	2,978	2,179	1,743	1,633	2,716
Pig iron and semi-finished goods of iron ...	5,010	4,259	3,618	2,436	2,894
Tubes and pipes ...	1,761	1,280	930	675	872
Iron in bars ...	6,070	5,101	4,629	3,496	3,444
Iron wire ...	1,389	1,063	1,059	777	835
Tinplate ...	908	801	600	629	751
Other sheet iron ...	4,052	3,192	2,503	2,018	1,921
Rails for railways and tramways ...	1,352	1,137	889	399	546

(6) INTERNATIONAL TRADE IN IRON ORE AND PIG IRON.

	In Million Metric Tons.											
	Iron Ores.						Pig Iron.					
	1929.		1932.		1934.		1929.		1932.		1934.	
	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.	Imp.	Exp.
Germany ...	17	1	3.5	0.2	8.3	0.8	2	4	0.6	0.7	0.9	1
Belgium and Luxembourg ...	14.1	8	9.5	4	10.3	7	7	1	2	0.4	2	0.4
France ...	1.1	16.4	3	10.1	9	12.6	0.4	6	0.7	2	0.7	2
U.K. ...	5.8		1.8		4.4		1	5	1	1	1	1
Czechoslovakia ...	1.6	4	2	0.8	3	0.9	0.6					
U.S.S.R. ...		5		3		3						
Sweden ...		10.9		2.2		6.9	0.9	0.7	0.4	0.3	0.8	0.7
Spain ...		5.6		1.3		1.8						
Japan ...	2.3		1.6		2.3		8		7		8	
Algeria ...		2.1		5		1.4						
Spanish Morocco ...		1		2		8						
Chile ...		1.8		2		1						
Newfoundland ...		1.4		5		4						
Canada ...	2.5		8		1		0.4					
U.S. ...	3.2	1.3	6	0.9	1.5	6	2	0.5	1		1	
British Malaya ...		8		7		1.1						

Only countries are mentioned where at least one item runs up to at least 1.0 in this table.

(7) Prices.

In R.M. per ton.

	Annual Averages									Monthly Average
	1913	1928	1929	1930	1931	1932	1933	1934	1935	July, 1936
<i>Iron Ore:</i>										
U.S., old range Bessemer, Lake Superior ...	?	18.80	19.59	19.84	19.84	19.84	15.63	11.83	11.77	11.76
<i>Pig Iron:</i>										
U.K., Middlesborough Cleveland III ...	59.49	66.13	70.76	67.31	54.79	42.36	42.60	41.39	40.80	46.12
<i>Iron Bars:</i>										
Belgium, barres, f.o.b. Ant- werp	103.04	114.54	115.81	97.20	69.37	49.26	57.05	63.89	64.09	64.09
<i>Girders:</i>										
Belgium, poutre normal, f.o.b. Antwerp ...	114.10	97.43	101.87	92.64	64.34	44.23	51.77	60.62	61.83	61.83
<i>Sheet Iron:</i>										
U.K., Middlesborough, ship plates, exp. f.o.b. ...	?	153.74	153.36	155.82	145.17	112.23	106.06	96.25	93.17	96.09
<i>Tinplate:</i>										
U.K., Cardiff, f.o.b. ...	?	379.91	386.37	372.61	281.68	234.77	237.91	224.55	234.14	241.65
<i>Scrap Iron:</i>										
U.K., heavy steel, N. Engl.	55.12	56.09	64.57	52.98	38.40	26.24	29.25	31.33	31.48	35.36

(8) GERMAN CONSUMPTION OF PIG IRON.

	1913.	1917.	1925.	1929.	1932.	1934.
Pig iron consumed in million tons	18.6	13.7	10	13.2	3.9	8.7
Population in million ...	67			63.1		

1913 to 1929: decrease of population 3.9 million or 6 per cent.; decrease of consumption in pig iron 5.4 million or 29 per cent.

(9) PRODUCTION IN THE U.S.S.R.

	In Million Metric Tons.							
	1913.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Pig iron	4.2	4.3	5	4.9	6.2	7.1	10.4	12.5
Raw steel	4.4	5	5.9	5.6	5.9	6.9	9.6	12.4
Rolling-mill produce ...	3.5	3.9	5	4.4	4.3	4.9	6.7	8.2

(10) DEVELOPMENT OF HEAVY INDUSTRIES IN WESTERN EUROPE.

(a) Production of Coal and Coke.

	In Million Metric Tons.				
	1913.	1930.	1929.	1932.	1934.
Coal:—					
Germany ¹	141	108	163	105	125
Saar territory	—	9	14	10	11
Belgium	23	22	27	21	26
France	40	24	54	46	48
Great Britain	292 ⁴	233 ⁴	262	212	225
Netherlands	2	4	12	13	12
Coke:—					
Germany ²	32	25	39	20	21 ²
Saar Territory	2	1	2	2	2
Belgium	4	2	6	4	4
Netherlands	?	?	2	3	3 ²

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(b) Production of Iron Ore, Pig Iron and Raw Steel.

	In 1,000 Metric Tons.				
	1913.	1920.	1929.	1932.	1934.
<i>Iron Ore :—</i>					
Germany ⁷ ...	2,353	1,919	2,080	443	137 ⁸
France ...	21,918	13,921	50,731	27,599	32,000
U.K. ...	16,248	12,881	14,014	7,446	10,757
Luxemburg ...	7,333	3,704	7,571	3,231	3,834
<i>Pig Iron :—</i>					
Germany ...	10,900	6,000	13,400	3,900	8,700
Saar Territory	1,371	644	2,105	1,349	1,826
Belgium ...	2,485	1,116	4,040	2,749	2,907
France ...	5,207	3,344	10,362	5,537	6,155
U.K. ...	10,425	8,174	7,711	3,631	6,074
Luxemburg ...	2,548	693	2,906	1,960	1,955
Netherlands ...	—	—	260	233	258 ⁸
<i>Raw Steel :—</i>					
Germany ...	11,800	?	16,000	5,600	11,900
Saar Territory	2,080	740	2,209	1,463	1,950
Belgium ⁸ ...	2,467	1,253	4,011	2,758	2,898
France ...	4,687	2,706	9,717	5,640	6,174
U.K. ...	7,787	9,213	9,791	5,346	9,002
Luxemburg ...	1,335	570	2,702	1,956	1,932

⁷ Bituminous coal and anthracite, excluding brown coal. ⁸ 1933. ^{*} Excluding Saar Territory.

⁸ Including Irish Free State. ^{*} Probably a misprint in the (German) source. ^{*} Excluding ingots.

^{*} Metal content of iron ores mined.

GENERAL NOTE TO THE STATISTICAL TABLES ON IRON.

The above figures are taken chiefly from the German Statistical Abstract.

The Statistics of the League of Nations differ from the German figures in some cases seriously. To give a few examples :

	1913. Production of					
	Iron Ores.		Pig Iron.		Raw Steel.	
	G	LN	G	LN	G	LN
	in Millions of Metric Tons.					
Germany ...	36.9	28.6	20.7	16.6	20.8	17.6

The differences concern mostly figures for Germany.

2.—ALUMINIUM.

(1) PRODUCTION OF BAUXITE.

	In 1,000 Metric Tons.				
	1913.	1929.	1932.	1934.	1935.
France	309	666	401	528	513
Italy	7	193	87	131	170
Yugoslavia	—	103	67	84	190
Hungary	?	389	112	120	211
U.S.	214	372	98	160	238
British Guiana	?	220	85	66	?
Dutch Guiana	?	215	127	101	110
World		1,951	1,026	1,270	?

The peak years of production were in Hungary and the U.S. in 1928, in Dutch Guiana in 1930.

(2) PRODUCTION OF ALUMINIUM METAL.

	In 1,000 Metric Tons.				
	1913. ¹	1929.	1932.	1934.	1935.
Germany	1	33	19	37	71
U.K. ⁵	10	8	10	11 ⁴	15.1
Norway	2	29	18	16	16
Switzerland	10	21	9	8	11.7
France	14	29	15	16	21.8
Italy	1	7	13	13	14
U.S. ²	21	146	69	76	?
Canada	6	39	18	16	20.6
World ³	65	277	154	170	259.2

¹ League of Nations figures for 1913: Germany, 8; U.K., 7.6; Norway, 1.5; Switzerland, 9.2; France, 14.5; Italy, 9; U.S., 20.9; Canada, 5.9; World totals, 63.3. The countries the names of which are not given in *italics* show serious differences.

² Including "secondary production." ³ Excluding "secondary production" of the U.S. ⁴ 1933.

⁵ The *Statistische Zusammenstellungen der Metallgesellschaft A.G., Frankfurt a. M.* give the following series: 1913, 7.6; 1929, 13.9; 1932, 10.2; 1934, 12.9.

(3) INTERNATIONAL COMMERCE IN ALUMINIUM (EXPORTS ONLY).

	In 1,000 Metric Tons.						
	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Bauxite	545	510	383	379	380	533	766
Aluminium	101	75	67	40	57	61	62

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(4) PRICES.

	In RM. per Kg.								
	Annual Averages.							July	
	1913.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Germany, "Hütten," 98-99 per cent. ...	170	190	185.71	170	160	160	157.33	144	144
U.S., New York ...	?	222.23	218.06	212.04	212.04	171.04	119.82	113.61	109.72

2a.—BARIUM MINERALS.

PRODUCTION.

	In 1,000 Long Tons.					
	1928.	1929.	1930.	1933.	1934.	1935.
Germany	254.1	281.6	232	145.4	349.2	341.8
U.S.	240.7	247.6	209.8	130.7	159.3	194.7
U.K.	49.9	57.1	58.7	66.6	74	18.1
Italy	26.7	25.5	19	23.1	31.9	40.5
France	29.6	—	—	13.5	18.1	—
Korea	—	—	—	4.9	5.8	10.9

A figure for world production is not available. The various barium minerals in this table contain very different percentages of the metal.

3.—CHROMIUM.

PRODUCTION OF CHROME ORE.

	In 1,000 Long Tons.					
	1928.	1929.	1930.	1933.	1934.	1935.
Southern Rhodesia ...	195.9	261.7	202.4	34.5	71	104.2
Union of S. Africa ...	31.2	63	13.5	33.5	60.4	89
India	45.5	49.6	50.7	15.5	21.6	39.1
Japan	9.7	9	11.2	19.7	26.8	?
Greece	20.6	23.8	16.8	14.6	30.2	31.5
Yugoslavia	16.4	42.3	50.6	25.1	46.6	59.5
Russia	40.7	28 ¹	65 ¹	110.9	127.2	?
Cuba	28.7	39.8	35.9 ²	21.8	57.3	47.7
Turkey	11.7	9.9	27.7	74.2	118	148.1
New Caledonia	50	49.9	52.7	49.1	54.3	54.4
World	440	580	530	403	618	?

¹ Incomplete. ² Only exports to the U.S.

4.—COPPER.

(1) PRODUCTION OF COPPER ORES.

	In 1,000 Tons of Content of Metallic Copper.				
	1913.	1929.	1932.	1934.	1935.
Germany	26.8	29.1	30.9	26.1	28.3
Yugoslavia	?	20.7	30.2	44.4	39
Norway	10.6	19.1	16.7	22	20.5
Spain	44.9	63.7	35	33	30
U.S.S.R. in Europe	33.7	25	30	40	55
India	?	7.6	11.4	11.8	11.3
Formosa	?	6.1	3.5	4.5 ¹	?
Northern Rhodesia	—	5.6	88.6	140	?
Union of S. Africa	—	9	9.4	7.9	10.7
South-West Africa	?	12.6	2.4	—	—
Canada	34.9	112.5	112.3	166.5	189.9
U.S.	555.4	905	216	217.1	335.2
Mexico	52.6	86.6	35.2	44.3	39.4
Cuba	3.4	15	5.9	6.2	—
Chile	42.3	320.6	103.2	256.7	267.5
Peru	27.8	54.4	115	27.6	29.6
Australia	52.1	13	14.9	12.2	17.5
WORLD TOTALS	990.4	1,947.6	900.8	1,287.3	1,491.7

¹ 1933.

(2) PRODUCTION OF COPPER.

Countries.	In 1,000 Metric Tons.				
	1913.	1929.	1932.	1934.	1935.
Germany	49.5	93.4	129	104.8	116
Belgium	1.3	68.2	86.2	151.6	?
Great Britain	52.2	22.4	13.2	11.5	15.5
France	12	1.4	1	1.3	1
Spain	31.3	53.4	33.1	27	?
U.S.S.R.	29	33.5	46.6	53.6	63
Yugoslavia	6.4 ¹	20.7	30.5	44.4	39
Japan	66.5	75.5	71.9	67.8	69.8
U.S.	732.6 ²	1,242.9	308.9 ³	407.1 ³	537.5 ³
Canada	13.9	72.9	95.7	151.9	140.1
Mexico	43.7	66.2	35.1	44.3	41.2
Chile	20.2	303.2	97.5	256.9	270.7
Northern Rhodesia	—	5.6	69	140.1	148.2
Belgian Congo	7.5	137	54.1	110.1	108
Commonwealth of Australia	43.8	11	13.5	8.1	16
WORLD TOTALS	1,018.5	1,894.7	929.1	1,273.2	1,497.5

¹ Serbia. ² Excluding "secondary copper." ³ Refined copper only.

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(3) INTERNATIONAL COMMERCE.

	In 1,000 Metric Tons.						
	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Total exports of copper ore	1,447	1,209	866	615	399	474	
Total exports of copper ...	1,284	1,136	976	755	870	1,158	1,329
Goods of copper exported, value, mill. RM. ...	815	718	475	289	260	265	265

(4) INTERNATIONAL TRADE IN RAW COPPER.

	In 1,000 Metric Tons.			
	Imports.		Exports.	
	1932.	1934.	1932.	1934.
Germany ...	131	180	45	12
Belgium and Luxemburg ...	39	74	60	61
France ...	93	94		
U.K. ...	146	255		
Italy ...	53	63		
U.S.S.R. ...	12	11		
U.S. ...	149	175	101	238
Yugoslavia ...			26	36
Belgian Congo ...			60	44
Northern Rhodesia ...			74	132
Canada ...			92	97
Chile ...			121	239
Mexico ...			?	?
Peru ...			23	26

¹ 1931: 43.

(5) STOCKS AND PRICES OF COPPER.

	Annual Averages.											M A J J
	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	
	Stocks: 1,000 metric tons ...	374	368	351	278	382	530	597	704	692	590		568	54
Prices: RM. per 100 Kg.—												
Great Britain, London:												
Electrol.	147.20 ¹	132.13	125.31	139.56	172.20	126.12	81.02	53.22	50.71	41.70	42.91	5
Standard	137.45		112.02	128.15	152.10	110.12	71.99	46.06	44.58	37.66	38.34	4

¹ December, 1935. ² 1913.

5.—GOLD AND SILVER.

(1) WORLD PRODUCTION AND PRICE OF GOLD AND SILVER.

	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Gold	603	609	648	695	751	818	860 ^a	946 ^a
Silver	8,022	8,117	7,735	6,094	5,129	5,007	5,772	6,230
Price of silver, RM. per Kg.	79·12	72·38	52·28	40·22	37·99	36·57	38·79	47·40 ¹
Units of silver equi- valent to one unit of gold	35·19	38·45	53·25	69·22	73·28	76·13	71·77	

¹ July, 1936: 32·76. ^a Excluding China.

(2) PRODUCTION OF GOLD, BY COUNTRIES, 1929-1935.

	In Kg.			
	1929.	1933.	1934.	1935.
Yugoslavia	575	2,194	2,305	2,445
France	1,795	2,930	3,157	?
Rumania	2,213	3,732	3,468	3,509
U.S.S.R.	33,760	114,600	132,600	175,000
Sweden	900	8,978	7,673	5,600
Europe	40,000	136,500	149,700	191,300
Belgian Congo	5,377	9,794	11,672	13,000
Rhodesia	17,465	20,064	21,563	22,600
Tanganyika	282	1,230	1,325	1,550
Union of South Africa	323,860	342,565	325,960	335,109
Gold Coast	6,465	9,551	10,140	11,050
Africa	354,000	380,000	378,800	393,000
Canada	59,977	91,736	92,443	102,351
U.S.	64,042	71,653	86,430	98,484
Mexico	20,274	19,836	20,572	21,223
Central America	1,655	2,708	4,043	4,666
Brazil	3,415	3,919	3,449	3,706
Chile	1,028	4,526	7,392	8,562
Colombia	4,268	9,277	10,704	10,233
Ecuador	2,094	1,887	2,066	2,177
French Guiana	1,522	1,493	1,476	1,555
Peru	3,734	3,010	3,075	3,421
Venezuela	1,446	2,977	3,392	3,577
America	163,848	215,421	237,878	261,614
China	2,700	4,666	?	?
Japan and Dependencies	16,437	26,814	28,618	?
India	11,318	10,454	10,018	10,100
Dutch Indies	3,412	2,452	2,232	2,120
Philippines	4,996	9,215	10,585	13,400
Asia	39,700	51,000	54,100 ¹	59,000 ¹
Australia	13,286	25,824	27,577	28,530
New Zealand	3,500	5,136	7,065	8,290
Papua	1,420	4,098	4,984	?
Oceania	18,206	35,058	39,420	41,200
World	615,754	817,979	859,898 ¹	946,114 ¹

¹ Without the production of China.

