

Operation	Participating troops and Commander-in-chief	Strength of Participating troops	Troops of Opposing Force
Second Tungpientao Subjugation	Fengtien Army : Yalu District troops Central District troops Shenghai District troops Guard Corps Cavalry Regiment Chinganyuchitui	8,000	Northeastern National Salvation Army : Tang Chu-wu
Li Hai-ching Subjugation	Heilungkiang Army : 3rd Infantry Brigade 3rd Cavalry Regiment Guard Corps	3,500	Li Hai-ching
Ki-Feng-Lung District Subjugation	Fengtien Army : Shenghai District troops 2nd Regiment of Cavalry Guard Corps Battalion Chinganyuchitui Kirin Army : Kirin Cavalry Detachment	5,000	San Kiang-hao Tien-chen Sung Kuo-jung Hung troops others
Third Tungpientao Subjugation	Fengtien Army : Yalu District troops Central District troops Shenghai District troops (part) Guard Corps	5,000	Bandits operating in the entire Tungpientao district
Jehol Subjugation	Commander-in-chief : Chang Ching-hui (張景惠) Chief of Staff : Kuo En-lin (郭恩霖) Taoliao Army : Seven Detachments National Foundation Army : Three Detachments National Protection Army National Salvation Army Guard Corps First Brigade	42,000	Tang Yu-lin Army Former Northeastern Army Regular Army of Republic of China National Salvation Army
Kirin Province Subjugation	Entire Kirin Army Heilungkiang Army : 1st Cavalry Brigade 3rd Non-Commissioned Detachment Chingan Army Artillery Corps Hsinching Independent Cavalry Regiment	35,000	Bandits in the entire province of Kirin

Enemy Strength	Operation Period	Note
20,000	October 7 to the end of October, 1932	Co-operating with Japanese troops, made great subjugation activity in the Tungpientao district, and made Tang Wu-chen and his 1,000 subordinates surrender, while more than 270 were shot to death.
3,000	Beginning of October to the end of October, 1932	The subjugation of the Li bandits who attempted to threaten the Japanese and Manchoukuo troops from behind, in the southern part of Heilungkiang Province, scheming together with Sun Ping-wen, was made in the Anta, Chaotung, and Chaochou; the Li bandits ran away to the distant regions of Jehol Province.
5,000	November 6 to November 20, 1932	To co-operate with the Japanese Independent Guard Corps in subjugating the bandits active in the square area formed by Ki-chang-Feng-Lung, troops were despatched from the Feng-tien and Kirin Armies.
20,000	November 22 to December 5, 1932	As small groups of bandits became active taking advantage of the fact that the South Manchuria military strength was weakened on account of the Su Ping-wen affair, they were attacked and 1,799 bandits were deprived of their arms.
130,000	February 20 to March 28, 1933	For subjugating Jehol Province, the troops were divided into the South and North Forces, and co-operating with Japanese troops, advanced into Jehol, and after fighting at various places for one month, rebels were all driven out of the province and Jehol was pacified.
20,000	Middle of October to the middle of November, 1933 (prediction)	Co-operating with Japanese troops, bandits of the entire province of Kirin was attacked at various places; particularly the subjugation of the Suining, Pinkiang, and Kichang districts was successful; Tien-chen was killed, Sun Chao-yang was captured, and Pi Ching-shan was brought to surrender; small bandits were either scattered or annihilated.

After Jehol Province was entirely cleared of bandits and rebels by the joint operations of the Japanese and Manchoukuo Armies, the Chinese troops that retreated to North China took up an anti-Japanese and anti-Manchoukuo attitude together with the Central Troops which came up to the North from the South, and threatened the southern border of Manchoukuo. Thereupon, in order to preserve the safety of the Manchoukuo frontiers according to the Japan-Manchoukuo Protocol, Japanese troops were obliged to advance to North China. But as the Chinese troops realized the wrongness of their attitude and expressed the desire to negotiate a truce, the truce agreement was signed on May 31, 1933, between Major-General Okamura, representative of the Kwantung Army, and Lieutenant-General Hsiung-pin (熊斌), representing the Chinese side. Regarding this truce agreement, the Headquarters of the Kwantung Army made the following announcement:

"The Commander of the Kwantung Army received at Miyun (密雲) on May 25 a formal truce proposal from Ho Ying-chin, submitted by Staff Officer Hsu Yen-mou, the parlementaire. Based on this proposal, Major-General Okamura, Vice-Chief of Staff, Kwantung Army, representing the Kwantung Army, concluded and signed the following truce agreement with Lieutenant-General Hsiung-pin, representing the North China Army of the Republic of China, at 11:11 a.m. May 31; at Tangku:

"1. The Chinese troops are to uniformly retreat to the districts south and west of the line connecting Yenching (延慶), Changping (昌平), Kaoli (高麗), Shunyi (順義), Tungchou (通州), Siangho (香河), Paoti (寶坻), Litingchen (林亭鎮), Ningho (寧河) and Lutai (蘆臺); will not advance beyond the said line hereafter; and will not commit any challenging and disturbing acts.

"2. In order to confirm the execution of the first item, Japanese troops will inspect its execution by aeroplanes or other methods at any time; the Chinese side shall give protection and other facilities for such inspections.

"3. Upon confirming the observance of the condition stipulated in the first item by the Chinese Army, the Japanese troops will not continue attacks, advancing beyond the aforesaid line of retreat of the Chinese Army, and will gradually return to the Great Wall line voluntarily.

"4. The maintenance of peace in the districts north and east of the above-mentioned line, south of the Great Wall line, is to be undertaken by the Chinese police.

"5. This agreement becomes effective upon its signing."

CHAPTER VII

FOREIGN AFFAIRS

Foreign Policy of Manchoukuo

After having been for centuries a more or less close preserve of the Manchu Ching dynasty, and a transitory period following the collapse of the Imperial régime at Peking, the vast area known as Manchuria was nominally placed under the jurisdiction of the Nanking national government toward the end of 1928. Actually, however, it retained many features of an independent or autonomous state under the rule of the Chang family. Whether this contradictory state of affairs was the outcome of conditions peculiar to a continuation of the transitional period, that is from autonomous government to an administrative unit of the Chinese state, is a matter of question.

In any event, there were many instances in which foreign countries faced special difficulties in handling problems concerning Manchuria because of the ambiguity as to the whereabouts of responsibility. This dualism in diplomacy and governmental responsibility was particularly manifest, for example, and utilized fully by the Chinese, during the Sino-Soviet conflict in connection with the Chinese Eastern (now North Manchuria) Railway in 1929, and also during the negotiations with the Japanese authorities on a variety of questions concerning Manchuria.

From the establishment on March 1, 1932, of the independent state of Manchoukuo, however, this problem went out of existence, as the new government has assumed full responsibility for relations with other countries. The supreme diplomatic authority of Manchoukuo is vested in the Chief Executive, or Emperor as he will be from March 1, 1934, and the central diplomatic organ is the Department of Foreign Affairs in the Council of State.

As its foreign policy, Manchoukuo declared as follows in the proclamation on the establishment of Manchoukuo issued on March 1, 1932:

'The foreign policy of the new State shall be to seek and further promote cordial relations with foreign powers by winning their confidence and respect, and to observe strictly international conventions. Financial

obligations incurred within the territory of Manchuria by treaty stipulations with various countries prior to the establishment of the new State shall be met according to the usual international conventions. Foreign investments by any nation shall be welcomed for the furtherance of trade and the exploitation of natural resources, thus bringing the principles of the Open Door and Equal Opportunity and the like to a fuller realization.'

This foreign policy was further concretely explained by the note sent in the name of Hsieh Chieh-shih (謝介石), Minister of Foreign Affairs, on March 12, 1932, to the Foreign Ministers of Austria, Belgium, Czechoslovakia, Denmark, Estonia, France, Germany, Great Britain, Japan, Italy, Latvia, Lithuania, Netherlands, Poland, Portugal, the United States, and the Union of Soviet Socialist Republics. The same note was also despatched on April 10, 1932, to the remaining thirty-five nations. The note read as follows:

'As regards the relations with foreign nations it has been definitely decided that diplomatic intercourse shall conform to the several principles hereinafter stated:

1. That the Government shall conduct the affairs of the State according to the primary principle of faith and confidence and the spirit of harmony and friendship, and it pledges itself to maintain and promote international peace.
2. That the Government shall respect international justice in accordance with the international laws and conventions.
3. That the Government shall succeed to those obligations, for which it is liable, of the Republic of China by virtue of treaty stipulations with foreign countries, in the light of international laws and conventions and that these obligations shall be faithfully discharged.
4. That the Government shall not infringe upon the acquired rights of the peoples of foreign countries within the limits of the State of Manchoukuo, and further that their persons and properties shall be given full protection.
5. That the Government welcomes the entry of the peoples of foreign nations and their residence in Manchoukuo and that all races shall be accorded an equal and equitable treatment.
6. That the trade and commerce with foreign countries shall be facilitated, thus contributing to the development of world economy.
7. That with regard to the economic activities of the peoples of foreign nations within the State of Manchoukuo, the principle of the Open Door shall be observed.'

the U.S.S.R. which also gives deep consideration to Manchoukuo.

This interest felt by the U.S.S.R. regarding Manchoukuo made her virtually recognize Li Shao-keng (李紹庚), Chairman of the Board of Directors of the North Manchuria Railway appointed by Manchoukuo, as a Manchoukuo official, and also made her recognize Manchoukuo Consuls despatched to U.S.S.R. territory as the Consuls of Manchoukuo. On September 17, 1932, or two days after the formal recognition of Manchoukuo by Japan, Hsieh Chieh-shih, Foreign Minister of Manchoukuo, stated as follows in the declaration of the establishment of Manchoukuo Consulates:

"Our nationals residing in foreign countries are to be fully considered and means for their protection are to be adopted. Thus we have held negotiations with the U.S.S.R. Government and discussed the question of despatching our consuls and protecting our people residing in their territory. The negotiations have now come to a successful agreement, and the Manchoukuo Consulate is now established at Blagovestchensk, and also our Consulates will be gradually opened at Vladivostok, Habarovsk, Chita and other places."

At present Manchoukuo has opened, in U.S.S.R. territory, Consulates at Blagovestchensk and Chita. This is interpreted as virtual recognition by the U.S.S.R. of the existence of Manchoukuo. As proofs of the virtual recognition of Manchoukuo by the U.S.S.R. may be mentioned a part of the statement made by Foreign Commissar Litvinov of the U.S.S.R. on May 13, 1933, which read as follows:

"Since eighteen months ago (since the outbreak of the Manchurian incident), China has given up her privilege to be the partner of the U.S. S. R. and discontinued to be a joint operator of the Chinese Eastern Railway."

Also the U.S.S.R. Government strongly insisted upon "the liberty of negotiating the transfer of the Chinese Eastern Railway with the government actually existing at present and having the privileges and duties of China in regard to the Chinese Eastern Railway." Furthermore the negotiations for the transfer of the North Manchuria Railway with Manchoukuo, with Japan as observer, opened at Tokyo on May 26, 1933, give another proof of the recognition of Manchoukuo by the U.S.S.R.

Thus the question in this respect left between Manchoukuo and the U.S.S.R. is only formal recognition of Manchoukuo. When the negotiations for the transfer of the North Manchuria Railway are successfully concluded, that will be merely a question of time.

Manchoukuo and the League of Nations.—The League of Nations Council, meeting to discuss the Sino-Japanese controversy, and the Assembly of the League opened at Geneva on November 21, 1932, denied the independent existence of Manchoukuo, adopting the conclusion of the Report of the Commission of Enquiry of the League of Nations into the Sino-Japanese dispute, submitted by the Enquiry Commission headed by Lord Lytton. Their denial of the independent existence of Manchoukuo also ignores and denies Japan's recognition of Manchoukuo and also the Manchoukuo-Japan Protocol. Thus the difference of views on the fundamental policy for maintaining the peace of the Orient obliged Japan to withdraw from the League.

Manchoukuo, whose independent existence was denied by the League of Nations, caused China implicitly to recognize her independent existence by concluding an agreement for the establishment of the buffer zone in North China. Also, Manchoukuo caused the U.S.S.R. to recognize virtually her independence. In this manner, over the independent existence of Manchoukuo, there have appeared two different currents in respect of world peace and particularly the maintenance of peace in the Orient. These currents are matters that cannot be overlooked by all who are giving thought to the peace of the world.

In this respect, the declaration respecting the Manchoukuo-Japan Protocol issued by Foreign Minister Hsieh Chieh-shih of the Manchoukuo Government on September 15, 1932, is to be particularly noted in order to understand the diplomatic policy of Manchoukuo. The main parts of the declaration are as follows:

"The State of Manchuria came into being through the will of the inhabitants of this region and will strive for the promotion of the people's welfare within and for the maintenance of friendly relations with foreign countries. Its standing as a State, I am sure, can be favourably compared with any other member of the family of nations. Moreover, its independence, regardless of whether or not it is recognized by the powers, is already a reality indisputable. No amicable adjustment in international relations is possible when this fact is completely disregarded and no one should be considered faithful to the cause of world peace and human happiness if he deliberately ignores its existence.

"It gives us, nevertheless, unbounded joy and satisfaction to realize that Japan, which has among the powers the most important relations with the existence of this nation and whose contact and intercourse are the closest, has in advance of others extended her *de jure* recognition by

affixing her signature to the Protocol. This is a matter which the entire people of our country have so ardently desired, for it vastly contributes to the solidifying of the national foundation and the strengthening of our international position. It should be noted that in this Protocol the High Contracting Parties are in agreement for the safeguarding of their mutual safety and security and that a permanent guarantee is included for the existence of Manchoukuo, thereby removing once for all whatever misgivings some of our inhabitants might have entertained hitherto as regards the future of their country.

"At this juncture, we note the existence of the war-lords of Chang Hsueh-liang's military clique who, vainly dreaming of the recovery of Manchuria, have so tenaciously engaged in disturbing the peace of the country by instigating outlaws and bandits. There are also the Kuomintang politicians who have plotted time and again to reinstate the former régime in the country already cleared of the old militarists by involving Western powers in the international complications of the Orient. We earnestly hope that these leaders of the Kuomintang and others will awaken to the changed conditions of the country and accordingly formulate policies designed to create, in co-operation with Manchoukuo and Japan, unity and harmony among all the races of the Far East.

"The European and American powers and the League of Nations have upheld the principle of justice and humanity and have advocated the doctrine of the 'self-determination of peoples.' To these powers we desire to point out that it is utterly inconsistent to attempt to subject these inhabitants of Manchoukuo, against their will, once more to the oppressive yoke of their former militarists from whom they have just liberated themselves. On the contrary, it is the duty of these Western powers to offer their assistance and encouragement for the fuller development of this new State. Our sincere hope is that the powers will acknowledge the fact that failure to recognize the independence of Manchoukuo and the support given by Japan to its realization will unnecessarily lead to the disruption of peace in the Far East, and that they will speedily take steps to extend their formal recognition.

"We are not at all unaware that there might be among the nations abroad some that are concerned over the especially intimate relations existing between Japan and Manchoukuo. Such relations are only natural in view of the geographic and historical connections of the two countries. Similar instances are numerous among other nations; it would be futile to spend more words on this point. In this respect it is perhaps not wide

of the mark if we assert that what the majority of those countries are particularly concerned about seems to be two points, namely, the Open Door principle in regard to economic interests in Manchoukuo and the fulfilment of international obligations on the part of this new State. Our policy on these matters already has been clarified in the Proclamation on the Founding of Manchoukuo and in the official communication to foreign powers despatched some months ago, which will be fully proved as our international standing becomes secure. If, in spite of this, there should exist any doubt among the powers, it behooves them to follow the step taken by Japan in recognizing this Government and concluding treaties to safeguard these two essentials.

"There are persons in China and in some of the Western countries who totally lack definite knowledge about Manchoukuo and who are easily influenced by false propaganda. Vile and malicious reports concerning this nation are circulated by these people, but we are confident that the facts will effectively refute such reports without apology. It remains for us, then, only to press forward courageously and steadfastly for the attainment of the objectives and ideals enunciated in our official proclamations."

Manchoukuo's Diplomatic and Consular Establishments Abroad and Other Offices

Legation—Tokyo (Japan).

Consulates—Blagovestchensk ; Chita (U.S.S.R.).

Office of Foreign Affairs Commissioner—Harbin.

Foreign Diplomatic and Consular Services

Japan :

Embassy—Hsinking (Changchun).

Consulates-General—Hsinking (Changchun) ; Harbin ; Kirin ; Mukden with branches at Tunghwa, Hailung, Hsinminfu and Taolu ; Chientao with branches at Hunchun, Paitsaokou, Chutzukai and Toutaokou.

Consulates—Manchouli ; Tsitsihar ; Chengchiatun ; Antung ; Ying-kow ; Chinchow ; Khailar ; Chihfeng.

U.S.S.R. :

Consulates-General—Mukden and Harbin.

Consulates—Dairen, Tsitsihar, Heiho and Manchouli.



Above, Consulate of Great Britain at Dairen.
Under, Consulate of the U. S. S. R. at Dairen.

Great Britain :*Consulates-General*—Mukden and Harbin.*Consulates*—Dairen and Yingkow.**U. S. A. :***Consulates-General*—Mukden and Harbin.*Consulates*—Dairen and Yingkow.**Germany :***Consulate-General*—Harbin.*Consulates*—Dairen and Mukden.**France :***Consulates*—Mukden, Harbin and Dairen.**Netherlands :***Consulates*—Harbin and Dairen.**Belgium, Czechoslovakia, Denmark, Estonia, Italy, Latvia, Lithuania, Poland and Portugal :***Consulates*—Harbin.**Sweden, Finland :***Consulates*—Dairen.**Norway :***Consulate*—Yingkow.**Austria :***Consulate*—Mukden.

CHAPTER VIII

FINANCE*

Provincial Finance under the Former Régime

By the cooperation effected between the Nanking Government and the Chang Hsueh-liang (張學良) government in 1928, the flag of the Republic of China came to be hoisted over the so-called Northeastern Four Provinces. But the control of the four provinces under the Nanking Government was limited to the political understanding brought about by the appointment of Chang Hsueh-liang as Vice-Commander of the National Army and Air Force, and Commander of the Northeastern Frontier Army. The Northeastern Administrative Committee (東北政務委員) established as the legal organ for intermediately guiding and supervising the four provinces was only a social institution for military men and bureaucrats, and the provinces were actually districts controlled by small military groups belonging to the great military family of Chang. Provincial governments were independent units under political conciliation with the Nanking Government. The final legislative power was vested in the military governments of the respective provinces, and the actual administrative power was in the hands of these military men. Various financial laws and regulations, and particularly laws and regulations regarding financial administration, promulgated by the Nanking Government were only the expression of the wishes of the Nanking Government; the national and local taxes distribution plan repeatedly announced since 1913 was never actually enforced, and all taxes other than customs tariffs were either hsien or city taxes, or provincial taxes. The Treasury revenue to be transmitted to the Nanking Government by stipulation of law was held at the provincial treasuries at the selfish will of the provincial military authorities. The financial reformation plan submitted by Finance Minister Sung at the National Finance Conference held in 1928 was based upon the restriction of military expenditures and the strengthening of the central financial power. It demanded that the

* Contributed by Mr. K. Noma, a member of the Economic Research Committee of the S. M. R.

Finance Department of the Nanking Government possessing the absolute right in the control of the State revenue, should not be interfered with in any manner by military authorities, that provincial civil officers should not interfere with national taxes in any way and should not collect any surtax upon them, and that the Nanking Government should be permitted to collect the national taxes freely and most effectively. This reformation plan of Sung Tzu-wen (T. V. Soog, 宋子文) based upon modern financial principles was put aside by the political power of the provincial military leaders, and the actual collection of even the national taxes was made "considering the special conditions of the respective provinces" and according to "special regulations" of the provinces. For example, the Chuanyentungshui (捲菸稅) or domestic consumption tax on cigarettes and cigars, which was regarded as the most modern among numerous consumption taxes now being levied in China and Manchoukuo, was declared by the Nanking Government in February, 1929, but yet to enforce the tax in Fengtien Province, it required the adoption of the Liaoningsheng Chengshou Chuanyentungshui Changcheng (遼寧省征收捲菸稅章程) or regulations for collecting the consumption tax on cigars and cigarettes in Liaoning Province, in May, 1927, and its enforcement in Heilungkiang Province required the Heilungkiangsheng Chengshou Chuanyentungshui Changcheng (黑龍省征收捲菸稅章程) or regulations for collecting the consumption tax on cigars and cigarettes in Heilungkiang Province, issued in January, the following year. Such a disruptive tendency of the financial administration caused by the provinces being made the respective spheres of influence of military leaders not only brought about the instability of the finances of the Nanking Government and the absolutism of provincial finances, but also naturally made the tax system of each province so complicated and varied that such conditions were believed to have been wilfully caused. The tax system of the Northeastern four provinces before the Manchurian incident of September, 1931, was different according to provinces; tax items were different, and articles on which taxes were levied also differed. For instance, on alcoholic beverages, Fengtien Province levied the 11 per cent ad valorem liquor tax legally stipulated as the national tax and the 6 per cent liquor sales tax, and the special 20 per cent liquor tax on alcoholic beverages excepting kaoliang spirit (高粱酒) and Huangchui (黃酒); Kirin Province collected the Paichiuhsui (白酒稅) which was to be the national tax, of 1 yuan (元) 4 chiao (角) Kirin Tayang per 100 chin (斤) and the 6 chiao Kirin Tayang Paichiuhsui (白酒費) which corresponded to the sales tax of Fengtien province, on kaoliang

spirit, the 10 per cent ad valorem Tsachiuchienfengshui (雜酒簽封稅) or Yaochiuchienfengshui (藥酒簽封稅) and the same rate of Tsachiuyaochiuchiefengsfei (雜酒藥酒簽封費) which equalled the sales tax in Fengtien Province, on alcoholic beverages excepting kaoliang spirit and other high alcoholic content spirits, and the 21 per cent ad valorem alcoholic beverage tax and alcoholic beverage sales tax which was the sales tax in Fengtien Province, on spirits of high alcoholic content; Heilungkiang Province levied the liquor tax of 2 fen (分) Kiang Tayang per 100 chin (斤) which was to be the national tax and 12 per cent ad valorem sales tax on all liquors and spirits other than Western wines, and the 20 per cent ad valorem machine-made liquor sales tax on all Western wines and spirits.

Thus, the provincial government appeared as if it were not a local entity, and its finances looked as though they were national finances. Then again, in one province, the financial administration was not controlled and adjusted as shown by law. The Provincial Government Organization Law and the Finance Office Organization Regulations of the respective provinces stipulated the organization and jurisdiction of the provincial finance office as the official organ of the financial administration for the entire province, but all the financial affairs of the province were not necessarily handled through the Finance Office. The Industrial Office merely reported to the Finance Office at the end of each year the amount of the mining district tax collected, and was never restrained in any way in levying and collecting the Shuilishui (水利稅), the tax for permitting rice-field cultivation which was said to be a compensating tax for irrigation facilities, and various Chutsefei (註冊費) or registration taxes (契稅) excepting the stamp tax. Then the Military Office which actually was not different from the provincial government made collection of the Kuantsaofei (官草費), Kuanchefei (官車費) and other military expenses at its own discretion. Thus the annual revenue and expenditure accounts of each province made by the respective provincial Finance Offices may be said to have been only the records of rough amounts of revenue and expenditure that could be made by the Finance Offices. The actual tax collection was made not only by the Shuichuanhu (稅捐局) under the control of the Finance Office, the Finance Offices of all hsiens and cities, and the second section of the Hsien Office (organ for collecting provincial taxes), but also by police stations. Further, according to the kinds of taxes and the districts of their collection, tax collection was undertaken under contract by the Shangwuhui (商務會), Nungwuhui (農務會) or other such private institutions or individuals.

The tendency of the financial administration to be disrupted among the provinces and its chaotic confusion in each province was as mentioned above before the outbreak of the Manchurian incident. Another point to be noted was the fact that the provincial finance operated by such organs was not supposed to have been clearly differentiated from the private finance of the Chang family or that of respective military groups which were like branches of the Chang family. Various financial documents of the provincial Finance Office which were not made public, were examined after the Manchurian incident, and it was revealed that the salaries of various low grade officials which had already been listed in the annual expenditure budget by the provincial Finance Office, were not paid many months, or that only certain portions of the stipulated salaries were actually paid. Thus the accountings of various government offices had been controlled by the whims of the military bureaucrats. The above facts also revealed that the administration given by various Government offices was nothing but work contracted for by their chiefs, and consequently the distinction between private finance and official finance was not clear. These facts at the same time reveal that the finances of the Chang family and the military leaders of all the provinces were mixed with the provincial finances. Thus, the revenue and expenditure budget made by a provincial Finance Office was only one portion of the actual provincial finance, and the figures of such budgets themselves may be doubted to have had any accuracy. Such chaotic confusion of financial administration and the feudalistic tendency of finance itself have made it almost impossible to represent accurately the finances of the so-called Northeastern Four Provinces during the former régime.

