

The birth rate of Japanese people is generally believed to be extremely high. As a matter of fact, since 1920, when Japan's economy entered the stage of high industrial development, the birth rate has steadily fallen. This exactly coincides with the situation in Britain where the rate began to decline with 1876 as the turning point, when the country attained the full stature of colonial empire. (See Chart.) The decline may be accounted for advance in marriage age, and wide-spread practice of birth control as a result of concentration of population in urban areas and advanced industrialization. The sharp drop in the period immediately after the termination of the war and the subsequent sharp advance caused by the return of numerous repatriates including ex-servicemen may be considered as transient phenomena, and it is believed that the declining trend will reappear before long, with further urbanization and industrialization. (See Tables III and IV.)

Population increase is influenced also by the decline in the death rate through the promotion of public health. Whereas the hard living during the closing days of the war and thereafter drove the death rate upward for a brief period, a comparative stability has been regained recently at a level slightly lower than the pre-war rate. It is expected that improved health measures in the future would bring about a further reduction in the death rate of this country, making up the fall in birth rate to that extent. But there will be the limit to the decline in death rate. It is believed, therefore, that with the diminishing birth rate the rate of natural increase of Japanese population is bound to decline. (See Table III.)

In fact, Japan has already passed the peak of population increase. Some Japanese demographers predict that within a certain period of time (20 to 50 years), the country's population will attain its maximum of 88,000,000 to 112,000,000 and will thereafter either remain stable or begin to decrease. (See Table V.) Japan's population problem is, therefore, not of tomorrow but of to-day. It is the present situation that calls for an immediate solution.

Table I

Changes in Japan's Population

Date	Total Population	Population in Areas where Census was Taken on April 26, 1946	Estimated Population Increase by 1950 in Areas Designated over Each Year Named (in 1,000 and in percentage)
Jan. 29, 1872	34,806,000	(See Note.)	46,812 134%
Jan. 1, 1900	43,847,000	(See Note.)	37,771 86
Oct. 1, 1920	55,963,053	55,153,578	26,464 48
Oct. 1, 1925	59,736,822	58,946,440	22,672 38
Oct. 1, 1930	64,450,005	63,639,731	17,978 28
Oct. 1, 1935	69,254,148	68,427,340	13,191 19
Oct. 1, 1940	73,114,308	72,324,658	9,293 13
May 1, 1946	74,024,000	74,024,000	7,594 10
Oct. 1, 1947	78,627,000	78,627,000	1,991 3
Oct. 1, 1950	81,618,000	81,618,000	0 0

- (Remarks) 1. Figures for the years from 1872 to 1947 are those published by the Statistics Bureau of the Cabinet.
 2. Figures for the years 1920, 1925, 1930, 1935 and 1940 are the census returns. Those for 1872 and 1900 are estimated figures, compiled in the light of the returns of censuses taken after 1920.
 3. Figures for 1946 and 1947 are based on the censuses.
 4. Figures for 1950 are estimation by the Economic Stabilization Board as published in August, 1947 and subject to modification upon the completion of recalculation currently being made.
- (Note) Same figure as for "Total Population" is taken, and the increase in number and in percentage is estimated accordingly.

Table II

Comparison of Population Density in Japan and Other Countries

(Unit: Density Per Square Kilometre)

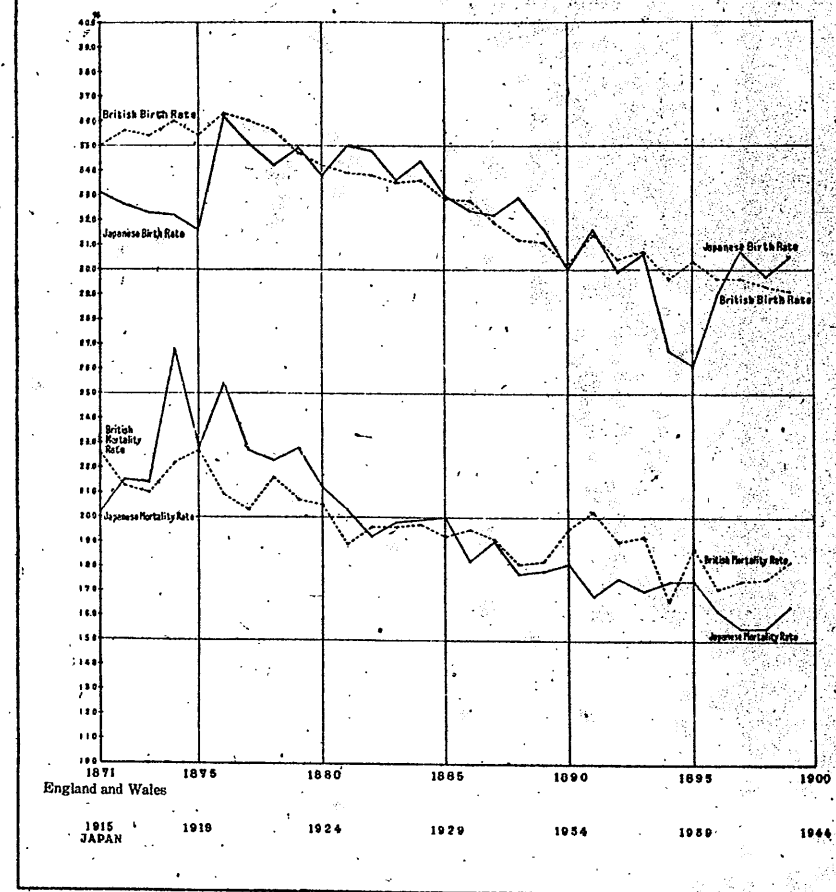
	Density for Total Area	Density for Cultivated Area	Cultivated Area in Percentage of Total Area
Japan	222	1,405	16%
United Kingdom	196	907	22%
Netherlands	268	803	33%
Belgium	271	763	35%
France	76	183	41%
U.S.A.	17	92	18%

- (Remarks)
1. Figures are those compiled by the Institute of Population Problems, Welfare Ministry.
 2. For population of Japan the estimated figure compiled by the Economic Stabilization Board for 1950 is employed, and her cultivated area then is deemed same as in 1930.
 3. Densities for total and cultivated areas in U.S.A. are those for 1940 and 1933 respectively.
 4. Densities for total and cultivated areas in Britain are those for 1930/40 and 1933 respectively.
 5. Figures for both Belgium and Netherlands are those for 1940.
 6. Densities for total and cultivated areas in France are those for 1939 and 1936 respectively.