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(3) PRODUCTION OF SILVER, BY COUNTRIES, 1929-1935.

	In 1,000 Kg.			
	1929.	1933.	1934.	1935.
Germany	171	197	185	195
Yugoslavia	11	54	60	57
Europe	392	494	443	
Canada	720	472	511	517
U.S.	1,830	719	1,020	1,485
Mexico	3,380	2,118	2,306	2,351
Central America	93	149	109	93
Bolivia	193	170	162	192
Peru	660	228	323	490
America	7,026	3,911	4,506	5,211
Africa	11	124	146	161
India	227	189	181	181
Japan and Dependencies	163	205	249	254 ¹
Asia	459	433	464	500
Commonwealth of Australia	313	336	353	386
Oceania	326	350	365	400
World	8,274	5,312	5,924	?

¹ Incomplete.

(4) SILVER : STOCKS.

Figures for India and Shanghai [stocks in warehouses and afloat], U.S. and Canada [stocks held by producers], in 1,000 Kg.

Annual Averages.										Monthly Average.
1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	March, 1935.
12,016	13,909	15,602	15,064	17,047	19,217	20,166	20,406	23,024	22,898	17,867

(5) STOCKS OF GOLD IN THE WORLD.

Visible stocks of banks and estimated gold in monetary circulation.^{1,2}

In million Kg.										
1913.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
15	16.2	16.5	17	17.4	17.1	17.7	18.7	18.4	19.7	20.1

¹ From 1930, excluding gold in circulation.

² Converted from tables in *Statistisches Jahrbuch fuer das Deutsche Reich, 1928-1935*, at the rate of RM. 1,392=500 gr. of gold.

(6) PRODUCTION OF GOLD DURING THE POST-WAR PERIOD.

In 1,000 Kg.								
	1913.	1920.	1921.	1922.	1923.	1924.	1925.	
Europe ...	47	2	3	7	10	21	31	
Asia ...	44	35	34	36	36	35	33	
Africa ...	312	288	281	249	316	330	329	
America ...	287	148	151	160	164	174	178	
Australia ...	80	34	28	28	28	25	22	
WORLD...	768	507	497	481	553	586	593	

6.—LEAD.

(1) PRODUCTION OF LEAD ORES IN THE WORLD BY COUNTRIES.

Lead Content of Ores Mined ; in 1,000 metric tons.

(a) in the World.

1913.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
1,429	1,435	1,565	1,639	1,599	1,684	1,598	1,337	1,186	1,145	1,287	1,341

(b) by Countries.

	1929.	1932.	1934.	1935.
Germany ...	52.5	45.3	52.9	54.2
U.K. ...	18.9	33.4	54.7	39.8
Yugoslavia ...	14.7	49.5	70.2	
Spain ...	116.5	100	63.1	66
India ...	103.7	80.1	90.2	90.8
Canada ...	148.1	116.1	157.1	153.8
U.S. ...	587.9	265.6	260.1	300
Mexico ...	248.4	137.2	166.3	184.2
Australia ...	197.1	213.9	233.5	225.4

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(2) PRODUCTION OF LEAD.

	In 1,000 Metric Tons.			
	1929.	1932.	1934.	1935.
Germany	124	106	124	136
Belgium	83	64	75	60
Spain	143	105	73	68
U.S. ¹	1,008	561	487	294 ²
Canada	148	115	143	149
Mexico	231	137	166	180
Burma	82	72	73	73
Australia	180	189	199	278
U.S.S.R.	6	19	27	45
WORLD	1,742	1,152	1,323	1,368

¹ Including, ²excluding, "secondary production."

(3) LEAD IN INTERNATIONAL COMMERCE.

	In 1,000 Metric Tons.						
	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Total exports	825	291	290	601	658	730	777

(4) STOCKS AND PRICES.

	1913.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Stocks, in 1,000 tons					65 ^a	136 ^a	240	279	304	302	294 ^a
Price, RM. per 100 Kg. ; Gt. Britain, London, raw, standard	40.06	51.49	45.09	49.44	36.33	24.24	17.21	15.94	13.47	17.11	19.50 ^b

^a June. ^b Only U.K. and U.S. ^c July.

(5) SCRAP LEAD PRODUCTION IN GERMANY.

	In 1,000 Long Tons.				
	1928.	1929.	1933.	1934.	1935.
Production of primary lead ...	85.6	96.4	114.8	118	120.4
Secondary lead (from scrap) ...	26.7	18.3	15.2	4	9.6
Total lead produced	111.7	114.7	130	122	130

(6) BALANCE SHEET OF LEAD FOR SOME "HAVE-NOT" NATIONS.

In 1,000 Long Tons.

[p=production, i=imports, e=exports, b=balance for consumption or addition to stocks.]

Years	Germany.					Italy.					Japan.				
	p	i	e	b		p	i	e	b		p	i	e	b	
1928	111.7	148.3	260	47.3	212.7	20.9	27.2	48.1	15.1	33	4.3	63.2	67.5	2.2	65.3
1929	114.7	136.9	251.6	55.8	194.8	22.3	24.8	47.1	10.8	36.3	3.6	62	65.6	2.1	63.5
1930	127.1 ¹	86.2	213.3	70.4	142.9	24	18.6	42.6	12.9	29.7	3.6	56.4 ²	60	2	58
1933	130	48.7	178.7	46.2	132.5	24	9.3	33.3	4.3	29	7.5	68	65.5	3.1 ³	72.4
1934	122	48.4	170.4	23.7	146.7	47	6.6	43.6	4.2	49.4	9	95.9	104.9	4.9 ⁴	100
1935	130	54.1	184.1	24	160.1	42	6.6 ⁴	48.6	4.2 ⁴	44.4	9	91.8	100.8	4.8	96

¹ Estimate. ² Metal content of ores assumed to be 73 per cent. of weight of ore.

³ Slightly incomplete. ⁴ Figure for 1934 repeated, as that for 1935 is not yet available.

7.—MANGANESE.

(1) PRODUCTION OF MANGANESE ORE.

	In 1,000 Metric Tons.			
	1929.	1932.	1934.	1935.
Germany ¹	...	182	21	129
Czechoslovakia	...	97	34	59
U.S.S.R.	...	1,184	826	1,820
U.S. ¹	...	1,321	44	253
Brazil	...	293	20 ²	2 ²
India	...	1,010	216	413
Egypt	...	192	3	1
Gold Coast ²	...	426	52	345
World	...	3,658	1,270	2,967

¹ With widely-varying contents of metal. ² Exports.

(2) MANGANESE ORE IN INTERNATIONAL TRADE.

	In 1,000 Metric Tons.					
	1929.	1930.	1931.	1932.	1933.	1934
Total exports	...	2,696	2,110	1,402	769	1,360
	...					1,660

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8.—NICKEL.
(1) PRODUCTION.

	In 1,000 Metric Tons.							
	(a) Nickel Ores.			(b) Nickel Metal.				
	1929.	1932.	1934.	1929.	1932.	1934.	1935.	
Greece	4	20	29	4	20	22		
New Caledonia...	136	92	118 ¹	136	92			
Canada	1,807	717	1,392 ¹	50	14	58	63	
Norway	24	23	24 ¹	24	23	29		

¹ 1933.

(2) PRICES.

	In RM. per 100 Kg. Annual Averages.						
	1930.	1931.	1932.	1933.	1934.	1935.	July, 1936.
Nickel, Great Britain, London ...	342.39	351.86	346.16	320.41	262.88	243.44	249.06

9.—QUICKSILVER (MERCURY).
PRODUCTION.

	In 1,000 Kg.			
	1929.	1932.	1934.	1935.
Spain	2,476	816	1,096	1,232
Italy	1,998	1,016	441	972
U.S.S.R.	120	200	267	
U.S.	816	435	532	604
Mexico	83	235	158	216
World	5,583	2,831	2,089	3,378

10.—TIN.

(1) PRODUCTION OF TIN ORES.

	Metal Content in 1,000 Metric Tons.						
	British Malaya.	Dutch Indies.	Siam.	Bolivia.	Nigeria.	U.K.	World.
1913	52.2	20.9	6.9	26.7	3.9	5.4	135.5
1923	40	29.6	7.8	30.2	6	1	131.1
1924	47.7	32.1	7.9	32.1	6.3	2	143
1925	48.9	33.2	6.9	33.1	6.6	2.4	148.1
1926	48.5	33.5	7.6	30.1	7.2	2.4	145.2
1927	55	35.9	7.7	34.4	7.7	2.6	159.3
1928	65.4	35.5	8.6	41	9.3	2.5	178.8
1929	70.5	31.2	11.1	47.1	10.9	3.3	195.1
1930	65	35.1	12.1	38.8	8.7	2.5	177.5
1931	55.8	27.8	11.3	31.2	7.2	.6	149.6
1932	30.2	17.1	9.8	20.9	4.4	1.4	98
1933	25.3	12.7	10.7	15	3.8	1.6	89.4
1934	34.7	20	10.8	21	5.1	2	118.1
1935	43.3	25	9.9	27.6	7.1	2.1	149.8

(2) PRODUCTION OF TIN

	In 1,000 Metric Tons.							
	Germany.	U.K.	Holland.	China.	Dutch Indies.	Straits Settlements.	U.S.	World.
1913	12	22.7		6.1	20.5	65.6		132.5
1923	2.4	31.5		8.9	74		34.2	125.6
1924	2.5	36.6		7.1	88		28.8	135.9
1925	1.5	39.6		8.5	90.7		28.1	146.1
1926	2.3	42.7		6.6	93.5		30.3	147.7
1927	6.2	43.7		6.2	99.1		23.5	158.1
1928	4.7	53.2		6.9	14.2	100.4	32.5	185.1
1929	2.7	56.3	.7	6.9	13.6	107.2	31.1	195.1
1930	2.9	48.1	1.9	6.6	14.6	98.5	23.8	179.6
1931	3.7	36.2	2.6	6.8	13	88.9	18	156.2
1932	1.9	29	3.8	7.1	8.2	50.7	13.4	107.4
1933	1.7	18.5	5.1	7.7	9	47.7	20	101.3
1934	2.2	26.9	13.6	8.2	10.7	50.4	22.6	124.2
1935	2.1	30.5	15.9	9.9	11.5	61.5		146.4

(3) FOREIGN TRADE IN TIN ORES AND TIN METAL.

	Exports in 1,000 Metric Tons.						
	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Tin ores ...	147	131	109	77	64	92	
Tin metal ...	170	159	131	94	121	111	141

(4) FOREIGN TRADE IN TIN IN SOME COUNTRIES.

In 1,000 Metric Tons.
i=imports; e=exports; aa=annual average.

		1913.	1919.	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.
Germany ⁵ i ...		14		5	5		6	9	13	11	16	13	18
e ...		6		2	6		2	3	3	4	6	6	5
U.K. ... i ⁴ ...		46	23	29	12	25	14	17	16	14	14	16	15
e ⁴ ...		12	15	13	10	13	20	18	26	27	27	23	30
U.S. ¹ i (ore) ...						aa 5,812				aa 1926/30		194 ²	
i ² ...						aa 132				aa 1926/30		177	

		1930.	1931.	1932.	1933.	1934.	1935.
Germany i		15	14	12	15	13	
e ...		5	5	3	4	2	
U.K. i ⁴ ...		12	12	4			
e ⁴ ...		23	12	13			
U.S. ¹ i (ore) ...			30 ²	17 ²	24 ²	22 ²	
e ² ...			148	78	143	90	

¹ Quantitative statistics of exports not printed in Statistical Abstract. ² Tin content.

³ In million lbs.; bars, blocks, pigs, etc. ⁴ Blocks, ingots, bars and slabs.

⁵ Raw, scrap and compounds.

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(5) STOCKS OF TIN ON WORLD MARKET.

In 1,000 Metric Tons. Annual Averages.											June, 1936.
1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	
24.2	17.6	16.2	19.9	28.3	43.8	57.2	59.1	43.7	21.8	17.4	15.7

(6) PRICE OF TIN.

	In RM. per 100 Kg. Annual Averages												July, 1936.
	1913.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	
London : blocks	405.65	522.37	582.10	576.92	456.00	411.67	285.59	221.97	196.92	265.46	286.11	271.85	229.14
New York	415.76	535.66	604.08	596.68	466.68	418.15	293.71	226.86	203.98	277.32	288.06	276.86	236.21

II.—ZINC (Spelter).

(1) PRODUCTION OF ZINC ORES.

	Metal Content of Ores ; in 1,000 Metric Tons.											
	1913.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Germany ...	244	49	79	111	117	125	131	99	72	85	105	108
Italy ...	63	69	71	85	85	87	70	42	32	25	40	50
Norway ...						1	8	7	9	10	7	6
Poland ...		122	116	97	90	94	97	75	25	42	53	45
U.S.S.R. ...						11	11	18	20	17	22	32
Sweden ...	17	19	21	24	14	30	30	29	25	25	29	30
Spain ...	67	49	53	47	43	53	50	39	35	35	32	33
India ...	4	43	46	61	65	56	62	46	42	56	56	59
Indochina	15	21	25	22	22	19	16	8	5	5	5	4
Algeria ...	37	24	26	26	15	15	8	4	2	3	2	2
Northern Rhodesia		2	1		13	23	20	7		19	20	21
Canada ...	7	81	99	102	124	141	121	108	78	90	136	145
U.S. ...	375	645	703	652	631	657	540	372	259	349	399	469
Mexico ...	7	46	105	137	162	174	143	151	88	89	125	136
Australia ...	220	141	153	174	150	157	122	175	118	126	139	151
World ...	1,139	1,312	1,558	1,585	1,565	1,704	1,511	1,164	929	1,144	1,374	1,493

	Excluding Zinc Dust; in 1,000 Metric Tons.															
	1913.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Germany	279	102	42	35	41	63	74	90	105	108	101	49	45	51	71	123
Holland... ..	24	6	13	16	18	21	25	26	27	26	23	19	16	19	20	14
Belgium	204	66	112	147	162	171	190	202	206	198	176	135	96	137	175	184
France	68	24	40	49	58	64	75	83	93	87	87	57	46	56	51	52
U.K.	66	6	19	32	39	39	18	43	56	59	49	22	27	46	55	64
Norway	9	2	2	4	5	7	5	6	—	6	35	40	39	45	45	45
U.S.S.R.	8	—	—	—	1	2	2	2	3	3	4	10	15	17	27	46
Poland	—	6	85	96	93	114	124	150	162	169	174	131	85	83	93	85
Italy	—	1	3	4	6	7	8	7	11	16	19	17	18	23	25	28
N. Rhodesia	—	—	—	—	—	—	—	—	10	12	18	7	—	19	20	21
U.S.	360	213	384	522	523	573	650	598	682	697	542	330	231	359	390	382 ¹
Canada	3	24	26	27	45	50	68	75	74	78	110	108	78	83	123	136
Mexico	7	5	3	19	18	1	6	6	11	17	19	35	30	28	27	40
Japan	2	10	13	14	14	17	17	17	19	22	25	25	27	31	32	32
Australia	4	2	24	42	47	47	48	49	51	53	56	55	45	55	56	69
World	1,001	437	708	948	1,006	1,135	1,233	1,418	1,403	1,457	1,400	1,001	783	988	1,172	1,335

¹ Incomplete.

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(3) WORLD EXPORTS.

	In 1,000 Metric Tons.						
	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Zinc ores ...	1,258	1,192	916	708	923	1,004	970
Zinc metal ...	452	440	445	358	398	450	446

(4) STOCKS AND PRICES.

	Unit.	1913.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Stocks ¹ ...	1,000 tons										303	253	224
Price, U.S., New York, spot ...	R.M. per 100 Kg.	43.40	73.98	71.20	61.02	58.98	63.24	42.22	34.17	26.46	29.07	22.96	23.80

Only those of the International Zinc cartel, U.S. and U.K.

12.—METALS OF THE PLATINUM GROUP, PRODUCTION.

	1928.	1933.	1934.		1928.	1933.	1934.
A. Platinum				B. Palladium			
U.S.S.R. ...	3,110	3,110		Canada ...	370	965 [*]	2,610 [*]
Columbia ...	1,665	1,429	1,703	U.S. ...	160	29	
Canada ...	328	770	3,615	C. Osmium and Iridium			
Union of S. Africa ...	736	74	1,174	Union of S. Africa ...	176	209	158
Ethiopia ...	101	100		Australia ...	57	18	
Sierra Leone	17 ¹	13	15	U.S. ...	66	60	
Japan ...	3	6		D. Other Platinum metals			
U.S. ...	1,616	1,549		Canada ...	53		
Australia ...	11	4		U.S. ...	11	3	
New Zealand	1	1					

This table comprises only primary productions.

¹ 1930. * Including Osmium, Iridium, Rhodium, Ruthenium.

13.—MINOR METALS.

A. Antimony.

PRODUCTION; METAL CONTENT OF ORES.