But at the same time, when it is understood that the revenue and expenditure of the provincial Finance Office was the central factor of the provincial finance, their statistics, though imperfect, show the outline of the finances of these provinces under the former régime.

Table 1

TOTAL REVENUE OF THE THREE EASTERN
PROVINCES IN 1930
(Silver Yuan)

	Amount	Percentage
Direct Taxes*	8,333,761	6.8%

* Mostly Land Tax (田賦)

Indirect Taxes:		
1. Salt Gabelle (鹽稅)	45,884,301	37.7%
2. Market Tax (銷場稅)	11,654,273	
3. Production Tax (生產稅)	10,485,295	
4. Tobacco & Wine Taxes (菸酒稅)	9,761,491	8.0%
5. Bean Tax (豆稅)	3,186,784	
6. Oil Grain Tax (油糧稅)	206,756	
7. Ginseng Tax (人蔘稅)	40,966	
8. Timber Tax (木稅)	2,022,959	
9. Raw Silk Tax (繭絲稅)	321,287	
10. Mining Tax (礦稅)	848,857	
11. Nitre Tax (硝磺稅)	202,024	
12. Cattle Tax (牲畜稅)	2,701,364	
Current Taxes:		
1. Deed Tax (印花稅)	1,956,955	4.8%
2. Stamp Duty (契稅)	2,811,663	
3. Vehicle License Tax (車牌稅)	694,788	
4. Others	423,601	
Fines	322,320	
Income from Government Enterprises	715,048	
Miscellaneous	19,101,905	

Table 2

TOTAL EXPENDITURE OF THE THREE EASTERN
PROVINCES IN 1930
(Silver Yuan)

	Amount	Percentage
Army	98,554,951	68.3%
Finance	18,867,717	13.1%
Foreign Affairs	206,126	
Education	4,703,080	18.6%
Interior	5,606,826	
Justice	1,395,561	
Construction	339,251	

Note: The above two tables were compiled by one of the research committees of the S. M. R. Company Economic Research Committee according to materials obtained after the Manchurian incident, but there is room for doubt whether they gave accurate figures for the revenue and expenditure of the Finance Offices of the three provinces. But at present, they are the only publicly announced figures for the finances of the Three Eastern Provinces under the former régime, when those submitted by the Chinese side to the Lytton Enquiry Commission are excluded, and so they have been reproduced here. Though minor mistakes might be expected, they are believed to be sufficient to give the outline of the finances of Manchuria under the former régime.

It is particularly notable that the compiler of these two tables has specially mentioned that almost the entire amount of the reserve fund mentioned in Table 2 was applied to military expenditures.

Agriculture and Commerce	154,240	} 100.0%
Political Committee	700,500	
Reserve	13,700,553	
Total	144,228,805	

Facts that are to be especially noted from the above two tables are that the majority of expenditure was applied to military expenses and that the majority of expenditure was paid by the collection of consumption taxes. The important items of consumption taxes were the salt tax, production tax, market tax and others which were taxation upon daily necessities. This system of levying more consumption taxes than direct taxes was the result of the traditional Chinese idea of judging the administrative policy by the burden of direct taxes. Direct taxes numbered only six or seven items, including the land tax, tobacco and wine tax, licence tax, business licence tax for commission merchants and pawnshops, and some others; and excepting the land tax, the others were all special business licence taxes. But consumption taxes numbered 25 items in Fengtien Province, 33 items in Kirin Province, and 39 items in Heilungkiang Province. Thus the consumption of almost everything was taxed. The amount thus collected by the vast consumption tax system out of the small living disbursements of the people was almost entirely for military expenses, or for the expansion of the influence of military leaders. It can be readily imagined that the actual amount of military expenditure which always was on the increase in order to satisfy the ambition of military leaders was not as represented by the above tables, and that the revenue and expenditure of provincial finances were not actually as represented because of the enormous military expenditure. Let us examine, for instance, the financial condition of Fengtien Province.

Table 3*

REVENUE, EXPENDITURE, AND BALANCE OF
LIAONING PROVINCE

(1,000 yuan Fengtien Tayang)

Year	Revenue	Expenditure	Balance	Amounts obtained by various Government Offices from Provincial Banks	Actual Surplus or Shortage
1918.....	15,622	12,113	3,508	—	3,508
1919.....	15,759	11,473	4,286	—	4,286

* The above table was mentioned in the report compiled by the Three Eastern Provinces Currency and Banking Adjustment Committee with Tsang Shih-i (臧式毅), head of the Liaoning provincial government, as the Chairman, in 1930, but not made public.

1920.....	15,801	11,373	4,427	2,898	1,529
1921.....	17,332	11,528	5,804	514	5,289
1922.....	18,492	16,495	1,996	8,882	-6,886
1923.....	18,991	17,115	1,876	25,786	-23,910
1924.....	22,521	17,848	4,672	79,424	-74,752
1925.....	30,629	19,040	11,588	126,173	-114,584
1926.....	61,532	131,471	-69,939	148,516	-218,456
1927.....	220,258	758,667	-538,409	702,235	-1,240,645
1928.....	648,516	721,862	-73,345	343,716	-417,062
1929.....	3,547,421	3,886,689	-339,268	28,497	-367,765

Since the establishment of the Republic of China (1912), the finance of Fengtien Province was not at all favourable, and plans for relieving the financial difficulty of the province had been repeatedly considered and adopted, and the Chief of the Finance Office was changed seven times. In 1916 when Chang Tso-lin secured the actual administrative power of the province and Wang Yung-chiang (王永江) was made the chief of the Finance Office in the following year, the financial condition of the province showed notable improvement for the first time. Since his appointment, Wang Yung-chiang enforced strict discipline and adopting a policy based upon the high ideal of 'integrity of borders and peace of the people' made special efforts for the reconstruction of the provincial finance. One year and a half after his appointment, the condition had so improved that Chang Tso-lin declared that there was no more worry for the future finance. But since 1922 when Chang Tso-lin dreamed of becoming the Emperor of China and opened the first Mukden-Chihli war by advancing his troops to Peiping beyond the Shanhaikwan barrier, utilizing the financial strength developed by this policy of 'integrity of borders and peace of the people', the provincial finance became unable to meet the ever expanding military expenditure, and it was necessary to obtain money from provincial banks or to issue inconvertible notes in order to prevent bankruptcy. Then the second Mukden-Chihli war of 1924, Chang Tso-lin's appointment as Marshal in 1927 at Peiping, Chang Hsueh-liang's conciliation with the Nanking Government in 1928, and other such developments finally destroyed the financial foundation established by Wang Yung-chiang. With the ever increasing military expenditure and the reckless issue of inconvertible notes, the provincial finance was pushed rapidly toward bankruptcy. This was not only true of Fengtien Province, but also of Kirin, Heilungkiang and Jehol Provinces which were suffering.

Financial Improvements by New Provincial Government Immediately After the Manchurian Incident

With the outbreak of the Manchurian incident on September 18, 1931, the old military rule was overthrown, and new provincial governments were established first in Fengtien Province, and then in Kirin and Heilungkiang Provinces.

These new provincial governments were not established to plan for political independence from the Nanking Government alone, but also with the ideal of forever parting with military administration and of establishing good administration. Improvement of the financial system was commenced in Fengtien Province within a few months after the incident, and then carried out in Kirin and Heilungkiang Provinces. As its administration policies, the Fengtien government declared for promoting the public welfare, public announcement of finances, and rational revision of the taxation system, and carried out radical changes in the budget which was formerly formed by military bureaucrats according to their selfish intentions. The main policies in forming the new budget of the province were as follow:

1. To make efforts to reduce expenditures as much as possible according to the principle of good administration, and to apply surplus funds thus saved toward lightening the burden of the people.
2. The financial source of the provincial government will be, as a principle, indirect taxes, and direct taxes will be transferred to local autonomous hsiens and cities.
3. To abolish or reduce former taxes recognized to be evil taxes.
4. No new taxes will be levied.
5. Expenditures will be limited to only those absolutely necessary for the present.
6. When a surplus or shortage is found in the estimated expenditure amount of all Government Offices, the Finance Office will increase or reduce the amount by proper methods.
7. All affairs concerning the accounting of revenue and expenditure will be handled by the main office and branches of the Three Eastern Provinces Provincial Bank.

With these policies, the new government of Fengtien Province proceeded to effect reduction of the people's burden, to establish 'inexpensive government', to adjust and unify financial administration, and also to

adjust and unify local finance and central finance. As the result of such reformation not only was official discipline maintained, but also the intermediate exactions by government offices and high officials as well as exactions by officials from merchants as contributions or offerings were prevented. The ginseng tax (蔘稅); timber tax (木植稅); chungkiang tax (中江稅), or transit tax on Manchuria-Korea trade in the upper regions of the Yalu river; Mongolian salt tax (蒙鹽稅); tobacco and wine tax; 20 per cent military surtax on tobacco and wine tax, and tobacco and wine licence tax; and various licence taxes were abolished. The production tax and bean tax were reduced to one-half; the land tax (田賦), cattle tax (牧畜稅), business tax, commission merchant and pawnshop tax (牙當稅), tobacco and wine tax (菸酒牌照稅), vessel tax (船捐), vehicle licence tax (車牌捐), and the land and consumption tax on tussah silk worm plants (剪課) were transferred to local autonomous bodies. Local autonomous bodies effected reduction of the people's tax burden by reducing former local taxes and making their rational adjustment, because of the new revenue obtained by the transfer of the above-mentioned taxes; the estimate for 1930 of the total amount of such transferred taxes was about 6,045,000 yuan, and the estimated revenue for the fiscal year of 1931 (from November, 1931, to June, 1932) was 4,965,000 yuan.

Kirin and Heilungkiang did not fundamentally revise the budgets formed by the former governments, but partial improvements were effected with the separation from the Nanking Government, the downfall of the military government, and the establishment of new governments with the ideal of good administration. Thus a part of the military expenditure was suspended, the expense of the Northeastern Administrative Committee and the expense of the provincial National Party (Kuomintang) were abolished, and reduction of expenditure was effected by adjustment of the peace preservation expenses and the Finance Office expense. In Kirin Province the surtax on the land tax (大租) was reduced by 40 per cent, and the military surtax on the stamp duty (契稅) and other taxes was abolished. In Heilungkiang Province, the consumption taxes (統稅) on wheat flour, cement and cotton weaving were abolished.

The amount of the reduction in the people's burden because of such improvements of the financial system is not yet clearly known. But the result in revenue from the tax system improvement may be seen from the following calculations announced:

Table 4*

REDUCTION OF TAX REVENUE CAUSED BY DECREASE OR
ABOLITION OF TAXES. (in Hsien Tayang Yuan)

	Fengtien Province	Kirin Province	Heilungkiang Province
Reduction by Tax Abolition	775,000	2,221,000	—
Reduction by Tax Decrease	5,973,000	629,000	—
Total	6,748,000	2,850,000	—

Finances of Manchoukuo

The establishment of Manchoukuo on March 1, 1932, brought about the second change in the financial system of the country, following the centralization of administrative organization. According to the new financial system, local finance is restricted to hsiens and cities, as a basic principle, and provinces are deprived of their financial authority, becoming only administrative districts. Local finances are to be controlled by the new Central Government. But as abrupt changes in the provincial system that had been observed for many years, however that might have been the result of the military administration, would cause disturbance of public feeling, and as fundamental changes in the finance system and particularly the accounting system within one fiscal year would bring about confusion in the system, it was decided that until July when the new fiscal year started, the former system would be followed within the limit of not conflicting with the spirit of the establishment of the new State and that hsiens and cities would operate their finances according to the budget formed for the fiscal year of 1931.

At the same time, however, the new Government proposed (1) the establishment of the budget system, (2) the adoption of the tax system aiming at the reduction of the public burden, and the adjustment of the monopoly system, (3) the adjustment of Government and public enterprises, and Government and public properties, and (4) the improvement of the tax collection system by abolishing the contract system, as the basic policies of the financial reformation. The absolute necessity of such reformation may be recognized by any one by looking at the financial system under the former régime.

During this period, or from March, 1932, to July, which is called the

* The figures of this table are calculated on the basis of the budget for the fiscal year of 1930. The adjustment of three consumption taxes (釐稅) in Heilungkiang Province was made in the fiscal year of 1930, but as it was suspended in the course of forming the budget of 1931, the reduction amount for the province is not known.

fiscal year of the national establishment, the provinces remained as remnants of the former provincial administration system, while the new Central Government was established to control all provincial administration. Thus there existed two financial systems at the same time—the provincial finances according to the budgets of the respective provinces that had been revised or renewed since the Manchurian incident, and the central finances according to the budget of the Central Government.

Respecting the Central Government budget, the authorities of the Finance Department of Manchoukuo have recently stated publicly as follows: "Immediately after the establishment of the new State, it was impossible to grasp the general condition of the entire country, and respecting administrative measures, planning and investigations were imperfect, and therefore it was difficult for the Central Government to form a budget for one whole year, and under such unavoidable circumstances, for the period of four months since the establishment of Manchoukuo, the budget was formed monthly." But in forming such monthly budgets, it was difficult to estimate revenue, and therefore the policy of reducing expenditure and increasing revenue was adopted. Only the expenditure appropriation was formed, and the sources of revenue were found in the salt tax, profit of the Chuehyunshu (稅運署) of Kirin and Heilungkiang Provinces, and national bond issues. The total of such monthly revenue and expenditure for the four months was announced by the Government as follows:

Table 5

REVENUE OF THE FISCAL YEAR OF 1931 (the year of
establishment) OF MANCHOUKUO.
(in 1,000 yuan Manchoukuo currency)

Ordinary:	
Tax	
Salt tax	8,000
Revenue from Government enterprise and property	
Profit of Chuehyunshu of Kirin and Heilungkiang	1,000
Miscellaneous revenue	1
Total	9,001
Extraordinary:	
National bond issue	11,500
Miscellaneous revenue	
Miscellaneous receipt	714
Exchange difference	22
Total	12,236
Grand Total	21,237

Table 6

EXPENDITURE FOR THE 1931 FISCAL YEAR (the year of establishment) OF MANCHOUKUO
(in 1,000 yuan Manchoukuo currency)

Ordinary :	
Office of the Chief Executive	333
General Affairs Board	856
General Affairs Board	484
Privy Council	41
Legislative Council	48
Supervisory Council	66
Bureau of Legislation	33
Supply Bureau	70
Hsingan Bureau	89
Capital Construction Bureau	25
Civil Affairs Department.....	767
Civil Affairs Department.....	364
Hsien Council	91
Police Force	289
Civil Engineering Bureau	18
Capital Police Bureau	5
Foreign Affairs Department.....	81
Defence Department.....	7,800
Finance Department	215
Finance Department	207
Tax Offices	8
Industry Department	102
Communications Department	126
Justice Department	335
Justice Department	79
Courts & Procuratorates	161
Prisons	95
Total	10,615
Extraordinary :	
General Affairs Board	7,583
Legislative Council opening ceremony expense...	1
Expense for guarding the Enquiry Commission of the League of Nations	25
Special local investigation expense.....	50
Expense of planting trees commemorating the national establishment	5
Expense for surveying the national capital	2
Payment on the shares of the Central Bank of Manchou	7,500
Total	7,583
Grand Total	18,198

Government authorities explain that the above-mentioned actual expenditure was extremely small mainly because the budget control of local districts was not fully enforced, and further say :

"In the year of the establishment of Manchoukuo, the budget was formed monthly, and for convenience' sake the total of the monthly budgets from March to June was made the expenditure budget amount of the fiscal year, and its total including supplementary budget amounts reached 19,327,898 yuan. But the actually paid amount was 18,197,864.41 yuan or 1,130,033.59 yuan less than the budget amount. The expenditure for the first fiscal year was not permitted to be carried forward to the next fiscal year, and therefore the shortage of the actually paid amount to the budget amount became desuetude.

"This difference was caused because the budget was formed monthly, and it was not permitted to carry forward the budget to the following month, and items which were absolutely necessary to be carried forward were embodied in a supplementary budget for the following month."

Contrary to the wish of the Central Government, the control of local budgets could not be properly made in the first fiscal year, and all government offices followed the former policy of meeting their expenditures by their own revenue, and thus they possessed deposits in banks, as already mentioned. But with the change of the fiscal year in July, the Finance Offices of the provinces were made Taxation Superintendence Offices under the direct control of the Finance Department of the Central Government, and the provinces were deprived of their financial authorities. The finances of hsiens and cities were placed under the control of the Central Government. In this way the centralization principle of the financial system was materialized. As the result of this reformation, the Finance Department of the Central Government came to exercise its authority as the organ for controlling the State revenue and the revenue of the various hsiens and cities, and the Accounts Bureau of the General Affairs Board, directly under the Council of State Affairs of the Central Government, exercised its authority in forming and superintending the revenue and expenditure appropriations. With the unification and control of the financial system, the Central Government effected unification of the Treasury system in order to control the budget. The establishment of the Central Bank of Manchou has facilitated the adjustment of the financial administration and especially the unification of the Treasury system.

But to dissolve the former provincial government which was the stronghold of provincial administration by military groups and make it

the Provincial Office or a branch organ of the Central Government, to change the provincial finances into the finances of the Central Government, and to include and unify provincial budgets in the budget of the Central Government, were an extremely difficult task. It was impossible, therefore, to obtain sufficient results in the first four months after the establishment of the new State. Thus it was necessary to form the monthly budget for July, 1932, the first month of the 1932 fiscal year and then to form the budget for the two months of August and September; thus the preparatory period for forming the annual budget by the nationally unified budget and accounting systems was obliged to be extended.

In October, 1932, after finishing this preparatory period, the Government announced the budget of revenue and expenditure for the 1932 fiscal year or from July, 1932 to June, 1933, adding together the actual accounts for July, already announced budget for August and September, and the newly formed budget for the remaining nine months.

Table 7
ESTIMATED REVENUE OF THE YEAR 1932
(In 1,000 yuan Manchoukuo Currency)

Ordinary :	
Taxes	85,378
Customs Duties	40,460
Tonnage Dues	430
Salt Gabelle	16,814
Land Tax	2,955
Production Tax	6,213
Business Tax	3,694
Cattle Tax	960
Slaughter Tax	50
Deed Tax	1,445
Tobacco and Wine Taxes	2,069
Uniform Tax	7,172
Stamp Duties	1,954
Mining Tax	116
Coal Tax	349
Other Taxes	697
Income from Government Properties and Enterprises ...	9,631
Receipts from Salt Transportation Offices of Kirin and Heilungkiang	4,362
Receipts from Opium Monopoly	5,000
Other Receipts from Government Properties and Enterprises	269
Miscellaneous Receipts	2,377
Total	97,386

Extraordinary :

Receipts from Government Properties	155
Miscellaneous Receipts	1,372
Receipts from Charge on Profit of C. E. Railway	2,104
Loans	12,291
Total	15,922
Grand Total	113,308

After the announcement of this budget, revenue items were changed, and consequently items given in the table were changed more or less, but as the budget was not substantially changed, the budget as originally announced, is given here :

Table 8
ESTIMATED EXPENDITURE OF THE YEAR 1932
(In 1,000 yuan Manchoukuo Currency)

Ordinary :

Chief Executive's Office	1,050
General Affairs Board	37,664
General Affairs Board	980
Legislative Council	256
Privy Council	197
Supervisory Council	362
Bureau of Legislation	189
Capital Construction Bureau	259
Tatung College	213
Provincial Government Offices	12,000
Subsidies	5,196
Other Expenditures	3,009
Reserve	15,000
General Administrative Office of Hsingan Province	1,012
Department of Civil Affairs	4,168
Department of Foreign Affairs	666
Department of Defence	30,000
Department of Finance	24,458
Department of Industry	434
Department of Communications	1,547
Department of Justice	3,108
Department of Education	271
Total	104,482

Extraordinary :

General Affairs Board	5,033
Department of Finance	662

Department of Defence.....	3,000
Department of Civil Affairs	116
Department of Communications	13
Total	8,825
Grand Total	113,308

Finance authorities gave the following unofficial statement in respect to the formation of the above budget.

"In forming the budget, the basic policy of the Government was to meet only the most urgent and necessary items of expenditure the State was confronting, and thus the budget was formed mainly of items for maintaining peace and order in the entire country and for the smooth operation of the finance system which are the urgent needs of the State at present, and in other demands for appropriations a radical cut of about 40,000,000 yuan was made. Practically no new demands were recognized, and thus it was a signally radical measure.

"Because the present budget was formed and adjusted in a very short time, not only there are many irrationalities, but also there was fear it might cause more irrationalities because of the attempt to retrench radically in expenditures; for meeting such requirements a large reserve fund was prepared. This is the special feature in the budget.

"Under the former military régime, the military expenditure took up 83 per cent of the total budget amount, but the military item in the Manchoukuo budget is only 29 per cent of the total. Thus it is proved that to administrative facilities, a greater fund has been allotted.

"The first step in carrying out the national policy of Manchoukuo was shown in the financial policy."

The budget for the fiscal year of 1932 was formed by the extraordinary efforts of the Manchoukuo authorities, and also was the first attempt of the kind ever made in China or Manchuria. Because it was formed in a very short time, it has such defects as that the military expense and the expenses of each provincial office which constituted the important part of the budget, were calculated in generalized plans, and the expenses for Jehol Province, Tungsheng Special District (the present North Manchuria Special District) and others were not entirely included. At the same time, the provinces, which had lost their financial authority, possessed the former financial resources, and the expenditures for provincial

offices of the budget, resulted to become subsidies to provincial offices. Not only were such irrationalities seen in the budget, but also the revolt of Ma Chan-shan (馬占山), the uprising of Su Ping-wen (蘇炳文), the change of attitude of Tang Yu-lin (湯玉麟) and developments on the North Manchuria and Jehol borders threatened to disturb the stability of the political organization, and the unification and adjustment of finance were handicapped by such circumstances.

After the formation of the original budget for the fiscal year of 1932, there arose such necessities as constructing national roads, maintaining peace and order, and restoring the damage caused by the North Manchuria flood, and in December the so-called National Establishment Bonds* of 30,000,000 yen were floated in Japan. Then forming supplementary budgets, it was decided to meet such urgent requirements. Although, at first, it was planned to apply about 13,500,000 yuan out of the bond issue towards the fund for constructing national roads, and to allot the balance to the maintenance of peace and order, and for restoring the damages caused by the flood, it was revealed that only 500,000 yuan was required for road construction in the fiscal year because of the limited period to undertake the actual construction work and the remaining road construction work was left to be undertaken in the succeeding years. The balance of more than 12,000,000 yuan left from the original sum allotted to road construction work was applied to the original and supplementary budgets. Under such conditions, the issue of national bonds, besides the National Establishment Bonds, was limited to 7,600,000 yuan, for the original and supplementary budgets of the fiscal year. The supplementary budget and the five special accounts estimates of the Capital Construction Bureau, National Road Bureau, Supply fund, fund for adjusting former foreign loans secured by the Custom revenue and salt tax, and Monopoly Office, were announced in March, 1933.

* Terms of the issue of the National Establishment Bonds; total issue amount ¥30,000,000; interest 5%; term, left unredeemed for two years, and then redeemed in five years by drawing lots; issue amount ¥96.50 (interest percentage for the last redeemed 5.7%); security, preferentially redeemed with Monopoly profits; place of paying interest and capital, main office of the Japan Industrial Bank; sales period, first part of December, 1932; application deposit, ¥5, to be applied to the first payment on the bond; payment period, January, 1933; fee, ¥1.

Table 9

SUPPLEMENTARY BUDGET FOR THE FISCAL
YEAR OF 1932, No. 1.

(in 1,000 yuan Manchoukuo currency)

Revenue		Expenditure	
Ordinary :	—	Ordinary :	—
		General Affairs Board	587
		Total	587
Extraordinary :		Extraordinary :	
National Bond Issue	16,948	General Affairs Board	3,312
		Clearing of bandits	1,410
		North Manchuria flood expense	402
		Applied to Special Accounts of National Road Bureau	1,500
		Hsingan Administrative Office	66
		Hulanbair incident expense	66
		Civil Affairs Department	5,763
		Improving Shore Guard	1,263
		Subsidies to local expense	4,500
		Defence Department	6,902
		Hulanbair incident expense	202
		Special peace maintenance ex- pense	6,000
		Expense for adjusting River Defence Fleet	700
		Finance Department	317
		National bond issue expense	317
Total	16,948	Total	16,361
Grand Total	16,948	Grand Total	16,948

Table 10

SUPPLEMENTARY BUDGET FOR THE FISCAL
YEAR OF 1932, No. 2.