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DECLINING TRENDS OF BIRTH AND MORTALITY RATES IN JAPAN, AND ENGLAND AND WALES



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Table III

Japanese Population Movement
(Per 1,000)

Year	Census Returns Birth Rate	Death Rate	Increase Rate
1900	31.69	20.31	11.38
1905	30.19	21.09	9.40
1910	33.91	21.07	12.84
1915	33.05	20.09	12.96
1920	36.19	25.41	10.78
1925	34.32	20.27	14.65
1930	32.35	18.17	14.18
1935	31.63	16.78	14.85
1940	28.91	16.23	12.71
1941	30.75	15.52	15.23
1942	29.74	15.53	14.21
1946	Jan.—Mar. 17.50	18.26	(-) 0.66
	Apr.—Jun. 25.23	19.13	6.10
	Jul.—Sep. 30.37	18.36	12.51
	Oct.—Dec. 31.56	15.16	16.40
1947	Jan.—Mar. 29.36	16.53	12.83
	Apr.—Jun. 38.30	15.44	23.16
	Jul.—Sep. 39.96	13.47	26.49
	Oct.—Dec. 34.52	13.60	20.92
1948	Jan.—Mar. 31.24	12.74	18.50
	Apr.—Jun. 37.77	13.31	24.46
1950	(26.50)	(16.42)	(10.08)
	(24.00)	(16.22)	(7.78)

- (Remarks) 1. Figures for the years, 1900 to 1942, are based on the "Vital Statistics" compiled by the Statistics Bureau of the Cabinet.
2. The quarterly figures for 1946, 1947 and 1948 have been computed by the Institute for Population Problems, Welfare Ministry, in terms of annual rates.
3. Figures for 1950 are estimation by the Economic Stabilization Board, as published in August, 1947.

Table IV

Reproduction Rate of Japanese Population

Year	Gross Reproduction Rate	Net Reproduction Rate
1925	2.491	1.548
1930	2.301	1.524
1937	2.117	1.483
1950	Estimate I 1.679	1.175
	Estimate II 1.520	1.064

- (Remarks) 1. The rate of reproduction is calculated by R. R. Kuczynski's method and represents the probability of a mother giving birth to female who in the next generation will become a mother. The gross rate is compiled without deducting mortality, while the net rate is obtained by deducting mortality from the gross rate.
2. Figures for 1925 to 1937 are based on census returns as compiled by the Statistics Bureau of the Cabinet.
3. Figures for 1950 are calculated on the basis of birth and death rates of the estimated population as published in August, 1947, by the Economic Stabilization Board.
4. Source: Institute of Population Problems, Welfare Ministry.

Table V

Year	Future Japanese Population	
	Dr. Teijiro Ueda's Figures	Dr. Tomonaga Nakagawa's Figures
1935	68,108,000	69,254,000
1940	71,846,000	73,939,000
1945	75,261,000	78,986,000
1950	78,355,000	84,336,000
1955	81,144,000	90,107,000
1960	83,582,000	95,356,000
1965	85,776,000	101,300,000
1970	87,723,000	106,558,000
1985	—	113,354,000
1995	—	122,328,000
2005	—	122,187,000
2015	—	118,493,000
2025	—	111,777,000

- (Remarks) 1. Dr. Ueda's figures are quoted from his work, "Japan's Population Policy," published in 1937.
2. Dr. Nakagawa's figures are quoted from the chapter on "Future Population on the Basis of Proposition 11" of an article entitled "On the Estimation of Future Population," which appeared in the May, 1940 number of the periodical "Studies in Population Problems."

2. Characteristics of Post-War Population Increase

As stated above, the Japanese population has registered a marked increase since the termination of the war. This increase is due to two factors: firstly, the repatriation of overseas Japanese residents amounting to 5,842,000 persons (as of April 29, 1948) and secondly, the temporary advances in birth rate after the war's end, coupled with a relatively rapid decline in death rate.

Now what will be the effects of a population increase of this kind? In the first place, let us study the trend of increase according to sex. It is estimated by the Economic Stabilization Board that during 4 years and 5 months from April 26, 1946 to October 1, 1950, the increase in the male population will account for 64 per cent, nearly twice that of female population. Of the male increase, repatriates from abroad represent about 60 per cent, while female repatriates account for some 30 per cent of the increase in female population.

In the second place, breakdown of the estimated increase by age groups will show: 14 year olds and under account for 12.8 per cent; 15 to 59 year olds who belong to the generative age account for 81 per cent; and 60 or more year olds form 6 per cent. Namely, the increase in the generative age group occupies an overwhelming proportion. As regards the changes in each age group, a slight increase is shown each year in the aged group, while the youngest group undergoes a gradual decrease, reflecting the decline in the birth rate. On the other hand, in the generative age group accounting for 81 per cent of the total increase, the increase in male population ranging from 20 to 39 years represents some 40 per cent of the total increase. This is largely due to the fact that repatriates from abroad mainly belong to this age group. Thus, apart from the change in the current birth rate, an annual increase of some 600,000 to 700,000 in the generative age group may be expected for ten years to come, owing to the repatriation of overseas Japanese and the maturing of the now youngest age group. (See Tables VI and VII.)

Table VI

Estimated Data of Population Classified by Sex and Age Group as of
October 1, 1947 (in 1,000)

	Classification	Total	Male	Female
Population in Each Group	Total	77,564	37,964	39,601
	0-14 Years old	27,042	13,678	13,364
	15-59 Years old	41,609	21,636	22,924
	60 or more Years old	5,913	2,600	3,313
Percentages	Total	100.0%	48.9%	51.1%
	0-14 Years old	34.9%	17.6%	17.2%
	15-59 Years old	57.5%	27.9%	29.6%
	60 or more Years old	7.6%	3.4%	4.3%

(Remarks) Figures are derived from "Data Relative to Recent Trend of Population" of the Institute of Population Problems, Welfare Ministry, and are compiled by deducting foreign nationals from the adjusted total published by the Economic Stabilization Board.