	In Long Tons.					
	1928.	1929.	1930.	1933.	1934.	1935.
Austria	1,125	700	—	—	—	
Czechoslovakia	1,189	684	378	1,341	1,142	1,900
France	1,138	1,200	1,300	379	261	
Italy	282	378	413	358	346	446
French Morocco	221	177	nothing*			135
Mexico	3,521	2,667	2,984	1,919	2,626	4,498
U.S. ¹	37	nothing		524	361	39
Bolivia ²	3,487	3,719	?	1,866	1,182	3,348
China	20,741	23,581 ³	18,060 ³	13,100	15,200	18,000
World ⁴	30,000	31,000	27,000	21,000	22,000	30,000

¹ Excluding recovered metal. ² Exports. ³ Spanish Morocco, 1934 : 309. ⁴ Estimates.

B.—Bismuth.

(1) PRODUCTION, BISMUTH ORE.

	In Cwts.					
	1928.	1929.	1930.	1933.	1934.	1935.
Australia	152	66	83	53	279	470
Germany	1,610	940				
Rumania				—	—	280
Spain	2,539	2,323		1,516	3,543	
Argentine	417	145		—	180	

(2) PRODUCTION, BISMUTH CONTENT OF ORES, OR METAL.

In addition to (1).

	In Cwts.					
	1928.	1929.	1930.	1933.	1934.	1935.
Canada	125	1,735	114	699	2,265	123
Germany				—	—	80
Spain	469	219	?	512	905	
Mexico				923	2,033	4,204
Bolivia (exports)	2,679	2,974		37	993	412
Peru	—	613		5,756	5,368	
China				350	570	
Japan	633	984	1,079	1,124	991	

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C.—Cadmium, Production. D.—Cobalt, Production.

	In 1,000 lbs. Avoirdupois.			In 1,000 Cwts.		
	1928.	1929.	1930.	1933.	1934.	1935.
<i>Cadmium.</i>						
Canada	492	774	457	246	294	581
Australia	387	446	510	357	380	490
France	104			88	—	267
Germany ¹	100	100	100			
U.S.	2,116	2,915	3,094	2,678	3,344	3,985
U.S.S.R.					6	26
Mexico	779	1,413	1,208	1,107	848	1,317
South West Africa				—	140	320
Belgium	11 ²	5 ²	11 ²	355	498	333
Norway				308	302	260
Poland	9	8		114	316	248
Italy			27 ¹	16	18	35
<i>Cobalt.</i>						
Canada	8.5	8.3	6.2	4.2	5.3	6.1
India ... ..	.2	2.2		2.3	3.5	4.3
Australia ... ..	.2	.4	.1	.1	.2	
Belgian Congo ...	9	13.9	14	12.2		
N. Rhodesia				2.3	11.4	8.2
French Morocco ...				1.4	3.3	8.2

¹ Estimates. ² Exports.

E.—Molybdene, Production. F.—Radium. G.—Strontium, Production.

(a) MoS₂ content of ores.
(b) Ores.

Radium content of
compounds produced.

Unit.	1928.	1929.	1930.	1932.	1933.	1934.	1935.
E. Canada (a)	—	258	—				
Australia (b)	40	10	105		208	89	212
Norway (a)	3,287	3,478	4,193		8,149	4,793	12,736
Fr. Morocco (a)	787	20			3,700	2,850	3,230
Mexico (b)					1,303	15,315	22,528
U.S. (a)	29,725	34,863			84,554	139,315	171,310
Japan and Korea (b)	609	582	520		2,070	2,136	2,077 ¹
F. Czechoslovakia } Belgian Congo } gr.	...	3.5 60		3.8 6	3.3 6.7	7.8	
G. U.K. } Germany } long tons Tunisia }	7,126 857	5,329 717	5,141 359 500		3,862 148	9,440 341	4,510 182

¹ Incomplete.

H.—Thorium.

Production of Monazite
in Long Tons.

I.—Titanium.

Production of Titanium Minerals
in 1,000 Long Tons.

	1928.	1929.	1930.	1933.	1934.	1935.
<i>Thorium.</i>						
India	103	180	14	139	1,009	3,819
Ceylon	85					
Brazil	100	88	15	401		
Egypt						11
<i>Titanium.</i>						
Canada	2	2.2	.4	—	1.8	2
India	25.3	23.7	28.8	53	75.6	127.1
British Malaya ... ..				.2	.1	3
Norway	7.9	7.8	7.5	22.9	26.1	37.5
Portugal ... ..	.7	.1	.8	.4	.3	
French Senegal	6.9	8	5.2	.3	.5	12
Argentine				2.6	1	
Brazil	1.5	6.3	.1	.1	.1	.3

J.—Tungsten (Wolfram). K.—Uranium Minerals. L.—Vanadium.
Production.

(a) Ores; (b) concentrates (about
60% WO₃ content); (c) WO₃
content; in 1,000 Long Tons.

Production
in Cwts.

Production of Ores
in Long Tons.

	1928.	1929.	1930.	1933.	1934.	1935.
<i>Tungsten.</i>						
India (a) ... ..	.8	1.3	2.5	2.1	3.3	3.8
British Malaya (b) ... ..	.1	.5	1	1	1.6	1.7
Portugal (b) ... ..	.1	.3	.5	.4	.7	1.1
U.S. (b)	1.1	.7	.6	.8	1.8	2.1
Bolivia (b)		1		.2	.8	1.3
China (a)	7.3	8.7	8.6	5.6	6.2	
French Indichina (c) ... ..	.1	.1	.1	.1	.2	.3
Japan and Korea (c) ... ..				.1	.3	
<i>Uranium.</i>						
Canada				300 ¹	250 ¹	
Czechoslovakia (U ₃ O ₈ content)		316	259	236	236	
Portugal	2,815			1,233	791	117
U.S. (U ₃ O ₈ content)		232		18	70	232
<i>Vanadium.</i>						
South West Africa	5,033	3,036	4,461	177	324	1,570
World ¹	5,160	5,000	5,000	220	330	2,000

¹ Estimates.

B.—NON-METALLIC MINERALS

I.—COAL.

(1) GEOLOGICAL STOCKS DOWN TO 6,600 FEET.(a)

(a) Estimate of the XIIIth International Geological Congress, Toronto, 1913.

In 1,000 Million Metric Tons.

	Cer- tain.	Certain and Probable.		Cer- tain.	Certain and Probable.
Germany	89 ¹	181 ¹	China	19	217
Belgium	7	11	India		78
France	5	17	French Indochina		20
Great Britain ...	141	190	Japan and Korea ...	1	8
Netherlands ...	3	5	Russian Asia ...		352
Poland	10	158	ASIA	22	680
U.S.S.R.		64 ²	OCEANIA	3	148
Spain	6	8	Belgian Congo ...		5
Norway		9	Rhodesia	1	1
Czechoslovakia ...	7	25	Union of S. Africa ...		56
EUROPE	270 ³	671 ³	AFRICA	1	57 ⁴
Canada	185	666	Total non-European territories ...	722	4,316
U.S.	511	2,736	WORLD	992	4,989
Chile	2	3			
AMERICA	698	3,434			

¹ Later estimate only 26 and 44. ² id. 203 and 534. ⁴ id. 225.

(a) In these tables on coal, brown coal has been converted into coal at the rate of .402 : 1.

(b) American Estimate.

In 1,000,000 Millions.					
North America ...	4.97	Australasia ... ..			.17
Asia	1.40	Africa ... ..			.06
Europe ... ..	.76	South America ...			.04
WORLD	7.40				

(2) PRODUCTION BY COUNTRIES.

	In Million Metric Tons.						
	1913.	1928.	1929.	1930.	1933.	1934.	^a 1935
U.K.	292	232.5	258	243.9	207.1	220.7	222.3
Union of S. Africa	8	12.4	12.8	12	10.5	12	13.4
Canada	14	15.7	15.6	13.3	10.6	12.4	12.4
India	16	22.6	23.4	23.8	20.3	22.7	23
Australia	13	13.4	12.1	9.5 ¹	11.7	12.2	13.1
Belgium	23	27.1	26.5	27	24.9	26	26.1
Czechoslovakia	—	34.5	38.5	33.1	25.2	25.4	25.8
France ³	41	41.6	54.1	54.2	47.2	47.9	47.3
Germany ⁴	238	324.4	346	297.1	243.2	269.1	287.5
Italy	—	.8	1	1	.8	.8	1
Holland	2	10.7	11.6	12.2	12.5	12.2	11.8
Poland	—	40	45.6	36.9	26.9	28.8	28.1
U.S.S.R.	37	35.2	38.1	45.7	74.7	82.5	102.2
U.S.	517	514.4	541.2	474	342.1	371.9	375.3
China	—	25	25	—	18.5	20.6	1.2
Japan ⁴	—	34.8	35.3	31.9 ¹	45	51.4	—
WORLD	1,268	1,440	1,430	1,390	1,150	1,260	1,290

¹ Incomplete. ² Without Saar. ³ Including Saar.

⁴ Including Asiatic possessions and, for 1933 and 1934, Manchuria.

Source: "The Mineral Industries of the British Empire," etc.

(3) WORLD PRODUCTION OF COAL.

1909-13 Annual Average.	In Million Metric Tons.							
	1913.	1920.	1921.	1922.	1923.	1924.	1925.	1926.
1,098	1,268	1,193	993	1,057	1,201	1,188	1,188	—
1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
1,357	1,335	1,421	1,298	1,149	1,023	1,057	1,156	1,260

Source: German Statistical Abstract.

(4) PRICES.

RM. per ton	Annual Averages							July, 1936.
	1913.	1930.	1931.	1932.	1933.	1934.	1935.	
Germany: Rheinisch-Westf. Fettkuder Kohle, Lo.b. mine	12.34	16.76	15.40	14.21	14.21	14.05	14	14
U.K.: Cardiff, best Admiralty, Lo.b.	21.11	21.11	18.73	14.12	13.34	12.11	11.72	11.99

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(5) WORLD EXPORTS.

	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Coal.							
Quantity, million tons	155	141	124	101	103	111	112
Value, R.M. million ...	2,825	2,586	2,042	1,352	1,205	1,138	1,095
Brown Coal.							
Quantity, million tons	3.6	2.8	2.4	1.8	1.9	2.1	2
Value, R.M. million	56	43	36	20	19	19	18

(6) EXPORTS AND IMPORTS, BY COUNTRIES, 1934.

In 1,000 Metric Tons.					
Countries.	Net Imports.	Net Exports.	Countries.	Net Imports.	Net Exports.
Germany ...		17,075	Austria ...	2,587	
Belgium and Luxembourg ...	670		Sweden ...	5,265	
Denmark ...	3,801		Poland ...	9,880	
France ...	13,720		U.S.S.R. ...		2,167
Great Britain ...		53,997	Switzerland ...	1,900	
Irish Free State...	2,343		Japan ¹ ...		3,322
Italy ...	11,781		Canada ...	11,462	
Holland ...	2,762		U.S. ...		11,638
Norway ...	2,065				

¹ Including Manchuria ; 1933.

2.—OIL.

(1) GEOLOGICAL STOCKS.

(a) Estimate by V. R. Garfias, 1933.

Countries.	Probable Capacity of Production of Fields worked at the end of 1932 in Million Metric Tons.	Future possibility of Production at the Rate of 1932. Years.	Countries.	Capacity of Production in Million Metric Tons.	Future possibility of Production at the Rate of 1932. Years.
U.S. ...	1,715	15	Trinidad ...	13	9
U.S.S.R. ...	429	20	Poland ...	7	12
Irak ...	357	?	Japan ...	6	20
Iran ...	314	52	Sarawak ...	4	14
Venezuela ...	286	17	Canada ...	1	14
Dutch East Indies	143	29	Egypt ...	1	7
Rumania ...	71	10	Germany ...	1	7
Colombia ...	57	29	Ecuador ...	1	7
Mexico ...	43	11	France ...	7	10
India ...	14	12	Other Countries	1	2
Peru ...	14	9			
Argentina ...	14	7	WORLD ...	3,495	19

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(3) WORLD EXPORTS.

Quantities in 1,000 Metric Tons ; =q.

Value in RM. Million ; =v.

			1929.	1932.	1933.	1934.	1935.
Crude Petroleum	q	...	31,038	27,061	29,170	33,645	
	v	...	1,006	608	571	691	
Light fuel oil	q	...	12,339	11,750	10,537	10,762	11,023
	v	...	2,044	910	700	616	624
Lighting oil	q	...	5,988	4,175	3,917	4,128	3,949
	v	...	661	241	197	164	156
Heavy fuel oil	q	...	14,250	15,826	17,485	19,808	
	v	...	501	337	373	406	
Lubricating oil	q	...	2,154	1,527	1,795	1,857	1,910
	v	...	583	296	276	233	239
Totals, value in million RM.			4,795	2,392	2,117	2,110	

(4) INTERNATIONAL TRADE, 1934.

I=Imports; E=Exports.

	In 1,000 Metric Tons.									
	Crude Petroleum.		Light Fuel Oil		Lighting Oil		Heavy Fuel Oil		Lubricating Oil	
	I.	E.	I.	E.	I.	E.	I.	E.	I.	E.
Germany ...	277		1,158		98		956		322	72
Belgium-Lux....	226		268		28		327	269	200	106
France... ..	4,322		1,054		38		516	295	156	
U.K.	1,939		3,682	186	784		3,230	143	394	
Italy	143		348		150		1,122		66	
Holland ...	141		336		188		379	50	45	
Austria ...	166		48							
Sweden ...	63		351		95		253		48	
Czechoslovakia	121		121							
Rumania ...		274		1,958		1,085		3,117		62
U.S.S.R. ...		459		1,120		436		1,951		305
Denmark ...			256		80		237			
Irish Free State			115		60					
Norway ...			108				301			
Switzerland ...			219				163			
Spain			440				352			
Hungary ...	229									
Poland and Danzig				56		31				
Greece ...							140			
Egypt	113		13	28	265		163	64		
Algeria ...			126							
Union of South Africa ...			301				110			

In 1,000 Metric Tons.

	Crude Petroleum.		Light Fuel Oil.		Lighting Oil.		Heavy Fuel Oil.		Lubricating Oil.	
	I.	E.	I.	E.	I.	E.	I.	E.	I.	E.
Japan ...	2,958		613							
Iran ...		1,565 ¹		1,524 ¹		445 ¹		3,741 ¹		
Dutch Indies ...		484		1,455		573		2,253		
Sarawak ...		15		93		14		535		34 ¹
British Malaya			412	326	93	55	353	250		
China ...			110		360		409			
Manchuria ...			54		75				35	
Philippines ...			75		56		288			
India ...					235		445		71	
Argentina ...	170		61				917	119	18	5
Canada ...	4,264		210				236		40	
Dutch West Indies ...	13,954 ¹	1,203 ¹		2,210 ¹		281 ¹	929 ¹	9,855 ¹		110 ¹
U.S. ...	4,972	5,716	16	2,689		1,210	2,133	5,596		1,007
Colombia ...		2,351								
Ecuador ...		172								
Mexico ...		1,641		264 ¹		750		1,116		46
Peru ...		1,351		389				196		
Venezuela ...		18,780						805		
Brazil ...			265		93		452		28 ¹	
Chile ...			53 ¹				213 ¹			
Cuba ...	24 ¹		32 ¹				248 ¹			
Trinidad and Tobago		65		303				996		
Uruguay ...	80 ¹						183 ¹			
Australia ...	532		690		112				46	
New Zealand ...			214				173			

¹ 1933.

(5) STOCKS OF PETROLEUM AND PROCESSED PRODUCTS, IN HANDS OF PRODUCERS IN U.S.

In Million Hektoliters.

1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	June, 1936.
858	839	895	981	1,059	1,095	1,015	981	951	925	883	866

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(6) PRICES.

	In RM. per 100 l.							July, 1936.
	1913.	1930.	1931.	1932.	1933.	1934.	1935.	
<i>Crude Petroleum:</i>								
New York, Pennsylvanian, free well ...	6.47	6.37	4.70	4.81	3.17	3.38	2.96	3.41
<i>Lighting Oil:</i>								
New York, standard white, spot, in chests	?	18.43	17.76	18.47	14.56	10.75	10.70	10.68
<i>Bensine:</i>								
New Orleans, 60/62 Bé	?	9.46	5.20	4.78	3.74	3	3.25	3.34

3.—ASBESTOS, PRODUCTION, BY COUNTRIES.

	In 1,000 Metric Tons.						
	1928.	1929.	1930.	1931.	1933.	1934.	1935.
Southern Rhodesia ...	35.7	38.1	33.7	21.8	26.9	28.8	38
Union of South Africa ...	24.2	28.7	23.1	11.7	15.2	16.2	18.2
Cyprus	16.3	14.1	7.3		3.5	7.1	7.5
U.S.S.R.	26.1	29.1	56	64.7	73	91	100
Canada	265.5	294.8	251	137.2	147.2	143.4	190.6
WORLD	379	414	379	243	279	303	374

4.—SALT, PRODUCTION.

In 1,000 Metric Tons.					
Africa	580	U.S.S.R. ...	2,900	Italy	1,054
U.S.	6,899	Oceania ...	112	Poland	450
Rest of America	562	Europe outside		U.K.	2,402
India	1,740	U.S.S.R. ...	10,380	WORLD	24,800
Rest of Asia ...	1,610	Germany ...	2,268		
		France	2,130		

5.—MINERAL FERTILISERS.