(in 1,000 yuan Manchoukuo currency)

Revenue		Expenditure	
Ordinary :	—	Ordinary :	—
Extraordinary :		Extraordinary :	
National bond issue	2,600	General Affairs Board Applied to special accounts of Monopoly Office	2,600
Total	2,600	Total	2,600
Grand Total	2,600	Grand Total	2,600

Table 11

SUPPLEMENTARY BUDGET FOR THE FISCAL
YEAR OF 1932, No. 3.

(in 1,000 yuan Manchoukuo currency)

Revenue		Expenditure	
Ordinary :	—	Ordinary :	—
		General Affairs Board	100
		Total	100
Extraordinary :		Extraordinary :	
National Bond issue	5,000	General Affairs Board	5,000
Interest revenue from special ac- counts of Capital Construction Bureau	100	Applied to special accounts of Capital Construction Bureau ...	5,000
Total	5,100	Total	5,000
Grand Total	5,100	Grand Total	5,100

In the original budget, 10.8 per cent of the revenue was represented by the national bond issue, but with the formation of the supplementary budgets, it became necessary to obtain 26.7 % of the total revenue by the issue of national bonds. This fact may make the finance of Manchoukuo appear to be in a depressed condition. But this is due to the extremely small estimate of the revenue, and according to the explanation of the Finance authorities, the ordinary revenue was estimated at one half or one-third of that under the former régime, in consideration of the degree of the maintenance of peace and order. With the stabilization of the peace and order of the country, it is expected that the financial and tax sources of Manchoukuo will greatly increase in future, and the financial prospects of the country are extremely bright, it is believed. Respecting the present and future finances of Manchoukuo no accurate figures have been announced, but the following statistics of actual amounts of revenue and expenditure of general accounts for the fiscal year of 1932, unofficially made public at the end of August, 1933, may give some hints for the future :

Table 12

ACTUAL AMOUNTS OF REVENUE OF GENERAL ACCOUNTS FOR THE
FISCAL YEAR OF 1932, COMPARED WITH THE BUDGET AMOUNTS

(As standing on August 31, 1933; in 1,000 yuan Manchoukuo currency)

	Budget Amount including supplementary budget amounts	Revenue amount collected to the date
Ordinary :		
Tax	84,838	98,555
Customs revenue	40,460	52,050

	Budget Amount including supplementary budgets amounts	Revenue amount collected to the date
Internal taxes.....	27,564	27,688
Salt tax	16,814	18,815
Monopoly profit	9,952	4,801
Monopoly Office profit	5,000	—
Chuehyunshu (樵運署) of Kirin and Heilungkiang profit	4,362	4,362
Others.....	590	439
Revenue from Government properties and other miscellaneous revenue ...	2,596	4,942
Total	97,386	108,300
Extraordinary :		
General	3,631	7,522
Brought from special accounts ...	100	20
National Bond Issue	36,840	36,840
Total	40,571	44,382
Grand Total	137,957	152,683

Table 13

ACTUAL EXPENDITURE OF GENERAL ACCOUNTS FOR THE FISCAL YEAR OF 1932, COMPARED WITH THE BUDGET AMOUNTS

(As standing on August 31, 1933; in 1,000 yuan Manchoukuo currency)

	Budget amount including supplementary budgets	Expenditure paid to the date
Ordinary :		
Office of Chief Executive	1,150	1,150
General Affairs Board	24,825	22,486
Hsingan Administrative Office.....	1,620	1,342
Civil Affairs Dept.	4,755	4,582
Foreign Affairs Dept.	865	841
Defence Department	30,224	30,216
Industry Department	440	436
Finance Department	24,667	22,867
Communications Department	1,602	1,574
Justice Department	3,640	3,628
Education Department	410	378
Total	94,202	89,505
Extraordinary :		
General Affairs Board	21,890	19,283
Hsingan Administrative Office.....	105	94

	Budget amount including supplementary budgets	Expenditure paid to the date
Civil Affairs Dept.	6,136	4,677
Foreign Affairs Department.....	334	334
Defence Department	13,497	13,497
Finance Department	1,273	1,163
Industry Department.....	207	195
Communications Department	71	70
Justice Department	190	185
Education Department	46	41
Total	43,754	39,544
Grand Total	137,957	129,050

Respecting the policy of forming the budget for the fiscal year of 1933, the Government gave the following instructions to all Government Offices to be observed in submitting their appropriation amounts :

1. Revenue is to be accounted for all divisions and sections without any exception.
2. Expenditure is to be calculated according to the principle of strict retrenchment, and new demands are to be included only when they are urgently necessary.
3. Expenditures which had been recognized in the budget for the fiscal year of 1932 should be adjusted and retrenched as much as possible.
4. Estimates of the budget should be made as accurate as possible so that there will be no difference from the actual amounts.
5. The reserve fund reached a comparatively large figure because of special prevailing conditions in the fiscal year of 1932, but in the fiscal year of 1933, it will be much reduced.

The above instructions expressed the wish of the Government to establish the 'inexpensive Government,' to effect perfect control and unity of the financial administration, and especially to effect the national control of budget, which was the fundamental policy of the Government since its establishment.

Then in June, was announced the budget for the fiscal year of 1933, or the third budget of Manchoukuo, together with the ten special accounts (excluding the North Manchuria Special District Special Account announced in September) including the five newly formed special accounts, the sinking fund, Clothing Depot, Kirin and Heilungkiang Chuehyunshu (樵運署), State property adjustment fund, and postal service.

Table 14

REVENUE BUDGET OF MANCHOUKUO FOR THE
FISCAL YEAR OF 1933

(in 1,000 yuan, Manchoukuo currency)

Ordinary :	
Tax	108,629
Land tax	4,354
Business tax	4,642
Tobacco & Wine tax	3,035
Mining tax	660
Customs tariff	49,617
Salt tax.....	20,736
Production tax	9,459
Cattle tax	1,471
Tungshui (統稅)	11,047
Deed tax (印花稅)	1,619
Stamp Duty (契稅)	1,309
Tonnage tax	163
Miscellaneous taxes	509
Revenue from Government enterprises and properties.....	18,724
Profit of Kirin and Heilungkiang Chuehyunshu (樵運局) ...	5,000
Profit of Monopoly Office.....	9,828
Revenue from the sale of matches	558
Revenue from other Government enterprises	268
Revenue from Government properties	3,069
Miscellaneous Revenues	4,780
Judicial revenue	990
Mining affairs revenue.....	223
Revenue from horse races	430
Shangwu (商務) revenue	275
Revenue of Marine Bureau	342
Other miscellaneous revenues.....	2,519
Total.....	132,134
Extraordinary :	
Revenue from the sales of Government properties	26
Revenue from the lottery tickets for the relief of the flood.....	300
Revenue from the adjustment of the properties of rebels.....	4,176
Brought from Special Accounts	317
Surplus from former fiscal year	3,039
National bond issue.....	7,000
Other revenues.....	2,174
Total.....	17,034
Grand Total	149,169

Table 15

EXPENDITURE BUDGET OF MANCHOUKUO FOR THE
FISCAL YEAR OF 1933

(in 1,000 yuan, Manchoukuo currency)

Ordinary :	
Office of Chief Executive.....	1,200
General Affairs Board.....	20,379
General Affairs Board.....	1,554
Privy Council	260
Legislative Council	209
Supervisory Council.....	393
Legislation Bureau	275
Tatung School (大同學院)	165
Printing Office	68
Building superintendence	44
Expenditure items	1,057
Applied to Foreign Loan Redemption Fund special account	11,848
Treasury Reserve.....	4,500
Hsingan Administrative Office	2,319
Hsingan Administrative Office	480
Hsingan Branch Administrative Offices	523
Hsingan police.....	895
Subsidies	414
Expenditure items	5
Civil Affairs Department	22,648
Civil Affairs Department	1,113
Civil Engineering Bureau	176
Central Police Institute	87
Capital Police Office.....	875
Provincial Offices.....	4,703
Policing expenses.....	3,389
Local policing expenses	3,316
Quarantine expenses	145
Local educational expenses.....	2,077
Cultural institutions.....	104
Jehol local offices.....	147
Jehol judicial expenses	93
Opium addict relief expenses	130
Banner affairs expenses	174
Civil engineering maintenance	105
Subsidies to hsien expenses.....	5,769
Secret expenditure	150
Expenditure items	88

Foreign Affairs Department	1,202
Foreign Affairs Department	715
Legation and consulates	287
North Manchuria Special Representatives' Office	92
Passport Vise Office.....	102
Expenditure items	4
Defence Department	37,333
Defence Department	1,085
Army expense	34,532
River defence expense.....	708
Horse administration expense.....	557
Expenditure items	448
Finance Department	12,411
Finance Department	1,151
Taxation Superintendence Office	1,836
Tax Collection Office	3,482
Salt Affairs Office	1,491
Custom-house	3,760
Match Sales Office	66
Expenditure items	624
Industry Department	1,521
Industry Department	711
Trade Mark Bureau.....	102
Meteorological Observatory	27
Koshan (克山) Agricultural Experimental Station	30
Forestry Office	62
Veterinary Surgeon Training School	41
Fengtien Fishery and Marine Office	159
Local Industrial Encouragement expense	378
Expenditure items	6
Communications Department	2,005
Communications Department.....	603
Navigation Bureau	394
Subsidy to Manchuria Air Transportation Co.	1,000
Expenditure items	7
Justice Department	5,595
Justice Department	483
Judicial affairs expense	2,401
Prosecution expense.....	1,293
Prison expense	1,406
Expenditure items	12
Education Department	831
Education Department	493
National Library	52
Higher Normal School	52

Expense for studying abroad	228
Expenditure items	5
Total	107,448
Extraordinary :	
General Affairs Board	19,299
Hsingan Administrative Office	25
Civil Affairs Department	1,632
Foreign Affairs Department	42
Defence Department	4,633
Finance Department	13,933
Industry Department	1,889
Communications Department.....	165
Education Department	99
Total	41,720
Grand Total	149,169

In the extraordinary expenditure items, the largest are the Government offices repairing expenses, subsidies to private organizations, fund for the redemption of long standing debts, expenses of the peace maintenance committee, and transfer to special accounts in items under the General Affairs Board; subsidies to local associations and relief of suffering people under the Civil Affairs Department; building repairing expenses, troop adjustment expenses, and bandit subjugation expenses under the Defence Department; national bond sinking fund, payment on the shares of the Central Bank of Manchou, subsidy to the Chinjunghoshe (金融合作社), and expenses of supervising the parcel post service under the Finance Department; and investment in the Manchuria Gold Mining Company, and subsidies for industrial encouragement under the Industry Department.

It will be seen that in the above budget is estimated the increased revenue due to the increased Customs and internal tax revenue and control of the Government enterprises and properties, following the restoration of peace and order, stability of the currency value, improvement of the taxation system and other conditions, and also is included the surplus left after balancing the revenue and expenditure for the fiscal year of the national establishment. Although there is the anticipation of the already decided issue of 7,000,000 yuan for obtaining the national road construction fund, which was postponed in the previous fiscal year, favourable improvement of revenue has made any other issue of national bonds for the purpose of filling shortage of revenue unnecessary. In the expenditure, it will be seen that attention is given first to the maintenance of peace and order in the country, to improve the policing system under

a unified organization, to guarantee the payment to troops and police forces, and to obtain appropriations for the expenses of the Peace Preservation Committee and bandit subjugation in summer. Also the expenses for controlling local judicial organs in preparation for the abolition of extraterritoriality and for the facilities for improving judicial officials are included. For establishing the foundation of the industrial development of Manchoukuo, expenses for the construction of national roads, investments in important industries, and expenses for urgent new facilities are included, besides the payment on the capital of the Central Bank of Manchou. Subsidies to hsien and cities are included for adjusting and controlling local administration and finance. It is also to be noted that in order to heighten the international reputation and credit, the fund for redeeming the capital amounts and unpaid interest on the former foreign loans secured by the customs revenue and salt tax, and the funds for redeeming long standing debts have been included in the budget, as has been done since 1932; also for effecting the sound development of finance, a sinking fund has been included.

Comparing the 1933 budget with that for the fiscal year of 1932, it will be found that the reserve fund has been greatly reduced and that the expenses of the Defence Department are calculated in smaller items. The most notable progress will be seen in the fact that the expenses of provincial offices are calculated in separate items, meaning that the provincial financial authority has been cancelled and that the provinces have lost their position as local autonomous bodies and have become merely administrative districts. Thus all provincial finance has been merged in the central finance, and the financial affairs of the provinces are now retained in the budget for administrative offices under the Central Government. The appearance of the budget for Jehol Province also deserves notice as it tells of the central control of the financial administration.

These facts not only reveal the progress made in the form of the budget, but also the progress and stability of Manchoukuo itself. The budget for the fiscal year of 1933 together with the ten special accounts (eleven when the North Manchuria special account announced in September is included) announced at the same time, may be called the first real annual budget made in Manchoukuo. At the same time, almost needless to say, it is the first perfect annual budget ever seen in either China or Manchuria.

Improvements in Financial System Made by Manchoukuo

Since the Manchurian incident of September 18, 1931, which caused the destruction of the administration by military groups, only two years have passed; since the establishment of Manchoukuo, merely one year and a half have passed. Thus in the various financial systems organized according to the semi-feudalistic rule by military leaders, necessary improvements are left to be accomplished in the future. But in this short period, quite remarkable improvements have already been effected.

The acquisition of all the Custom-houses in Manchoukuo, simultaneously with the establishment of the new State, is not yet recognized by foreign countries except Japan. But this development means the establishment of Manchoukuo's autonomy in the Customs administration, and also the rejection of interference by foreign powers in the financial administration, just as she rejected the interference of the Chihoso (稽核所) in the salt administration. This independence of financial administrative authority and the already mentioned unification of the financial administration or centralization of the financial system are the greatest reforms made by Manchoukuo in the financial system.

In the first year of Manchoukuo, the centralization of the financial system was not yet fully carried out and there were still left much confusion and non-uniformity. But in its second year, Manchoukuo accomplished this great task, and by withdrawing provincial financial authority, and centralization, the Central Government and provincial offices came to be provided for by the national budget based on the national revenue and expenditure, and the finances of hsien and cities were placed under the control and supervision of the Central Government directly. In view of the fact that formerly the provinces were districts controlled by military groups, that the base of their military and political activities was the powerful provincial financial authority, and that it may be considered that Manchuria and China did not possess qualifications as unified nations because of the existence of this powerful provincial financial authority, the greatness of this reformation may be recognized. Also it means the first step in the modernization of the financial system of Manchoukuo.

The first improvement made in the taxation system according to the basic policy of the centralization of financial administration was the division of national taxes and local taxes in September, 1932. The ordinance of the Finance Department said: "The existing taxes which formerly

belonged to the revenue of the Central and provincial Governments, regardless of their collection organs, shall all be made national taxes; other taxes shall be made local taxes and become the revenue of hsien, city or the Shechihchu (設治局). Thus, the Customs revenue, salt tax, land tax, business tax, production tax and 18 other taxes were made national taxes; the vehicle tax, vessel tax, Miaochüan (廟捐) a sort of local surtax on the business tax, Chichüan (妓捐) licence tax on singing girls or restaurants, amusement tax, and other taxes supplementary to such taxes were transferred to hsiens and cities. The ordinance announced that this division of taxes should be enforced from October 1, 1932. The division of national and local taxes was the central financial problem of China since the establishment of the Republic of China, just as the question of adjusting troops was. But because of the powerful influence of the provincial military leaders, the repeatedly issued regulations for dividing the taxes became void. This reformation in Manchoukuo organized as a centralized State was, however, accomplished in a very short period. In the fiscal year of 1932, a few of the national taxes and hsien or city taxes remained as provincial taxes, despite this ordinance, but in the fiscal year of 1933, all taxes were duly divided as stipulated by law, and the taxes of Manchoukuo came to be clearly divided into national and local taxes.

From the standpoint of planning the national unification of the taxation system and also the fair distribution of the tax burden as far as possible, Manchoukuo levied the three Tungshui (統稅) in Kirin Province, since May, 1933. The Tungshui (統稅) or consumption tax on cotton fabrics, wheat flour and cement were levied in Fengtien, Heilungkiang and Jehol Provinces (in Heilungkiang Province it was abolished after the Manchurian incident, but revived in 1932) but in Kirin Province alone, these goods were left free of the tax. The abolition of all Piaochoafei (票照費) was also a reform from the same standpoint, and also a manifestation of the lightening of the people's burden. Piaochoafei was collected as the cost of paper and printing of various tax receipts and freight certificates. Such a tax collected upon paying taxes or freight charges possessed the nature of a surtax, however small the amount might be. The annual amount of this tax in 1930 in the case of Fengtien Province was about 472,000 yuan Hsien Tayang. Only a small portion of this amount was applied to the cost of paper and printing, and the rest was applied to the bonuses of officials of government offices. Following the example set by the new provincial government of Fengtien immediately after the Manchurian incident of abolishing this tax, Manchoukuo also abolished it

in districts other than Fengtien Province.

As another reform for lightening the public burden, may be mentioned the abolition of all military surtaxes on various taxes in Heilungkiang Province in August, 1932, and also the abolition of the policing salt tax in Kirin and Heilungkiang Provinces in December, 1932. In Heilungkiang Province, the collection of military surtaxes was continued because of the special political situation, even after the establishment of the new provincial government following the Manchurian incident. The 20 per cent surtax on all kinds of taxes was quite a heavy burden on the people, and it is needless to say that the amount was mainly used for military expenses. The Manchoukuo Government abolished it in Kirin Province, just as in Fengtien and Heilungkiang Provinces, when the provincial financial authority was virtually abolished. The policing salt tax was collected under the pretext of being the compensation for protecting the sale and transportation of salt, and was a sort of consumption tax on salt. But in Kirin and Heilungkiang Provinces, the sale of salt was monopolized by the Chuehyunshu, and thus the people had to bear not only the salt tax and the profit of the Chuehyunshu, but also this policing tax of 4 chiao (角) Kirin Tayang or Kiang Tayang per 100 chin (斤). Also for pacifying the public sentiment, it is to be noted, the Manchoukuo Government adopted the following measure, though not of a permanent nature; exemption from unpaid land tax and business tax, and their surtaxes; one half reduction of the land tax and its various surtaxes to be levied for the fiscal year of 1932; and suspension of the application during the fiscal year of 1932 of the punishment clauses of the Stamp Duty Regulations.

In February, 1933, the Civil Affairs Department announced prohibition of the requisition by troops, stationed at various points, of coolies, foodstuffs, fodder, and the commandeering of labour and goods in place of the payment of various surtaxes, according to the order to the Defence Department. There are no available figures to prove how severe was the collection of these taxes (which included many that were to be paid in goods) and labour under the former military régime in the name of assisting in perfecting military equipment. These requisitions were made by troops stationed at various points according to their selfish wish, or in cooperation with officials of hsien governments. Also it is a fact that in Fengtien Province, the government expense of one village reached 7 yuan Hsien Tayang per one shang (响), and besides various articles were commandeered by troops. These facts will prove how severe was the requisition of goods and labour under the former régime. To farmers and

also the entire people residing in Manchuria, such illegal taxations and requisitions became a much more serious and heavier burden than the legal taxes. Locally stationed troops, which could not give up their former evil practices, continued to force such illegal taxes upon the people even after the Manchurian incident. Because such were illegal acts and were committed at the selfish will of soldiers, the Manchoukuo Government made a thorough prohibition of such practices. Their prohibition is believed to have effected a signal lightening of the people's burden.

Since its establishment, the Manchoukuo Government carried out the reform of internal taxes, as already mentioned, with a view to lighten the public burden and to unify the taxation system, according to good administration principles, following the new provincial governments established after the Manchurian incident. But such reforms were obliged to be partial ones. In the period of confusion following the Manchurian incident, Manchoukuo first desired to unify the financial administration nationally, in effecting the improvement of the financial system. Manchoukuo succeeded to obtain this first wish. But as all know, the taxation system under the former régime was different according to provinces, and the burden was unequally distributed. Manchoukuo, which succeeded to such a system, found that it is necessary to make a general reform, not satisfied with only partial improvements, as the national foundation is established and the people found hope of new prosperity. As the first step toward such a general reform, the Government has started to conduct a thorough research throughout the country in respect of the taxation system. In the budget for the fiscal year of 1933, 78,000 yuan is included for the expense of carrying out this investigation.

Salt Administration in Manchoukuo

The existence of a heavy salt tax is not desirable for the life of the people. The present system of Manchoukuo, succeeded to from the former régime, levies the high salt tax of 6.3 yuan per 100 chin, while the production cost is only a little more than 2 chiao (0.2 yuan) for 100 chin. In Kirin and Heilungkiang Provinces, the people are obliged to shoulder an additional 3 to 4 yuan profit for the salt monopoly system. Thus the urgency of improving this situation may be clearly seen. But as the salt tax occupies an important position in the revenue of the country, together with the customs revenue, the reduction of the salt tax and the monopoly profit will immediately reduce the national revenue of Manchoukuo.

Thus to Manchoukuo, the question is very urgent, but at the same time a very difficult one.

The history of the salt industry in China is very old. It is recorded that, in the remote age of the Emperor Huang (黃), salt was already made by boiling sea water. The present sun-evaporation salt manufacturing method is said to have been introduced in China by a Catholic priest in the Kanghsi (康熙) era, or 1662-1721. Thus the salt administration has a long history in China, and it is recorded that already in about 680 B. C. under the Chou (周) dynasty, the salt and iron taxes were levied by the Emperor Huan (桓) of Chi (齊). Then in the period of Han (漢), 109 B. C., a salt monopoly system was enforced throughout China. Since those early days, there was adopted the principle of levying a consumption tax on salt, of making it a government monopoly, or of specially licensing salt dealers.

Sun-evaporation salt manufacturing was introduced to Manchuria first by immigrants from China. Since salt-fields were opened in the Kaiping (蓋平) district in 1862, salt manufacture was gradually carried on along the coast of the Liaotung peninsula which finally became famous as the sun-evaporation salt producing district. Already under the Han dynasty, salt officials were stationed all over China and the salt monopoly system was adopted. Salt officials also were stationed in the western parts of the Liaotung peninsula, and the salt monopoly law was issued.

Since then Manchuria had many vicissitudes, governments rose and fell, and consequently the salt administration was also often disturbed. In 1679, at the beginning of the Manchu dynasty, in Manchuria was adopted the system of Yenyin (鹽引), and in 1862 it was replaced by a consumption tax called Yenli (鹽釐), and at various places were opened such salt administration offices as the Yenlichu (鹽釐局), Puchengchu (補徵局) or branch of Yenlichu, Chissuchu (緝私局), and others. In 1908 the salt monopoly system was adopted in Kirin and Heilungkiang Provinces, and Chuehyunchu (樵運局) was opened at Changchun (now Hsinking) and Harbin. Thus toward the end of the Manchu dynasty, the salt administration organ in the Three Eastern Provinces was unified. The salt administration, however, was corrupt because of the existence of various different salt taxes, the controversies in collecting salt taxes, and the corruption of officials, which caused various evil practices. In 1913 when the five-power loan agreement was signed upon the security of the salt tax revenue, the salt administration system was greatly improved, foreigners being appointed as advisers. Thus as the organ for controlling

the administration respecting salt and private salt, there were opened the Yenwushu (鹽務署) as the central office, and Yenyunshihshu (鹽運使署) and Chuehyunchu (樞運局) as local offices. For collecting the salt tax there were opened independent collection offices, separated from the administration organs in view of past experiences. That is to say, Chihotsungso (稽核總所) as the central institution and Chihofenso (稽核分所) in local districts in order to centralize the salt administration. In the Three Eastern Provinces were the Three Eastern Provinces Yenyunshihshu (鹽運使署) and the Kiheichuehyungchu (吉黑樞運局) amalgamating the Chuehyungchus of Kirin and Heilungkiang Provinces, as organs under the Yenwushu; and as the organ for collecting the salt taxes was the Yenwuchihofenso (鹽務稽核分所) at Yingkow, and for supervising the Chuehyungchu there was opened at Changchun the Chihoso. Thus the salt affairs of Manchuria were under the control of the Central Government of China, and the salt tax revenue and the monopoly profit became the revenue of the Chinese Central Government.

But when Chang Tso-lin declared the independence of Manchuria in 1922, these revenues came to be included in the revenue of the Three Eastern Provinces, excepting the share for redeeming foreign loans, and the same condition was continued even after the co-operation effected with the Nanking Government by Chang Hsueh-liang.

In this manner, although the salt system was once unified for the entire territory of China, the collection system differed according to districts, and in Fengtien Province the so-called Shrangyen (商鹽) system was adopted, and in Kirin and Heilungkiang Provinces the so-called Kuanyen (官鹽) system.