Table VII

Estimated Data of Population Increase between 1946 and 1950
Classified by Sex and Age Group (in 1,000)

	Classification	Total	0-14 Years old	15-59 Years old	60 or more Years old
Total	Apr. 26, 1946	72,376	26,134	40,920	5,771
	Oct. 1, 1950	80,922	27,212	47,475	6,236
	Increase	8,546	1,028	6,555	465
	Percent of Total Increase	100%	13%	81%	6%
Male	Apr. 26, 1946	34,749	13,234	18,986	2,529
	Oct. 1, 1950	39,938	13,782	23,405	2,751
	Increase	5,189	548	4,419	222
	Percent of Total Increase	100%	7%	55%	2%
Female	Apr. 26, 1946	38,126	12,950	21,934	3,242
	Oct. 1, 1950	40,985	13,431	24,970	3,484
	Increase	2,859	481	2,136	242
	Percent of Total Increase	100%	6%	27%	3%

(Remarks) Figures are based on the data of estimated population, as published by the Economic Stabilization Board in August, 1947.

III. JAPAN'S ECONOMIC RECONSTRUCTION AND THE LIMITS OF HER FEEDING CAPACITY.

1. Absorption of Increased Population in Japan.

From the early years of Meiji to 1930, during which the population of this country increased from 33,000,000 to 64,450,000, it was only through the progress of industrial technique and accumulation of capital that not only the increased population could be fed, but also the standards of living could be raised gradually. If we compare the returns of the censuses taken in 1920 and 1930, it will be seen that the agricultural population remained almost unchanged, while the total population increase (by 8 million during the decade) was wholly absorbed by occupations other than agriculture. In order to make this possible, it was necessary to import raw materials from abroad to eke out the slender domestic resources as well as to develop a large scale export industry and overseas markets. (See Table VIII.)

The depression of 1929-1930 diminished the scale of economy to such an extent that it created a large amount of surplus population. This census of 1930 revealed the existence of some 300,000 unemployed population, in addition to which it was estimated some 2,000,000 were laid off. The surplus population did not show directly in the unemployment statistics, but most of those who lost their work sought refuge in agriculture as well as small and medium scale commerce and industry.

This meant that both rural and urban areas were loaded with an excess supply of labor, bringing down the general wage level and standard of living. After the war's end, economic chaos and decline of industry gave rise to a large scale exodus of urban population to farming areas. Moreover, sizable number of repatriates are making their way into agricultural communities. Meanwhile, some portion of the surplus continues to remain in cities, inflating urban employment (Note). (See Table IX.)

(Note) "The creation of a labor market in Japan was marked by the formation of a reservoir of potential stagnant labor drawn largely from a dispossessed peasantry whose absorption into industries was retarded by the slower pace in the development of large-scale industry. That such absorption took place is not denied, but the extent to which a surplus population was left stagnating in the countryside and in the cities is an important factor limiting the standard of living and the wage level of Japanese labor." ("Japan's Emergence as a Modern State" by E. Herbert Norman; Page 169)

The development of overseas labor markets toward the close of the 19th century served to solve the population problems in some of the European countries. In the case of Japan, the number of overseas residents, which amounted to only 230,000 around 1905, gradually increased. During the thirties the Government took active measures to encourage emigration for the solution of her population problem, but, on account of restrictions imposed on Japanese immigration by sparsely-populated countries, the result fell far short of expectations.

As shown in Table X, the principal areas where the Japanese immigrants have settled in the Western Hemisphere are the continental U.S., Hawaii, Canada, Brazil and Peru; while in Asia they are China, Manchuria, the Philippines, British Malaya and Dutch East Indies. Under the Gentleman's Agreement between the United States and Japan of 1908, and also the so-called Lemieux Agreement of the same year, Japanese immigration into the continental United States, Hawaii and Canada was limited to the extreme. In particular, after the enforcement of the Immigration Act of the United States in 1924, the continental United States and Hawaii have been entirely closed to Japanese immigrants. Therefore, any increase or decrease in the number of Japanese in these areas (including Canada), since then is accounted for by natural growth, and transmigration or repatriation. A marked increase in the number of Japanese immigrants was registered in Brazil, due largely to the subsidies which were given by the San Paulo State Government from 1908 to 1922. The Japanese Government also gave subsidies and provided preparatory training to the prospective emigrants, so as to adapt them beforehand to the manners and customs of a receiving country.

The sudden increase in the number of Japanese residents in China and Manchuria in 1940 is attributable to the political developments on the continent during the preceding years. (See Table X.)

Table VIII

Changes in Distribution of Population to Respective Industries

Classification	Population			Percentage			Increase or Decrease in comparison with 1920	
	1920	1930	1940	1920	1930	1940	1930	1940
Total Population	55,963,053	64,450,665	71,330,613				8,486,952	15,417,590
Employed Population	27,260,784	29,619,610	32,422,513	100.0%	100.0%	100.0%	2,358,826	5,221,732
Agriculture	14,236,592	14,131,925	13,841,576	52.4	47.7	42.6	(-)155,567	(-)145,016
Aquatic Industry	536,604	568,433	542,958	2.0	1.9	1.7	31,832	6,354
Mining Industry	447,717	315,476	197,755	1.6	1.1	1.3	(-)132,241	150,038
Manufacturing Industry	5,138,755	5,875,991	8,132,314	18.9	17.8	25.0	737,237	2,993,559
Commerce	3,661,649	4,905,655	4,881,533	13.4	16.6	15.0	1,244,006	1,219,889
Transportation & Communications	951,863	1,045,116	1,364,506	3.5	3.2	4.2	(-) 6,747	412,533
Public Service & Profession	1,516,755	2,005,192	2,101,803	5.6	6.8	6.8	488,427	678,123
Household Work	662,072	802,167	708,945	2.4	2.7	2.2	140,095	46,873
Others	52,764	70,582	218,141	0.2	0.2	0.7	11,818	159,377
Unemployed Population	23,702,239	34,830,955	38,898,127				6,128,066	10,195,858

(Remarks) Figures are derived from "Data Relative to Recent Trends of Population" of the Demographical Research Institute of the Welfare Ministry.