(1) PRODUCTION.

Countries.	In 1,000 Metric Tons.									
	Potash Content of K ₂ O.		Natural Phosphates.		Super- phosphate.		Basic Slag.		Natural Guano.	
	1928.	1934.	1928.	1934.	1928.	1934.	1928.	1934.	1928.	1934.
Germany ...	1,432	1,179			792	720	1,639 ^a	1,400 ^a		
France ...	407	379	180	71 ¹	2,265	1,324	1,594	988 ¹		
Spain ...	24	110			895	967 ¹				
Poland ...	58	58 ¹			240	90				
U.S. ...	54	131	3,580	2,720	4,071	2,602				
U.S.S.R. ...			122	712 ¹	151	850				
Algeria ...			876	532						
Tunisia ...			2,789	1,766						
French										
Morocco			1,268	1,199						
Egypt ...			201	438						
Dutch West										
Indies			104	86 ¹						
Xmas Island			114	130						
Japanese										
Empire			138	150	976	1,083				
Nauru and										
Ocean Island			552	558 ¹						
Paumotu										
Islands			187	77						
U.K. ...					507	494 ¹	222	266		
Belgium and										
Luxemburg					400	290 ¹	1,554	1,003 ¹		
Holland ...					645	559				
Italy ...					1,151	1,083				
Australia ...					732	759 ¹				
Chile ...									3·2	11·1 ¹
Peru ...									125·5	162·4 ¹
India ⁴ ...									10·7	4·7
Union of										
South Africa									9·2	5
Seychelles ⁴ ...									15·4	12·3

^a 1933. ¹ Saar: 330. ² Saar: 323. ⁴ Exports.

In addition to the materials mentioned in this table Chile produced the following quantities of Sodium Nitrate: 1928, 3·1; 1934, ·5 million metric tons.

(2) PRODUCTION OF NATURAL NITRATES IN CHILE; NITRATE OF SODA.

	In 1,000 Long Tons.						
	1928.	1929.	1930.	1933.	1934.	1935.	
Production ...	3,113	3,186	2,403	528	1,115	1,201	
Exports ...	2,788	2,851	1,757	659	1,274	1,269	
Increase (+) or decrease (-) of home stocks ...	+325	+335	+646	-131	-159	-68	
	+ 1,306			- 358			

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(3) PRODUCTION OF GUANO.

	In 1,000 Metric Tons.										
	1913.	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.
Peru ...	29	51	64	63	111	137	126	80	78	125	151
WORLD	57	79	100	107	147	185	171	120	131	154	177

	1930.	1931.	1932.	1933.	1934.
Peru ...	133	95	134	162	148
WORLD ...	163	115	170 ¹	211 ¹	

Figures before 1932 from the Statistical Year Book of the League of Nations, afterwards from the German Statistical Abstract.

¹ Including Indian "fish guano."

(4) WORLD EXPORTS OF SOME MINERAL FERTILISERS.

	In 1,000 Metric Tons.							
	1929.	1930.	1931.	1932.	1933.	1934.	1935.	
Raw phosphates ...	7,039	6,961	4,330	4,437	5,194	5,799	5,436	
Superphosphate and basic slag ...	3,866	3,627	3,291	2,478	2,345	2,696	2,552	
Sodium nitrate (Chilean saltpetre) ...	3,002	1,886	1,550	519	804	1,394	1,342	
Potash compounds ...	2,452	2,370	1,864	1,317	1,717	2,366	2,475	
Ammonium sulphate ...	1,756	1,537	1,772	1,706	1,591	1,457	1,656	

(5) PRICES.

	Annual Averages; in RM. per 100 Kg.									
	1913.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Great Britain, London, Chile saltpetre ...	23.86	25.98	24.32	22.57	19.55	13.18	11.50	9.75	9.36	9.53 ¹
Basic slag, 15% P ₂ O ₅ , Aachen, Germany ...	132	91.36	88.98	83.40	78.77	73.18	70.08	67.50	65.25	71.00 ¹

¹ Monthly average, July. * Idem, June.

6.—SULPHUR.

(1) PRODUCTION OF BRIMSTONE AND IN PYRITES.

	In 1,000 Metric Tons.									
	Brimstone.					Sulphur Content of Pyrites Mined.				
	1928.	1929.	1932.	1934.	1935.	1928.	1929.	1932.	1934.	1935.
Italy ...	328	345	234	251	329	257	306	238	372	
Germany ...						146	150	75	97	118
France ...						92	92	87	69	
Greece ...						45	64	42	23	
Yugoslavia ¹ ...						64	60	16	23	80
Norway ...						322	324	319	425	396
Portugal ...						122	193	112	102	100
U.S.S.R. ...						152		242 ²	382	
Sweden ...						12	32	50	104	
Spain ...	21	24	17	43		1,572	1,815	1,219	1,320 ³	
Cyprus ...						124	149	81	101	
Japan ...		66	85	128	152	270	280	330	491	
Canada ...						35	39	48	5	13
U.S. ...	2,014	2,400	905	1,450	1,659	115	122	68	170	
Chile ...	16	16			21					

¹ Pyrites without regard to proportion of sulphur contained in them. ² 1930. ³ 1933.

(2) SULPHUR BALANCE SHEET OF THE "HAVE-NOT" POWERS.

	In 1,000 Metric Tons.								
	Germany.			Italy.			Japan.		
	1933.	1934.	1935.	1933.	1934.	1935.	1933.	1934.	1935.
Production : pyrites, sulphur cont.	80.3	95.4	122.5	330.4	366	372	409	500	605
Imports : pyrites, sulphur cont.	334	388	401	48.4	47.2	47.2 ¹			
Production : brimstone	24.5	27	34	395	360	324	116.2	140	157
Importation : brimstone....	45.6	52.1	60.1				2.8	2.5	.5
	484.4	562.5	617.6	773.8	773.2	743.2	528	642.5	762.5
Exports : pyrites, sulphur cont.	13	7.4	8.6	119.6	126.3	77.4			
Other sulphur	29	28.9	24.4	217.5	215.2	242.8	32.3	45.7	54.5
Total exports	42	36.3	33.4	337.1	341.5	320.2	32.3	45.7	54.5
Balance	442.4	526.2	584.2	436.7	431.7	422	485.7	596.8	708

¹ Figure for 1934 repeated, as figure for 1935 is not yet available.

7.—MINOR NON-METALLIC MINERALS, PRODUCTION.

	Graphite Stone in 1,000 tons.		Mica in 1,000 Kg.		Silicious Earth (Diatomæ Earth) in 1,000 Kg.	
	1928.	1933.	1928.	1933.	1928.	1933.
Germany	18	20	269	73		
Austria	24	15				
Czechoslovakia	32	1				
Italy	7	3				
France	1				10,000	9,130 ¹
Sweden			12	68	721	650
U.S.S.R.	1		1,493		12,220	
Great Britain					4,312	4,062
Denmark					35,561	21,337
Hungary ¹					3,547	1,266
Spain					250	1,229
Ceylon ²	15	6 ¹				
Japanese Empire	23	17 ¹	29	20 ¹	203 ²	3,042
India ³			4,851	2,932		
Madagascar	17	3 ¹	861	178 ¹		
Union of South Africa			3,629	358		
Southern Rhodesia			186	4		
Tanganyika			34	11		
Algeria					9,000	11,000
U.S.	5		7,803	8,104	117,497	100,529
Canada	1	4	3,320	856	334	1,623
Mexico	5	3				
Australia			12	43	1,382	2,895

¹ 1934. ² Exports. ³ 1929.

C.—VEGETABLE AND ANIMAL RAW MATERIALS
I.—GRAINS (CEREALS), INCLUDING WHEAT, FLOUR AND RICE.

(1) PRODUCTION OF CEREALS IN IMPORTANT COUNTRIES.

(a) Wheat.

No.	Countries.	In 1,000 Metric Tons.																
		1913.	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
1	Europe	53,653 ^a		47,924 ^b				56,068								75,291	75,267	
2	Germany	7,972 ^b	2,248	2,934		2,897	2,427	3,217	2,597	3,280	3,854	3,349	3,789	4,233	5,003	5,604	4,532	4,667
3	France ¹	8,692	6,609	8,994		7,500	7,684	8,956	6,308	7,739	7,655	8,705	6,208	7,338	9,077	9,861	9,000	7,753
4	Great Britain ...	1,482	1,549			1,618	1,449	1,440	1,388	1,518	1,354	1,354	1,150	1,028	1,187	1,700	1,899	1,780
5	Italy	5,835	3,847	5,248		6,119	4,631	6,555	5,329	5,329	6,221	7,097	5,717	6,748	7,537	8,100	6,333	7,715
6	Poland		497	960		1,354	885	1,573	1,281	1,476	1,612	1,793	2,240	2,265	1,346	2,174	2,080	2,011
7	Russia ²	12,189 ^b				8,976	9,107	15,706	22,035	20,400	21,590	20,110	29,500		20,250	27,727	30,410	31,330
8	America	29,404 ^b		32,128 ^b				35,990								31,842	29,235	
9	Argentina	5,400		4,620		6,723	5,220	5,202	6,010	6,509	8,365	9,740	6,422	6,149	6,406	6,978	6,550	3,920
10	Canada	6,306	7,163	8,977		12,906	7,133	11,196	11,325	11,987	15,424	8,152	11,449	8,277	12,058	7,341	7,508	7,548
11	U.S.	20,776	22,672	21,634		21,702	23,751	18,217	22,652	23,724	24,899	21,950	23,356	24,284	20,251	14,354	13,538	16,968
12	Asia	14,232 ^b		11,440 ^b				11,470								15,596	12,410	
13	India	9,870	10,284	6,817		10,142	9,911	8,836	8,844	9,092	7,916	8,595	10,637	9,397	9,169	9,601	9,582	9,884
14	Japan ³	710	770	759		773	691	1,090	1,060	1,042	1,072	1,055	1,049	1,085	1,086	1,282	1,549	1,596
15	Russian Asia ...	5,496 ^b																
16	Africa	2,762 ^b		2,568 ^b				3,122								3,330	4,138	
17	Union of S. Africa	148	221	237					231	181	189	291	253	384	289	315	418	550
18	Australia ⁴	2,659	4,117	3,862 ^b		3,511	4,600	3,049	4,606	3,217	5,545	3,241	6,011	4,944	6,110	4,967	3,792	4,039
19	WORLD, without U.S.S.R.	83,271 ^b					85,230	91,857	93,005	99,805	109,080	96,908	104,593	103,750	103,467	103,350	94,430 ^d	
20	TOTAL, WORLD ...	106,701 ^b		97,921 ^b			94,337	107,563	115,040	120,205	131,570	117,108	134,093	?	123,717	131,077	124,843	

Notes.—Under 1935 is included 1934–35, where this is the harvesting year, etc. ¹ After 1919, including Alsace-Lorraine. ² After 1919, territory of U.S.S.R. in Europe and Asia. ³ Annual average 1915–17, excluding Poland, but including the later Baltic States and Bessarabia. ⁴ Annual average, 1915–17. ⁵ Including New Zealand. ⁶ 1914. ⁷ After 1924 including Korea.

(b) Rye.

Countries.	In 1,000 Metric Tons.													
	1913.	1920.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	
<i>Europe</i> ...	44,009 ¹	34,097	44,705		42,093 ²							49,672	43,091	
Germany ...	9,585 ¹	4,934	8,063	6,406	6,834	8,522	8,155	7,679	6,680	8,364	8,727	7,608	7,478	
Poland ...	5,711 ²	1,901	6,539	5,011	5,688	6,110	7,010	6,958	5,702	6,111	7,073	6,464	6,617	
Czecho- slovakia	—	837	1,476	1,166	1,25	1,464	1,834	1,729	1,388	2,176	2,085	1,523	1,638	
U.S.S.R. ...	19,172 ⁴	9,337	19,498	22,030	23,700	19,900	20,220			22,020	24,190	20,130	21,380	
<i>Asia</i> ...	200 ³	100 ⁷	116		101 ³						341			
<i>Africa</i> ...	16 ³	19 ⁷	18		21 ³						35	28		
<i>America</i> ...	990 ³	1,537	1,180	1,017	1,725 ³		1,056 ⁴		276	284	898	961		
<i>Australia</i> ...	6 ³				2 ³									
<i>World:</i>							36-48 million ⁵		40-50 million ⁵					
Incl. } U.S.	42,240 ³	36,618 ⁷	46,565		44,840 ³						50,950	44,082		
Excl. } S.R.											26,760	23,950		

See note to Wheat Production (C1 1(d)); also for explanation of territory covered.

¹ Annual average, 1911-13. ² Annual average, 1909-13. ³ Very rough German estimates.

⁴ 1914. ⁵ 1913-1932 and 1934 only U.S. ⁶ Annual average, 1926-30.

⁷ Annual average, 1920-24. ⁸ Annual average, 1926-28. ⁹ Whole American continent.

(c) Maize.

	In 1,000 Metric Tons.													
	1909/13. ¹	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	
<i>Europe</i>	16,454	14,410 ¹	20,413									20,481	22,854	
Italy	2,549 ²	2,684	2,793	3,000	2,220	1,659	2,550	2,997	1,946	3,015	2,591	3,193	2,520	
Yugoslavia	762	3,795	3,791	3,410	2,109	1,819	4,178	3,465	3,203	4,793	3,578	5,154	3,028	
Rumania	2,730 ³	3,949	4,159	6,083	3,333	2,733	6,386	4,520	6,063	5,993	4,554	4,846	5,379	
Hungary	1,506 ⁴	1,883	2,235	1,944	1,736	1,101	1,794	1,407	1,518	2,432	1,809	2,098	1,436	
U.S.S.R.	1,335	2,395	5,024	3,705	3,780	3,320	4,220				3,430	4,800	3,840	3,260
<i>Asia</i>	4,586	4,688 ¹	5,100									7,920	6,305	
India	2,105 ⁵	1,716	1,904	1,950										
<i>Africa</i>	3,183	4,076 ¹	3,760									5,490	5,320	
Egypt	1,540 ⁶	1,961	1,961			1,990		1,775	1,986	1,932	1,476	1,572	1,689	
Union of S. Africa	754 ⁷	2,192	988	1,715	1,962	1,743	1,763	1,473	1,389	866	2,168	1,722	1,407	
<i>America</i>	22,263	27,457 ¹	24,529									76,000	55,700	
U.S.	68,897	58,746	74,094	67,186	70,153	72,138	66,606	52,221	65,212	73,867	59,733	33,072	55,954	
Argentina	4,869	4,732	7,670	8,133	7,700		3,886	10,510	7,434	6,700	6,526	11,500	9,650	
WORLD :														
Including U.S.S.R. ...												110,000	90,443	
Excluding U.S.S.R. ...	103,558	95,940	114,789	110,098	108,600	106,357	109,227	97,914	100-130 million ⁸		105,200	86,600		

Maize statistics are very incomplete and full of later corrections of figures for earlier years.

¹ Annual average. ² Very rough German estimate. ³ Pre-war territory. ⁴ Annual average, 1911-15. ⁵ Annual average, 1911-13.

⁶ Annual average, 1910-13. ⁷ Annual average, 1920-24.

(d) *World Production of Rice.*

In Million Metric Tons.													
Annual Averages		1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935
1909-13.	1920-24.												
78.2	83.2	86.3	87.7	85.2	84.6	87.6	85.4	90.8	88.3	88.7	90.1		82.5

These figures exclude U.S.S.R., China, Irak and Iran.

(e) *World Harvest of Grains, 1933.*

	In Million Metric Tons.						
	Wheat.	Rye.	Barley.	Oats.	Maize.	Rice. ^a	Totals.
Europe ¹ ...	75,291	49,642	24,755	43,548	20,881	975	214,692
Asia ...	15,596	341	7,190	435	7,920	79,253	110,735
Africa ...	3,330	35	2,350	864	5,490	1,599	13,668
America ...	31,842	898	5,890	16,370	76,000	803	131,803
Australia ...	4,967		16	60			5,043
WORLD ...	131,077	50,950	40,380	61,030	110,000	82,630	476,067

¹ Including whole of U.S.S.R. ^a The figure for rice in Asia is certainly much too low.

(2) **INTERNATIONAL TRADE IN GRAINS.**

(a) *World Exports, 1929-1935.*

	In Million Metric Tons.						
	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Wheat ...	19.1	16.3	19.9	17.3	15.4	13.9	13.9
Rye ...	1.3	1.5	1.8	1.3	1.2	1.1	1
Barley ...	3.9	4	4	2.7	2.7	2.8	2.5
Oats ...	1.6	1.7	1.5	1.3	.9	1.1	1
Maize ...	9.6	8	12.1	10.6	9.6	8.3	9.4
Rice ...	6.7	6.7	7.1	7.3	7	7.6	
Wheat Flour ...	3.8	3.6	3.1	2.7	2.8	2.7	2.6
Other milling products from cereals and rice	.7	.7	.7	.7	.7	.8	.7

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(b) World Trade in Grains, etc., by Countries.

I=Imports; E=Exports.