Under the former régime, the salt system of Fengtien Province was pointed out as the model system in the entire country of China. Under this system, the salt fields were divided into several salt districts, according to geographical conditions, and each district had its governor to supervise the salt fields. Under the salt district governor were salt field superintendents to supervise sections, each district being divided into several sections. Salt field superintendents directly associated with the salt makers and supervised the production and stored the salt. Then there were special guards for the salt administration to keep watch over the stored salt and prevent smuggling. The total of such salt guards reached about 1,000. These organs were directly or indirectly responsible to the Three Eastern Provinces Yenyunshihshu at Yingkow which was the direct organ of the

Central Government of China. The Yenwuchihoso established in 1913 existed, besides the above-mentioned organs of Fengtien Province, independent of the Yenyunshihshu, and organized a unified collection system, belonging to the Yenwushihotsungso headed by a foreigner. The Yenwuchihoso had the Yenwuchu under its authority, and the chief of the Yenwuchu controlled inspectors and co-operated with the salt district governors and superintendents of the Yenyunshihshu in conducting the collection of the salt tax.

Those desiring to build salt fields had to obtain the permit of the Yenwushu, according to the salt manufacture license regulations. Salt makers had to report their daily production to superintendents and inspectors. Salt dealers had also to obtain permits. When dealers purchased salt from salt makers directly, they had to report to the Yenshuichu (鹽稅局) or the Yenwuchihoso (鹽務稽核所) after the contract between dealers and makers the quantity of salt purchased and their destinations, paying the stipulated salt tax, and then received the permits for taking delivery of salt. The above permits were presented to the Yenyunshihshu or the salt district Governor and exchanged for the salt shipment permits bearing the certificate that the tax had been paid. Then upon the presentation of the shipment permits, the salt was handed to the merchants under the examination of the superintendent or inspector. Then at the destination already specified in the permits the salt was sold by the dealers to retail merchants.

Under the Kuanyen system of Kirin and Heilungkiang Provinces, the entire salt affairs were controlled by the Kiheichuehyunchu (吉黑樞運局) which was directly under the Central Government and was in the same rank as the Yenyunshihshu (鹽運使署). The Chuehyunshu had its office for purchasing and transporting salt at Yingkow, and established more than ten salt warehouses at important places in the two provinces. Salt was sold to wholesale merchants from those warehouses. There were salt guards to prevent the coming of private salt and the smuggling of foreign salt. When the Kuanyen or official salt was to be purchased, the purchase price was decided by the tender system, and then the tax had to be paid to the Fengtien Province Yenwukuanshu as done by the salt merchants of Fengtien Province. Besides these organs, there was opened in 1915 the Kiheiyenwuchihoso (吉黑鹽務稽核所) as the standing supervising organ of the Chuehyunchu, as already mentioned.

In Jehol Province where salt is not produced except a small quantity of Mongolian salt, the condition was much different from the above-

mentioned three provinces. Until 1924 there was no salt administration system, and no supervision was given to the sale of salt, it is reported. In 1925, the system of Kuanyunkuanso (官運官銷) was adopted imitating the monopoly system of Kirin and Heilungkiang Provinces, and thus the salt monopoly was commenced. But the system was not enforced properly, and it was soon abolished. Since then the salt tax was adopted, or the system of Kuanyunshangso (官運商銷), or the poll tax called Yenchin-shih huchuan (鹽斤食戶捐); thus the system was constantly changed. These measures only advanced the salt price, and invited the increase of private salt, resulting in the confusion of the system. Thus it was decided that the tax on salt should be an indirect tax, the former system was reformed to that of Kuantushangso (官督商銷) in order to control the salt affairs of the entire province. In 1931 the Jehol Province Yenwukuanlichu (鹽務管理局) was established, with the main office at Chengte (承德) and branches in all hsiens. Also the Shangwuhui (商務會) of all hsiens were asked to form the Yenchan (鹽棧) to which the salt sales monopoly right was given; they were taxed at the rate of 2 yuan per 100 chin of salt sold under the name of the monopoly right tax.

Thus when we view the salt administration under the former régime, it may be seen that the former military government regarded salt as the most important revenue source, regardless of its forms or conditions. Particularly after the establishment of the Yenwuchihoso, they were assured of a huge revenue from salt, and it was to them the most important and welcome revenue source. It may be said that the salt administration controlled the life or death of the finances of the military government.

Table 16
SALT TAX REVENUE OF FENGTIEN PROVINCE
(in 1,000 silver yuan)

1913	3,411	1923	8,313
1914	5,239	1924	9,433
1915	5,004	1925	9,966
1916	5,037	1926	15,769
1917	6,585	1927	18,334
1918	6,475	1928	30,662
1919	9,093	1929	24,082
1920	6,802	1930	25,131
1921	8,754	1931*	19,642
1922	9,099		

* The figure for 1931 is uncertain due to the outbreak of the Manchurian incident.

Table 17
SALT MONOPOLY PROFIT OF KIHEICHUEHYUNCHU
(in 1,000 Yuan Hsien Tayang)

1925	2,474	1928	8,341
1926	2,170	1929	11,118
1927	2,409	1930	8,098

Whenever the military requirements made it necessary, the military leaders gave their first thought to the salt tax. This tendency can be well understood from the above two tables and also the following table giving the changes of the salt tax rates.

Table 18
SALT TAX RATES ON VARIOUS KINDS OF SALT
(per 100 chin)

Year	Crude Salt	Refined Salt	Fishery Salt	Bittern	Glauber's Salt
1911	0.75 Hsiao-yang	—	0.75 Hsiao-yang	0.75 Hsiao-yang	0.75 Hsiao-yang
1914 (July)	1.50 "	—	1.50 "	1.50 "	1.50 "
1915 (Jan.)	2.00 "	—	2.00 "	2.00 "	2.00 "
1917 (Jan.)	—	—	0.50 Tayang	—	—
1925 (Jan.)	—	—	—	1.20 Tayang	1.00 Tayang
1925 (Feb.)	2.75 Tayang	2.75 Tayang	—	—	—
1925 (Sept.)	2.75 Hsien Tayang	—	—	—	—
1926 (April)	4.00 "	—	1.00 Hsien Tayang	—	—
1927 (April)	8.00 "	8.00 Hsien Tayang	—	—	—
1928 (Sept.)	6.00 "	6.00 "	—	—	—
1929 (Aug.)	6.00 "	—	—	—	—
1930 (Jan.)	—	—	1.50 "	—	—
1931 (April)	6.30 "	—	—	—	—

The military government used the salt tax as a means of exaction, but they did not give positive and direct protection to the salt industry. Although the population increased and various industries progressed, and it appeared the salt production should naturally increase, the salt production of Manchuria did not show any increase practically in the past ten years, because of the large sale of private salt due to the high salt tax, the financial suffering of salt makers due to the oppression by salt merchants, and the unimproved crude method of salt manufacture. But

yet it is said that at present there is a surplus salt production of about 660,000,000 chin.

Table 19

ANNUAL PRODUCTION OF MANCHOUKUO SALT

(Former Three Eastern Provinces Salt)

(In 1,000 chin.)

1915	183,400	1924	528,900
1916	336,800	1925	603,800
1917	323,300	1926	793,500
1918	214,700	1927	427,100
1919	449,700	1928	470,000
1920	456,000	1929	467,700
1921	342,000	1930	452,800
1922	425,800	1931	336,000
1923	401,700		

The Manchoukuo Government announced the regulations governing the Yenwushu and Kiheichuehyunshu, closed the Chihoso, and declared the independent autonomy of its salt administration. Thus the administrative autonomy over the salt affairs was secured, but respecting the relations with foreign countries in regard to the foreign loans secured with the salt tax revenue, satisfactory settlement has not yet been made with various foreign countries. But the Government decided that the redemption fund of foreign loans which was borne and paid by the former Manchurian Government would be reserved in one special account.

Customs

Establishment of Manchoukuo Customs Administration.—Manchoukuo having declared to the world its independence as a sovereign state on March 1, 1932, it became clear that the entire customs administration of Manchuria, hitherto under Chinese control, must be acquired by the new state as an integral part of its governmental functions.

The process of doing this, however, was made somewhat difficult by problems arising from the peculiar status of the Chinese Customs system, of which the Manchurian Customs had been a part, due to the traditional chaotic conditions in China, and the obligations to foreign countries under which the customs revenues of China are security for foreign loans and the so-called Boxer indemnity.

Foreign nations, therefore, are much interested in the Chinese

Customs and the disposal of its revenues, and moreover Dairen, the chief gateway of Manchoukuo through which the major part of its foreign trade passes and where consequently the greater part of the customs revenue is collected, is situated in the Kwantung Leased Territory, which is under lease from China to Japan.

Almost immediately after the establishment of the new state, the Manchoukuo Government, on March 21, 1932, informally intimated to the Nanking Government a proposal on the basis of the following four points for a settlement of the customs question, in the hope of reaching a working agreement with China for taking over the customs administration in Manchuria:

1. All custom-houses in Manchuria including the Dairen Custom-house, and their branches to be placed under the control of Manchoukuo.
2. The present import tariff and its collection system to be followed for the present.
3. Regarding the redemption of the foreign loans secured by the customs revenues, the Manchoukuo Government is prepared to bear its share out of the customs revenue, according to a rational system, but the balance left after paying such share will be retained and used by the Manchoukuo Government.
4. Former foreign and Chinese officials of the various custom-houses to be retained for the present, but regarding appointment or discharge of Customs Commissioners and other high officials, the agreement of the Manchoukuo Government is to be obtained.

The attitude of the Nanking Government to the above proposal was insincere, and they showed no intention of considering it. Therefore the Manchoukuo Government suspended remittance of the revenues of all custom-houses in Manchoukuo, except the Dairen Custom-house, to the Nanking Government. Then on June 9, the Manchoukuo Government issued a warning to the Customs Commissioner at Dairen regarding remittance to the Nanking Government, having resolved to secure entire control of the customs revenues including that at Dairen. Still the Nanking Government did not show any sincerity in respect to this question. Whereupon the Manchoukuo Government made the final decision, and issued a statement on June 18 in the name of the Minister for Finance that if trouble developed on account of this question, the responsibility must be borne by the Nanking Government.

To this the Nanking Government issued offensive statements and

adopted an attitude of absolutely denying the wishes of Manchoukuo. On the other hand, Manchoukuo gradually made preparations according to its already decided policy, but respecting the Dairen Customs no step could then be taken as it was located in the territory leased by Japan from China, and Manchoukuo was not yet recognized by Japan, and it therefore issued a note to the Kwantung Government that in case of necessity a new custom-house would be established at Wafangtien.

On June 26, more than 60 Japanese officials of the Dairen Customs declared severance of their relation with the Chinese Customs service, motivated by the question of the dismissal of the Customs Commissioner and immediately undertook to carry on the customs service in the name of the Customs Collection Office of the Finance Department of Manchoukuo. Thus it developed that at Dairen there were the customs services of both the Manchoukuo and the Nanking Governments. Because of the superior position the Japanese officials had occupied in the Dairen Customs, Manchoukuo was thus able to take it over in fact. Encouraged by this development, Manchoukuo proceeded to take over all custom-houses in Manchoukuo, other than the Dairen Customs, and to have them remit all retained revenues to the Manchoukuo Government.

The statement issued by the Manchoukuo Government at that time respecting the customs question was as follows :

STATEMENT ISSUED BY THE MANCHOUKUO GOVERNMENT
REGARDING CUSTOMS TARIFF

June 27, 1932.

The Government of Manchoukuo, immediately after its declaration of independence on March 1, 1932, felt absolutely free as the natural consequence of its customs autonomy to take over all custom-houses within its borders and to take over at least the revenue of, if not the Dairen Customs itself, located in the Kwantung Leased Territory, as the import and export duties of Dairen are after all charged to the people of Manchoukuo. However, with due respect to the spirit of our declaration of independence, as well as of our initial communication addressed to foreign countries, we did not proceed beyond making a compromise proposition to the Nanking Government, expressing our willingness to preserve the integrity of customs administration in China and our determination to meet the foreign loan service punctually.

With great patience we continued to do everything in our power for a few months to bring China to reason and to accept our proposals, but

the Nanking authorities refused to accept them and even insisted that Manchoukuo should give them the whole revenue of the Dairen Customs, besides one-third of the revenue of all other custom-houses in Manchuria. Such a proposal would automatically deprive Manchoukuo of all the benefits of the customs service in its own territory, weaken its financial foundation, and enable its enemy to use the funds unjustly wrested from it for the purpose of menacing peace and order in this country. Our Government has been compelled recently to attach the revenue of the Dairen Customs in order to stop the continuation of such a preposterous situation and to fulfil our earnest purpose of maintaining the Chinese Customs integrity by causing the Republic of China to accept our original proposals.

Nevertheless, the said Republic refused to listen to reason and proceeded to dismiss suddenly Mr. J. Fukumoto, Customs Commissioner at Dairen, who from the beginning has been devoting himself to the preservation of the customs administration of China in spite of his difficult position between Manchoukuo and Nanking. The authorities of Nanking have in this way dared to commit an inexcusable act, directly challenging the preservation of the customs integrity to which they themselves declare they are so greatly attached, while branding Manchoukuo's efforts to retain the customs revenue justly belonging to it as an attempt to break up the integrity of the customs.

In this connection we must remember that the Nanking Government took the initiative, in 1928, in disturbing the unity of the customs administration when they appointed Sir Frederick Maze to the position of Inspector-General, brushing aside Mr. Edwards, then Inspector-General duly appointed by the recognized Government of China in Peking, and succeeded in placing the Inspector-General and other foreign employees in the customs service under their absolute control, thus destined the integrity of the customs to complete destruction sooner or later. It is absurd and inconsistent for the Nanking Government, by forgetting all its own past records, to come out now to criticize openly Manchoukuo's just attempt to take over its legitimate portion of the customs revenue and to brand it as an attempt to break up the integrity of the customs and to go so far as to dismiss Commissioner Fukumoto without presenting adequate reasons.

We are now, therefore, compelled to declare that we will carry out the taking over of all the custom-houses within our boundaries and commence to collect duties at Dairen, and that should it become impossible

to collect at Dairen we may be obliged to exercise our right to collect the duties at Wafangtien, the border town of Manchoukuo and the Kwantung Leased Territory. We also wish to state that, regardless of the future development of this question, there will be no change in our original policy of safeguarding the foreign interests in the customs and of meeting Manchoukuo's portion of the foreign loan service of the Chinese Maritime Customs.

MANCHOUKUO GOVERNMENT

27th June, 1932.

First Year of Tatung.

Respecting the question of the foreign loans secured by customs revenues, theoretically speaking, Manchoukuo has no responsibility for them, they being entirely the obligations of China. Therefore Manchoukuo might disregard them entirely, but out of its friendly spirit, Manchoukuo issued a statement on July 25 respecting the portion of the foreign loan service of the Chinese Customs to be borne by it, and sent it to Sir Frederick Maze, Inspector-General of Chinese Maritime Customs; the American, British, Belgian, French, Italian, Japanese, and Netherlands Ministers in Peiping; and also the American, British, Belgian, French, and Italian Ambassadors in Tokyo.

The statement issued was as follows:

TELEGRAPHIC COMMUNICATION ON MANCHOUKUO'S CUSTOMS
REMITTANCE AND RELATED MATTERS DESPACHED
BY THE FOREIGN MINISTER

July 25, 1932

Sir,—I have the honour to inform you that the Government of Manchoukuo, desirous of giving effect to its past declarations that it will pay without fail its quota of the foreign loan service of the Chinese Customs and to facilitate and ensure such payments, has arranged to deposit a reasonable amount of money out of the customs revenues of Manchoukuo in reliable foreign banks.

The Government of Manchoukuo, in its desire to arrive at a satisfactory agreement with the foreign creditor Governments concerned as to the method of definitely fixing and remitting the portion of the foreign loan service to be borne by Manchoukuo out of the total amount of foreign loans secured on the Chinese Customs revenues as it stood on March 1st, 1932, (the Day of Independence of the State) is ready to open negotia-

tions with the creditor Governments or with the Inspector-General of Customs, on presentation of exact data.

In the meantime, however, and until such an agreement is reached with the foreign creditor Governments or with the Inspector-General of Customs, the Government of Manchoukuo proposes to fix Manchoukuo's quota in accordance with the ratio existing between the Manchoukuo Customs revenue and the total of the combined Manchoukuo and Chinese Customs revenues.

In view, however, of the certainty that the said ratio may undergo changes in the future, due to increase of revenues consequent upon the adjustment of tariffs, reorganization of the customs service and system and the development of natural resources and trade, the Government of Manchoukuo declares that under no circumstances will it recognize or agree to any increase in the ratio above that existing in 1931, deeming it unreasonable that Manchoukuo should be asked to pay a higher ratio resulting from any increase in its customs revenues proceeding from its own efforts.

As evidence of its sincerity in the above matter, the Government of Manchoukuo takes this opportunity to inform you further that it has completed arrangements for remitting to the Inspector-General of Customs at Shanghai through the Dairen Branch of the Yokohama Specie Bank the sum of Silver Yen 1,140,101.95 out of the customs revenues detained by it at the time of taking over the customs and that it reserves the right to adjust the said amount with the Manchoukuo's quota when the latter is definitely decided upon.

Respectfully,

HSIEH CHIEH-SHIH
Minister for Foreign Affairs,
Manchoukuo

25th July, 1932

First Year of Tatung

As the Japan-Manchoukuo Protocol was signed on September 15 and Japan formally recognized the new State, the question of the Dairen Customs naturally disappeared, and thus the customs independence of Manchoukuo was firmly established.

On the same day, the Manchoukuo Government issued an important statement respecting the customs administration of the country, declaring clearly that China would be treated as a foreign country, and forwarded

it to Sir Frederick Maze, Inspector-General of the Maritime Customs of China, as well as foreign Embassies and Legations in Tokyo and Peiping. The statement was as follows :

TELEGRAPHIC COMMUNICATION DESPATCHED BY THE
FOREIGN MINISTER REGARDING CUSTOMS REFORM

Sept. 15, 1932

Sir,—I have the honour to inform you that at the outset of its establishment, the Manchoukuo Government declared to the world that, for the time being, the existing system in regard to customs tariff, commerce and navigation would be retained without change, which has been practiced until the present time.

Since then, however, Manchoukuo has not only steadily perfected its internal organization as a new State, but this fact has also led to the formal recognition of this State by Japan. As a result this Government is in a position unable any longer to place the Republic of China on the same footing as our internal region in the matters of customs tariff, commerce and navigation. The Government of Manchoukuo has accordingly come to the decision to treat the Republic of China as an entirely alien nation in matters relative to customs tariff, commerce and navigation as in all other matters, thereby reforming the anomalous relations existing hitherto, and accordingly the following regulations shall take effect as from the 25th day of September, the first year of Tatung (1932) :

- I. Export duties at the present rates shall be imposed on all merchandise forwarded to the Republic of China from Manchoukuo by either sea or land routes.
- II. Import duties at the present rates shall be imposed on all merchandise entering Manchoukuo from the Republic of China by either sea or land routes.
- III. In respect of the levy of tonnage dues, certificates issued by the Republic of China showing that such dues have been paid shall have no validity in Manchoukuo.
- IV. The right of inland or riparian navigation shall not be recognized between the various sea ports of the Republic of China and those of Manchoukuo. Permits granting such rights issued by the Republic of China shall possess no validity in Manchoukuo.
- V. For the purpose of enforcing the foregoing provisions, customs stations shall be established at Shanhaikwan and at other necessary

points with authority to collect duties.

It is for the purpose of averting unexpected losses and damages to both foreign and native merchants as a result of the present reform that the Manchoukuo authorities have decided to enforce the new regulations after allowing a certain period of grace from the date of the issuance of this ruling. Furthermore, for the purpose of causing no unjust damages to shippers, this Government is prepared to give reasonable consideration to such goods which the consignors had without knowledge of the new situation shipped from ports outside of the Republic of China prior to the date of the enforcement of the new ruling and, after import duties have been levied at ports in the said Republic, may arrive at Manchoukuo ports after the date of such enforcement.

Issued this 15th day of September,
First Year of Tatung (1932)

HsIEH CHIEH-SHIEH,
Foreign Minister, Manchoukuo

The National Government of China issued on September 24 instructions which read as follows : "Japan having occupied Manchuria, it has become unable temporarily to collect the legal Chinese Customs duty at various Manchurian ports, and so the custom-house at Harbin, Newchwang, Antung, and Lungtsingsun are closed from September 24, 1932, until further instructions ; customs duty legally collectable at those ports will be collected at other Chinese ports temporarily." Consequently the tariff on goods shipped to those ports was changed as follows :

- (A) The method of collecting various customs tariffs of China is decided to be as follows :
 - A. Method of collecting the tariff on merchandise shipped to Manchuria (shipped to Harbin, Newchwang, Antung, and Lungtsingsun, excluding Dairen) :
 1. Chinese products are taxed as before (interport duty).
 2. Factory products are taxed as before (consumption tax or single tax).
 3. Foreign products :
 - a. Those on which import duty was already paid are not taxed (free).
 - b. Those on which import duty was not yet paid are taxed import duty (formerly import duty was levied upon their arrival at Manchuria).

- c. Transshipment goods on which import duty was not yet paid are levied import duty at the ports of transshipment (formerly import duty was levied upon their arrival at Manchuria).
- B. Method of collecting the tariff on goods shipped to China from Manchurian ports excluding Dairen.
1. On Chinese native products are levied interport duty and surtax (formerly interport duty was levied at the shipment ports but not at destinations).
 2. On products of foreign factories in China are levied shipment duty and surtax at importing ports (formerly shipment duty was collected at the shipment ports but not at importing ports).
 3. On foreign goods import duty is levied (formerly foreign goods on which import duty was paid at Manchurian ports were free).
- (B) In the Dairen Leased Territory, the Japanese authorities refuse to exercise their duties according to the Sino-Japanese treaty, and thus it is impossible to ascertain the shipping points and destinations of goods entering and leaving Dairen, and therefore the tariff collection method is fixed as follows :
- A. Merchandise shipped from China to Dairen :
1. On Chinese native products export duty is collected (formerly on shipments to the Kwantung Leased Territory was levied export duty, and on those to interior districts of Manchuria interport duty).
 2. On the products of foreign factories in China shipment duty is collected on all regardless of their final destinations (formerly those shipped to the Kwantung Leased Territory were free, and on those sent to interior districts of Manchuria were levied consumption duty or single duty).
 3. On foreign goods import duty is collected (formerly import duty was collected upon their arrival at Manchurian ports).
- B. Merchandise shipped from Dairen to China :
- On all goods import duty is levied, and also customs surtax and Famine Relief surtax are to be collected on all (formerly import duty was collected only on goods made in the Kwantung Leased Territory, and on those coming from the interior districts of Manchuria were levied only interport duty).

Customs Revision of Manchoukuo.—As all custom-houses of Manchuria which were formerly controlled by the Inspector-General of the Maritime Customs as organs for securing foreign loans have been completely taken over by Manchoukuo, coming under the direct control of the Minister for Finance of Manchoukuo, it is quite natural that their organization and system have undergone some revision.

Manchoukuo came to treat China as a foreign country in regard to the customs service, as already explained. Other important changes in the customs service and system of Manchoukuo are as follows :

A. From necessities in foreign trade, Manchoukuo increased the number of custom-houses. Formerly seven custom-houses were located at Dairen, Antung, Newchwang, Harbin, Aigun, Hunchun, and Lungtsingsun. But at present there are eight custom-houses, located at Dairen, Harbin, Antung, Yingkow (Newchwang), Lungtsingsun, Tumen (on August 2, 1933, the Hunchun custom-house was removed to Tumen and thereafter named the Tumen Custom-house), Chengte (opened on June 5, 1933), and Shanhaikwan (a branch of the Yingkow Custom-house was opened at Shanhaikwan on September 25, 1932, and was made an independent custom-house on August 2, 1933).

B. The customs currency system of Manchoukuo was at first as before, temporarily after the taking over of the customs, and import duty was based on the customs gold unit while export duty, interport duty, tonnage dues, and other charges were collected in Haikwan taels. But as the difference between these customs currencies and the actually circulated currencies had continuously fluctuated, the Government adopted the policy of collecting customs revenues in the new currency of Manchoukuo after April 10, 1933, and fixed the exchange rates between the customs currencies and the national currency at 1.95 yen of the national currency for one customs gold unit and 1.56 yen of the national currency for one Haikwan tael.

Since July 22, 1933, the Manchoukuo Government has adopted national yen system in the customs statute, converting former one gold unit into 1.95 national yen and one Haikwan tael into 1.56 national yen.

C. Manchoukuo notified that the present import tariffs Nos. 302 and 345 are revised as follows as from 8th November, 1932 :

- (1) Tariff No. 302 (apples), if the customs duty of silver yen 5.07 per picul is in excess of the *ad valorem* duty of 25%, the latter duty may be paid provided a declaration is made to that effect by the importer at the time of importation.

- (2) Tariff No. 345 (oranges), if the customs duty of silver yen 5.07 per picul is in excess of the *ad valorem* duty of 25%, the latter duty may be paid provided a declaration is made to that effect by the importer at the time of importation.