Figures do not include men in military service.

Table IX

Increase in Population of Principal Prefectures (in 1,000)

Prefecture	Population as of			Increase in Population of Principal Prefectures over 1920 in Number and Percentage		Percent of Total Increase	
	1920	1930	1940	1930	1940	1930	1940
Hokkaido	2,359	2,812	3,273	453 (19.2)	914 (38.7)	5.3%	5.3%
Tokyo	3,699	5,409	7,355	1,710 (46.2)	3,656 (98.8)	20.1	21.3
Kanagawa	1,323	1,620	2,180	297 (22.1)	856 (65.5)	3.5	5.0
Aichi	2,090	2,567	3,167	477 (22.8)	1,077 (51.5)	5.6	6.2
Kyoto	1,287	1,553	1,730	266 (21.4)	443 (34.4)	3.1	2.6
Osaka	2,588	3,540	4,793	952 (36.8)	2,205 (85.2)	11.2	12.9
Hyogo	2,302	2,646	3,221	344 (14.9)	919 (39.9)	4.1	5.4
Fukuoka	2,188	2,527	3,094	339 (15.5)	906 (41.4)	4.0	5.3
Miyazaki	651	760	840	109 (16.7)	189 (29.0)	1.3	1.1
Whole country	55,963	64,450	73,114	8,487 (15.2)	17,151 (30.6)	100.0	100.0

(Remarks) 1. Figures are based on census returns compiled by the Statistics Bureau of the Cabinet.
2. The Prefectures enumerated are those having populations above the national average. Increases in the populations of Hokkaido and Miyazaki Prefecture may be accounted for by the progress of land reclamation in these areas. Some of the other Prefectures include such cities and towns as developed modern manufacturing and mining industries.

Table X

Statistics of Japanese Emigrants

(1) Japanese Residents in Foreign Countries

	Far Eastern Territory of U.S.S.R.	China	Manchuria	Hongkong (incl. Amoy)	Siam	French Indo-China	British Malaya (incl. British North Borneo)	British India and Burma	Dutch East Indies	Philippines	Australia and Oceania	Continental U.S.A.	Hawaii	Canada
1904		8,550		2,170	109		1,635	384		2,652	3,469	48,354	65,008	3,838
1909	3,600	16,607	31,427	856	185		2,611	792	780	2,156	3,960	76,709	65,760	8,850
1916	5,148	27,770	58,852	1,478	224	339	7,103	1,021	3,956	6,263	6,041	100,955	96,060	13,279
1920	6,288	54,544	81,385	1,780	261	289	8,278	1,368	3,559	9,339	5,548	125,285	108,109	17,688
1925	721	47,613	97,179	1,561	293	287	6,950	1,219	4,195	8,995	3,883	133,080	125,764	19,670
1930	2,970	54,391	112,137	2,219	336	346	7,427	1,916	6,325	19,572	3,948	99,552	120,908	20,835
1935	2,383	56,106	322,394	1,402	412	239	7,357	1,507	6,598	25,528	3,072	112,418	151,285	20,183
1940	840	365,412	819,614	702	587	206	8,839	1,134	6,334	28,793	2,422	94,731	91,764	22,065

	Mexico	El Salvador	Cuba	Panama	Venezuela	Colombia	Peru	Bolivia	Chile	Brazil	Argentina	Paraguay	Uruguay	Others	Sub-Total
1904	456						1,486			5	5			463	133,591
1909	2,465						4,560		145	605	27			1,231	233,189
1916	2,737						6,767	5	324	16,555	750	6	8	2,964	349,287
1920	2,284		191	170			5,910	815	429	33,456	2,027	7	4	1,398	470,401
1925	3,632		636	241			10,969	657	556	49,400	2,609	6	6	3,498	523,748
1930	5,832		787	228	12	122	20,535	551	610	116,562	4,027	8	36	3,521	605,471
1935	5,470	8	771	328	13	174	22,570	369	658	192,823	5,691	20	65	3,145	937,970
1940	5,030	7	658	355	39	293	21,200	641	595	202,514	7,095	674	86	3,807	1,636,230

(2) Japanese Residents in Former Japanese Possessions

	Saghalien	Korea	Formosa	South Seas Islands	Kwantung Territory	Sub Total
1906	12,361		71,010		16,613	100,014
1910	31,017	171,533	88,018		62,333	362,944
1916	66,270	320,938	142,472		51,129	580,799
1920	165,899	561,384	166,621	3,671	137,911	975,484
1925	189,036	421,326	139,670	7,430	184,001	841,067
1930	295,196	501,867	222,229	19,330	233,158	1,271,772
1935	331,942	583,423	259,793	51,871	381,923	1,627,952
1940	415,381	650,101	316,963	84,178	502,827	1,769,450

(Remarks) In the absence of a figure for 1934, the 1930 figure is given above instead.

(3) Total

1906	2,377,371(1)
1910	2,771,172(2)
1916	3,940,073
1920	4,315,335
1925	4,933,314
1930	4,851,623
1935	2,559,073
1940	3,331,273

(Remarks) (1) Figures for emigration to foreign countries are those for the year 1904, while emigration to former Japanese possessions is given in figures of 1906.
(2) Figures for emigration to foreign countries are those for the year 1900, while those showing emigration to former Japanese possessions are figures of 1910.

2. Economic Reconstruction and Limits of Employment.

According to the returns of the national census taken on October 1st, 1947, the unemployed numbered only 670,000. Comparing these returns with those of October 1st, 1940, it will be seen that, while the total population had registered an increase of some 6,100,000 during the interval, the percentage of the employed against total population declined from 44.78 to 43.02 per cent only. In spite of a marked fall in the level of production, the ratio between the unemployed and the employed remained almost unaltered.