				In Million Metric Tons.													
				1913	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Wheat:																	
U.K. ...	...	...	I	5.4	5.1	6	4.9	4.9	5.6	5.2	5.6	5.3	6	5.3	5.7	5.2	5.1
			E														
Germany ...	...	...	I	2.5	.5	.7	1.7	2.2	2.6	2.5	2.1	1.2	.8	1	.8	.6	.2
			E	.5			.2	.3	.3	.3	.3	.5	.5	.2			
France... ..	...	...	I	1.6	1.4	1.5	1.2	.3	2.2	1	1.4	1	2.3	2.1	.8	.7	.7
			E									.4				.3	.8
Italy ... ..	...	...	I	1.8	2.8	2.1	2.2	2.1	2.3	2.7	1.8	1.9	1.4	1.1	.5	.5	.5
			E														
India ... ..	...	...	I							.6	.4	.2	.3				
			E	1.2	.6	1.1	.2	.2	.3	.1	.2	.2					
U.S. ... ..	...	...	I	2.5	.5	.4	.4	.4	.3	.5	.4	.5	.4	.2	.3	.5	1.1
			E														
Russia ... ..	...	...	I	.1													
			E	3.3	.3	.3	.4	1	.8				2.5	2.5	.6	.7	.2	.7
Rye:																	
Germany ...	...	...	I	.4	.9	.5	.4	.2	.8	.3	.1		.1	.6	.2	.1	.2
			E	.9				.3	.1	.4	.6	.2	.1	.1	.3	.1	
U.S. ... ..	...	...	I														
			E		.8	.9	.7	.3		.9	.4						
Russia ... ..	...	...	I														
			E	.6	1.2	.6	.2	.2	.4				.6	1.4	.4	.2	.1
Wheat Flour:																	
U.K. ... ..	...	...	I	.6	.6	.6	.5	.5	.6	.5	.5	.6	.5	.4	.5	.5	.4
			E	.1	.2	.3	.4	.2	.2	.2	.2	.2	.2	.2	.2	.2	.1
Germany ...	...	...	I			.6	.4	.1	.1		.1				.2	.2	
			E	.2			.1	.1		.1	.1						
France... ..	...	...	I														
			E			.1							.3	.4	.1	.2	.2	.2
Canada ... ..	...	...	E	.4	1	1	.9	.9	.8	1	.9	.7	.5	.5	.5	.4	.4
			E	.1	.1	.2	.1		.2	.2	.1	.1	.1	.1	.1	.1	.1	.1
U.S. ... ..	...	...	E	1	1.5	1.4	1	1.1	1.1	1.1	1.2	1.2	.9	.5	.4	.4	.3
			E														
Barley:																	
U.K. ... ..	...	...	I	1.1	1	1.1	.8	.6	.8	.7	.6	.8	.8	.5	.8	.8	.9
			E														
Germany ...	...	...	I	3.2	.3	.6	.9	1.7	2	1.9	1.8	1.5	.8	.5	.2	.6	.2
			E	.1	.1	.1				.1	.2	.4	.4	.2	.2	.2	
France... ..	...	...	I														
			E	.3	.3	.5	.7	.8	.7	.8	.4	.1	.5	.2	.2	.2	.2	.2
Rumania ...	...	...	E	.4	.8	.3	.2	.7	.4	1.2	1.4	1	.5	.6	.3	.2	.2
			E	.4	.3	.5	.6	.3	.8	1.1	.6	.2	.2	.2	.2	.1	.2	.6
U.S. ... ..	...	...	E	.4	.3	.5	.6	.3	.8	1.1	.6	.2	.2	.2	.2	.1	.2
			E	3.9	.2	.2	.5	.7	?	?	.2	1.2	1.0	.4	.6	.2	.2	.6
Maise:																	
U.K. ... ..	...	...	I	2.5	1.8	1.9	1.4	1.6	2.1	1.6	1.7	1.6	2.6	2.5	2.6	3	2.9
			E		.1	.1	.1	.1									
Germany ...	...	...	I	.9	.3	.4	.6	.7	2.1	1.3	.7	.7	.5	.8	.3	.4	.3
			E	.6	.6	.6	.5	.6	.8	.7	.8	.8	1.1	1.2	.7	.6	.6	.6
France... ..	...	...	I	.4	.4	.1	.2	.5	.4	.9	.8	.7	.7	.6	.1	.2	.2
			E														
Italy ... ..	...	...	I														
			E	4.8	2.9	4.5	2.9		8.3	5.4	5	4.7	9.8	7.1	5	5.5	7.1
U.S. ... ..	...	...	I														
			E	1.2	1.1	.5	.3	.6	.3	.9	.9	.2	.1	.2	.1	.1	.1
Russia ... ..	...	...	E	.6		.2	.1	.3	.1			.1	.1	.3	.1	.1	

	1913	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Oats:														
U.K. ...	I	9	5	5	4	4	3	4	4	5	4	3	3	2
Germany ...	I	5			4	3	3	2	1					2
	E	7		1	1	1	3	5	4			1		
France...	I	6	1	1	1	1		1	1	1	2			
Argentina ...	E	9	5	7	4		6	3	4	5	6	7	4	5
Canada ...	E	5	4	5	7	2	1	2	1		2	2	1	2
U.S. ...	E	5			5	2	1	2	1		1			
Russia ...	E	6	1				1			4	4		1	1
Rice:														
U.K. ...	I	2	2	2	2	1	1	1	1	1	1	1	1	1
Germany ...	I	5	2	4	5	3	3	4	3	4	4	4	3	2
	E	2		2	2	2	1	1	1	1				
India ...	E	2.5	2.2	2.3	2.6	2.1	2.2	1.8	2.4	2.3	2.2	2.2	1.9	1.4
Italy ...	E	1	1	2	2	2	3	2	2	2	2	2	2	1
Indo-China ...	E	1	9	1.1		1.5	1.6	1.3		9	1.1	1.2	1.4	1.7
U.S. ...	I				1									
	E	1	1			1	1	1	1	1	1	1	1	1

(c) Foreign Trade in Rice.

	In 1,000 Metric Tons.								
	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
(1) Imports:									
British									
Malaya	858	820	811	816	704	605	609	636	672
Ceylon	486	510	513	470	461	470	458	485	566
China ...	1,275	765	655	1,203	650	1,360	1,295	771	1,296
Manchuria							337	741	80
Formosa	122	46	84	12	2	35	7	1	
Japan ...	1,812	1,505	1,238	1,180	1,765	1,693	1,748	2,069	1,822
Dutch									
Indies	470	570	735	627	608	424	334	279	387
(2) Exports:									
British									
Malaya	296	281	234	210	177	187	163	169	188
Formosa	407	328	316	297	412	528	544	727	615
Korea ...	877	955	788	700	1,228	1,018	1,079	1,348	1,108
Siam ...	1,540	1,320	1,006	928	1,202	1,518	1,530	1,863	

(d) Japanese Balance of Foreign Trade in Rice.

	In 1,000 Metric Tons.								
	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Imports ...	1,934	1,551	1,322	1,192	1,767	1,728	2,192	2,811	1,902
Exports ...	1,284	1,304	1,147	1,089	1,839	1,617	1,652	2,164	1,794
Balance ...	-650	-247	-175	-103	+72	-111	-540	-647	-118
Annual averages	-202						-594		

Note.

Total production of rice in the Japanese Empire, 1929 to 1935 ... 96.5 million metric tons.
 Import surplus 2.5 " " "
 Total consumption 99.1 " " "
 Net importation in per cent. of total consumption 2½ per cent.

(3) PRICES.

	In RM. per 100 Kg.											
	Annual Averages.										July,	
	1913.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
(a) WHEAT.												
<i>Germany</i> : Berlin, "märkisch" ...	18.81	26.81	26.71	23.40	22.78	25.64	24.88	22.95	18.71	19.61	20.74	21.94
<i>France</i> : Paris, home wheat ...	23.18					24.51	28.42	24.23	18.18	19.61	12.97	17.94
<i>Great Britain</i> : London, Plata, Rosario, spot ...	14.86	25.05	23.24	20.23	19.88	16.29	10.83 ^a	8.57 ^a	7.30 ^a	6.08 ^a	6.90 ^a	
<i>U.S.</i> : New York, red winter II, spot	15.92	26.11	23.03	25.97	22.23	17.42	12.37 ¹	9.90 ¹	10.52 ¹	9.50 ¹	9.56 ¹	11.35
<i>Canada</i> : Winnipeg, North Man. I, spot	13.61	23.07	22.85	20.81	20.70	14.57	8.73 ^a	7.56 ^a	6.78 ^a	6.94 ^a	7.69 ^a	8.54
(b) WHEAT FLOUR.												
<i>Great Britain</i> : London, stand. ex mill						25.71	16	13.33	12.46	10.92	11.88	13.75
(c) RYE.												
<i>Berlin</i> : "märk." ...	15.55	19	24.90	23.91	19.24	16.19	18.28	17.85	16.04	16.31	16.82	17.13
<i>Poland</i> : Poznan, home, spot ...	15.64	13.78	19.98	19.22	13.39	9	10.89	9.80	7.66	7.21	6.27	6.27
(d) OATS.												
<i>Berlin</i> : "märk." ...	15.97	18.46	21.60	22.63	18.42	15.25	15.60	14.75	13.29	16.44	?	?
<i>Buenos Aires</i> : home ...	9.78	11.82	13.07	15.90	12.73	6.95	5.52	5.70	4.33	3.91	4.78	5.64 ⁴
(e) BARLEY.												
<i>Winnipeg</i> : Western III, spot...	8.90	11.98	15.46	15.40	13.95	7.61	5.74	5.93	7.90	5.34	4.78	5.87
(f) MAIZE.⁵												
<i>New York</i> : mixed II, spot ...	?	14.37	16.30	17.35	17.72	15.78	11.12	6.82	6.41	7.14	9.43	9.91
(g) RICE.												
<i>Bombay</i> : Rangoon ...	17.15	26.89	25.56	22.84	21.80	18.84	11.17	10.39	9.26	6.23	7.66	7.52

See footnotes at bottom of opposite page.

(2) PRODUCTION OF SUGAR BEET.

	In Million Quintals.		
	1928-32.	1933.	1935.
Germany	112	86	106
Belgium	17	15	15
Bulgaria	2	3	2
Denmark	11	17	19
France	72	75	87
Great Britain	21	33	32
Irish Free State	1	2	5 ¹
Italy	28	1	23
Yugoslavia	8	5	5
Latvia	—	2	3
Holland	18	19	15
Austria	9	11	11
Poland	39	19	25
Rumania	7	7	6
Sweden	11	18	19
Spain	20	20	23 ¹
Czechoslovakia	56	29	37
Hungary	13	9	7
U.S.S.R.	98	90	162
Asia	?	5	2
Canada	4	4	4
U.S.	74	100	72
WORLD	?	540	653 ¹

¹ 1934.

(3) PRODUCTION OF SUGAR, BY COUNTRIES.

	In Million Metric Tons of Raw Sugar.		
	1913-14.	1934-35.	1935-36.
Germany	2.2	1.7	1.7
Czechoslovakia	—	.6	.6
U.S.S.R.	1.4 ¹	1.4	2.5
France	1	1.2	.9
U.S. ² ... ..	.8	1.5	1.5
Hawaii ... ..	.6	.9	.9
Cuba	2.6	2.6	2.6
India	2.4	3.1	3.6
Java	1.4	.5	.6
Japan and Formosa ... ..	.2	1.1	1.1
TOTAL, beet sugar	9	9.8	10.3
TOTAL, cane sugar	10.1	14.7	16.1
TOTAL SUGAR	19.1	24.5	26.4

¹ Territory of Tsarist Russia.² U.S., including Hawaii and Puerto Rico : 1913-14, 1.9 ; 1934-35, 3 ; 1935-36, 3.3.

(4) TOTAL WORLD PRODUCTION.

					In Million Metric Tons of Raw Sugar.		
					Beet Sugar.	Cane Sugar.	Total Sugar.
1912/13	...	...	...	...	8.9	9.5	18.4
1913/14	...	...	...	...	9	10.1	19.1
1929/30	...	...	...	...	9.3	17.8	27.1
1930/31	...	...	...	...	11.9	16.4	28.3
1931/32	...	...	...	...	8.7	16.7	25.4
1932/33	...	...	...	...	7.9	15	22.9
1933/34	...	...	...	...	9	15	24
1934/35	...	...	...	...	9.8	14.7	24.5
1935/36	...	...	...	...	10.3	16.1	26.4

(5) INTERNATIONAL TRADE IN RAW AND REFINED SUGAR, BY COUNTRIES.

					In Million Metric Tons.			
					1929.	1932.	1934.	1935.
<i>A. Imports:</i>								
Great Britain	...	...	...	...	2.1	2.4	2	2
Japan	...	...	...	...	1	.9	.8	1
U.S.	...	...	...	...	4.4	2.6	2.7	2.7
France	...	...	...	...	.5	.4	.4	.4
India	...	...	...	...	.9	.4	.2	.2
China	...	...	...	...	.4	.4	.2	.3
<i>B. Exports:</i>								
Dutch Indies	...	...	...	...	2.4	1.5	1.1	1
Philippines	...	...	...	...	.7	1	1.2	5
Cuba	...	...	...	...	5	2.7	2.4	
Czechoslovakia	...	...	...	...	.5	.4	.2	.2
Japan and Formosa	...	...	...	...	1	1	.8	1.1

(6) TOTAL INTERNATIONAL TRADE IN SUGAR, EXPORTS.

	1929	1930	1931	1932	1933	1934
Quantities, in million metric tons ...	13	11.3	9.7	9.6	8.5	8.5
Values, in RM. million ...	3,022	2,283	1,662	1,295	1,018	858

(7) STOCKS.

Million Metric Tons.									
1927	1928	1929	1930	1931	1932	1933	1934	1935	June, 1936
4.9	5.3	6.1	7.1	8.8	9	8.7	8.2	7.4	5.8

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(8) NET SUGAR EXPORTS OF CERTAIN COUNTRIES.¹

	In 1,000 Metric Tons.				
	1931	1932	1933	1934	1935
Germany	341	56	-1	-13	-9
Belgium	2	-1	20	-14	10
France	-68	-127	240	248	-106
Holland	-81	-118	-55	-23	-64
Poland	345	185	114	101	107
Hungary	52	17	22	40	13

¹ Figures with negative sign = net imports.

(9) PRICES.

	In RM. per 100 Kg.							Dec. 1935
	Annual Averages.							
	1913	1930	1931	1932	1933	1934	1935	
<i>Great Britain, London, Java</i> White, cif. India ...	22.16	18.36	15.08	11.58	10.11	7.50	7.52	7.98 July, 1936
<i>Czechoslovakia, raw, 88°</i> ...	18.06	11.73	9.33	7.20	7.16	5.58	5.11	4.66
<i>U.S., N. York, Cuba, 96°</i> centr. excluding duty ...	20	14.07	12.41	8.61	8.89	9.35	17.87	15.37

(10) HOME CONSUMPTION IN CERTAIN COUNTRIES.

	In 1,000 Metric Tons of Raw Sugar.									
	1913/14	1929/30	1931/32	1933/34	1934/35	1929	1930	1931	1932	1933
Germany ...	1,430	1,655	1,449	1,506	1,547					
Great Britain		1,813	2,102	1,920						
Italy ...		355	313							
U.S. ...		4,513	5,466							
Belgium ...						200	211	198		
France ...						942	901	968	959	965

3.—RUBBER.

(1) WORLD PRODUCTION, STOCKS AND PRICES.

	1913	1920	1925	1928	1929	1930	1931	1932	1933	1934	1935	June, 1936
World production, 1,000 tons	114	347	510	673	882	839	812	721	863	1,034	887	
Stocks, 1,000 tons ...			137	271	311	442	588	621	664	733	721	561
Amsterdam, stand. plant, price, RM. per 100 Kg.	709			202	189	108	54	30	41	71	68	86

(2) CHANGES IN STOCKS DURING STEVENSON SCHEME.

In 1,000 Metric Tons.				
1925	1926	1927	1928	1929
137	174	282	271	311

(3) PRODUCTION, IN CERTAIN COUNTRIES.

	In 1,000 Metric Tons.																
	1913	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
British																	
Malaya ...	33	174	151	216	168	168	201	299	246	304	464	451	430	413	453	475	424
Dutch Indies	5	79	68	89	118	168	193	211	233	233	259	245	261	214	285	384	288

(3a) PRODUCTION, BY COUNTRIES.

	In 1,000 Metric Tons.		
	1920	1925	1934
Africa ...	6	8	3
Mexico ...	—	4	—
South America ...	33	31	9
British Borneo ...	6	15	29
Ceylon ...	40	46	80
India ...	6	11	12
Dutch Indies ...	79	192	384
French Indo-China ...	3	8	20
British Malaya ..	174	213	475
Siam ...	...	5	18
Total Asia ...	308	490	1,018
Oceania, including Philippines ...	...	1	1
WORLD TOTALS ...	347	534	1,031
Colonial ...	...	483	992
Non-Colonial ...	...	51	39

(3b) PLANTATION AND WILD RUBBER, PRODUCTION.

	In 1,000 Metric Tons.							
	1913	1920	1921	1922	1923	1924	1925	1935
Plantation rubber ...	51	311	274	368	342	377	466	869
Total, including wild rubber	63	36	24	28	28	30	38	18

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(4) INTERNATIONAL TRADE: WORLD EXPORTS OF RUBBER, GUTTAPERCHA AND BALATA.