Manchoukuo made the second revision of the customs tariff in July, 1933, and the reasons and details for this revision have been fully explained by the statement issued by the Manchoukuo Government. This statement reads as follows :

PARTIAL REVISION OF MANCHOUKUO'S IMPORT AND EXPORT DUTIES

Ordinance No. 62

Promulgated on July 22, Second Year of Tatung (1933)

In regard to the partial revision of the present Import and Export Customs Tariffs of Manchoukuo promulgated on July 22, and made effective on and after July 23, 1933, the Department of Finance of the Manchoukuo Government to-day gave the following explanation :

In view of the fact that the present Import and Export Customs Tariffs of Manchoukuo were originally promulgated and put into operation by the old Chinese régime, it is generally admitted that they contain various inadequate and unreasonable points in respect to both rates and classification of articles, as a result of which they fail to meet the requirements of the present economic and industrial conditions, as well as the standard of living of the masses of this country. Hence, a thorough revision of the present Tariffs is necessary. As the revision of the Customs Tariff, however, has important bearing upon the various spheres of economic and financial activities of the people, it can be effected only after due consideration and careful deliberation.

In the circumstances, the finance authorities of the Government have thought it advisable to study the general trend of economic and financial conditions of this country, setting aside at least three years in which they may be able to make full preparations for a general and fundamental revision of the present Tariffs. Thus, the authorities have decided to map out a basic programme for the materialization of the objective in view, externally keeping in harmony with general tendencies of world economic conditions, and internally accomplishing the readjustment or reformation of the tax system.

Nevertheless, it is the opinion of the authorities that some suitable arrangements should be made until the general and fundamental revision of the present Tariffs is effected, so as to modify such Tariff rates now in

force which are not in accord with the present state of affairs and which hinder the development of industries and the execution of the present national policies or hinder the work of collecting revenues.

Accordingly, the authorities have decided to effect a partial revision of the present Tariffs as an interim measure pending the contemplated general revision.

In effecting this partial revision, the following general policies have been kept in mind :

- (1) In the present financial conditions of this country, any Tariff revision which will lead to a decrease of national revenues shall be avoided.
- (2) As the present revision assumes the nature of an interim measure, no modification involving mere matters of formality shall be attempted.
- (3) Such partial revision as may cause disparity in the general rates on articles shall be avoided.
- (4) Modifications of rates designed to maintain an equilibrium with the consumption tax shall be refrained.
- (5) Rates shall be revised to the widest extent possible to relieve the tax burdens of the people, if they may be deemed as fulfilling the following conditions :
 - (a) Tariff rates which are so high as to have an anti-foreign taint or discrimination ;
 - (b) Tariff rates which are so high as to be in the nature of protection in spite of the fact that there exist no industries in this country requiring such protection ;
 - (c) Tariff rates on articles of daily necessities whose importation is prevented due to excessively high duties ;
 - (d) Tariff rates on articles which are deemed essential to the development of industries in this country, subject to a certain limitation placed thereon by financial conditions ;
 - (e) Tariff rates on building materials which are indispensable in the construction works of cities in this country.
- (6) In order to cover the possible decrease on the customs revenues as a result of the aforementioned Tariff modifications, duties shall be raised on articles which are deemed to be flexible in bearing tax burdens.

Articles on which Tariff rates have been revised are as follows :

(1) Articles selected as coming under (a) and (b) mentioned in the foregoing are:
Tariff No. 60—Knitted Clothing, Raised

“ “ 62—Socks and Stockings:

(a) Not raised on either side

(1) Made of ungasped or unmercerised thread

“ “ 66—Towels, Turkish

“ “ 499—Soap, Household and Laundry (including Blue Mottled)

“ “ 564—Straw, Panama Straw and the like and Manufactures thereof:

(c) Hats:

(1) of Straw or Rush

“ “ 576—Chinaware (including those for tobacconists' use)

(2) Articles that come under (c) mentioned in the foregoing are:

Tariff No. 64—Ankle-bands

“ “ 67—Blankets and Blanket Cloth

“ “ 97—Woolen Piece Goods (including those mixed with other fibres except silk) n.o.p.f.

“ “ 258—Fish, Fresh:

(a) Pagrosomus major, Temminck et Schlegel; Evynnis cardinalis, Lacepede; Eels (Anguilla japonica; Temminck et Schlegel); Tunnies and Albacores; Lobsters (Palinurus japonicus, de Haan); Prawns (Penaeus japonicus, Bate).

“ “ 513—Paper, Common Printing and Newsprinting (made chiefly of Mechanical Wood Pulp), Calendared or Uncalendared, Sized or Unsized, White or Coloured:

(a) Newsprinting Paper in rolls

(b) Others

“ “ 561—Mats, n.o.p.f.:

(a) Fancy

(b) Rush

(c) Straw

(d) Tatami

(e) Others

“ “ 562—Matting, n.o.p.f.:

(a) Straw, 36 ins. by 40 yds.

(b) Others

“ “ 621—India-Rubber and Gutta-percha, and Manufactures thereof:

(b) Boots and Shoes as also Footgear made wholly or partly of Rubber

(1) “Tabi” Shoes, with Rubber Soles

(3) The following articles come under (d) mentioned above:

In Import Tariff:

Tariff No. 216—Agricultural Machinery and parts thereof.

“ “ 216-2—Rock Drills, Coal Cutters, Exploratory Boring Machines, Underground Ventilating Machines of Large Sizes, Winding Machines, Conveying Vehicles, Power Shovels, Excavators, and other Machines, Implements or Tools for Mining and accessories and parts thereof.

“ “ 216-3—Blast Furnaces, Steel Furnaces, Crushers, and other Machines, Implements of Tools for Dressing and Metallurgy and accessories and parts thereof.

“ “ 442—Sulphur:

(a) Crude (Lumps or Powder)

“ “ 610—Animals, Living:

(a) Domestic Animals for Breeding

“ “ 356—Seeds, n.o.p.f.:

(a) Cotton Seed for Culture

“ “ 525—Fodder

In Export Tariff:

Tariff No. 102-2—Mineral Oils

“ “ 104-2—Paraffin Wax

“ “ 161-2—Wood Pulp

“ “ 189—Wool, Sheep's

“ “ 220—Iron and Manufactures thereof:

(c) Pigs and Kentledge

“ “ 249-2—Chemicals and Chemical Compounds (including Benzol, Creosote, Naphthalene, Pitch and other Coaltar Distillates, and Coaltar) n.o.p.f.

The Tariff rates on the following articles have been revised for the development of agriculture, animal-breeding, mining and industries for producing raw materials of this country.

(4) Articles that come under (e) mentioned in the foregoing are:

Tariff No. 156—Nails, Wire and Cut

“ “ 178—Others:

(a) Barbed Wire

“ “ 236—Electrical Materials, Fixtures and Fittings for Wiring, Transmission, and Distribution:

(a) Bulbs, Cleats, Insulators or Knobs, Ceiling, Rosettes, Fuse-boxes, Plugs, Receptacles, Switches and Switchboards

“ “ 477-2—Paints, excluding Ships Bottom Paints, Patent Dryer, and Luminous Paints

“ “ 587—Cement, Hydraulic as Portland

“ “ 593—Tiles:

(a) For Roofing

“ “ 611—Building Materials, n.o.p.f.

As prices of the above-mentioned articles which have been in great demand for the

city construction and other building enterprises since the founding of the new State have advanced of late, the authorities have decided to reduce by half the Tariff rates on these articles uniformly as an interim measure until the present constructive enterprises reach a final stage, thus coping with the urgent requirements of the moment.

(5) The only article that comes under (6) mentioned in the foregoing is:
Tariff No. 388—Tobacco, Leaf:

- (a) Value over M.¥200 per picul.
(b) Value over M.¥70 but not over M.¥200 per picul.
(c) Value not over M.¥70 per picul.

Customs Revenue as Taxation Resources.—As the establishment of Manchoukuo is yet new, the foundation of the national finance is the most important among the urgent matters to be accomplished. But the Government has no good financial resources besides the salt tax, the revenue from Government enterprises (mainly the profit of the opium monopoly) and the customs revenue. Thus the Government cannot give up the great customs revenue as shown in the following tables:

Table 20

MARITIME CUSTOMS REVENUE, 1910 TO 1932

(Haikwan Taels)

	Import Duty	Export Duty	Coast Trade Duty	Transit Dues		Tonnage Dues	Famine or Flood Relief Surtax	Total
				Inwards	Outwards			
1910 { China	14,087,232	13,128,635	2,123,798	1,486,778	577,389	1,329,024	2,839,023	35,571,879
1910 { Manchuria	1,110,195	2,011,189	133,406	27,199	1,351	54,315	415a	3,338,226
1915 { China	14,367,221	15,439,709	2,517,713	1,519,507	769,433	1,194,959	939,164a	36,747,706
1915 { Manchuria	1,330,876	2,776,546	105,940	34,242	1,034	59,373	—	4,308,011
1920 { China	25,196,386	17,875,836	2,483,928	1,636,132	835,859	1,791,744	—	49,819,885
1920 { Manchuria	3,103,037	4,398,814	124,436	75,931	740	61,365	—	7,764,323
1925 { China	36,366,981	24,568,778	2,641,030	2,701,533	977,641	2,614,040	855,664	70,725,667
1925 { Manchuria	4,650,202	5,997,185	158,211	131,060	1,023	132,038	175,614	11,245,333
1926 { China	42,855,027	26,263,787	2,793,370	2,625,813	685,670	2,898,610	2,313,685	80,435,962
1926 { Manchuria	5,397,360	6,525,566	187,767	130,226	215	131,795	370,432	12,743,271
1927 { China	34,903,322	25,461,617	2,486,401	2,467,833	667,179	2,748,776	46,748	68,781,876
1927 { Manchuria	5,395,471	7,223,070	177,743	114,338	734	156,849	11,547	13,079,752
1928 { China	46,499,394	27,057,564	2,699,203	2,592,017	518,420	2,965,928	—	82,332,526
1928 { Manchuria	6,639,304	7,284,155	195,268	140,121	1,032	183,898	—	14,443,778
1929 { China	107,251,967	36,293,157	3,635,676	1,884,426	587,602	3,177,265	—	152,830,093
1929 { Manchuria	13,560,893	8,416,426	203,402	41,651	877	177,416	—	22,400,665
1930 { China	135,840,256	35,547,839	4,042,015	1,478,283	604,775	3,106,590	—	180,619,758
1930 { Manchuria	15,983,393	8,115,605	229,994	15,962	171	208,194	—	24,553,319
1931 { China	201,981,127	30,700,261	10,042,372b	—	—	3,363,670	1,025,967	247,113,397
1931 { Manchuria	13,296,343	9,271,728	3,235,126b	—	—	275,683	110,676	26,189,556
1932 { China	151,663,470	17,186,747	13,191,188b	—	—	2,739,392	15,460,673	200,241,470
1932 { Manchuria	5,133,748	4,619,150	1,781,077b	—	—	69,816	891,864	12,495,655

Table 21
TOTAL MARITIME CUSTOMS REVENUE AT EACH PORT OF MANCHURIA
(Haikwan Taels)

	1910	1925	1926	1927	1928	1929	1930	1931	1932
Aigun	62,911	31,532	35,820	47,756	54,040	18,766	37,176	84,906	33,344
Sansing	92,070	—	—	—	—	—	—	—	—
Harbin	876,069	1,574,587	2,233,208	2,460,009	2,431,780	3,202,959	4,079,795	5,288,998	1,977,878
Hunchun.....	8,973	46,983	63,454	67,036	80,585	104,946	142,651	226,165	51,796
Langtsingtsun.....	4,226	103,156	198,578	238,305	195,071	360,483	418,691	577,094	281,789
Antung	195,931	1,912,680	2,094,553	2,143,426	2,310,678	3,791,138	4,134,059	3,697,427	1,817,496
Dairen.....	1,102,805	6,273,262	7,015,577	7,133,725	8,187,780	12,837,741	12,334,348	12,515,589	7,137,904
Newchwang	995,241	1,303,133	1,102,081	989,495	1,183,844	2,084,932	3,406,599	3,799,377	1,195,448
Total for Manchuria	3,338,226	11,245,333	12,743,271	13,079,752	14,443,778	22,400,665	24,553,319	26,189,556	12,495,655
	(100)	(337)	(382)	(392)	(433)	(671)	(736)	(785)	(—)
Total for China	35,571,879	70,725,667	80,435,962	68,781,876	82,332,526	152,830,093	180,619,758	247,113,397	200,241,470
	(100)	(199)	(226)	(193)	(231)	(430)	(508)	(695)	(563)
Percentage for Manchuria	9.4%	15.9%	15.8%	19.0%	17.5%	14.7%	13.6%	10.6%	—

MARITIME CUSTOMS REVENUE, 1910-1932
(in Millions of Hk. Tl.)

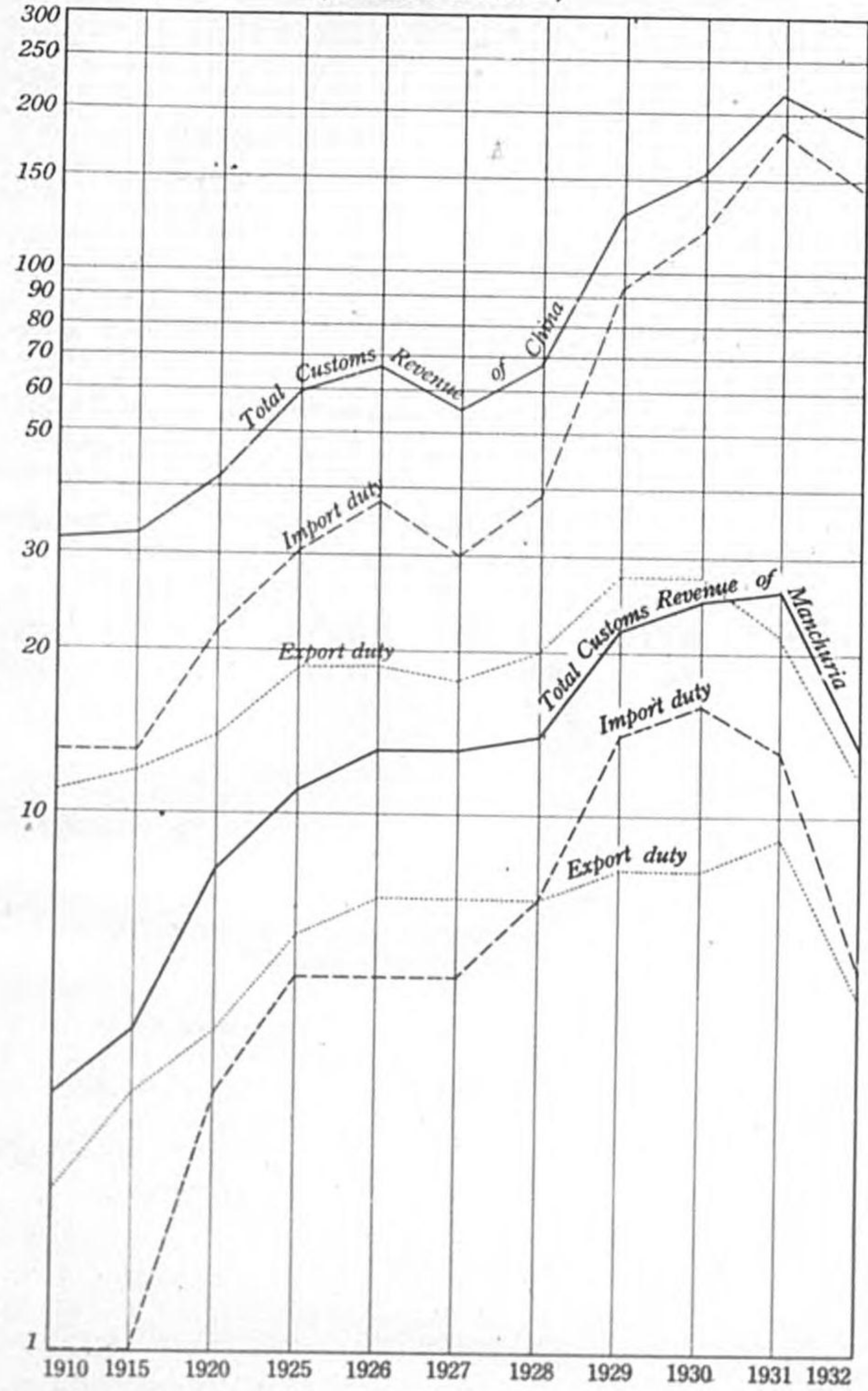


Table 22
MARITIME CUSTOMS REVENUE OF EACH PORT IN
MANCHURIA, 1931
(Haikwan Taels)

Port	Import Duty	Export Duty	Interport Duty	Tonnage Dues	Flood Relief Surtax	Total
Aigun	5,654	2,048	5,858	71,248c	98	84,906
Harbin District d... ..	2,174,451	1,914,112	1,071,584	112,180c	16,671	5,288,998
Hunchun	124,101	78,410	23,207	—	447	226,165
Lungtsingtsun	417,915	155,836	141	—	3,202	577,094
Antung e	2,378,691	953,242	339,289	10,814	15,391	3,697,427
Dairen	6,820,974	4,804,110	819,352	3,196	67,957	12,515,589f
Newchwang	1,374,557	1,363,970	975,695	78,245	6,910	3,799,377
Total.....	13,296,343	9,271,728	3,235,126	275,683	110,676	26,189,556

As shown in table 20, the total customs revenue of Manchuria reached 22,400,665 Haikwan taels in 1929, 24,553,319 Hk. Tls. in 1930, and 26,189,556 Hk. Tls. in 1931. When these figures are calculated in the Manchoukuo currency they become M.¥34,945,037 M.¥38,303,177 and M.¥40,855,707 respectively. In the total customs revenue, import duty takes up the greatest portion, and thus the increase of the total amount is mainly due to the increase of import duty. Although Manchoukuo is an export surplus nation, it must be noted that the export duty is in recent years about 60 or 70 per cent of the import duty amount.

The above figures are all before the establishment of Manchoukuo, and after its independence it is believed that the interport duty will be

- Note: 1. Figures of tables 20, 21 and 22 are based on the Chinese Maritime Customs Statistics.
2. In China is included Manchuria.
3. Figures for 1910 include besides the above-mentioned export and import duties, opium duty amounting to 156 Hk. Tls.
4. Flood Relief Surtax for 1932 includes customs surtax.
5. a indicates Opium Likin.
6. b indicates Interport Duty, introduced from June 1, 1931.
7. c indicates Navigation Fees, i.e. applied locally to aid navigation.
8. d Lahasusu, Manchouli, Harbin, and Suifenhö.
9. e including Tatungkow.
10. f Including Junk Duties, Hk. Tls. 37,877.
11. One Haikwan tael is fixed to contain 583.3 grains of pure silver, and therefore equals to 1.65 yuan Hsien Tayang in 1929, 1.52 yuan in 1930, and 1.51 yuan in 1931. Recently Manchoukuo fixed one Haikwan tael at M.¥ 1.56.
12. Figures in brackets of table 21 show index numbers of increase.

reduced, but on the other hand the coastwise trade with China will become foreign trade with China, Japan or other foreign countries, and will thus increase the amount of import and export duties. In this manner, the total amount is expected to increase, unless there appear other factors.

The importance of the customs revenue to Manchoukuo may be judged by the fact that in the budget for the fiscal year of 1932, the total customs revenue constituted 36% of the total national revenue, 42% of the total ordinary expenditures, and 48% of the total tax revenue. In the fiscal year of 1933, the percentage is 33%, 38% and 46% respectively. From these percentages the importance of the customs revenue to Manchoukuo as the revenue source can be understood.

Of course, such a condition of the customs revenues forming the majority of the annual national revenue is not desirable, being against the principle of equality in collecting taxes. Particularly the export duty among the customs revenue items constitutes more than 30 per cent of the total amount, and such a condition is to be objected to from the standpoint of industrial development. But because of the present condition of Manchoukuo where civilization is still undeveloped and the people's ideas about tax payment have not advanced, the policy of making the reliable indirect tax such as customs revenue the main financial resource, may be said to be most suitable, as the expense of collection is low, and its burden upon the people is not consciously felt.

As there is no good financial resource besides the customs revenue, Manchoukuo cannot abolish it nor even reduce it. But in the future, the importance of the customs revenue will be reduced as the tax receipts or profits obtained from alcoholic beverages, tobacco, sugar, or opium, which have more features of social policy although they are also indirect taxes, will increase, and other direct taxes will increase with economic progress.

Respecting the question of her share of the foreign loan service of the Chinese Maritime Customs, Manchoukuo has issued repeated statements. In its budget, Manchoukuo has an item for the redemption of foreign loans, which is reserved for the future. The amount included in the budget is M.¥11,050,419 for 1932, and M.¥9,892,721 for 1933. The basis in calculating her share of the burden is founded upon the proportion declared in the statement issued on July 25, 1932.

Customs and Trade.—Manchoukuo issued a declaration to the powers of the world on March 12, 1932, in which the seven basic principles of the establishment of the new State were given (refer to the Chapter on Foreign Investments). Two basic principles related to foreign trade are :

(1) "That trade and commerce with foreign countries shall be facilitated, thus contributing to the development of world economy," and (2) "That with regard to the economic activities of the peoples of foreign nations within the State of Manchoukuo, the principle of the Open Door shall be observed." Then the basic economic construction policy announced on March 1, 1933, gave the four principles of economic construction of Manchoukuo by which the interests of the people as a whole will be made the keynote and efforts will be made to prevent any exclusive class of people from monopolizing the benefits of the exploitation of natural resources and the development of industries, and to enable all to enjoy such benefits. In the work of unlocking resources and encouraging industries, the principle of the Open Door and Equal Opportunity will be observed. In the spirit of this principle, capital investments from various parts of the world will be invited, while appropriate and effectual use will be made of the technical skill and experience and other features of civilization, taken from advanced nations. Furthermore, in the paragraph on the fostering of commerce, particularly it is proposed that the tariff policy will be designed to promote foreign trade and international transactions.

Thus it has been made clear that Manchoukuo will plan for the development of foreign trade according to the principle of Equal Opportunity, from the necessity of promoting the welfare of the people and developing the national economy. Manchoukuo has not yet advanced from the stage of being an agricultural country, and 90 per cent of its population are farmers. Furthermore, as there are not many among the general industries outside primitive industry that require protection directly by customs duties, to stimulate import trade under low tariff rates will contribute to the welfare of the people and the progress of their national economy. The previously mentioned first and second revision of the tariff of Manchoukuo is only a small change, but it may be said to fully represent this spirit.

In short, Manchoukuo has to follow the revenue principle in her customs policy for the present, to a degree not unduly reducing the present customs revenue ; but at the same time it has adopted the free principle based on the Open Door and Equal Opportunity, as far as possible within the above limit. This tendency deserves attention as it is quite contrary to the high tariff economy that has been widely adopted in recent years.

Special Position of Dairen Custom-house.—The customs system in the Kwantung Leased Territory was first formulated in accordance with the

agreement concerning the southern branch of the Chinese Eastern Railway which was signed in July, 1898, four months after the conclusion of the convention for the lease of Liaotung Peninsula to Russia.

According to the treaty of lease, Port Arthur was to be made a Russian naval port, closed to foreign ships except those of China, but Dairen was to be kept partially open to foreign commerce and free entry to it was to be granted. And for the customs system the agreement concerning the southern branch of the Chinese Eastern Railway allowed the Russian authorities to fix the customs tariff in the Leased Territory, while to China her right of levying and collecting duties at the boundaries was preserved. At the same time, in dealing with this matter the Chinese Government was to arrange with the Russian authorities for the latter to establish a custom-house at Dairen and to appoint the Chinese Eastern Railway Company to act as the agent of the Chinese Imperial Board of Revenue to open and manage that custom-house under the sole control of the Peking Government.

In August, 1899, a Russian Imperial Order was issued by which Dairen was proclaimed a free port. Consequently there arose no question of fixing the customs tariff, for the Russian authorities. The Chinese custom-house at Dairen was not established until the termination of the Russo-Japanese War and Japan succeeded to the lease of the territory.

The Japanese Government decided to adopt the recommendation of an expert committee to keep the Leased Territory as a free district, and opened negotiations with the Peking Government on the question of establishing a customs office at Dairen.

According to the agreement reached in May, 1907, Japan approved the establishment of an office of the Chinese Maritime Customs at Dairen for collecting duty on goods passing through the Leased Territory to the interior, or entering the Leased Territory from the interior, and in the name of the Government-General of the Kwantung Leased Territory, proclaimed the Provisional Customs Regulations. In July, 1907, the Dairen Custom-house was opened, but the system adopted was different from that at other treaty ports of China, being more complicated.

The conditions under which duty was levied according to the agreement and regulations were as follow :

A. Exemptions :

1. Goods imported to Dairen by sea and consumed within the Leased Territory (Chinese goods imported from other treaty ports of

China are taxed export duty at the point of shipment).