Next let us examine the distribution of the employed population among various branches of industry. Notwithstanding the reduction of agricultural production in 1947, estimated at about 90 per cent of 1940, the farm population showed an increase of 23 per cent. Also in the mining and manufacturing industries, despite the sharp decrease in production to about 20 per cent, the employment was maintained at as high as 90 per cent. Taking the productivity during the years 1935 to 1937 as 100, the indices as of October, 1947 were only 23 in mining industry and 33 in manufacturing industry respectively, on the basis of the average production per person employed. The excessive absorption of population by agriculture as well as the presence of redundant labor in mining and manufacturing industries in the post-war period, as mentioned above, have caused a sharp decline in the productivity of labor throughout all the industrial branches, as compared with the pre-war level, resulting inevitably in the lowering of real income and standards of living, which stand at 54 per cent of 1930-34 level. (See Table XI.)

If those in the ranks of latent unemployment were added to statistical figure, the number of the jobless would, it is said, reach 4,000,000. (cf. Draft 1 of Economic Reconstruction Plan dated May 17th, 1948, of the Economic Stabilization Board.) And it is estimated that if the inflated employment in 1947 has been trimmed down on the basis of a real wage corresponding to that for 1930-34, it would have thrown out of work as many as 15,300,000.

With increased production in the course of reconstruction of Japan's economy, the situation is expected to turn gradually for the better. But

according to the Economic Rehabilitation Plan announced by the Economic Stabilization Board in May, 1948, even if in 1952 the mining and manufacturing production will have been raised to more than three times over 1947 (122.4 per cent of 1930-34 level), the export to more than nine times (95 per cent of 1930-34 level), the import to more than three times (82 per cent of 1930-34 level), and even if the productivity of labor is increased to twice the level of 1947 (90 per cent of 1930-34 level), the living standard of the people will still remain at 90 per cent of the 1930-34 level, with an estimated jobless population approaching 2,000,000. (See Tables XII and XIII.) The increased production as mentioned above can only be attained provided that the difficulties pertaining to transportation, power supply and currency inflation will have been removed at the start of the first year of the plan and that overseas market conditions will have gradually turned for the better, enabling both import and export to expand. But it is feared that the attainment of these objectives is no easy matter. The presence of a surplus of population, during the period of economic reconstruction of this country, handicaps accumulation of capital, and accordingly retards economic recovery. Measures that can conceivably be taken for the solution of this problem would be: (1) to raise the level of industrialization, accompanied, as stated in the foregoing, with a wider practice of birth control; and (2) to encourage emigration abroad. The former question will be dealt with in detail at another opportunity, while as to the latter question it may be said, as has been pointed out by Professor W. Thompson of Miami University, that in a country like Japan where the rate of population increase has shown a sure sign of lowering, the emigration will most effectively contribute to relieving the pressure of over-population and consequently checking the fall in living standard (Note).

(Note) "The birth rate in Japan is declining faster than the death rate, and the chance is that her population will grow less and less rapidly during the next few decades. This decline in the birth rate is likely to be accelerated by any considerable migration which would lead to improvement in the living. Only after a country has reduced its death rate to reasonable low limits so that migration does not of itself lead to further reduction and after it has begun to control its birth rate can migration on a large scale furnish any permanent relief to population pressure. There is reason to believe that Japan has reached or soon will reach this condition." ("Population and Peace in the Pacific" by Warren S. Thompson; Page 327)

Table XI

Statistics of Employment Based on the Census Returns of
1940 and 1947 (in 1,000)

Classification	Oct. 1, 1940	Oct. 1, 1947	Increase	Increase in Percentage
Total Population	72,510	78,627	6,087	8%
Total Employed Population	(Total Population 32,483)	33,881	1,398	4
Agriculture	13,549	16,622	3,073	23
Forestry	292	480	188	64
Aquatic Industry	513	719	167	31
Mining	563	667	69	12
Building Industry	955	1,329	365	38
Manufacturing Industry	7,973	5,722	(-) 1,311	(-) 19
Public Utilities	143	191	48	34
Commerce	3,598	2,190	(-) 1,318	(-) 38
Finance	238	240	2	1
Transportation & Communications	1,364	1,567	143	10
Service Trade	1,845	838	(-) 1,007	(-) 55
Profession	1,555	1,127	(-) 428	(-) 28
Public Service & Organization Management	639	1,271	632	99
Others	218	444	226	104
Unemployed Population	—	672	672	—
Non-employment Population	(Population not for Employment)	40,957	27,251	—
9-Year Olds and Under	—	16,823	4,017	10

(Remarks) 1. Classified figures for the year 1947 are unadjusted values, the total of which does not agree with the total employed population.
2. Comparison given above is approximate, because of the differences in the definitions of categories between 1940 and 1947.

Table XII

Comparison of Population for Employment and Employed Population
(in 1,000)

Classification	1948	1950	1952
Population for Employment	36,395	37,871	38,978
Employed Population	32,584	35,004	36,983
Population Employed in Each Branch			
Agriculture	16,216	16,613	16,863
Aquatic Industry	661	707	742
Mining Industry	503	512	519
Manufacturing Industry	4,279	5,565	6,386
Civil Engineering	1,538	1,887	2,076
Transportation & Communications	1,633	1,696	1,758
Commerce	4,576	4,840	5,449
Public Service & Professions	2,325	2,329	2,333
Others	853	855	857
Non-Employment Population	43,595	43,747	43,994
Unemployed Population	3,811	2,867	1,995

(Remarks) Figures are based on the Draft I of Economic Reconstruction Plan, published in May, 1948, by the Economic Stabilization Board.

Table XIII

Estimated Annual Personal Expenditures
(1930-34 Average Prices)

Classification	1948	1949	1950	1951	1952
Personal Expenditures (in million Yen)	6,835	7,506	8,313	8,941	9,628
Index	79	87	97	104	112
Per Capita Personal Expenditures (in Yen)	85.4	92.8	101.8	108.6	116.0
Index	69	72	79	84	90

(Remarks) 1. Figures are based on Draft I of Economic Reconstruction Plan, published by the Economic Stabilization Board.
2. 1930-31 level is taken as 100 for the indices in the table.