	1929	1930	1931	1932	1933	1934	1935
Quantities, in 1,000 metric tons	1,139	1,058	1,005	875	1,111	1,308	1,111
Values, in RM. million ...	1,723	1,038	485	234	358	679	590

(5) NET IMPORTS, 1934.

In 1,000 Metric Tons (— = net exports).			
Germany	64	Japan	71
Belgium and Luxemburg	15	India	-11
France	58	Ceylon	-81
Great Britain	160	Dutch Indies	-385
Italy	22	Brazil	-12
U.S.S.R.	48	Canada	29
British Malaya	-472	U.S.	446

4.—TIMBER.

(1) FOREIGN TRADE.

		In 1,000 Metric Tons.			
		1929.	1932.	1933.	1934.
A. IMPORTS <i>I. Hard Wood, unsawn</i>	Germany	479	210	235	324
	Belgium and Luxemburg				
	Luxemburg	275	177	192	174
	France	?	65	105	113
	Great Britain	102	50	43	63
	Holland	67	55	52	57
	Switzerland	53	50	41	55
	Czechoslovakia	15	45	31	40
	China	87	105	148	122
	Japan	42	—	4	9
Canada	23	9	28	82	
TOTALS		1,143	766	879	1,039
II. Pit Prop Material	Germany	285	86	28	81
	Belgium and Luxemburg				
	Luxemburg	576	435	568	417
	France	165	198	239	259
	Great Britain	2,073	1,476	1,494	1,754
	Holland	145	132	180	120
	Czechoslovakia	132	25	1	—
Hungary	114	78	65	64	
TOTALS		3,490	2,430	2,575	2,695
III. Wood for Pulp and Paper	Germany	2,534	1,200	2,472	3,018
	Holland	340	84	259	323
	Sweden	62	42	23	19
	Czechoslovakia	147	56	48	49
	Canada	81	82	33	27
	U.S.	2,934	1,408	1,571	2,109
Norway	—	267	139	81	
TOTALS		6,098	3,139	4,525	5,626

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	1929.	1932.	1933.	1934.	
<i>IV. Other Soft Wood, unsawn</i>	Germany ...	1,623	300	372	986
	Denmark ...	76	30	32	24
	Finland ...	158	241	253	360
	France ...	491	140	136	116
	Great Britain ...	328	327	258	312
	Italy ...	442	221	254	321
	Holland ...	361	120	195	207
	Sweden ...	138	90	93	126
	Switzerland ...	157	166	134	108
	Hungary ...	311	134	145	251
	China ...	244	207	177	140
	Manchuria ...	—	—	161	122
	Japan and Korea	934	587	512	462
	U.S. ...	443	172	213	106
	Norway ...	197	267	?	?
	Czechoslovakia ...	182	32	—	—
	TOTALS ...	6,085	3,934	2,935	3,641
<i>V. Hard Wood, sawn</i>	Germany ...	159	16	17	58
	France ...	17	29	13	9
	Great Britain ...	662	584	594	720
	Holland ...	57	39	43	47
	Austria ...	35	14	6	7
	Sweden ...	—	9	8	15
	Switzerland ...	57	51	35	38
	Czechoslovakia ...	35	27	17	15
	Hungary ...	31	6	3	10
	China ...	34	31	33	34
	Canada ...	167	41	39	47
	U.S. ...	162	29	51	39
	TOTALS ...	1,416	876	859	1,039
<i>VI. Soft Wood, sawn</i>	Germany ...	1,645	583	583	1,039
	Belgium and Luxembourg ...	1,005	669	627	554
	Denmark ...	409	257	391	481
	Finland ...	—	54	125	104
	France ...	1,285	775	726	591
	Great Britain ...	4,009	3,246	4,300	4,843
	Irish Free State	81	74	110	?
	Italy ...	1,194	835	976	931
	Holland ...	1,392	851	1,279	1,140
	Norway ...	190	97	49	67
	Spain ...	591	348	303	320
	Hungary ...	461	221	210	274
	Union of South Africa ...	224	117	182	272
	China ...	428	193	344	311
	Manchuria ...	—	—	74	94
	Japan and Korea	1,064	466	423	396
	Canada ...	172	26	22	43
	U.S. ...	2,008	484	438	345
	Commonwealth of Australia ...	459	162	245	257
	Czechoslovakia ...	139	17	4	1
TOTALS ...	16,756	9,475	11,411	11,263	

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			1929	1932	1933	1934
VII. Wooden Sleepers	Germany ...	237	6	3	20	
	Belgium and Luxemburg ...	93	22	53	70	
	Denmark ...	31	9	4	5	
	France ...	15	11	7	5	
	Great Britain ...	284	171	177	233	
	Holland ...	91	81	30	27	
	Spain ...	114	23	13	4	
	China ...	—	83	133	167	
	Manchuria ...	—	—	141	173	
	Canada ...	57	10	7	10	
	U.S. ...	63	29	31	29	
	Austria ...	41	1	—	—	
	Hungary ...	60	1	—	—	
	New Zealand ...	16	—	—	—	
TOTALS ...			1,102	447	499	743
B. EXPORTS <i>I. Hard Wood,</i> <i>unsawn</i>	Germany ...	86	93	76	57	
	Yugoslavia ...	114	29	30	51	
	Poland ...	197	75	92	102	
	U.S.S.R. ...	95	62	33	2	
	French Equatorial Africa ...	7 ¹	264	303	353	
	French West Africa	83	38	58	61	
TOTALS ...			965	561	592	626
II. Pit Prop <i>Material</i>	Germany ...	373	299	304	217	
	Finland ...	991	946	1,006	1,266	
	France ...	868	256	173	190	
	Latvia ...	384	135	135	116	
	Poland ...	416	104	48	45	
	Portugal ...	70	268	266	376	
	U.S.S.R. ...	521	784	765	901	
	Sweden ...	454	228	276	205	
	Czechoslovakia ...	112	72	49	38	
	TOTALS ...			4,189	3,092	3,022	3,354
III. Wood for Pulp <i>and Paper</i>	Finland ...	740	121	475	800	
	Latvia ...	108	58	180	145	
	Lithuania ...	177	75	124	134	
	Austria ...	179	37	98	199	
	Poland ...	1,172	152	337	352	
	U.S.S.R. ...	1,477	1,304	1,693	1,798	
	Czechoslovakia ...	196	428	434	520	
	Canada ...	2,813	1,149	1,416	2,005	
	Sweden ...	181	5	19	42	
	U.S. ...	114	62	23	26	
TOTALS ...			7,157	3,391	4,799	6,021

		1929	1932	1933	1934
<i>IV. Soft Wood, unsawn</i>	Germany ...	287	204	172	99
	Finland ...	276	61	93	193
	Yugoslavia ...	253	85	122	129
	Austria ...	581	145	209	349
	Poland ...	396	62	150	284
	U.S.S.R. ...	776	664	556	476
	Sweden ...	300	99	141	168
	Czechoslovakia ...	535	210	247	608
	Brazil ...	104	82	84	?
	Canada ...	683	330	435	390
	U.S. ...	566	174	215	322
	France ...	201	44	50	54
	TOTALS ...	4,958	2,160	2,474	3,072
<i>V. Hard Wood, sawn</i>	Yugoslavia ...	324	186	230	236
	Poland ...	154	74	96	116
	Rumania ...	104	62	67	81
	U.S.S.R. ...	12	79	107	187
	Canada ...	176	84	111	133
	U.S. ...	762	400	487	463
TOTALS ...	1,532	885	1,098	1,216	
<i>VI. Soft Wood, sawn</i>	Esthonia ...	169	45	129	218
	Finland ...	3,165	1,881	2,491	2,719
	Yugoslavia ...	722	272	356	414
	Latvia ...	396	213	369	386
	Austria ...	1,044	549	574	576
	Poland ...	830	441	789	785
	Rumania ...	1,007	518	436	601
	U.S.S.R. ...	2,301	2,600	2,799	2,816
	Sweden ...	2,579	1,617	1,892	1,969
	Czechoslovakia ...	256	118	109	238
	Canada ...	2,598	1,039	1,511	1,986
	U.S. ...	3,507	1,182	1,294	1,388
	Norway ...	132	72	48	45
	Australia ...	114	58	34	30
TOTALS ...	18,820	10,578	12,831	14,169	
<i>VII. Wooden Sleepers</i>	Yugoslavia ...	—	17	12	43
	Poland ...	219	54	77	157
	U.S.S.R. ...	177	171	167	86
	U.S. ...	362	76	137	222
TOTALS ...	758	318	393	508	

^a 1930: 390.

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(2) SUMMARY OF FOREIGN TRADE IN TIMBER.

				In 1,000 Metric Tons.			
				1929	1932	1933	1934
A. IMPORTS	I	...	Hard wood, unsawn	1,143	766	879	1,039
	II	...	Pit prop material	3,490	2,430	2,575	2,695
	III	...	Wood for pulp and paper	6,098	3,139	4,525	5,626
	IV	...	Soft wood, unsawn	6,085	3,034	2,935	3,641
	V	...	Hardwood, sawn	1,416	876	859	1,039
	VI	...	Soft wood, sawn	16,756	9,475	11,411	11,263
	VII	...	Wooden sleepers	1,102	447	499	743
TOTALS				36,090	20,167	23,683	26,106
B. EXPORTS	I	...	Hard wood, unsawn	965	561	592	626
	II	...	Pit prop material	4,189	3,092	3,022	3,354
	III	...	Wood for pulp and paper	7,157	3,391	4,799	6,012
	IV	...	Soft wood, unsawn	4,958	2,160	2,474	3,072
	V	...	Hard wood, sawn	1,532	885	1,098	1,216
	VI	...	Soft wood, sawn...	18,820	10,578	12,831	14,169
	VII	...	Wooden sleepers	758	318	393	508
TOTALS				38,379	20,985	25,209	28,966

5.—WOOD PULP, PRODUCTION.

							In 1,000 Metric Tons of Dry Weight.	
							1925	1933
Canada	...	...	...	...	...	...	2,455	2,703
U.S.	...	...	...	...	...	...	3,594	3,898
Asia	...	...	...	...	...	...	422	647
U.S.S.R.	...	...	...	...	...	...	75	472
Rest of Europe	...	...	...	...	...	...	5,890	8,030
Germany	...	...	...	...	...	...	1,650	1,700
Finland	...	...	...	...	...	...	624	1,379
Norway	...	...	...	...	...	...	812	855
Sweden	...	...	...	...	...	...	1,733	2,563
TOTALS	...	...	...	...	...	...	12,610	16,020

6.—OIL SEEDS, ARRANGED ALPHABETICALLY.

(1) COPRA.

(a) *Production, by Countries.*

	In 1,000 Metric Tons.													
	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
Africa	35	38	42	49	50	47	50	51	54	54	57	61	64	
British Col. Africa ...	20				28			26			28		27	
French Africa	1				2			4			3		4	
Colonial Africa	35				50			51			57		64	
British Central America ¹	6	10	8	8	14	12	19	20	18	15	13	15	11	
Asia	968	886	929	958	1,067	1,013	1,248	1,304	1,092	1,104	1,083	1,370	1,363	1,330
British Colonial Asia ...	250				299			311			257		367	
French Asia	7				12			13			5		5	
Oceania	140	144	147	158	169	171	203	205	201	179	172	183	178	
British Colonial Oceania	44				69			87			54		38	
French Oceania	24				14			31			21		30	
WORLD	1,150	1,079	1,126	1,175	1,300	1,243	1,519	1,579	1,365	1,352	1,324	1,629	1,646	1,580
Colonial ²	1,127				1,300			1,579			1,005		1,044	
Non-Colonial	23				—			—			319		572	

¹ Including British Gulana. ² The Philippines counted as colonial, prior to 1930.

(b) *Prices.*

	In Gold Francs per 100 Kg. ; end of Year.												
	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
London, Ceylon copra	73.78	71.80	78.35	69.02	72.43	64.99	60.02	41.99	29.31	27.57	17.24	17.28	20.89 ¹

¹ June.

(2) COTTON SEED.

(a) Production.

	In 1,000 Metric Tons.												
	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
<i>Africa ...</i>	726	853	961	906	745	996	998	977	827	724	1,070	1,031	1,120
Non-Colonial													
<i>Africa ...</i>	611	677	745	711	565	745	790	762	583	455	784	692	760
<i>North America</i>	4,084	5,489	6,486	7,247	5,224	5,838	5,978	5,616	6,896	5,245	5,264	3,885	4,380
<i>Central America</i>	102	117	119	198	104	155	123	91	106	57	120	105	110
Colonial Central													
<i>America ...</i>	2	2	2	4	3	3	4	6	3	1	1	2	
<i>South America ...</i>	390	406	430	399	434	403	513	426	479	410	725	1,014	1,170
<i>Asia¹ ...</i>	3,420	4,036	4,261	3,482	4,062	4,365	3,976	4,301	3,629	4,098	4,508	4,741	4,960
Colonial Asia	66	69	73	76	78	84	85	91	66	75	80	82	105
<i>Europe ...</i>	9	11	12	62	38	69	64	52	57	31	82	104	150
<i>Oceania ...</i>	6	8	5	4	6	4	7	6	8	6	9	7	
Colonial Oceania	1	1	2	1	1	1	1	1	1				
WORLD ...	8,740	10,920	12,274	12,300	10,610	11,820	11,660	11,470	11,950	14,560	11,720	10,820	11,900
Colonial ...	184	248	293				298			345	367	423	467
Non-Colonial ...	8,556	10,672	11,981				11,362			10,215	11,253	10,397	11,433

¹Including U.S.S.R. in Asia.

(b) Prices.

		In Gold Francs per 100 Kg; end of Year.								
		1927	1928	1929	1930	1931	1932	1933	1934	1935
London,										
Sakellaridis		28.63	23.65	19.93	14.07	10.11	12.22	6.72	9.06	9.64

(3) GROUND-NUTS (PEA-NUTS).

(a) Production.

Countries.	In 1,000 Metric Tons.								
	1922	1925	1928	1929	1932	1933	1934	1935	
Africa ...	610	917	1,140	1,270	1,260	1,390	1,380		
Colonial Africa ...	595			1,248	1,230		1,358		
U.S. ...	287	317	388	434	471	411	482	573	
Mexico ...	9	8	8	6	5	5	7		
South America ...	51	79	57	74	90	115	100		
Asia ...	1,797	2,753	3,550	3,110	4,050	4,130	2,720	2,900	
Colonial Asia ¹ ...	310			550	792		493		
Spain ...	21	22	27	26	20	21	21		
Australia... ..			3	4	1	2			
WORLD ...	2,770	4,090	5,170	4,920	5,900	6,070	4,710		
Colonial ¹ ...	905			1,798	2,022		1,851		
Non-Colonial ...	1,865			3,122	3,878		2,859		

¹ After 1925, including Manchuria, after 1930 excluding the Philippines.

(b) Prices.

		In Gold Francs per 100 Kg., End of Years.									
		1923	1925	1928	1929	1930	1931	1932	1933	1934	1935
London, Coromandel,											
shelled ...		56.58	53.66	49.75	44.67	26.99	22.72	22.12	15.40	17.47	20.46

(4) HRMP-SEED.

(a) Production.

Countries.	In 1,000 metric tons.							
	1921	1925	1928	1929	1932	1933	1934	
Europe ...	266	600	603	464	329	269	325	
U.S.S.R. ...	218	550	560	410	280	219	277	
WORLD ...	268	604	605	465	329	270	325	

Without China, which is a very important producer; no reliable statistics exist.

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(b) Prices.

	In Gold Francs per 100 Kg., End of Years.									
	1923	1925	1928	1929	1930	1931	1932	1933	1934	1935
London, Manchurian ...	36.75	50.87	37.22	28.54	20.20	17.52	15.65	13.32	10.80	17.07

(5) LINSSEED.

(a) Production.

Countries.	In 1,000 Metric Tons.							
	1921	1925	1928	1929	1932	1933	1934	1935
Africa ...	16	25	15	13	13	8	15	12
North America ...	308	728	579	457	367	194	159	420
Mexico ...		1	1	1	4	2	2	
South America ...	929	9,160	2,044	1,353	1,614	1,665	2,110	1,367
Asia ...	292	521	357	331	427	430	416	470
Europe ...	378	791	777	964	906	868	845	
U.S.S.R. ...	347	576	600	710	800	740	690	
Oceania ...	3	2	1	5		8	1	
WORLD ...			3,770	3,120	3,330	3,170	3,550	

(b) Prices.

	In Gold Francs per 100 Kg., End of Years.							
	1922	1925	1928	1929	1932	1933	1934	1935
Buenos Aires, 4% extraneous matter...	35.26	36.39	33.65	42.19	11.97	13.24	12.10	12.40

(6) OLIVE OIL, PRODUCTION.

Annual Average.	In 1,000 Quintals.			
	1909-13	1920	1930	1933
Colonial Africa ...	604	868	535	786
U.S. ...	1	1	10	?
Colonial Asia ...	200	422	370	166
Europe ...	5,023	6,712	3,620	6,830
WORLD ...	5,830	8,005	4,540	7,790
Colonial ...	804	1,290	905	952
Non-Colonial ...	5,826	6,715	3,635	6,838

(7) PALM OIL AND PALM-KERNEL OIL, RAW, NET EXPORTATION.