2. Goods brought into the Leased Territory from the interior by land and consumed in the territory.
3. Re-exports of goods imported by sea (in case of re-export of imported foreign goods to other treaty ports of China the goods are taxed import duty at the destination).
4. Exports of products of the Leased Territory, of goods made therefrom, or of materials imported from foreign countries (when the destination is another treaty port of China an import duty is levied at the destination).

B. Imports :

1. Foreign goods imported at Dairen and passing the border of the Leased Territory by land into the interior are subject to import duty.
2. When Chinese goods brought into the Leased Territory from the interior are exported from Dairen an export duty is levied (when the destination is another treaty port of China, an additional coastwise trade duty will be levied at the destination).
3. When Chinese goods brought to Dairen by sea from other treaty ports of China are sent to the interior by land, a coastwise trade duty will be levied.
4. When products of the Leased Territory or goods made therefrom, or of foreign materials are sent by land into the interior, an import duty is levied.
5. When goods manufactured in the Leased Territory of Chinese materials are exported, an export duty is levied.
6. When goods manufactured in the Leased Territory of Chinese materials are sent over the border of the Leased Territory to the interior, an import duty is levied, the amount of which is equal to the export duty.

As a result of the establishment of Manchoukuo and Japan's recognition of the new State in September, 1933, the above-mentioned Sino-Japanese agreement was naturally abrogated, and an agreement of similar nature was concluded between Japan and Manchoukuo, China being treated as an absolutely foreign country.

Finances of the Kwantung Leased Territory

Special Account and Local Expenses.—The annual account of the

Kwantung Government is treated as a Special Account in the budget of the Japanese Government, and in the Special Account, the revenue consists of taxes, revenues other than taxes, and subsidies from the general account of the Japanese Government. The Local Expenses is under the management of the Governor of the Kwantung Leased Territory, and is applied to defray the expenses of local administration.

The tax system is as follows:

National Expenditure—land tax, income tax on corporation, salt tax, exchange business tax, tax on stock and grain exchanges, wine tax and tobacco tax.

Local Expenditure—business tax, miscellaneous taxes.

The expenditure of the Kwantung Government is yearly increasing, owing to the improvement of sanitary equipment, the expansion of the police system, the extension of educational facilities, the development of communications and other administrative measures. The revenue thus being insufficient to meet the increasing expenditure, the shortage is made up by an annual subsidy from the Japanese Government.

The Local Expenses is that of local administrative expenses that are required directly for the protection and welfare of local communities, and are defrayed out of local revenues.

During the first period (1905-1915) of the administration of the Kwantung Government (then Kwantung Government-General), local expenses were paid out of the Special Account, but with the development of the territory, there was an increase of local revenue as well as of that from water works, electric light service, and hospitals, and all local expenses are now paid out of the local revenues.

The revenue and expenditure of the Special Account and the Local Expenses are as follows:

Table 23
REVENUE AND EXPENDITURE OF THE SPECIAL ACCOUNT FOR THE KWANTUNG GOVERNMENT
(Yen)

	1910	1915	1920	1925	1928	1929	1930	1931	1931*
REVENUE									
Ordinary Revenue:									
Taxes—									
Land tax	106,171	108,935	217,228	217,046	216,174	216,682	216,441	216,639	215,995
Salt tax	101,022	167,137	198,599	359,438	331,768	385,157	398,935	448,630	406,000
Income tax	—	—	368,382	1,028,775	2,661,581	2,492,744	2,604,750	1,661,269	683,253
Wine tax	—	—	—	281,553	404,314	440,886	396,265	407,825	396,265
Tobacco tax	—	—	—	674,427	853,577	903,060	714,050	660,216	607,696
Other taxes	—	—	218,400	126,038	93,805	128,786	96,483	80,809	60,265
Total	207,193	276,072	1,012,609	3,587,277	4,561,469	4,568,215	4,427,824	3,475,388	2,369,274
Revenue from government enter- prises and properties	1,357,487	1,834,322	5,745,262	6,485,715	9,975,392	10,983,197	9,506,384	10,217,120	10,265,510
(Postal, telegraph and tele- phone revenue)	(1,039,433)	(1,490,868)	(5,149,587)	(5,629,261)	(6,677,711)	(6,857,011)	(6,011,299)	(6,277,739)	(6,208,154)
Stamp revenue	38,048	87,212	573,984	444,217	799,437	888,424	602,117	490,180	451,587
Other revenues	29,134	23,867	231,674	231,392	313,414	312,312	287,353	293,913	369,082
Received from Special Deposit Account, Finance Department	—	—	—	60,000	60,000	190,000	190,000	190,000	190,000
Total	1,631,862	2,221,473	7,563,529	10,808,601	15,709,712	16,942,148	15,023,678	14,666,631	13,645,453
Extraordinary Revenue	5,020,556	3,311,985	6,660,750	7,139,121	10,768,408	11,001,897	10,147,493	9,961,431	9,090,563
(National Treasury Grant)	(3,615,416)	(1,937,000)	(3,250,000)	(3,000,000)	(4,000,000)	(4,550,000)	(4,000,000)	(3,700,000)	(4,000,000)
GRAND TOTAL	6,649,419	5,563,458	14,224,279	17,947,722	26,478,120	27,944,045	25,161,171	24,628,062	22,736,016
EXPENDITURE									
Ordinary Expenditure	2,088,893	3,024,977	7,006,521	11,788,346	15,020,758	16,247,873	15,736,715	16,525,110	16,373,747
Extraordinary Expenditure	2,782,442	1,093,047	4,699,201	2,248,068	5,831,174	6,328,596	4,134,162	4,373,426	6,362,269
(Various enterprises)	(1,522,250)	(799,883)	(2,317,636)	(2,088,524)	(3,974,255)	(3,913,425)	(2,450,825)	(2,139,408)	(1,536,446)
GRAND TOTAL	5,771,335	4,118,024	11,705,722	14,036,414	20,851,932	22,576,469	19,870,877	20,898,536	22,736,016

* Estimate.

Table 24
INCOME AND DISBURSEMENT OF LOCAL EXPENSES OF THE KWANTUNG LEASED TERRITORY
(Yen)

	1910	1915	1920	1925	1927	1928	1929	1930	1931	1932*
INCOME										
Ordinary Income:										
Taxes—										
Business tax.....	184,696	171,183	979,338	1,237,646	1,377,795	1,399,954	1,376,258	1,448,366	1,266,742	904,835
Other taxes.....	177,581	181,784	404,755	449,153	573,314	584,607	632,375	525,888	588,772	481,328
Total.....	312,277	352,967	1,384,093	1,674,799	1,951,039	1,974,561	2,008,633	1,974,254	1,855,514	1,386,163
Income from enterprises and properties.....	497,877	428,775	1,181,944	1,673,043	1,833,504	1,224,630	2,064,410	1,948,790	1,836,138	2,003,095
Miscellaneous income.....	159,654	2,323,627	3,986,776	1,916,020	1,756,738	817,218	705,703	491,111	287,010	246,416
Total.....	892,809	3,105,369	6,559,813	5,264,762	5,541,281	4,556,409	4,778,746	4,414,155	3,978,662	3,636,484
Extraordinary Income:										
Total.....	265,833	607,176	4,128,802	3,047,639	5,448,178	5,489,457	4,751,726	4,343,559	3,652,153	1,574,394
GRAND TOTAL.....	1,158,642	3,712,545	10,681,615	9,212,401	10,989,459	10,045,866	9,530,472	8,757,795	7,630,815	5,210,878
DISBURSEMENT										
Ordinary Disbursement:										
Huiting Office.....	1,690	1,690	18,418	24,984	31,960	34,095	37,927	34,843	36,326	31,413
Education.....	89,434	82,336	230,607	306,176	371,381	402,080	462,216	470,799	484,922	586,130
Industrial encouragement.....	56,640	94,888	163,934	259,053	368,110	162,026	39,403	45,508	48,451	43,604
Sanitation.....	159,016	175,589	567,598	416,028	466,505	149,247	105,567	110,002	100,087	398,740
Other expenses.....	393,437	339,013	1,479,877	1,540,523	1,773,107	1,884,776	2,168,852	1,962,582	1,870,256	1,969,138
Total.....	700,217	693,516	2,460,434	2,546,764	3,011,063	2,632,224	2,813,065	2,623,664	2,540,042	3,029,025
Extraordinary Disbursement:										
Total.....	334,217	1,119,215	4,435,796	2,591,581	3,724,404	3,519,248	3,164,813	3,229,530	2,285,599	2,181,853
GRAND TOTAL.....	1,034,435	1,812,731	6,896,230	5,138,345	6,735,467	6,151,472	5,978,778	5,853,194	4,825,612	5,210,878

* Estimate.

Self-Government Bodies.—Finance of Cities.—The finance of the cities of Dairen and Port Arthur is based on three taxes, the household tax, a tax supplementary to the local tax of the Kwantung Government, and a special tax. Besides these, there are collected at Dairen an amusement tax, a carriage tax, and a tax supplementary to the real property transfer tax of the Kwantung Government. The annual expenditure accounts of the two cities have been as follows.

Table 25

ANNUAL ACCOUNTS OF THE CITIES OF DAIREN AND PORT ARTHUR

City of Dairen	Revenue	Expenditure
1925	¥ 802,259	¥ 799,396
1926	1,139,652	1,026,757
1927	1,126,859	1,066,552
1928	1,224,861	1,151,356
1929	1,231,917	1,145,158
1930	1,151,072	994,240
1931	1,105,009	973,205
1932*	1,083,334	1,083,334
City of Port Arthur	Revenue	Expenditure
1925	¥ 105,076	¥ 105,077
1926	171,283	172,771
1927	117,895	108,255
1928	104,769	95,168
1929	114,295	105,798
1930	146,318	138,606
1931	99,987	98,438
1932*	108,405	108,405

The city of Dairen used its municipal properties, and also has a special account for managing municipal lands, dwelling houses and pawnshops.

Finance of Kai.—The Kai, or Hui (會) receives revenue from property and that derived from fees and charges is also limited. So most of the expenditure is defrayed by levying taxes, which are of two kinds, household tax and land tax.

Annual Accounts of South Manchuria Railway Zone.—The South Manchuria Railway Company is bound to undertake civil engineering works and to provide educational and sanitary equipment in the Railway Zone, but at the same time, it is privileged to levy charges on the inhabitants within the Zone.

The annual accounts of the Railway Zone are as follows:

* Estimates.

Table 26

ANNUAL ACCOUNTS OF THE SOUTH MANCHURIA RAILWAY ZONE

1907	¥ 21,072	1928	¥ 4,342,936
1910	" 236,307	1929	" 4,717,407
1915	" 708,076	1930	" 3,409,224
1920	" 2,653,404	1931	" 3,174,390
1925	" 3,769,398	1932	" 3,352,805
1926	" 3,979,504	1933*	" 3,128,954
1927	" 3,941,504		

Table 27

ANNUAL REVENUES OF THE RAILWAY ZONE

(in 1,000 yen)

	1927	1928	1929	1930	1931	1932	1933*
Taxes							
Household rate.....	617	631	674	650	600	600	600
Other taxes	250	307	326	277	253	323	296
Total.....	868	938	1,000	928	854	924	897
Fees	219	220	241	240	231	269	255
Other revenues.....	110	133	140	142	133	167	133
Supplies	2,742	3,050	3,336	2,097	1,955	1,991	1,842
Grand Total.....	3,941	4,342	4,717	3,409	3,174	3,352	3,128

Table 28

ANNUAL EXPENDITURES OF THE RAILWAY ZONE

(in 1,000 yen)

	1927	1928	1929	1930	1931	1932	1933*
Ordinary :							
General Affairs.....	57	59	67	63	60	62	60
Councils	9	10	16	11	15	11	12
Civil Affairs.....	496	486	526	473	403	369	401
Education.....	1,416	1,481	1,543	1,610	1,571	1,585	1,605
Libraries	153	195	156	156	137	127	121
Sanitation.....	255	265	507	501	402	508	392
Policing	205	215	218	198	183	190	193
Parks.....	143	183	178	165	144	139	140
Social welfare	24	28	28	71	85	83	86
Cemetery and cremation	17	14	15	12	10	11	12
Other expenditures.	675	830	1,361	82	76	214	95
Total.....	3,455	3,772	4,618	3,347	3,090	3,303	3,121

* Estimate.

Extraordinary :							
Civil Affairs	112	109	55	16	34	11	2
Education.....	56	130	6	8	12	4	—
Parks	22	24	19	23	28	1	1
Social welfare	2	10	5	9	3	—	—
Other expenditures.	291	295	10	4	4	31	3
Total.....	486	570	98	61	83	48	7
Grand Total.....	3,941	4,342	4,717	3,409	3,174	3,352	3,128

CHAPTER IX

GENERAL ECONOMIC POLICY

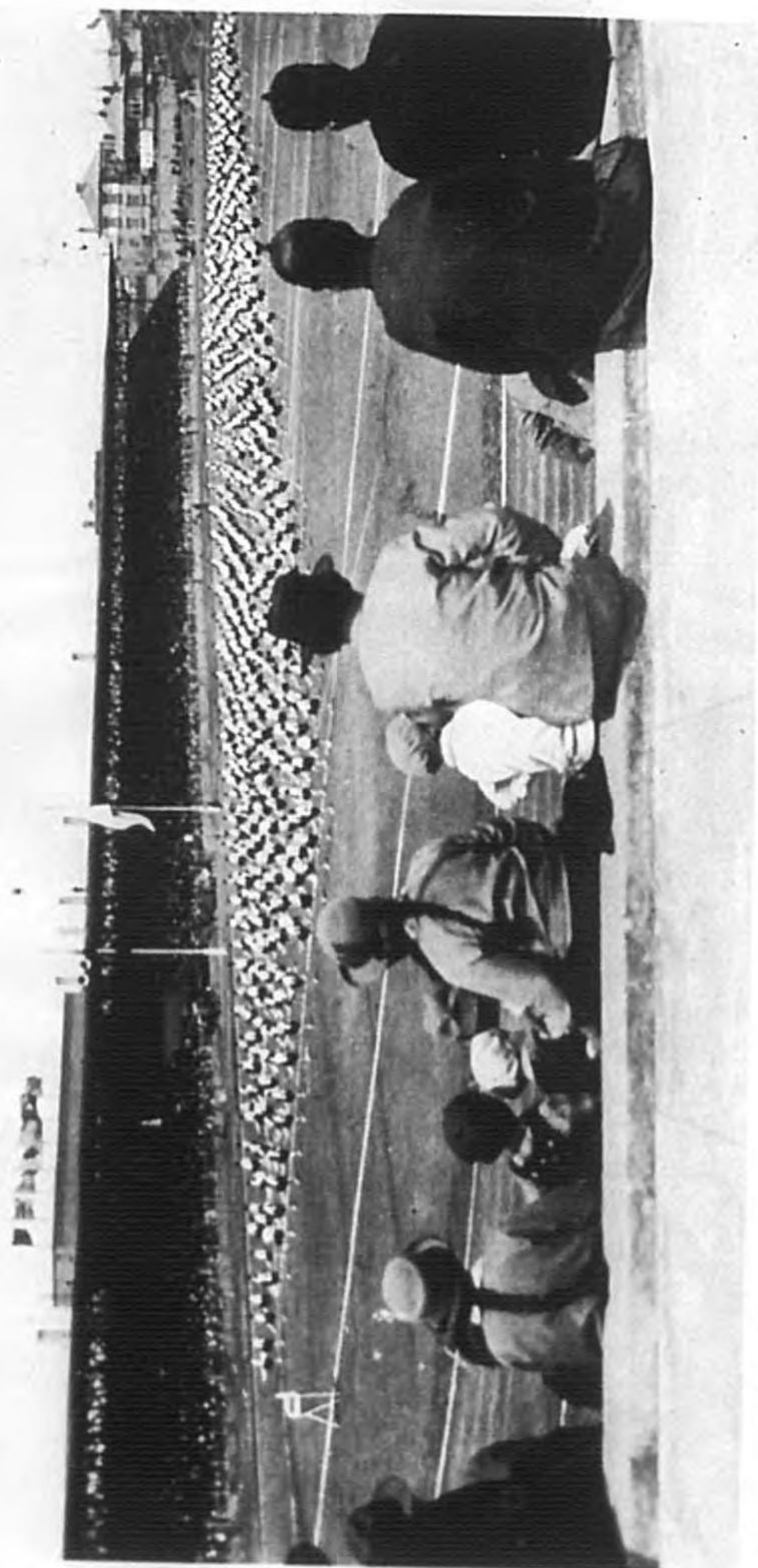
The Manchoukuo Government made public the General Outline of the Economic Construction Programme on March 1, 1933, first anniversary of the establishment of the new State. This programme reveals the fundamental economic construction policy of Manchoukuo for the next decade, and the guiding spirit of the programme is State economic control. (Refer to the second of the four principles given in the Second Chapter, and also the Third Chapter, of the outline, which is appended hereto.

This policy of economic control was adopted by the Manchoukuo Government because the establishment of the new State took place in the midst of the world economic depression and also because of the influence exercised by the world tendency for controlled economics. But it must not be overlooked that in Manchoukuo controlled economics is comparatively easy to be adopted and put into practice, as powerful manufacturing and commercial enterprises have not yet developed as free and independent enterprises of the individual people.

Manchuokuo has not yet developed beyond the stage of an agricultural country, as described in the following chapters. The railways, mining industry, and other enterprises which made some development in the past were either Government enterprises from the days of Chang Hsueh-liang or under the control and management of foreign capital, especially Japanese. It was the same with powerful banks. The trade in staple products of Manchoukuo, which constituted the greatest portion of the commerce, was almost entirely monopolized by Government banks.

The new State of Manchoukuo succeeding to all these Government enterprises, it is not at all surprising that the Government has adopted controlled economics as a basic policy.

The General Outline of the Economic Construction Programme was announced by Manchoukuo only one year after its foundation, and consequently it may not be a thoroughly well regulated construction programme. But despite its shortcomings, we can learn from this outline the basic economic policy the Government of Manchoukuo is following.



Stadium at Dairen.

GENERAL OUTLINE OF ECONOMIC CONSTRUCTION
PROGRAMME OF MANCHOUKUO

Published by the Manchoukuo Government, March 1, 1933.

I. Introduction.

A year has gone by since Manchoukuo was established in accordance with its lofty ideals in March last following the extinction of the old corrupt military régime. Though it was a year of trials and tribulations in both foreign and domestic affairs, the Government continued in its untiring efforts for remedying that dismal state of affairs which had prevailed over the land under the former rule. On the one hand, laws and regulations were revised, the basis of all administrative activities was solidified, and the currency system and finance were gradually stabilized, while, on the other hand, the task of maintaining peace and order was vigorously pursued by eliminating all disruptive forces. In the sphere of diplomatic intercourse, efforts were made as an independent State to strengthen the ties of friendly relations between this country and our neighbours and to elevate our international position.

Needless to say, the basic principle which underlay the founding of the State was to conform to the will of Heaven, and to give security to the people. This principle must be realized through the creation of a peaceful land for the 30 million people of our country.

On this happy occasion of the first anniversary of the national foundation, this State is able to lay down the policies for its economic construction, and is now prepared to make the first move in the historical work of materializing the aforementioned basic principle. In the conduct of State affairs, action is undoubtedly far more important than speech; but so far as the economic construction of a State is concerned, success is difficult even with the aid of clear-cut policies and exhaustive plans coupled with co-operative human efforts. Accordingly, the Government has hereby decided to indicate these fundamental policies and the general outline of its programme, as a guiding beacon in the course of the forward movement to be undertaken jointly by the Government and its people.

This outline, however, represents a programme extending over a long period of years, and consequently, separate plans may be drawn up and published in regard to the work of the immediate future.

II. Fundamental Policies for Economic Construction.

In order to avoid the baneful effects which capitalism when unbridled

may exert, it is necessary, in constructing our national economy, to apply a certain amount of national control thereto, and to utilize the fruits of capital so that a sound and lively development in all branches of the people's economy may be realized. Thus will the economic life of the great mass of citizens be enriched and rendered secure, the standard of their national life elevated, and the country's power strengthened, in turn enabling this country to contribute to the development of world economy, and advance the cause of culture. Through such a process Manchoukuo intends to realize a model State which is the aspiration of the founders of this nation and which, after all, is the ultimate goal of the economic programme.

In order to attain this great objective, it is essential to proceed under four basic policies enumerated hereinafter :

Firstly, the interests of the people as a whole will be made the keynote and efforts will be made to prevent any exclusive class of people from monopolizing the benefits of the exploitation of natural resources and the development of industries, and to enable all to enjoy such benefits.

Secondly, in order to develop all natural resources most effectively and to secure a co-ordinated development of every branch of economy, national control will be exerted over important economic activities and measures for their rationalization devised.

Thirdly, in the work of unlocking resources and encouraging industries, the principle of the Open Door and Equal Opportunity will be observed. In the spirit of this principle, capital investments from various parts of the world will be invited, while appropriate and effectual use will be made of the technical skill and experience and other essence of civilization, taken from advanced nations.

Finally, with a view to harmonizing and rationalizing economic relations among Eastern Asiatic countries, and in view of the close economic inter-dependence between Japan and this country, emphasis will be placed upon securing co-operation between the two nations, thereby rendering more intimate the relationship of mutual assistance.

These four policies being fundamental in the projected economic construction, they will be thoroughly and scrupulously observed in all cases so as to insure their complete execution.

III. Means of Economic Control.

Based upon the fundamental policies listed in the foregoing, this Government will seek to control its national economy within the scope of

the following limits considered as the most feasible and best under the present circumstances :

- (1) As a principle, those enterprises which are important from the standpoint of national defence, or which are in the nature of public utility or public benefit will be conducted under official management or by special companies.
- (2) Industries and resources not included within the above category will be left to the free management of private persons. Proper and necessary adjustment will be effected in the spheres of both production and consumption in order to promote national happiness and welfare, as well as to maintain the livelihood of the people.

IV. Perfection of the Means of Transportation.

Since a proper adjustment of the means of transportation constitutes the most important factor in the foundation work of economic construction, for the development of agriculture, which is the backbone of our national economy, and of other natural resources, for the preservation of peace and order, for seeking prosperity in commerce and trade, and for economic intercourse with foreign countries, energy will be devoted to the organic expansion of these means.

- (1) Railways.
 - a. In the construction of railways, the primary object will be the development of the economic wealth of this country ; and the safety of national defence and the maintenance of public peace will also be sought for.
 - b. The total length of railways, when completed in the future, will reach 25,000 kilometres. In the next ten years, 4,000 kilometres of new lines will be laid, making a total of 10,000 kilometres by adding the existing railways.
 - c. Trunk lines will be State-owned and operated under unified management.
- (2) Harbours.
 - a. Besides the harbours in our country, those in adjacent countries will be effectively utilized in order to accelerate the economic development of Manchoukuo and to effect the most economical connection between the producing districts and seaports.
 - b. Necessary improvement will be made in the harbours of Ying-kow and Antung.
 - c. The harbour works of Hulutao will be completed as the

d. demands of economic necessity become pressing in the future.

- d. In maritime transportation, the perfection of coastwise services will be sought first. The ocean services will also be attended to in order that they may be developed as speedily as possible.

(3) Rivers.

In view of the important nature of rivers, transport facilities on the Amur, Sungari, Yalu and Liao Rivers will be promoted.

(4) Roads.

- a. With the object of facilitating transport and of preserving public peace, highways connecting the principal cities and the hsien (district) towns, and such other roads as may be necessary for opening up backward regions and for purposes of defence will be newly built or improved. They will be completed within the period of ten years and their total length will be about 60,000 kilometres.
- b. Motor traffic will be opened on these highways throughout the country in the future.

(5) Communications.

- a. The unification and the linking up of the communication services within the country will be given primary consideration while connection with foreign countries will also be perfected.
- b. Telegraph and wireless services will be operated under unified management; principal economic lines and their feeder lines will be improved and extended; telephone installations in principal cities and equipments for radio broadcasting will likewise be bettered and enlarged.

(6) Air Transport.

In view of the ever progressing tendency of air transport, efforts will be directed towards the encouragement of this enterprise. The Manchuria Air Transport Company, which is equipped with superior aeroplanes and technical skill, will be permitted to operate this service. About 3,500 kilometres of air routes will be opened in the next three years. New air lines will be established in the future connecting Europe and Asia, as well as various parts of the Far East.

(7) City Planning.

- a. Hsinking, the capital of Manchoukuo, will be built up into a model city, which, when completed, will have an area of 200 sq. kilometres, capable of accommodating a population of 500,000.

- b. In such cities as Mukden, Harbin, Kirin and Tsitsihar modern city planning will be put into practice at appropriate times in the future.

V. Development of Agriculture.

(1) Agriculture.