JAPANESE WHALING

FOREIGN OFFICE
JAPANESE GOVERNMENT

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CHAPTER I IMPORTANCE OF WHALING TO JAPAN

I. Importance as Source of Protein

Coastal whaling with stations on land has long been operated as an old industry in Japan chiefly for the meat. On the other hand the main object of the whaling in the Antarctic Ocean in the pre-war period, which Japan first took up in 1934, was the production of whale oil as was the case with other countries. However, since the war's end, because of the drastic shortage of livestock as well as the stoppage of the importation of Manchurian soya beans, Antarctic whaling has come to assume greater importance than coastal whaling as a source of protein food. This is clearly shown in the 1947 announcement of the Public Information Office of the Allied Headquarters (Note 1), which has granted Japan for the past three successive seasons a special permission to send whaling fleets to the Antarctic waters. In 1946 Japan's output of whale meat amounted to as much as 42% of the country's meat supply, and 53% of that whale meat was derived from whales caught in the Antarctic Ocean.

Output of Meats in 1946

Description of meat		Output (metric tons)
Whale meat	Coastal whaling	18,701
	The Bonin Is. whaling	879
	The Antarctic whaling	22,166
	Total	41,746
Livestocks	Beef	43,459
	Mutton	449
	Pork	2,322
	Horse Flesh	9,589
	Others	28
	Total	56,347
Grand Total		98,093

(Note 1)

The Special Release, Public Information Office, G.H.Q., June 22, 1947

A second SCAP-controlled and Japanese-managed Antarctic whaling expedition has been authorized by the Supreme Commander pursuant to instructions from the United States Government.

(1)

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It is true that the output of whale meat is comparatively small as compared with the total output of the other fishery. But the importance of whale meat, especially that of the Antarctic whales, does not lie so much in the absolute quantity as in other considerations that (1) it arrives in bulk and its distribution to large consumption centers can be readily adjusted to the rationing plan; and hence, it can correct local disequilibrium in the intake of protein food; (2) the price is modest; and (3) the utilization rate is much higher than fishes (Note 2).

II. Importance as Source of Fats and Oils

Even in the pre-war period Japan imported an enormous volume of oil materials from her overseas territories such as Korea, Saghalien, the South Sea Islands and Formosa as well as from Manchuria and China proper. After the war the supply from those areas has ceased. Even if such importation should be resumed in future, it would take the form of foreign trade requiring Japan to dip into her foreign exchange funds. Thus Japan's dependence on whale oil is bound to increase.

According to the statistics for 1946, the output of whale oils almost matched the total output of fish oils and vegetable oils, and the oils from

The reasons for this action are obvious. The last whaling expedition produced for Japanese consumption some 21,000 metric tons of needed protein foods which helped make up the food deficit in Japan. It also produced for the world market, which is in short supply, over 12,000 tons of whale oil and 11 tons of Vitamin A and D oil. It is expected that the second expedition will produce an equivalent amount of whale meat for consumption in Japan and an equivalent amount of needed oils for allocation to other parts of the world by the International Emergency Food Council.

There is a continuing food shortage in Japan. The burden of supplying the deficit imports of food continues to fall upon the United States, which is also endeavoring to meet demands for food from many other countries. With their whaling fleets and trained crews the Japanese possess a means of providing additional food for themselves and of helping to meet a world deficit in oils. These utilities at this moment of need must be used.

(Note 2)

The whale meat from the catch of the 1946 Antarctic expedition was distributed in 45 prefectures (including Tokyo Metropolis) to the amount of 17,455 metric tons (the planned amount of distribution, 16,710 metric tons). The per capita rations were made larger for the "Big Six" cities (Tokyo, Osaka, Kobe, Yokohama, Kyoto, Nagoya), the largest being 1 kilogram for Tokyo. Generally speaking, the districts in Western Japan, and Northern Kyushu were allowed higher rations as compared with the Eastern Japan, where fish happened to be then available in abundance with the herring season at its height. Besides, the whale meat was distributed as bonus for miners and other workers in vital industries.

(2)

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the Antarctic whale amounted to 92% of the total output of whale oil (Note 3).

Oil production in 1946		
	Description	Output (metric tons)
Whale oil	Coastal whaling	972
	Bonin Is. whaling	20
	Antarctic whaling	12,260
	Total	13,252
Other oils	Fish	4,020
	Vegetable	9,290
	Total	13,310
Grand Total		26,562

Of 12,200 metric tons of whale oil which was produced from the catches in the first expedition in the Antarctic Ocean, about 7,200 metric tons was exported to European countries, the remainder amounting to some 5,000 metric tons being allocated to domestic consumption, while the output of 17,800 metric tons from the second expedition was all distributed at home.

III. Importance as Source of Foreign Exchange Funds

In the pre-war period Japan exported a greater part of oil manufactured from Antarctic whales to the Netherlands, Germany, China and other countries, earning thereby a substantial amount of foreign exchange. The importance of the Antarctic whaling in the future cannot be minimized as viewed from this angle. Of the 12,200 metric tons of whale oil which was obtained in the first Antarctic expedition, 7,200 tons was exported, which fetched \$2,300,000. (Japan imported copra from the South Seas with this fund.)

As whale oil produced by the second expedition was all used at home, it did not directly earn foreign exchange. However, it provided Japan with

(Note 3)

The SCAP summation of non-military activities in Japan (No. 21, June 1947)

The volume of oils produced by the 1946 Antarctic whaling expedition was about 75 per cent greater than the total of fish and whale oils produced in home waters since August 1945.

the corresponding volume of food which would otherwise have been imported, rendering it possible to devote so much foreign exchange to the import of other necessities. In this sense, whale oil and other products produced from the second expedition may be said to have fetched more than \$20,000,000 (Note 4).

CHAPTER II JAPANESE WHALING IN THE PRE-WAR PERIOD

I. History

Japanese whaling before the war consisted of the coastal whaling operated with land stations and the whaling operated by factory ships on the open seas, the latter being subdivided into the Antarctic whaling and the Northern Pacific whaling. In contrast with the coastal whaling which has a very long history, pelagic whaling is of recent origin, dating back to ten odd years. In the case of the Northern Pacific Ocean, trial expeditions were dispatched there only twice immediately before the Pacific War.