	Annual Average. 1909-13	In 1,000 Quintals.		
		1921	1930	1933
Liberia ...	—	5	?	56
Colonial Africa ...	2,651	2,155	4,628	4,434
Brazil ...	2	35	55	3
Dutch Indies ...	—	—	537	1,267
WORLD ...	2,653	2,195	5,220	5,760
Colonial ...	2,651	2,155	5,165	5,701
Non-Colonial ...	2	40	55	59

(8) RAPE SEED.

(a) Production.

	In 1,000 Metric Tons.							
	1921.	1925.	1928.	1929.	1932.	1933.	1934.	1935.
Asia ¹	970	1,309		925	1,133	1,151	1,066	1,031
Europe ¹	208	174		160	138	92	137	230
WORLD ¹	1,178	1,483		1,085	1,219	1,243	1,204	1,260

¹ Without: China, U.S.S.R. and from 1921 to 1925 Germany; i.e., without nearly all important producers.

(b) Prices.

	In Gold Francs per 100 Kg.; End of Years.									
	1922.	1925.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Hull:										
Toria	39.81	51.18	47	45.91	26.79	21.16	20.18	15.57	17.59	19.67

(9) SESAMUM.

(a) Production.

	In 1,000 Metric Tons.								
	1922.	1925.	1928.	1929.	1932.	1933.	1934.	1935.	
Africa	40	40	51	67	67	57	67		
French Africa	3	3		5	5	7			
British Colonial Africa ¹	5	31		42	46	36			
Italian Africa	?	2		2	—	?			
All Colonial Africa	40	35		63	62	51			
Mexico	5	10	15	11	16	13	14		
Asia	582	476	582	574	614	619	513	600	
British Colonial Asia	4	3		5	1	—	3		
Japan and Colonies ²	9	8		8	14	30	45		
All Colonial Asia	11	11		19	17	31			
Europe		13	41	55	46	46	46		
WORLD	640	539	689	707	743	734	640	720	
Colonial	51	46		82	79	82			
Non-Colonial	589	493		625	664	652			

Note.—Chinese production large but size unknown; in some important colonial countries only exports are recorded; these and Chinese exports are included in the table.

¹ Including the Anglo-Egyptian Sudan. ² Including Manchuria.

(b) Prices.

	In Gold Francs per 100 Kg.; End of Years.								
	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
London:									
Chinese	60.89	55.64	45.40	33.11	24.01	24.69	18.38	20.89	22.56

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(10) SOYA BEANS.

(a) Production.

	In 1,000 Metric Tons.							
	1922.	1925.	1928.	1929.	1932.	1933.	1934.	1935.
Japanese Empire ¹	185	133	5,735	5,754	5,148	6,160	4,122	
WORLD	1,617	5,533	6,117 ²	6,100	5,193	6,787	4,880	

¹ Including Manchuria after 1925. ² Changed statistical method.

(b) Prices.

	In Gold Francs per 100 Kg. ; end of Years.									
	1923.	1925.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Hull, Manchurian ...	30.62	31.33	29	25.44	17.06	12.76	12.14	9.79	9.53	11.12

(11) WHALE OIL, PRODUCTION.

	1920- 21.	1925- 26.	1928- 29.	1929- 30.	1930- 31.	1931- 32.	1932- 33.	1933- 34.	1934- 35.
No. of whales caught ...	12,174	28,193	27,896	37,674	42,874	12,797	28,668	32,167	39,056
Production of oil, in 1,000 tons	79.8	195.2	319.4	474	624.3	155.1	439.7	435.7	454.5

7.—COTTON.

(1) PRODUCTION (EXCLUDING LINTERS AND SEED).

Type of Cotton.	(a) In Million Quintals.			(b) Percentages of World Harvest.		
	1913-14.	1920-21.	1926-27.	1913-14.	1920-21.	1926-27.
American	33.6	31.6	43.4	59	58	65
Indian	9.3	9.5	9.1	16	17	14
Egyptian	3.4	2.7	3.9	6	5	6
ALL SORTS	56.8	54.5	66.5	Others ... 19	20	15
Country of Production.	1927-31.	1934.	1935.	1927-31.	1934.	1935.
U.S.	31.8	20.9	23.1	56	42	43
India	9.5	8.7	10.4	17	17	19
Egypt	3.4	3.5	3.8	6	7	7
WORLD	56.6	50	53.5	U.S.S.R. 5	8	16
				Others ... 16	26 ¹	15 ²

¹ Brazil, 3. ² Brazil, 4.

(2) EXPORTS.

(a) Exports from Certain Countries; Raw Cotton, including Linters.

	In 1,000 Metric Tons.					
	1913.	1925.	1929.	1932.	1934.	1935.
Egypt	313	289	343	301	385	384
India	530	757	713	291	621	571
U.S.	2,069	1,989	1,806	2,179	1,428	1,467
Proportion of Indian to U.S. cotton	1:3.9	1:2.6	1:2.5	1:7.5	1:2.3	1:2.6

(b) Whole Volume of World Exports of Raw Cotton.

	Unit.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Quantities	1,000 tons	3,333	3,040	3,015	3,157	3,278	2,999	3,079
Values ...	RM. million	5,908	3,994	2,581	2,158	2,182	1,958	2,025

(3) CONSUMPTION.

(a) In Million Bales.

[One bale=230 Kg. for American; 180 Kg. for Indian; 340 Kg. for Egyptian; 135 Kg. for other cotton.]

	U.S.-American.			Indian.		Egyptian.			All Types.			
	1913.	1930.	1934.	1913.	1930.	1934.	1913.	1930.	1934.	1913.	1930.	1934.
Germany	1.3	.9	1.1	.2	.3	.2	.1	.08	.1	1.7	1.3	1.5
Belgium ... ..	.2	.2	.1	.1	.2	.1				.3	.5	.3
France ... ..	.8	.7	.7	.1	.2	.2	.1	.1	.2	1	1.2	1.1
U.K.	3.7	1.5	1.5	.05	.2	.2	.4	.3	.4	4.3	2.5	2.5
Italy ... ..	.6	.7	.6	.2	.3	.1		.05	.08	.8	1.1	.9
U.S.S.R. ... ..	.5	.03	.06	.02	.03	.03	.1	.05		2.5	2.1	1.9
Spain ... ..	.3	.3	.3	.03	.1	.06		.03	.05	.4	.4	.4
Czechoslovakia	?	.3	.2	—	.1	.03		.02	.03	?	.5	.3
Europe	8.4	5.5	5.4	.9	1.6	1.1	.8	.7	.9	12.6	10.4	9.9
China	?	.3	.3	?	.5	.2				?	2.3	2.4
India ... ..	.1	.04	.04	2.1	2.2	2.2				2.2	2.4	2.5
Japan ... ..	.4	1.1	1.8	1	1.7	1.2				1.6	3	3.3
Asia ... ..	.5	1.4	2.2	3.1	4.4	3.6		.06	.1	3.8	7.7	8.1
U.S.	5.5	5.8	5.6	.1	.06		.1	.1		5.8	6.1	5.7
Brazil1						.5	.4	.5
America	5.7	6	5.8	.2	.06		.1	.1	.08	6.6	6.9	6.6
WORLD	14.6	13	13.5	4.2	6.1	4.8	.9	.9	1.1	23	25.2	25.1

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(b) In 1,000 Metric Tons.

	U.S.-American.		Indian.		Egyptian.		Totals.	
	1913.	1934.	1913.	1934.	1913.	1934.	1913.	1934.
Germany ...	299	253	36	36	34	34	379	341
Russia ...	115	14	4	5	34	—	411	227
Great Britain	851	345	9	36	136	136	1,020	572
Asia ...	115	506	558	648	—	34	694	1,479
U.S. ...	1,265	1,288	18	11	34	—	1,321	1,303
WORLD ...	3,358	3,075	756	864	306	374	4,856	5,082

(4) STOCKS.

	In 1,000 Metric Tons.											
	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936. ¹
All types ...	1,039	1,276	1,527	1,313	1,344	1,646	1,966	2,087	2,070	1,822	1,411	1,230
American only	740	955	1,188	909	880	1,124	1,470	1,688	1,671	1,332	1,036	812

¹ End of June

(5) COTTON SPINDLES IN SOME IMPORTANT COUNTRIES AND IN THE WORLD.

	In Millions of Spindles; July 31st.						
	1913.	1925.	1929.	1932.	1934.	1935.	
Germany ...	11.2	9.5	11.3	10.2	10.1	10.1	
France ...	7.4	9.4	9.9	10.1	10.2	10.2	
U.K. ...	55.7	57.1	55.9	51.9	45.9	42.7	
Italy ...	4.6	4.8	5.2	5.4	5.5	5.5	
Austria ...	7.9 ¹	1	1	8	8	8	
Russia ...	7.7 ²	7.2	7.5	9.2	9.8	9.8	
Spain ...	2	1.8	1.9	2.1	2.1	2.1	
Czechoslovakia ...	—	3.5	3.7	3.6	3.6	3.6	
Belgium ...	1.5	1.9	2.2	2.2	2.1	2.1	
Europe ...	99.5	101.1	104.3	101.4	96.2	92.9	
China ...	?	3.4	3.6	4.3	4.7	4.8	
India ...	6.1	8.5	8.7	9.3	9.6	9.6	
Japan ...	2.3	5.3	6.3	7.8	9.1	9.9	
Asia ...	8.4 ³	17.1	18.8	21.4	23.4	24.4	
Brazil ...	1.2	2	2.8	2.7	2.7	2.7	
U.S. ...	32.1	37.9	34.8	31.7	30.9	30.1	
America ...	34.9	42	39.6	36.5	35.7	34.8	
WORLD ...	143.5	161.4	164.2	161	156.9	153.8	

¹ Including Czechoslovakia. ² Excluding Poland and Finland. ³ Excluding China.

(5a) COTTON LOOMS, EXCLUDING THOSE DRIVEN BY HAND.

In Thousands.							
Countries.	1913.	1920.	1933.	Countries.	1913.	1930.	1933.
Germany ...	230	224	223	Czechoslovakia	—	125	105
Belgium ...	24	54	55	India ...	94	180	190
France ...	108	200	198	Japan ...	21	188	277
U.K. ...	805	693	588	U.S. ...	696	699	614
Italy ...	140	147	147	Brazil ...	50	78	82
Holland... ..	40	55	56				
Austria	170 ¹	14	13	Europe ...	1,875	1,914	1,847
Hungary		12	13	Asia ...	121	401	515
U.S.S.R. ...		213	159	250	America ...	804	842	766
Spain ...	55	81	67				
				WORLD	2,807	3,159	3,130

Austro-Hungarian Monarchy.

(6) PRICES.

	In RM. per 100 Kg.								
	1913.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	July, 1936.
Egypt, Alexandria, Sakellaridis, futures	175.76	311.31	223	126.85	91.02	86.15	89.89	84	101.21
India, Bombay, Oomra I	85.03	127.57	80.79	65.19	60.52	52.59	51	55.34	54.92 ¹
U.S., New York, middling upland, spot	118.76	177.13	125.74	79.26	59.63	62.41	68.14	65.37	71.94
Cotton yarn, U.K., Manchester, 32' ...	?	?	220	157	122	117	119	115.03	126.29

¹ June.

(7) RUSSIA: PRESENT TERRITORY OF THE U.S.S.R. IN EUROPE AND ASIA

	Unit.	1913.	1920.	1929.	1930.	1931.	1932.	1933.	1934.
Production of cotton ...	1,000 tons	740	10	860	1,110	1,290	1,270	1,315	1,320
Production of cotton piece goods ...	million metres	1,625	5	3,183	2,515	2,541	2,690	2,701	2,711
Imports of raw cotton ...	1,000 tons	196.9	—	115	57.9	53.7	24.3	22.5	22.6
Exports of raw cotton ...	" "	?	?	2.5	10.1	40.2	17.9	.6	11
Exports of cotton piece goods ...	" "	17.2	—	3.2	13.4	15.9	18.8	15.3	20.8

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(8) PRODUCTION OF GINNED COTTON, ANNUAL AVERAGE, 1925-1929.

In 1,000 Q.

French Africa	96	Total, Central and		U.S.S.R.	2,158
Belgian Congo	57	South America ...	2,551	Europe	267
Egypt	3,442			Australia	16
Portuguese Africa ...	25	China ¹	4,465	WORLD	57,700
British colonial Africa ...	403	India	10,243	Colonial	921
Italian Africa	9	Iraq	6	Non-colonial ² ...	56,779
Anglo-Egyptian Sudan...	272	Iran	175		
Union of South Africa ...	25	Siam	7		
Total, Africa	4,330	Dutch Asia	10		
		Br. colonial Asia ...	5		
U.S.	33,104	Korea	298		
British West Indies ...	8	French Asia	3		
Non-colonial Central and South America	2,543	Total, Asia	15,245		

¹ Very incomplete. ² Proportion, 1934 : colonial, 1,100 ; non-colonial, 48,900 (roughly).

8.—MINOR TEXTILE FIBRES.

A.—Flax.

(1) PRODUCTION.

In 1,000 Quintals.

	Annual Average	1934.	1935.		Annual Average	1934.	1935.
	1925-29.				1925-29.		
Egypt	10	14		Rest of Europe	2,260	1,480	
Asia	37	24 ¹		WORLD	5,290	6,800	9,691
U.S.S.R.	2,980	5,300	5,500				

¹ 1933.

(2) QUANTITY IN INTERNATIONAL TRADE.

In 1,000 Metric Tons.

1929.	1930.	1931.	1932.	1933.	1934.	1935.
406	316	265	272	246	280	305

(3) PRICES.

In RM. per 100 Kg.

	1913.	1930.	1931.	1932.	1933.	1934.	1935.	July, 1936.
Great Britain, London, Riga flax, spot ...	66.72	103.29	65.78	65.63	70.12	75.16	94.78	67.59

B.—Hemp.

(1) PRODUCTION IN CERTAIN COUNTRIES.

	In 1,000 Quintals.			
	Annual Averages		1934. ¹	1935. ²
	1925-29. ¹	1929-33. ²		
Chile	23		¹	
Japanese Asia	293	280	258	
Philippines	1,855			
Total, Asia	2,166			
U.S.S.R.	3,189	2,278	1,565	
Rest of Europe	1,950	1,456	2,960	1,453
WORLD	8,180	4,148	3,415	

¹ Including manilla hemp. ² Excluding manilla hemp.

(2) INTERNATIONAL TRADE: EXPORTS OF EUROPEAN HEMP.

In 1,000 Metric Tons.				
1929.	1932.	1933.	1934.	1935.
127	69	78	85	90

(3) PRICES.

	In RM. per 100 Kg.; Annual Averages.						July, 1936.
	1913.	1931.	1932.	1933.	1934.	1935.	
London, Man. J.2, futures	62.82	35.04	26.99	21.75	18.38	23.59	34.47

C.—Silk

(1) PRODUCTION OF COCOONS.

	In 1,000 Metric Tons.						
	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Japan and Korea	398	417	382	355	401	350	329
China ¹	121	92	82	47	54	38	
France	2.5	1.8	1	1	.9	1	.7
Italy	53	53	34	38	35	29	18
Greece	2.5	1.9	1.7	1.9	2.2	2.6	
Turkey	1.8	1.6	1.4	1.2	1.9	1.9	
Bulgaria	2.4	2.3	1.1	1.3	1.4	.3	1.2
Yugoslavia	1.3	1.3	.8	.5	.7	.4	
Syria and Lebanon	3.5	3.7	2.8	1.7	1.8	1.2	.7
U.S.S.R.	15	19	20	10	14	15	18

¹ Exports.

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(2) PRODUCTION OF RAW SILK.

Countries.	In 1,000 Tons.					Countries.	1929.	1932.	1933.	1934.	1935.
	1929.	1932.	1933.	1934.	1935.						
Korea and Japan	43.4	42.8	42.8	47	41	Rest of Europe	5.8	4.5	4.1	3.8	2.4
China ¹ ...	10.2	4.2	4.6	3.5	4.6						
Total, Asia ...	54.3	47.3	48.7	50.8	45.9	WORLD ...	61.4	52.6	54.2	56	49.9
U.S.S.R. ...	1.3	.9	1.2	1	1.5						

¹ Exports.

(3) STOCKS AND PRICES.

	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Stocks, in 1,000 tons ...	7	7.1	8.1	8	9.1	13.7	15.2	15.2	15.7	16.9	13.3	11.2 ³
Prices; Great Britain, London, Japanese silk; RM. per 100 Kg. ¹	...	...	...	...	...	34.97	23.83	15	12.25	7.88	9.57	9.73 ²

¹ 1913: 36-03. ² June. ³ April.

(4) INTERNATIONAL TRADE, EXPORTS.¹

	Unit.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Values ...	RM. million ...	2,327	1,391	1,068	602	467	290	366
Quantities	1,000 metric tons	56	47	52	44	43	41	45

¹ Excluding silk waste.

D.—Jute.

(1) PRODUCTION.