Agriculture is the mainstay of our national economy. The objective for the increase of farm produce lies in planning to become self-sufficient in those products which at present must be imported from abroad, as well as in striving to export in greater quantities agricultural produce in general and thereby secure a larger measure of happiness and benefit for the rural masses and elevate their standard of living.

(2) Improvement and Increase of Farm Products.

- a. Proper guidance and encouragement will be given to the cultivation of soya beans, kaoliang, millet and maize which constitute the staple products of Manchoukuo, so as to improve their qualities and increase their output.
- b. The area for the cultivation of cotton will be increased to 300,000 cho, and the annual output of ginned cotton to 150,000,000 kin.
- c. The cultivated area for wheat will be increased to 2,300,000 cho, and its annual production to 20,000,000 koku.
- d. The growing of tobacco, hemp, peanuts, sesame, castor, beans, hops, sugar beet, fruits, vegetables, etc., and tussah silk culture will be encouraged for the betterment of agricultural management and the prosperity of farmers.

(3) Stock-farming.

1. Though this country is abundant in live-stock, there is a vast number of inferior breed which lowers their value as resources. The chief concern in developing these resources will accordingly be to improve their stock, as well as to increase the number of such animals.
2. Improvement and Increase of Animals.
- a. The existing breed of horses will be improved upon by introducing Arabs and Anglo-Arabs and other superior strains, as a result of which at least 2,000,000 heads of select breeds are to be obtained.
- b. Merino will be introduced to improve the existing stock of

- sheep, and at least 4,000,000 of the present breeds are to be replaced by the improved variety.
- c. Cattle of superior quality will be increased by selecting at least 2,700,000 heads.
 - d. Hogs will be improved chiefly by introducing Birkshires, and their production will be increased to meet home consumption.
3. A system of live-stock hygiene will be established so as to contribute to the stabilization of the stock-raising industry and increase live-stock resources.
 4. Pastures will be improved to increase the number of domestic beasts.
- (4) Forestry.
1. The principal object of forestry in this country will be to endeavour to restrict and control the indiscriminate felling of trees, and to protect and increase the production of trees, as well as to preserve the productive capacity of forests through rationalized management.
 2. Any new grant of forest-ownership will be withheld for the time being. In the coming five years, all existing rights of forest-ownership will be readjusted, while a basic survey will be conducted of the principal forests in this country, and the State forests determined so as to establish a basis for their rational management. Generally speaking, State forests should be administered by the State but, in case of necessity, they may be managed otherwise. Public and private forests will be encouraged to conduct rationalized management under Government supervision. Afforestation will also be fostered with the view to developing the industry.
- (5) Marine Products Industry.
- a. Fisheries.
Fishery resources will be carefully fostered through culture increase, while any wanton catch will be prohibited in order to preserve their lasting utility.
 - b. Salt manufacturing.
The industry will be developed by readjusting and enlarging the salt fields.
- (6) Agricultural Management.
The prevailing method of farming which requires the use of domestic beasts will be adopted as the basic form of management,

- which will be improved by cultivating new varieties of crops, and by introducing various avocational enterprises and the use of machinery.
- (7) Agricultural Establishments.
1. With the view to promoting the prosperity of agricultural districts and increasing the economic resources of the peasant households, a system of agricultural associations will be organized to place their positions regarding production and consumption on a better basis, and secure unobstructed circulation of money. The various institutions in the rural communities will be perfected and stabilized.
 2. In order to guide and stimulate agricultural industries, various experiment stations, organizations for the improvement of live-stock, research institutes for the prevention of cattle plague, grounds for experimental cultivation and seedlings, and model forests will be established.
 3. Scientific facilities for meteorological observations will be installed within five years from 1932 (First Year of Tatung).
 4. A preliminary investigation will be made in respect to river improvements and irrigation works.
- (8) Lands.
1. A survey of lands will be started immediately, a land system established, and evils which attend the unscrupulous acquisition of land will be prevented.
 2. A special organ will be created for the cultivation of untilled land, and within fifteen years about 5,000,000 cho of it will be developed by agricultural settlers.
- VI. Development of Mining and Manufacturing Industries.
- (1) Policy.
The policy in regard to these industries will be designed to increase the wealth of this country by enriching the people's economy and increasing the national wealth through exploitation of mineral resources, and establishment of basic industries as well as those necessary for national defence.
- (2) Mining.
- a. By unifying the various coal mines and rationalizing production and supply of coal, efforts will be made to supply the public with an ample quantity of the fuel at reduced prices, and also

to augment its export.

- b. As a rule the mining rights of mineral resources essential for national defence must be held by special corporations so as to prevent reckless and uncontrolled mining operations, and facilitate the opening of new mines.
 - c. Alluvial gold and gold mines will be classified into two categories, the one owned by the State and the other privately, the latter to be opened to public exploitation.
- (3) Manufacturing Industries.
- a. The undermentioned industries will be developed by degrees under necessary control according to domestic demands :
 - Metallic industry ;
 - Machine manufacture ;
 - Oil milling ;
 - Pulp industry ;
 - Soda manufacture ;
 - Alcohol manufacture ;
 - Tussah silk industry ;
 - Spinning industry ;
 - Flour milling ;
 - Cement manufacture ;
 - Brewing and distilling industry.
 - b. Industries not included in the foregoing list will, for the time being, be permitted to develop freely, but, whenever necessity arises in the future, they may be properly controlled.
 - c. Electric industries will be placed under unified management in order to provide the country with a sufficient supply of power at low cost.
- (4) Establishments.
- a. In order to stimulate healthy development of industries, and to secure the benefits of concentrated establishments, industrial districts will be established in the following places :
 - Mukden ;
 - Antung ;
 - Harbin ;
 - Vicinity of Kirin.
 - b. Uniformity will be secured in grade and quality of industrial products.

VII. Adjustment of Money.

Among the acts of misgovernment under the former régime, the indiscriminate issue of paper money with the consequent circulation of worthless notes was the most vicious in its effects. In consideration of this fact, this Government, acting upon the policies decided upon at the beginning of the new State, will endeavour to secure the stable circulation of Manchoukuo national currency, and maintain its value. The monetary basis of this country will thus be placed on a solid footing, the credit system generally improved, and the circulation of money rendered easy.

- (1) The Central Bank of Manchou will speedily dispense with its subsidiary business, and labour to regulate and stabilize the currency, and be exclusively responsible for its control.
- (2) Popular financial organs such as industrial and credit associations, and other general financial establishments will be re-adjusted, and appropriate measures will be adopted to aid and regulate their business.
- (3) In order to assist the development of agricultural and manufacturing industries, special financing facilities will be created. A way will be opened for these organs to offer long-term credits from funds gathered, for instance, by issuing their own debentures with premiums by special permission of the Government.
- (4) The issue of lottery tickets will be exclusively undertaken by the Government. The issue of premium-bearing debentures will not be permitted except in the case of organs mentioned in the preceding paragraph.
- (5) With the object of encouraging thrift among the people, the system of postal savings will be improved and developed.

VIII. Aids to Commerce.

- (1) Every assistance and encouragement will be given to general commerce, and its prosperity will be enhanced by securing smooth transactions, and finding markets for the products in all parts of the world. In this respect, the desirable traits of our merchants will be further encouraged, and old conventions which require reform will be rectified, so as to rationalize business transactions. The supply and prices of the necessities of life, and other articles which have important bearing upon the national life will be properly regulated.
- (2) Laws governing patents and trade marks will be promulgated, and

rights of "industrial ownership" protected. Regulations governing deposit or trust funds and insurance will likewise be enacted, weights and measures will be unified, the system of produce exchanges will be improved, and in general advanced facilities in regard to commercial transactions will be instituted.

- (3) The tariff policy will be designed to promote foreign trade and international transactions.

IX. Improvement of Private Economy.

The Government of Manchoukuo does not intend to confine its activities to removing the effects of the misrule committed by the former régime, but desires also to enforce its various policies and establish facilities which will insure happiness to all classes of the people, and strengthen the national resources by improving the private economy of this country. It will not, however, tolerate the existence of any class of idlers in the country; it will encourage the virtues of self-dependence and co-operation with others, for which object the following measures will be adopted:

1. The lives and properties of the people will be safeguarded with all available means;
2. Necessary arrangements will be considered by the Government and people to prepare against famines and other natural calamities, and thereby prevent starvation among the inhabitants;
3. The national power will be expanded by readjusting taxation, and by rationally dividing and lightening the burden of the people;
4. The necessities of life will be supplied to the people at low prices;
5. The fruits of mutual assistance will be secured by effecting sound development of various industrial and credit associations;
6. Measures will be provided to give work to the unemployed.

X. Conclusion.

Although the present programme covering various branches of economy is small in scale, it will be gradually enlarged in proportion to the growth of our financial and economic activities. Even with this programme, it is quite obvious that in less than ten years the present total production of the country, amounting to 3,000,000,000 yuan, will be doubled. It is confidently expected that the national power will expand with amazing speed in the not distant future. It must be noted, at the same time, that

the present plan for the initial period alone demands an enormous amount of capital and expert skill, together with the united efforts of the entire people. As for the funds necessary for the execution of this programme, it is the intention of this Government to raise them in the world market, while funds of comparatively small amounts will be collected in the domestic market. Technical guidance, too, will be sought from abroad.

In brief, the present economic construction plan seeks to perfect a new unparalleled system of economy based on the perpetual happiness of this State and its people, its great mission being the realization of that noble principle, "Wangtao," upon which Manchoukuo stands. By setting forth this outline the Government of Manchoukuo earnestly calls for the united and determined support of the entire people.

CHAPTER X
AGRICULTURE*

Agriculture in the National Economy
of Manchoukuo

Agricultural Products.—Manchoukuo is first of all an agricultural country. At present the majority of the national wealth annually produced is represented by agricultural products, and the majority of the population are farmers. As the country possesses vast agricultural resources of great possibility and room for future development, its rôle will continue to be that of an agricultural territory.

Of course, it cannot be overlooked that iron, coal, oil shale, gold, magnesite and other mineral resources, as well as the metal and chemical industries which are progressing in connection with such mineral resources, will also gradually occupy very important positions. But the future prospect of the development of agricultural resources is bright, and there is no doubt that agriculture will become the foundation of industries and economy of Manchoukuo. Let us see what an important position agricultural products occupy by examining the figures for 1931.

Value of Agricultural Products.....	637 million yen
(cereals only)	
Value of Mineral Products	66 " "
(coal and pig iron only)	
Value of Manufacturing Products.....	216 " "

From the above table it will be seen that the value of agricultural products is about ten times the value of the coal and pig iron products which constitute almost the entire value of the mineral products, or nearly three times that of the value of manufacturing products. Furthermore, 34 per cent of the value of the manufacturing products represent the products of bean oil mills using soya beans as raw material. Among other agricultural products there are tobacco, hemp, cotton and other industrial materials; fruits; tussah silk (wild raw silk); cattle, horses, sheep, pigs, mules,

* Contributed by Dr. Denzayemon Hashimoto, Professor of the Kyoto Imperial University.

and other animals, and live-stock products. When the standing timber stock reaching 4,200,000,000 square metres (the production in 1931 was 840,000 square metres) is considered, it will be readily noticed what a large percentage the agricultural and forestry products represent in the total production amount of the country.

The details of the export items of Manchoukuo also show that agricultural products play a prominent part in the export trade.

Table 1
EXPORT STATISTICS OF VARIOUS PRODUCTS*

(In 1,000 Haikwan taels)

	1929	1930	1931	Average	Percentage
Agricultural Products.....	225,486	181,766	218,136	208,463	49.7
	(323,565)	(285,684)	(347,665)	(318,972)	(76.0)
Manufacturing Products...	119,472	129,828	160,904	136,735	32.6
	(21,393)	(25,910)	(31,375)	(26,226)	(6.3)
Mining Products	49,364	51,311	60,411	53,695	12.8
Live-stock Products	11,653	9,212	11,217	10,694	2.5
Aquatic Products.....	3,461	4,657	6,891	5,003	1.2
Forestry Products	4,689	4,497	5,992	5,059	1.2
Total	414,125	381,271	463,551	419,649	100.
Others	8,748	8,719	10,318	9,262	
Grand Total	422,873	389,990	473,869	428,911	

It is thus learned that the agricultural products occupy about 50 per cent of the total export amounts in the average for three years. In the manufacturing products, beancake, bean oil and bran, which are directly produced out of agricultural products as raw material, constitute 80 per cent of the total. These facts prove what an important controlling position is occupied by agricultural products in the export trade.

Agricultural Population.—According to the investigation by the Statistical Office of the Manchoukuo Government made at the end of December, 1932, the total population was 29,606,117, excluding the Kwantung Leased Territory and the South Manchuria Railway Zone, and the number of households was 4,829,881. But as no investigation was made respecting the population as classified according to occupations, it is not clearly known what percentage the farming population constitutes. Judging,

* The figures in parentheses for Agricultural Products include the amounts of beancake, bean oil, and bran; the figures in parentheses for Manufacturing Products exclude those for Beancake, bean oil, and bran. 'Others' represent those which are difficult to be classified according to the Manchuria Trade Returns.

however, from the number of the farming households in the Three Eastern Provinces and the estimated total population in 1919, it is calculated that the farming population is not less than 80 per cent of the total.

Agricultural Lands.—Of the entire land of Manchoukuo, 28.1 per cent is arable. This figure is not a large percentage of the entire land, but the actual area of the arable land is 33,462,030 hectares. When this arable area is compared with those of other countries, it will be seen that it is larger than those of Canada and Argentine, and is next only to those of the United States, India, the U. S. S. R., and China. Only 46.9 per cent of this arable land is now cultivated. When the cultivated arable land of Manchoukuo is compared with those of other countries, it is larger than those of Italy and Roumania, and ranks next to those of Poland and Spain, as shown in the following table:

Table 2
COMPARISON OF THE CULTIVATED AREAS OF
VARIOUS COUNTRIES

(in 1,000 Hectares)

United States	138,403	Germany	20,485
U. S. S. R.	138,000	Poland	18,551
British India	125,457	Spain	15,947
China	100,000	Manchoukuo	15,684
Argentine	26,447	Italy	13,782
Canada	23,523	Australia	13,751
France	22,163	Roumania	13,487

Thus the agricultural land of Manchoukuo is not particularly inferior in point of area to those of other prominent agricultural countries of the world. Provincially divided, Fengtien Province has the largest cultivated area, the percentage to the arable area being 73 per cent; Jehol Province comes next with 52.4 per cent; Heilungkiang Province has the greatest room for development, with only 31.7 per cent of the arable land being cultivated, as shown in Table 3.

Heilungkiang Province which has the greatest room for future development is most fertile, and Kirin Province comes next, as explained later. Thus, to predict that Manchoukuo will make progress as an agricultural country, must be regarded as justifiable.

Table 3

LAND UTILIZATION STATISTICS

(in Hectares)

	Fengtien	Kirin	Heilungkiang	Total	Jehol	Grand Total							
Total Area.....	18,506,800	26,755,300	58,217,410	103,479,510	15,689,874	119,169,384							
Arable Land {	Cultivated	5,218,610	4,075,880	13,968,420	1,715,858	15,684,278							
							Uncultivated...	1,725,720	5,673,190	8,801,930	16,200,840	1,576,912	17,777,752
							Total	6,399,650	10,891,800	12,877,810	30,169,260	3,292,770	33,462,030
Unarable Land.....	12,107,150	15,863,500	45,339,600	73,310,250	12,397,104	85,707,354							
Percentage of {	Unarable	65.4	59.3	77.9	70.8	79.0							
							Total Area {	Cultivated	25.3	19.5	7.0	13.5	10.9
Percentage of {	Cultivated.....	73.0	47.9	31.7	46.3	52.4							
							Arable Land {	Uncultivated..	27.0	52.1	68.3	53.7	47.6

Natural Factors of Manchurian
Agriculture

Temperature.—The climate of Manchoukuo being controlled by the continental climate of Asia, winter is extremely cold, summer is extremely hot, and the difference of temperature between day and night, and between summer and winter, is great. Spring and autumn are very short and it is commonly said that Manchoukuo has no spring or autumn. Of course, the climate differs much according to district; for instance, there is much difference between the climates of the Chinchow peninsula facing the Sea of Pechili, the Mongolian district bordering the Gobi desert, Changpaishan (長白山) in the east, and North Manchuria. Generally speaking, however, the temperature suddenly rises in May, and burning hot days continue from the end of May through June, July, and August. In September it rapidly falls, and in November the extreme cold season sets in and continues until March. The summer season of high temperature is also the rainy season during which 70 to 80 per cent of the annual rainfall occurs. With the high temperature and abundant rainfall, the growth of agricultural plants is greatly fostered in this season. Because of these natural factors, even in North Manchurian districts of high latitude, where the temperature often falls 30 degrees below zero, wheat, soya beans, potatoes and others are successfully cultivated. The average monthly temperature at various important points is given in the following table:

Table 4
AVERAGE MONTHLY TEMPERATURE AT IMPORTANT PLACES
(in Celsius; - is under zero)

Year	Position E. Long. N. Lat.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Year
		1928	117° 26' 49° 35'	-26.1	-23.1	-15.3	1.4	8.9	17.9	20.6	18.7	8.9	1.1	-14.6
Average	126° 38' 45° 70'	-17.8	-14.6	-7.6	5.2	13.0	18.8	22.0	21.5	14.2	5.1	-6.8	-17.6	3.1
1929	128° 4' 45° 10'	-19.3	-16.2	-4.4	5.0	13.5	18.9	23.5	20.1	12.5	6.1	-2.8	-14.8	3.5
1929	129° 36' 46° 20'	-20.8	-17.2	-6.6	3.4	13.0	17.9	23.3	20.0	12.0	5.3	-5.0	-16.8	2.4
1914~20	129° 11' 40° 13'	-8.7	-5.6	1.4	9.4	16.7	21.9	25.5	24.7	17.8	11.9	2.4	-6.2	9.3
1925~27	124° 02' 40° 26'	-20.4	-6.6	2.4	11.5	17.1	23.0	25.6	26.1	20.8	12.1	3.3	-7.9	9.8
1925~29	124° 04' 42° 36'	-15.1	-11.5	-1.6	7.8	15.0	21.1	23.6	22.0	16.0	7.2	-1.0	-13.0	5.9
1925~29	123° 30' 43° 40'	-15.7	-12.0	-3.2	6.8	14.2	20.6	23.4	21.7	15.5	6.4	-2.5	-13.8	5.1
1915~25	124° 48' 43° 31'	-16.0	-11.0	-1.7	9.3	16.8	22.8	25.2	24.1	18.0	9.7	-1.9	-12.0	6.9
1928~29	122° 45' 45° 20'	-17.7	-12.6	-3.4	5.9	13.8	20.4	23.5	21.2	13.7	5.8	-5.4	-14.0	4.2
1928~29	123° 55' 47° 22'	-22.1	-16.7	-4.2	6.5	14.3	20.0	23.7	21.7	13.8	5.0	-7.8	-18.9	2.9
Average	121° 16' 36° 47'	-4.3	-3.0	1.7	8.6	14.4	19.4	23.0	24.2	19.8	14.1	5.8	-1.3	10.2
"	121° 38' 38° 54'	-5.0	-3.5	1.8	9.2	15.2	20.3	23.5	24.6	19.8	13.7	5.2	-2.1	10.2
"	123° 24' 41° 46'	-13.0	-9.2	-1.2	8.5	15.7	21.6	24.7	23.6	16.6	9.0	-1.3	-10.2	7.1
"	125° 18' 43° 55'	-17.2	-12.5	-4.4	6.4	14.3	20.6	23.1	21.8	14.6	6.4	-4.5	-14.3	4.5

Table 5
MONTHLY HIGHEST AND LOWEST TEMPERATURE, AND DIFFERENCE (in Celsius)

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Lowest	-31.3	-28.4	-22.0	-6.5	-0.1	9.2	12.1	12.6	3.7	-5.9	-20.6	-29.2	-8.9
Difference	10.1	10.9	13.0	14.4	15.6	14.5	14.9	11.8	10.5	14.2	12.4	9.7	12.7
Highest	-14.2	-9.2	1.5	13.8	18.8	24.9	28.1	27.7	22.1	11.7	-1.3	-11.7	9.4
Lowest	-25.2	-22.0	-9.3	-0.8	6.0	12.5	17.9	18.2	9.4	-0.2	-10.8	-22.4	-2.2
Difference	11.0	12.8	14.8	14.6	12.8	12.4	10.2	9.5	12.7	11.9	9.5	10.7	11.6
Highest	-13.9	-9.3	0.5	13.5	17.6	23.1	26.4	26.0	22.0	11.5	-1.0	-11.7	8.7
Lowest	-24.1	-19.8	-9.8	-0.6	6.9	12.5	17.7	17.4	9.4	0.1	-9.6	-20.8	-1.7
Difference	10.2	10.5	10.3	14.1	10.7	10.6	8.7	8.6	12.6	11.4	8.6	9.1	10.4
Highest	-14.9	-8.9	2.2	9.2	19.2	22.7	27.3	26.4	18.1	9.3	-4.5	-12.6	7.8
Lowest	-25.0	-20.2	-9.7	-1.4	6.6	12.3	17.1	15.6	7.5	-0.9	-12.3	-21.1	-2.6
Difference	10.1	11.3	11.9	10.6	12.6	10.4	10.2	10.8	10.6	10.2	7.8	8.5	10.4
Highest	-3.2	0.2	6.9	15.7	22.5	27.6	30.2	29.6	23.5	18.1	7.5	-1.1	14.8
Lowest	-15.6	-11.9	-4.6	2.8	10.4	16.4	21.2	20.2	12.4	5.8	-3.0	-11.9	3.5
Difference	12.4	12.2	11.5	12.9	12.1	11.1	9.0	9.3	11.1	12.3	10.6	10.9	11.3
Highest	-4.9	-1.5	6.4	16.4	21.2	27.1	29.1	29.7	24.9	16.8	7.7	-4.0	14.1
Lowest	-20.0	-15.3	-6.5	-0.1	5.4	11.6	16.4	16.0	16.0	9.9	1.0	-5.0	2.5
Difference	15.1	13.8	12.9	16.5	15.8	15.5	12.7	13.7	8.9	6.9	6.7	1.0	11.6
Highest	-8.7	-4.9	4.1	15.7	22.2	28.3	28.8	27.7	23.4	14.1	4.7	-7.4	12.3
Lowest	-22.5	-18.7	-7.1	0.6	8.6	15.0	19.4	17.6	10.2	1.6	-6.6	-19.6	-0.1
Difference	13.8	13.8	11.2	15.1	13.6	13.3	9.4	10.1	13.2	12.5	11.3	12.2	12.4
Highest	-9.0	-3.7	4.6	14.1	21.8	27.3	29.7	27.8	21.5	13.9	0.7	-6.1	11.9
Lowest	-22.2	-17.8	-8.6	0.9	7.4	14.4	19.7	18.1	9.4	1.6	-9.9	-18.2	-0.4
Difference	13.2	14.1	13.2	13.2	14.4	12.9	10.0	9.7	12.1	12.3	10.6	12.1	12.3

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Year	
Kungchuling ...	Highest	-10.8	-6.2	2.6	13.4	20.8	26.7	28.7	27.3	21.3	13.3	2.1	-7.7	11.0
	Lowest	-22.2	-18.1	-9.0	0.7	7.8	14.6	19.3	17.4	9.2	2.0	-8.2	-18.0	-0.4
	Difference	11.4	11.9	11.6	12.7	13.0	12.1	9.4	9.9	12.1	11.3	10.3	10.3	11.4
Taonan	Highest	-11.1	-5.8	4.3	14.5	21.9	27.7	29.5	26.5	20.4	13.0	1.2	-8.5	11.3
	Lowest	-24.7	-20.2	-11.2	-2.4	6.8	13.6	18.6	16.9	8.0	-0.9	-11.8	-20.4	-2.4
	Difference	13.6	14.4	15.5	16.9	15.4	14.2	10.9	9.6	13.0	13.9	12.9	11.7	13.7
Tsitsihar	Highest	-15.8	-11.5	6.8	15.1	21.8	24.4	27.4	26.7	20.1	13.8	2.7	-9.5	10.2
	Lowest	-28.7	-23.6	-13.5	-3.2	5.3	11.7	18.8	15.9	7.2	-5.0	-14.3	-24.7	-4.5
	Difference	12.9	12.1	20.3	18.3	16.5	12.6	8.6	10.8	12.9	18.8	17.0	15.2	14.7
Port Arthur	Highest	9.5	12.0	21.3	28.4	33.9	34.2	34.8	35.4	31.6	27.4	24.4	13.7	35.4
	Lowest	-19.3	-19.3	-12.1	-4.0	0.1	9.9	14.9	14.5	6.1	-2.7	-11.3	-18.2	-19.3
	Difference	28.8	31.3	33.4	32.4	33.8	24.3	19.9	20.9	25.5	30.1	35.7	31.9	54.7
Dairen	Highest	10.2	13.0	17.7	28.3	30.9	35.0	35.2	35.7	31.0	27.4	23.0	13.0	35.7
	Lowest	-19.4	-19.3	-12.4	-3.5	1.4	11.3	14.9	15.0	5.8	-2.9	-11.6	-18.9	-19.4
	Difference	29.6	32.3	30.1	31.8	29.5	23.8	20.3	20.7	25.2	30.3	34.6	31.9	55.1
Mukden	Highest	7.8	12.1	20.0	30.3	33.1	39.3	38.9	37.0	33.9	30.4	25.5	11.2	39.3
	Lowest	-32.9	-32.7	-20.9	-8.0	2.0	6.5	10.7	9.6	-1.0	-10.0	-26.3	-31.3	-32.9
	Difference	40.7	44.8	40.9	38.3	31.1	32.8	28.2	27.4	34.9	40.4	51.8	32.5	72.2
Hsinking	Highest	3.5	10.5	19.9	30.2	33.3	39.5	38.3	37.0	31.8	29.8	24.0	7.3	39.5
	Lowest	-35.7	-36.0	-26.0	-15.5	-3.4	4.4	9.0	6.4	-2.7	-13.4	-27.2	-33.5	-36.0
	Difference	39.2	46.5	44.9	45.7	36.7	35.1	29.3	30.6	34.5	43.2	51.2	40.8	75.5
Yingkow	Highest	7.5	10.1	18.5	27.7	31.1	35.1	35.2	36.9	32.5	26.4	22.9	11.6	36.9
	Lowest	-29.4	-31.0	-18.0	-14.6	1.0	7.1	12.2	10.4	0.0	-8.1	-23.4	-28.1	-31.0
	Difference	36.9	41.1	36.5	42.3	30.1	28.0	23.0	26.5	32.5	34.5	46.3	39.7	67.9

Underground Temperature.—As the air is dry and the rainfall is small, the underground temperature falls exceedingly in winter, and in the districts north of Mukden, the underground freezing reaches one to two metres. Thus there is the inconvenience of the necessity of planting spring seeds when the underground freezing had not yet entirely melted, because the spring temperature rising suddenly and the melting and evaporation of the frozen moisture underground being extremely rapid, seeds would not have sufficient moisture to sprout if planted late. If the seed planting time is not mistaken, the freezing of the ground enables the maintenance of moisture in the ground. When the spring season comes, the frozen moisture is melted and evaporated with the advance of the atmospheric temperature, and thus the growth of plants is aided. Because of the freezing the soil is made porous to a great depth, which greatly facilitates the weathering. Also the freezing of the soil prevents the propagation of bacteria, or noxious insects and enables the cultivation of kaoliang, maize, millet and others which consume the nourishment of the soil comparatively largely. Thus although a cultivation system that almost robs the nourishment out of the soil is adopted, the nourishment in the soil is not exhausted, comparatively.