(A) Coastal whaling

In Japan where no rich livestock resources are available, whale meat seems to have been used for food from fairly early times. Since the beginning of the 17th Century (Keicho era) Japanese whaling came to be conducted in a systematic way, which reached its peak in the first half of the 19th Century with 39 whaling bases. But American and Russian modernized whaling boats penetrated into the adjacent seas of Japan and gradually outyied the primitive Japanese whaling, until it was completely replaced by the Norwegian type of whaling which was first introduced into this country in 1899.

(Note 4)

In this connection, Mr. C. M. Adams, Fishery Division, Natural Resources Section, G.H.Q. stated as follows in the press conference on April 16, 1948:

The value of the products from a monetary point of view is very large. The whale oil alone is estimated to have a value of \$7,069,587, based on latest reports of world trade in this commodity. The whale meat and blubber is estimated to have a minimum value of \$12,072,243 based only on the caloric content. This was determined by estimating the value of the food it would be necessary to import to replace this meat.

As the animal protein was not taken into consideration the actual value would be much greater than this amount. Whale liver oil, bone meal, and other products obtained from the expedition has an estimated value of \$1,099,734. Therefore, a conservative estimate of the monetary value of whale products produced by this expedition amounts to \$20,241,564.

After the Russo-Japanese War, the Norwegian method of whaling made rapid progress, and in 1908 there were 12 companies operating 28 whaling boats, with more to be built. Under such circumstances, in 1909 the principal whaling companies were amalgamated into the Oriental Whaling Company Ltd. (Toyo Hogei Kabushiki Kaisha) to check excessive competition and prevent over-hunting. The government, on their part, deemed it necessary to exercise control in one way or another for the protection of whales as well as for the sound development of the industry. Thus on October 20, 1909, the Regulation on Whaling was promulgated under which the number of catcher boats was limited to 30.

Thereafter the business made steady progress, and before the outbreak of the War four companies in all were in operation with their stations in Saghalien and Hokkaido in the north and in Formosa in the south as well as in Korea and Kwantung Leased Territory, their catches aggregating annually around 2,000 whales. The whales thus taken, after being brought to the stations, were processed chiefly for food. But it should be noted that almost all parts of the blubber, bones, baleens, internal organs, etc. were also utilized for diverse purposes.

(B) The Antarctic whaling

Whaling by factory ship was first contemplated in Japan in 1929. But that year did not witness its operation owing to the business depression then prevailing, although a factory ship was purchased from England. It was in 1934 that Japan sent her first whaling fleet to the Antarctic Ocean. A factory ship named "Antarctic" and catcher boats purchased from Norway, on their way to Japan, were dispatched directly to the Antarctic Ocean for a trial operation. It was already ten years after the most modern factory ships of other countries equipped with a slip-way had made their appearance in the Antarctic Ocean. This trial expedition showed that the enterprise would pay, though the catch was insignificant as compared with the present day level. So in the following year (1935) the same factory ship (renamed Toman-maru) and five catcher boats were dispatched. Two fleets were dispatched in 1936, 4 in 1937 and 6 in 1938 and thereafter, which gave Japan 100,000 tons of oil and other products annually until 1941 when the War broke out.

(C) The Northern Pacific whaling

Though the Northern Pacific Ocean (including the Bering Sea and the Arctic Ocean) had been considered as a promising whaling ground by Japanese, it was not earlier than 1940 that Japan undertook a trial operation. That year one factory ship and four catcher boats made an expedition to the Northern Pacific, the Bering Sea and the Arctic Ocean from June 19 to September 6, in which 579 whales were caught with 7,224 tons of products therefrom. In the following year a fleet consisting of one factory ship and 5 catcher boats was operated in the same waters from June 9 to August 17, the result being 673 whales and 7,642 tons of products. Thus the promising future of the business was established, but it was suspended because of the War.

II. International Whaling Agreements

As stated in the foregoing, not only Japanese people have long been engaged in coastal whaling but participated in the Antarctic whaling in seven seasons since 1934 and again made expeditions in the Northern Pacific Ocean in 1940 and 1941. But Japan has not yet adhered to the International Agreements for Regulation of Whaling, owing to circumstances as described below.

(A) The Agreement of 1937

In June 1937, there was held in London the first international whaling conference which chiefly aimed at regulating the Antarctic whaling. Japan, still a new comer in the field of Antarctic whaling, could not make adequate preparations in time for the conference and so neither took part in the conference nor adhered to the International Agreement concluded there. It was announced, however, that the Japanese Government would be ready to participate in the conference set for the next year.

(B) The Protocol of 1938

In June 1938, another whaling conference was held in London for the purpose of modifying the agreement of the preceding year. This time Japan dispatched her delegates to the conference. The Japanese delegation, however, did not sign the protocol agreed upon in the conference but signed only the Final Act which was in substance the minutes of the meeting, since not only Japan had not yet adhered to the agreement of the preceding year but various domestic procedures had to be taken before pledging her ad-

herence to it. This conference modified the agreement of the preceding year (the Principal Agreement) in various respects with due consideration of Japan's special position as set forth in the conference by her delegation. So towards the end of the conference notification was served by the Japanese delegation to the effect that Japan was prepared to take the necessary legislative and other measures to enable her to adhere to the Agreement of 1937 (the Principal Agreement) and the Protocol of 1938 after an interval of a year, subject to a reservation in respect of the first paragraph of Article 3 of the Protocol of 1933 prohibiting to employ in other areas a factory ship used in the Antarctic within 12 months after the termination of the open season (Note 5), and also that in the meantime she was prepared to observe the principles of the said agreement and protocol as closely as possible (Note 6).

(C) Report and Resolutions of 1939

In July, 1939, there was held in London an informal conference of five principal whaling countries, at which a Japanese delegation was also present. The meeting adopted a report and resolutions, which were signed by the Japanese delegation, but these were in substance a mere report and a recommendation, instead of an agreement or a protocol. At this conference a recommendation omitting the Northern Pacific from the application of the preceding year's protocol, in respect of which Japan had then made reservation, was adopted (Note 7). The Japanese Government notified the conference that Japan would complete all necessary legislations for her

(Note 5)

Japan desired to employ in the Northern Pacific factory ships which operated in the Antarctic to catch baleen whales.

(Note 6)

Final Act of 1938, 3.