	In 1,000 Quintals.					
	1913.	1920.	Annual Average 1925-29.	1929.	1933.	1934.
Japanese Empire ...			48			
French Indo-China ...			4			
India ...	16,140	10,730	18,688	18,750	14,490	15,480
Nepal ...			113			
WORLD ...			18,853			

(2) EXPORTS FROM INDIA.

	Unit.	1913.	1920.	1929.	1932.	1933.	1934.
Raw jute ...	1,000 tons ...	781	480	820	572	760	765
Jute piece goods ...	Million metres	970	1,237	1,509	925	962	972
Jute bags ...	Million	369	534	522	415	402	423

(3) EXPORTS IN INTERNATIONAL TRADE, ALL COUNTRIES.

	In 1,000 Tons.						
	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Raw jute ...	886	649	692	519	755	750	824

(4) PRICES.

	In RM. per 100 Kg.							July, 1935.
	1913.	1930.	1931.	1932.	1933.	1934.	1935.	
Great Britain, London, nat. I, futures ...	61·17	42·39	32·09	24·40	21·13	19·23	22·17	20·43

9.—WOOL.

(1) PRODUCTION.

	In 1,000 Metric Tons.						
	1928.	1930.	1931.	1932.	1933.	1934.	1935.
Germany ...	15·3	14·7	14·7	14·3	14·2	14·6	16·5
France ...	21·4	26·1	25·4	24·6	24·4	24·3	24·3
Great Britain ...	51·7	50·3	51·3	54	54·4	51·7	49·9
Italy ...	14·5	21·8	20	19·1	18·6	16·3	
Yugoslavia ...	12·3	12·3	12·6	13·4	13·5	13·7	12·5
Rumania ...	25·6	23·8	24·7	25·2	25	26	29·6
Spain ...	38·1	36·3	34·9	35·4	35·4	33·1	29·9
Turkey ...	19·2	16·7	18·9	18·7	17·6	17·1	19·7
U.S.S.R. ...	177·8	137	98·9	64·9	61·7	64	75·8
Europe ...	427·2	388·1	352·7	310·1	318·1	314	328·8
China ¹ ...	41·1	25·7	29·5	13·5	27·8	41	55
India ...	45·4	45·4	45·4	45·5	45·4	45·4	45·4
Iran ...	22·2	20·4	22·2	22·2	22·2	22·2	22·2
Asia ...	130·6	112·9	118·2	100·5	113·6	127·8	143
French Morocco ...	12·7	12·7	10·5	12	12·2	12·8	15
Union of South Africa ...	131·6	137	142·4	149·7	128·8	100·7	113·4
Africa ...	175·2	187·3	180·5	105·5	175·2	146·3	
U.S. ...	174·1	197·1	210·7	199·8	208·6	204	204·6
Argentina ...	157·4	163·7	171·4	176	174·6	170·6	163·3
Brazil ...	15·2	15·7	15·9	15·3	16	16·5	
Chile ...	15·4	12·1	12·9	15·3	12·7	12·7	
Uruguay ...	62·6	75·3	47·2	50·8	43·1	53·1	47·6
America ...	448·3	491	482	481·1	478·3	480·4	468·1
Australia ...	439·2	536·7	584·9	612·4	583·1	587·8	554·3
New Zealand ...	123·4						
WORLD ...	1,744·4	1,716	1,718·3	1,709·6	1,668·3	1,656·3	1,656
Colonial... ..					78·6		
Non-colonial ...					1,589·7		

¹ Exports.

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(2) STOCKS.

	In 1,000 Tons.								
	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936. ^a
Raw wool	?	?	?	?	?	189	223	199	135
Tops ...	23·1	25·5	21·4	22·3	25·8	30·7	28	21 ¹	

¹ October. ^a June.

(3) PRICES.

	RM. per 100 Kg.							
	1913.	1930.	1931.	1932.	1933.	1934.	1935.	July, 1936.
France, Le Havre, Buenos Aires fine, futures ...	157·95	139·22	96·89	76·41	87·43	89·93	85·09	91·30

(3a) WORLD PRODUCTION, 1909-1935.

Annual Average 1909-13.	In 1,000 Metric Tons.						
	1922.	1923.	1924.	1925.	1928.	1933.	1935.
1,463	1,214	1,236	1,296	1,329	1,744	1,669	1,656

(4) WORLD EXPORTS.

	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Quantities, in 1,000 tons							
Raw wool	1,004	918	946	961	1,114	904	1,015
Tops	55	52	56	55	63	53	60
Values, in RM. million							
Raw wool	2,905	1,657	1,190	884	998	1,174	938
Tops	368	255	197	155	177	162	160

(5) EXPORTS, BY COUNTRIES.

	In 1,000 Metric Tons.						
	1931.	1934.	1935.	1931.	1934.	1935.	
Great Britain ...	16	25	36	Chile	10	11	10
Union of S. Africa...	107	87	118	Uruguay	66	24	50
India	18	18	23	Australia	369	367	386
China	15	15	20	New Zealand	96	103	101
Argentina	141	113	136				

(6) PRODUCTION OF WOOLLEN GOODS.

	Year.	Woolen Yarns, in 1,000 tons.	Woolen Cloth, in 1,000 tons.	Id., in million metres
Germany ...	1927	61.2		
	1928	61.7		
	1933	64		
France ...	1913	88	55	
	1926/27	106.7	73.6	
Poland ...	1930	23.2	8.6	
	1933	23.6	6.6	
Sweden ...	1930	10.2	8.4	
	1933	10.8	8.2	
Great Britain ...	1907	202.3		416
	1912	256.3		440
	1924	251.5		398 ¹
	1930	175.1		288 ¹
U.S. ...	1925		151.6	
	1927		145	
	1929		143.4	
U.S.S.R. ...	1931	73.3		122.6
	1934			88.2
Japan ^a ...	1929	29.2		205.6
	1930	25		198.8
	1931	35.2		215.2
	1932	38.5		?
Australia ...	1929/30	3.5		14.5 ^b
	1932/33	4.6		28.1 ^b

¹ Qm. ^a Excluding rugs, carpets and shawls. ^b Rugs, million: 1929, '9; 1930, '9; 1931, 1.2.

10.—ARTIFICIAL SILK (RAYON).

(1) WORLD PRODUCTION.

In Million Lbs.									
1892.	1902.	1912.	1919.	1921.	1929.	1932.	1933.	1934.	1935.
'031	5	20	40	65.5	442.4	489.4	670.7	795.4	1,017.6

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(2) PRODUCTION BY COUNTRIES.

	In 1,000 Metric Tons.						
	1929.	1930.	1931.	1932.	1933.	1934.	1935.
France	16.8	18.1	20	23	25.5	32.1	32
Germany	26.5	26.8	28.1	28.2	32.8	41.6	62
Great Britain	25.8	22.1	24.8	32.9	38.1	42.2	49.1
Italy	32.3	30.1	34.6	32.1	37.2	48.3	
Japan	12.2	16.6	22.3	31.6	44.7	69.2	98.6
U.S.	55.3	49.9	65.5	61.2	94.6	95.4	116.4
WORLD	198.9	192.6	224.6	240.2	349.7	413.8	462

(3) PRICES.

	In RM. per Kg.							
	1913.	1930.	1931.	1932.	1933.	1934.	1935.	July, 1936.
Germany, Krefeld, 120 den. Schuss	12.50	6.74	5.15	5.08	5	5	5	4.85

(4) EXPORTS OF RAYON AND RAYON YARNS.

(a) World Exports.

In 1,000 Metric Tons.						
1929.	1930.	1931.	1932.	1933.	1934.	1935.
61	63	66	64	69	89	88

(b) By Countries.

	In 1,000 Metric Tons.				
	1931.	1932.	1933.	1934.	1935.
Germany	8.5	9.1	9.6	7.4	6.4
Belgium and Luxemburg	2.8	2.5	2.7	3.5	3
France	8.5	8.3	10.4	12.5	8.3
Great Britain	4.1	6.8	7.3	8.1	8.3
Italy	22.5	18.7	19.1	30.1	24.8 ¹
Holland	10.1	8.4	8.3	8.1	7.6
Switzerland	4.6	3.7	4.7	4.5	3.5
U.S. ... ..		.3	.5	1.1	1
Japan		3.3	4	10	13.6

¹ January-September.

D.—ELECTRICAL ENERGY

(1) PRODUCTION.

	In Million Kwh.		
	1925.	Last Year for which Figures Available.	Figure.
	Year.		
Algeria	59	1933	174
Morocco	?	1934	141
Union of South Africa	1,761	1934	3,309
Canada	10,110	1935	23,404
U.S.	90,300 ¹	1935	99,384
Newfoundland	?	1930	795
Mexico H.	1,262 ¹	1935	2,064
Argentine T.	?	1933	1,630
Chile	214	1934	356
Uruguay	84	1932	158
French Indo-China	?	1934	56
Japan	8,172	1934	19,108
Dutch Indies H.	?	1933	231
British Malaya T.	57	1934	228
Philippines	65	1934	115
U.S.S.R.	2,925	1935	25,900
Germany	20,328	1934	30,727
Belgium T.	2,274	1935	4,875
Bulgaria	32	1934	137
Denmark T.	380	1933	751
Spain H.	1,611	1935	3,270
Estonia T.	—	1933	39
Finland	541	1935	2,000
France	10,222	1935	15,600
Greece T.	?	1932	140
Hungary T.	441	1933	729
Irish Free State H.	?	1933	185
Italy	6,545	1935	13,118
Latvia T.	?	1933	100
Norway H.	?	1934	7,143
Holland	1,004	1935	2,207
Poland T.	1,668	1935	2,810
Portugal	?	1933	250
Austria	2,140	1934	2,465
Rumania	243	1933	594
U.K.	11,278	1935	18,944 ²
Saar Territory T.	504	1935	990
Sweden H.	3,673	1935	6,900
Switzerland H.	3,665	1935	5,692
Czechoslovakia T.	1,955	1935	2,970
Turkey T ³	?	1933	89
Yugoslavia	?	1931	392
Australia	1,537	1934	2,910
New Zealand H.	340	1934	916

¹ 1926. ² Only Istanbul. ³ Only public works.
H—only hydro-electric power. T—only thermal-electric power.

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(2) DEVELOPED WATER-POWER OF THE WORLD, JAN. 1ST, 1932.¹

		In 1,000 H.P.	
Canada	6,125	France	2,300
U.S. (incl. Alaska)	14,921	Germany	2,000
North and Central America	21,800	Italy	4,840
Brazil	640	Norway	1,000
Total South America	900	Spain	1,000
America	22,700	Sweden	1,675
Japan	3,500	Switzerland	2,300
Asia	4,000	Europe	18,400
Africa	33	WORLD	46,000
Oceania	370		

¹ From *The World Almanac*, 1933.

E.—TABLE OF MARKS OF INTERNATIONAL WEALTH

(A) UNWEIGHTED MARKS

No. of Country.	Iron Ore.	Iron.	Steel.	Bauxite.	Chromium Ore.	Copper Ore.	Gold Stocks in Central Banks.	Gold Production.	Silver.	Lead Ore.	Manganese Ore.	Nickel Ore.	Quicksilver.	Tin Ore.	Zinc Ore.	Platinum.	Palladium.	Osmium and Iridium.	Other Platinum Metals.	Antimony Ore.	Cadmium.
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1 Australia									1	2					1						1
2 Brazil ...																					
3 Canada ...						1		1	1	1	9				1	1	9	8			
4 China ...																				7	
5 France ...	4	1	1	4	1		2				1										1
6 Germany		2	1													1					
7 G. Britain	1	1	1		2	1	1				1										
8 Holland ...				1											4						
9 India ...											1	1			2						
10 Italy ...				1									2								
11 Japan ...					1																
12 Poland ...																					1
13 Russia ...	2	2	1		2			1			6		1			3					
14 Union of S. Africa ...						1		4										7			
15 U.S. ...	3	3	3	1		2	5	1	1	2	1				3	2		2	2		6

B.—WEIGHTING INDEX FIGURES.

5	4	4	1	1	1	1	10 ¹	10 ¹	1	3	1	2	1	7	2	1	1	1	1	1	1
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¹ See explanation in text.

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No. of Country	Cotton.	Flax.	Hemp.	Silk.	Jute.	Wool.	Rayon.	Electrical Energy.	Total Marks.
I ...						2			11
2 ...	I							I	7
3 ...								I	46
4 ...				I		I			18
5 ...							I	I	38
6 ...		I					I	I	36
7 ...							I	I	48
8 ...									13
9 ...	2				10				62
10 ...				I			I	I	17
11 ...				8			2	I	32
12 ...									5
13 ...	2	8	4			I		I	73
14 ...						I		I	17
15 ...	4					I	3	I	112

B.—WEIGHTING INDEX FIGURES.

	43	3	I	8	3	20	4	10 ¹
--	----	---	---	---	---	----	---	-----------------

¹ Estimated.

C. WEIGHTED MARKS.

No. of Country.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
I ...									I	6						2				
2 ...								10	I	3		18				2	I	9		8
3 ...																				7
4 ...																				
5 ...	20	4	4	4	I	2	20					2								
6 ...		8	4	4																
7 ...	5	4	4	I	2						I					28				
8 ...				I											14					
9 ...					I					3	I									
10 ...					I								2							
11 ...					I															
12 ...																				
13 ...	10	8	4		2			10			6		I			3				
14 ...					I			40												7
15 ...	15	12	12	I			5	50	10	I	6	I			6	2			2	2

STATISTICAL TABLES

No. of Country.	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1 ...	I						3	I									2	I	
2 ...																			
3 ...				2															
4 ...									5						5				
5 ...	I								I						I	4	8	I	3
6 ...				4	I							58			I	I2		I	4
7 ...					9				3			58			I			I	4
8 ...																			I
9 ...		I				7	6		2						I				
10 ...																		I	
11 ...				3														I	
12 ...	I																	I	
13 ...												29	46	3	I			I	
14 ...								3											
15 ...	6		9					2	I	I		87	276		3	2	6	2	

No. of Country.	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
1 ...																			2
2 ...																		I	
3 ...				I		20				I									
4 ...															48	10	I		4
5 ...					2	20				I									4
6 ...			3				2			3	I		9						
7 ...									3	I		13	18		78				4
8 ...										I			9	9	52		10		4
9 ...	2			3		20			3		65								8
10 ...		I				20													
11 ...		I	2							26	18								
12 ...						2				I					24				
13 ...						40	5		6	3			27		48			I	
14 ...																			
15 ...		3		6		20		32	3	2		27	9		24	20	4		4

No. of Country.	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	Total Weight-Metric
1 ...													60			75
2 ...								43							10	58
3 ...															10	149
4 ...	2	I									8		20			48
5 ...							4									123
6 ...										3				4	10	140
7 ...							8							4	10	260
8 ...						4	4							4	10	95
9 ...			6	8	4	2		86				30				260
10 ...							24				8					71
11 ...	16			I							64			4	10	151
12 ...														8	10	28
13 ...				9	12			86	24	4			20		10	422
14 ...													20		10	81
15 ...								172					20	20	10	894

F.—SUPPLEMENTARY TABLES

1.—POTATOES.

(a) PRODUCTION, 1921-1935.

	Annual Average, 1921-25.	In 1,000 Metric Tons.				
		1929.	1932.	1933.	1934.	1935.
North America ...	13,249	11,583	11,565	10,695	12,710	11,490
Europe ...	...	189,733	189,056	185,724	200,229	203,240
Germany ...	35,502	40,072	47,016	44,071	46,781	41,016
France ...	12,284	16,618	16,484	14,822	16,653	14,019
Poland ...	26,535	31,750	29,975	28,330	33,470	32,502
U.S.S.R. ...	...	47,850	45,120	49,250	51,010	69,740
WORLD ...	...	206,000	205,890	202,050	218,150	220,702

(b) PRICES, 1926-1935.

	In Gold Francs per 100 Kg. ; End of Year.									
	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.
Berlin, red ...	7.75	7.98	7.05	5.88	6.42	4.18	3.26	3.80	5.93	5.56
Czechoslovakia, for consumption ...	10.83	5.27	6.51	4.76	4.38	4	4.16	5.08	4.90	5.63

2.—PRODUCTION OF GRAPHITE, ASPHALT AND NATURAL GAS IN THE "HAVE-NOT" COUNTRIES, 1928-1935.

Country.	Commodity.	Unit.	1928.	1929.	1930.	1933.	1934.	1935.
(a) Germany	Graphite ...	Long tons ...	17,188	21,012	24,602	19,443	17,258	21,321
	Asphalt rock	1,000 long tons	156	143	115	43	64	71
(b) Italy ...	Graphite ...	1,000 long tons	6.9	7.4	5.8	3.1	3.8	5.1
	Natural gas ...	Million cubic feet	226	247	307	487	529	436
	„ asphalt	Long tons ...	2,144	904	286	301	313	719
	Asphalt rock	1,000 long tons	238	216	220	49	133	146
	Oil shale ...	Long tons ...	7,271	8,101	10,923	10,875	4,642	12,440
(c) Japan	Natural gas ...	Million cubic feet	970	?	?	1,657	1,664	?
	Graphite ...	Long tons ...	435	303	226	855	954	

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PRINTED IN GREAT BRITAIN BY
MACKAYS LIMITED, CHATHAM.