(Note 7)

Report and Resolutions: July 20, 1939, London
Part II Resolutions

I. Article 3 (1) of the Protocol of 1933.

The Conference resolved to recommend:--

That Article 3 (1) of the Protocol of 1933 should not apply to the following areas:--

- (a) The sea area between 40° North Latitude and 52° 30' North Latitude from 159° East Longitude eastwards to 140° West Longitude;
- (b) The sea area between 52° 30' North Latitude and 72° North Latitude from 150° East Longitude eastwards to 140° West Longitude;
- (c) The Okhotsk Sea northward of 52° 30' North Latitude.

(7)

adherence to the Agreement of 1937 and the Protocol of 1938 before the opening of the 1939-40 whaling season provided that the said recommendation came into effect (Note 8).

(D) The Notification by Japan to Postpone the Adhesion to the Whaling Agreement

For the implementation of the Japan's reservation adopted in the resolution made by the unofficial conference in 1939, it was necessary that the acceptance notification of the respective Governments of the United States, Denmark, Germany, Norway and Great Britain should be filed with the British Government in accordance with the provision contained in the article VII, General (b) of the same resolution. The aforesaid resolution was then to be embodied in a formal protocol and signed by duly authorized representatives of the governments concerned.

However, no action in the matter by the United States' Government was expected until February or March of the next year when the Senate would be in session, so that it was impossible for the reservation terms to be carried into effect till the 1939-40 season. Therefore, the Japanese Government proceeded to formally adhere to the 1937 year Agreement and the 1938 year Protocol, before the beginning of the 1939-40 season, with a reservation to the Article 3, paragraph 1 of the 1938 year Protocol, pending the coming into force of the above resolution.

Meanwhile, the European War broke out, which rendered hopeless the implementation of the resolution, while there was little need of control because of the diminished number of the countries operating in the Antarctic. The Japanese Government decided therefore to defer the adhesion to the Agreement until the return of normalcy and so informed to the British Government on December 11, 1939. Thereafter, the war spread all over the world and Japan herself was involved, so that she has had no chance since to adhere formally to the international whaling agreements.

III. Domestic Legislation

Japan did not fail to take voluntarily necessary steps to protect whale stocks by enacting domestic laws and regulations. "Whaling Control Ordinance" was promulgated as well as related regulations, governing factory

(Note 8)

Part I, Report, (8)

(8)

ship fisheries including pelagic whaling regulations.

(A) Whaling Control Ordinance and Related Regulations

This ordinance which was enacted on October 20, 1909 with special reference to balen whale (except mink whale) and sperm whale, made it necessary to obtain permission for whaling. It contains provisions relating to the procedure and limitation or cancellation of the permission; limitation or prohibition of whaling; reports and punishments, etc. (partly revised in 1911, 1934 and 1936).

At the same time, under this ordinance, the number of catchers operating in the licenced area was limited to 20 by Notification No. 418 of the Department of Agriculture and Commerce. Later, on June 27, 1934 this number was cut down to 25. This limitation of the number of catchers is to have been accountable for the preservation of Japan's coastal whaling to this day.

Furthermore, on June 8, 1938 a regulation was set up, prohibiting the capture of whales below a specified size, in accordance with the Article 9 of the Whaling Control Ordinance. This step was taken in line with the 1937 year International Whaling Agreement and at the same time in consideration of the special nature of Japan's coastal whaling.

(B) Factory-ship Fishery Ordinance

This Ordinance was enacted on July 25, 1934 when a Japanese whaling fleet operated for the first time in the Antarctic. It provided in Chapter 4, stipulations relating to the use of factory ships and catchers; persons in charge; items for report; etc.

Later, in 1938, in accordance with the principles contained in the 1937 International Whaling Agreement, additional regulations were enacted as to prohibited whales, open season, treatment of the animal, payment of crews, and etc.

The regulations mentioned above were not always exactly the same as the provisions contained in the international agreements. A plan for a thorough revision of these regulations on the basis of international agreements was dropped with the outbreak of the World War II as already stated.

CHAPTER III. WHALING IN THE POST-WAR PERIOD

I. Resumption of Whaling

Soon after the termination of the war, the movement of all Japanese ships including fishing vessels was prohibited for a time (General Order No. 1, IV of September 2, 1945). On September 14 operation of wooden vessels (auxiliary sailing vessels) was permitted within 12 miles of the coast of Japan proper (Memorandum FLTLOSCAP-35) and a small scale coastal fishing was resumed. Next, on September 22, 34 fishing vessels including 24 whale catchers were permitted to operate in specified waters, during a specified period, which revived coastal whaling in the waters of Hokkaido, Sanriku and Sanin (Memorandum FLTLOSCAP-69).

Of the fishing vessels below 100 tons and of those above 100 tons, the operation area was generally designated respectively on September 27 and on October 13 (Memorandum FLTLOSCAP-30 and Memorandum SCAJAP-42) and within this area (Note 9) any sort of fishing became possible.

But, as for the whaling grounds, the above-mentioned area did not include the waters of the Bonin, Korea, Formosa and Kwantung as well as the Kuriles, which used to account more than thirty per cent of the total coastal whale catch of Japan. The Japanese Government applied for a special whaling permission in the Bonin waters, a good whaling ground next to the Kuriles, and the permit was granted by the Memorandum (SCAPIN-371) dated November 30, 1945. It had been planned to use 9 catchers and 9 carriers in conjunction with the land station already established on the Bonin, the use of the latter was denied, whereupon the Government applied for the permission to employ dissection ship, with access to the port facilities and water supply on the Bonin. This was not permitted either. The Government as a last resort decided upon factory ship whaling.

(Note 9)

As regards the fishing area of the Hokkaido waters designated by the 27-Sept. and 13-Oct. memoranda, the demarcation was not clear. The memorandum dated November 3, 1945 defined it definitely as follows:

From Nosappu Misaki to 41 30 North 159 East, south to 30 North 150 East, west along 30th parallel to 130 East, south to 29 North 134 East, west to 29 North 126 East, south to 26 North 126 East, west to 26 North 123 East, northeast to southern tip TSUSHIMA. From northern tip TSUSHIMA to 40 North 135 East to 45 30 North 149 East to 45 30 North 145 East, south along 145th meridian to HOKKAIDO.