Table 6
UNDERGROUND TEMPERATURE (Annual Average, in Celsius)

Year	Depth (metres)	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Hsiungyocheng (Average)	0.1	-6.2	-4.0	0.7	9.4	17.4	23.5	26.5	25.6	19.6	11.1	2.7	-3.4	10.2
	0.5	-2.4	-1.8	0.1	7.4	15.2	21.0	24.4	24.8	21.0	14.4	7.2	1.6	11.1
	1.0	2.1	0.8	1.0	5.6	12.2	17.3	21.0	22.7	20.9	16.4	10.8	5.8	11.4
	2.0	7.6	5.5	4.5	5.1	8.3	11.8	15.2	17.8	18.4	16.9	14.1	10.7	11.3
Fenghuangcheng..... (1929)	0.1	—	—	—	—	—	—	—	—	—	—	—	—	—
	0.5	—	—	—	—	—	—	—	—	—	—	—	—	—
(Average)	1.0	-5.1	-4.8	-0.9	3.0	12.9	20.6	23.5	24.0	17.6	10.2	2.5	-1.0	8.5
	2.0	—	—	—	—	—	—	—	—	—	—	—	—	—
Kaiyuan..... (Average)	0.1	-8.7	-7.2	-0.9	6.7	14.3	22.3	24.6	24.0	18.2	8.9	1.2	-5.7	8.1
	0.5	-5.1	-5.0	-1.4	2.3	10.1	17.4	21.2	21.9	17.9	11.4	4.6	-1.2	7.9
	1.0	-0.1	-1.6	-0.8	0.0	5.3	12.3	16.5	18.6	17.2	13.0	7.8	3.6	7.6
	2.0	5.3	3.1	2.4	2.1	3.2	7.1	10.7	13.5	14.5	13.5	11.0	8.0	7.8
Chengchiatun..... (Average)	0.1	-13.6	-10.0	-2.4	4.1	11.2	20.3	25.0	24.5	16.2	8.1	-1.5	-10.4	6.0
	0.5	-6.0	-5.1	-1.9	2.0	8.2	16.4	21.7	22.2	17.8	11.1	3.1	-2.6	7.2
	1.0	-0.6	-1.4	-0.7	-0.5	3.3	11.6	17.0	19.5	17.2	12.9	7.0	1.6	7.2
	2.0	4.2	2.8	2.1	1.9	2.3	6.3	10.5	13.6	14.0	12.6	10.4	6.7	7.3
Kungchuling (Average)	0.1	-12.8	-10.0	-3.4	4.3	12.1	19.1	23.1	22.4	15.2	7.0	-1.1	-9.0	5.7
	0.5	-6.1	-5.6	-1.7	2.0	8.4	17.2	20.5	21.6	17.5	10.9	3.9	-1.8	7.1
	1.0	-0.6	-2.1	-0.9	0.5	3.9	10.5	15.4	18.1	16.5	12.5	7.5	3.1	7.1
	2.0	5.1	3.2	2.3	2.0	2.5	5.4	9.0	12.1	13.2	12.4	10.3	7.6	7.2
Taonan (Average)	0.1	-15.9	-12.2	-3.9	5.2	13.4	21.7	25.0	23.7	15.7	7.0	-3.5	-12.6	5.3
	0.5	-10.6	-9.0	-3.5	2.6	10.2	17.6	21.4	21.5	16.6	9.9	1.5	-5.3	6.1
	1.0	-4.4	-7.3	-3.0	0.3	4.8	12.8	17.2	18.9	16.2	11.3	4.9	0.3	6.0
	2.0	-2.4	0.8	0.0	1.1	1.3	6.8	11.2	14.0	14.1	11.5	8.3	5.3	6.1
Tsitsihar..... (Average)	0.1	-16.5	-18.0	-5.6	1.7	10.8	16.6	21.4	20.1	12.5	4.1	-3.2	-9.8	2.8
	0.5	—	—	—	—	—	—	—	—	—	—	—	—	—
(Average)	1.0	-7.1	-8.5	-5.4	-2.5	1.0	7.9	13.5	15.6	13.6	9.2	3.4	-0.1	3.4
	2.0	1.2	-0.2	-0.7	-0.5	-0.3	0.8	6.2	9.7	10.8	9.5	6.4	3.6	3.8

Rainfall.—In Manchoukuo the rainfall is comparatively small, averaging 500 to 700 millimetres, and the majority of the district belong to the semi-dry or dry zones.

Looking over the rainfall distribution, it will be seen that it is largest in the eastern mountain zone near the northern border of Korea, it gradually decreases as one goes north-west, and it becomes the smallest in the Mongolian dry zone and desert district. In the districts along the South Manchuria Railway line and the southern line of the North Manchuria Railway, the rainfall is about 600 millimetres on an average. In the districts along the Ssutao (Ssuping kai-Taonan) and Taoang (Taonan—Anganki) Railways, further west, it becomes about 400 millimetres. Lands where the rainfall is less than 400 millimetres generally are not suitable for agricultural cultivation, and unless there are facilities for irrigation, such areas can be utilized only as pasture lands.

The south-eastern part of Manchoukuo has a comparatively great rainfall, because it is near the sea and also is mountainous, and has no danger of being short of water for agricultural purposes; in the mountain regions of this part, there are numerous streams and there are not a few districts possible for paddy-field cultivation of rice.

Viewing the seasonal distribution of rainfall, it is seen that the rainfall is mostly limited to the summer season. The period from the end of June to August constitutes the rainy season, during which about 70 to 80 per cent of the total annual rainfall takes place. After September fair weather continues, convenient for the harvesting of crops. The winter season also is dry, and in the spring, March to May, the dryness becomes extreme. The seed planting period being in the dry season, often the planted seeds do not sprout for nearly one month, and consequently the harvest is much reduced. It is said that if the planted seeds properly sprout, the harvest is half assured. The large rainfall in summer when plants grow is favourable for agricultural cultivation. But there sometimes come floods in summer on account of the large rainfall.

In Manchoukuo, kaoliang, millet, maize and wheat, which stand dryness are cultivated as the main crops, and the planting method is based upon the so-called dry-farming, because of the condition of the rainfall.

Table 7

RAINFALL VOLUME (monthly average, in m.m.)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total (Year)
Manchouli	6.9	3.0	11.6	11.1	0.3	63.3	28.7	99.0	73.1	0.0	4.2	4.3	305.5
Harbin.....	9.1	10.4	0.2	3.6	55.5	101.0	225.1	201.4	27.8	13.4	3.5	7.0	658.0
Imenpo	18.2	11.8	2.9	2.9	69.2	112.6	132.6	216.0	60.7	17.3	10.2	12.3	666.7
Sansing	3.1	10.4	5.9	8.7	48.2	100.3	128.3	233.0	36.7	10.2	5.9	11.4	602.1
Hsiungyocheng	9.9	3.6	20.6	16.0	39.7	51.1	156.7	133.6	119.6	38.2	39.5	5.4	663.9
Fenghuangcheng.....	17.8	9.8	20.9	34.4	69.2	65.3	249.6	251.9	128.1	71.2	32.4	23.7	974.3
Kaiyuan	13.4	11.5	15.4	11.5	49.8	89.8	195.1	160.5	56.4	49.5	16.3	13.9	683.1
Chengchiatun	1.8	4.7	5.1	13.2	30.9	48.4	131.8	136.5	28.1	26.0	2.5	2.5	431.5
Kungchuling	5.9	5.2	11.3	17.9	46.6	79.2	168.5	144.2	59.3	40.1	11.7	4.5	594.3
Taonan	1.7	2.7	1.1	15.0	7.8	41.6	174.5	95.9	43.8	6.5	1.0	1.4	392.7
Tsitsihar	2.4	1.5	3.8	16.2	31.6	94.9	125.9	157.2	34.0	9.8	1.4	1.4	480.1
Port Arthur.....	11.4	7.7	16.2	20.7	41.1	41.0	159.9	128.4	93.1	25.0	28.0	12.8	585.3
Dairen.....	12.8	8.5	19.0	24.4	45.0	46.0	164.9	126.3	104.9	28.2	24.8	10.8	615.6
Mukden	5.2	6.1	19.5	26.8	58.3	85.1	157.6	150.8	76.0	39.2	24.6	8.0	657.1
Hsinking	6.7	6.6	17.2	20.5	54.2	111.1	190.1	132.8	65.9	34.0	18.1	6.9	655.9
Yingkow	7.1	5.9	19.4	24.9	51.0	59.5	174.8	154.6	79.1	48.1	22.7	6.4	653.8

Sunshine Hours. — The sunshine hours of Manchoukuo are comparatively long, as the air is dry and clouds are few. This condition is favourable for plant growth, and particularly in the harvest season it facilitates the outdoor work and also dries the cereals. The following table of the sunshine hours as observed at various points shows that the dry zone near the Mongolian desert has the longest sunshine hours.

Table 8

MONTHLY AVERAGE SUNSHINE HOURS (Jordan system)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Hsiungyocheng	172.3	197.7	226.3	243.0	229.2	242.2	214.8	221.1	206.2	208.1	162.5	167.4	2,513.1
Fenghuangcheng	190.5	185.9	235.3	228.7	204.0	210.4	150.2	196.6	222.9	216.5	179.9	164.8	2,385.7
Kaiyuan	192.9	204.8	257.6	264.7	240.9	256.1	225.2	240.3	239.2	228.2	182.6	177.7	2,710.4
Chengchiatun	197.1	207.3	248.2	252.9	245.9	272.2	242.9	244.8	242.5	227.3	132.8	178.6	2,742.5
Kungchuling	172.8	175.4	217.7	197.2	198.0	230.0	202.4	214.9	210.0	202.1	165.1	163.0	2,348.6
Taonan	185.0	216.6	253.1	270.4	259.5	266.6	262.2	237.8	246.3	228.3	194.3	198.3	2,818.2
Tsitsihar	181.4	215.4	276.6	281.4	240.3	225.5	241.5	203.5	224.3	199.1	173.6	182.9	2,645.5

Table 9

MONTHLY AVERAGE MOISTURE

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Hsiungyocheng	64	62	57	49	51	62	72	71	69	64	63	61	62
Fenghuangcheng	78	81	74	59	64	62	75	71	62	57	68	76	69
Kaiyuan	75	73	64	48	59	60	80	82	74	69	68	75	69
Chengchiatun	72	68	63	53	61	63	76	78	71	65	66	71	67
Kungchuling	77	70	56	44	48	53	67	68	58	56	58	69	60
Taonan	73	66	51	48	47	54	71	83	68	57	59	64	62
Tsitsihar	67	67	60	42	45	55	65	73	61	57	66	66	60

Moisture and Evaporation Quantity.—The atmospheric moisture of Manchoukuo is comparatively small, the district generally being dry. But it is not so dry as the western dry zone of the United States. Seasonally speaking, March, April and May have the least moisture, it increases from June and reaches the greatest percentage in July and August. Then it again decreases rapidly. Thus the moisture is largest in the plant growing season and it becomes dry at the time of harvesting. The condition is therefore very favourable for agricultural cultivation, far better favoured than the dry zone of the United States, where it becomes the driest in summer. As generally the moisture is small, rainfall is small, and wind blows comparatively constantly, so naturally the evaporation quantity is great, generally being 1,400 to 1,600 millimetres in a year. These factors play important parts in calculating the amount of water required for cultivating paddy-field rice; they also necessitate the adoption of the dry-farming system in the case of upland farming. The large content of alkali in the soil of Manchoukuo is mainly due to this great evaporation quantity.

Table 10

EVAPORATION QUANTITY (Monthly Average, in m.m.)

	Year	Jan.	Feb.	Mar.	Apr.	May	June	July
Hsiungyocheng	1914-20	30.3	42.1	75.5	166.5	214.3	213.5	181.7
Fenghuangcheng	1925-29	23.3	32.1	70.5	119.5	124.0	153.6	117.8
Kaiyuan	1926-29	31.7	41.4	90.8	222.4	254.2	309.7	199.8
Chengchiatun	1925-29	32.6	51.4	119.7	235.1	257.0	277.9	208.5
Kungchuling	1915-29	21.9	36.7	87.1	183.3	242.0	247.7	179.6
Taonan	1928-29	20.0	42.0	131.2	225.3	326.9	331.7	219.1
Tsitsihar	1928-29	18.0	29.0	106.9	205.3	281.0	250.2	227.4
		Aug.	Sept.	Oct.	Nov.	Dec.	Total	
		155.0	115.4	103.0	49.8	40.8	1,387.6	
		118.2	98.8	68.3	37.4	22.9	986.4	
		162.6	157.8	119.8	59.7	33.1	1,683.0	
		169.3	143.4	111.6	73.5	37.3	1,717.3	
		145.1	120.7	96.2	47.2	26.7	1,438.3	
		129.6	136.2	122.6	55.8	27.7	1,768.1	
		144.3	107.8	97.8	46.9	21.0	1,535.4	

Frostless Period.—The frostless period is 150 to 200 days long in South Manchuria, a little more than 160 days at Taonan near Mongolia, and a

little more than 140 days at Tsitsihar in North Manchuria. Thus there are sufficient frostless days to enable the growth of agricultural products in summer, and moreover there is almost absolutely no damage from late frost. Thus Manchoukuo is well favoured for agriculture.

Table 11

SEASONS OF FROST AND SNOWFALL

	Year	Frost		From the last frost day of the previous year to the first day of the year	Snow	
		First day	Last day		First day	Last day
Hsiungyocheng.....	1921-29	Oct. 4	Apr. 23	202 days	Nov. 2	March 26
Fenghuangcheng ...	1925-29	Oct. 3	May 3	218 "	Nov. 3	April 4
Kaiyuan	1923-29	Sept. 21	May 1	226 "	Oct. 19	April 14
Chengchiatun	1925-29	Oct. 5	Apr. 12	189 "	Oct. 16	April 3
Kungchuling	1915-29	Sept. 4	May 3	224 "	Oct. 18	April 10
Taonan.....	1923-29	Oct. 29	Apr. 16	202 "	Oct. 12	April 10
Tsitsihar.....	1928-29	Sept. 27	Apr. 27	219 "	Oct. 1	April 24
Port Arthur	Average	Nov. 13	Apr. 3	223 "	Nov. 6	March 25
Dairen	"	Oct. 31	Apr. 1	212 "	Nov. 6	March 29
Mukden	"	Oct. 3	May 3	151 "	Oct. 27	April 8
Hsinking.....	"	Sept. 23	May 3	143 "	Oct. 16	April 18
Yingkow	"	Oct. 10	Apr. 12	180 "	Nov. 1	March 29

Wind.—Wind has to be discussed in completing the explanation of the climatic and atmospheric conditions of Manchoukuo. Generally speaking, from the middle of April to October, the high pressure over the East China Sea brings moisture to Manchoukuo, while from October to March, the high pressure over Siberia and the Mongolian plateaus brings cold and dust storms. Particularly the so-called Mongolian wind which blows in spring brings in the sand and dust of the Gobi Desert, and the yellow dust thus blown over Manchoukuo from Mongolia covers everything in spring. The surface soil of Manchoukuo particularly of South Manchuria, is formed of this æolian deposit. Because of this fact the soil becomes adhesive and the passage of air and water is prevented; thus various disadvantageous features of the soil are caused for cultivation as later described. The wind velocity is quite high, and there is danger of earth and sand being carried away. But on the other hand the high wind velocity increases the evaporation, and stimulates the drying process. Thus wind-break forests have to be planted, and it may be said that the wind indirectly brings a supply of kindling wood to the people.

Table 12
WIND VELOCITY AND DIRECTION (unit metres per second)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Manchouli.....	2.4	1.1	3.7	3.2	5.9	3.0	3.0	3.4	3.4	2.8	2.8	1.9	3.0
Direction (Mostly)	W.SW.	SW.	SW.	W.NW.	NW.	NE.W.	NW.	SE.	NW.	SW.	SW.	SW.	SW.
Harbin	5.2	5.3	6.2	6.4	5.8	5.4	5.1	4.1	4.1	6.0	6.2	6.0	5.5
Velocity	S.SW.	S.W.	NW.W.	NW.SW.	S.SW.	SW.	S.SW.	S.SW.	W.SW.	S.SW.	S.SW.	S.	S.SW.
Direction	4.6	2.1	3.0	3.5	2.8	3.7	2.6	2.3	2.6	2.6	2.9	3.0	2.8
Imenpo	W.SW.	SW.W.	W.NW.	SW.NW.	SE.SW.	SE.SW.	SW.W.	SE.SW.	SW.SW.	SW.W.	W.SW.	SW.W.	SW.W.
Velocity	4.4	4.0	4.6	3.6	3.6	4.2	2.9	3.5	1.8	2.6	3.2	3.4	3.4
Direction	3.6	4.1	4.1	4.8	4.0	3.4	3.1	2.2	2.6	3.2	3.7	3.8	3.6
Hsiungyocheng..	SE.	SE.	NW.	SW.	SW.	SW.	SW.	SW.	SE.	SE.	NE.	NE.	SE.
Direction	1.5	1.8	2.3	2.3	2.1	1.9	7.6	1.2	1.5	1.7	1.6	1.9	1.8
Fenghuangcheng	NNW.	NNW.	N.	NNW.	E.	S.	NNE.	SSE.	NW.	NNE.	NW.	NNW.	NNW.
Direction	3.0	3.4	3.8	4.7	4.6	4.2	3.0	2.2	2.7	3.7	3.4	3.6	3.5
Kaiyuan	SW.	SW.	NW.	SW.	SW.	SW.	SE.	SE.	SE.	SW.	SW.	SW.	SW.
Velocity	4.4	5.3	7.6	8.1	7.7	7.0	5.1	4.1	4.5	6.4	6.0	4.7	5.9
Chengchiatun ...	NW.	N.	NNW.	NE.	S.	NW.	N.	SW.	W.	SW.	NEE.	SE.	NE.
Direction	3.1	4.0	5.4	6.0	5.4	4.9	4.1	3.4	3.7	4.9	4.1	3.9	4.4
Kungchuling	SWW.	SW.	SWS.	S.	SW.	SW.	N.	W.	SW.	SSW.	SSW.	SW.	SWW.
Direction	2.4	3.0	4.1	4.3	4.0	3.7	3.7	2.8	3.1	3.8	3.2	3.2	3.4
Taonan	NNW.	NW.	SSW.	NNW.	N.	SW.	SW.	W.	SSW.	N.	N.	NW.	NW.
Velocity	2.8	3.7	6.0	5.7	5.6	4.4	4.1	3.4	4.7	4.8	3.3	2.6	4.3
Tsitsihar	N.	NNW.	NW.	NW.	SSW.	NNW.	NNE.	W.	N.	N.	W.	NW.	NW.
Direction	4.3	4.1	4.3	4.3	4.1	3.2	2.9	2.7	3.1	3.6	4.4	4.4	3.8
Port Arthur	NNE.	W.	NNW.	NNW.	SEE.	SE.	SEE.	E.	SEE.	NS.	NNE.	W.	NW.
Direction	4.8	3.7	5.3	5.4	5.1	4.3	4.2	3.6	4.0	4.6	5.2	5.0	4.7
Dairen.....	N.	N.	N.	NW.	SSW.	NW.	SSW.	S.	NE.	N.	N.	N.	N.
Velocity	2.4	2.6	3.3	3.6	3.4	2.8	2.4	1.9	2.0	2.6	2.7	2.4	2.7
Mukden.....	SW.	NE.	SW.	SW.	SSW.	SW.	SW.	N.	SW.	NNW.	SSW.	SW.	SSW.
Direction (Mostly)	3.7	1.8	4.8	5.4	4.9	3.8	3.0	2.5	3.0	3.8	4.4	4.0	3.7
Average Vel.	3.7	WSW.	SW.	SW.	SW.	SW.	SW.	SW.	WW.	SW.	SW.	SW.	SW.
Hsinking	3.7	3.7	4.5	4.9	4.6	3.9	3.4	2.8	3.2	3.9	4.2	3.6	3.9
Direction (Mostly)	N.	W.	N.	N.	S.	SE.	SE.	N.	SW.	N.	NNE.	N.	NNE.
Yingkow	3.7	3.7	4.5	4.9	4.6	3.9	3.4	2.8	3.2	3.9	4.2	3.6	3.9
Average Vel.	3.7	W.	N.	N.	S.	SE.	SE.	N.	SW.	N.	NNE.	N.	NNE.
Direction (Mostly)	N.	W.	N.	N.	S.	SE.	SE.	N.	SW.	N.	NNE.	N.	NNE.

Nature and Condition of the Soil.—The soil of Manchoukuo naturally differs according to district. But in the important agricultural plains, the soil belongs to the diluvial and alluvial series of the Quaternary Period. Clay is most widely distributed, and loamy soil exists at the bases of mountains or along rivers. In the districts along rivers and in swampy districts in mountains there are bogs. Generally the surface soil is formed of minute earth particles blown from the western desert districts, and is extremely adhesive, becoming thick mud when rain falls, and hard crust when dried. Thus it prevents the passage of air and water, and makes cultivation difficult; also it stimulates the evaporation of the water in the ground, and quickens the drying. Particularly the diluvial deposit found largely in the districts north of Mukden is of the yellow aeolian soil, and the layer is deep, reaching 21 metres in some places. Generally the surface soil is deep, and its formation is the same. By the freezing of the ground in winter, the weathering process goes quite deep into the ground, and enables the recovery of nourishment. The soil of Manchoukuo forms zones by colour. That is to say, North Manchuria is the black soil zone, Central Manchuria the indigo soil zone, and South Manchuria the red or indigo zone. This difference in colour reveals the greater presence of organic matter in the soil as it goes farther north, and organic matter is less in the southern part. As to the chemical characteristics of the soil, it is an outstanding feature that alkali soil is most widely found. Particularly the slightly alkaline soil of the northern and eastern parts is becoming a very favourable factor in agriculture production. On the other hand, in the western part where it is extremely dry, the alkaline character becomes stronger, and in the Mongolian district, it is barren because of the extreme alkaline nature of the soil. In many places various alkaline salts and particularly soda form white layers on the surface, having oozed out from the ground. Also phosphoric acid and potassium are comparatively abundant, but nitrogen is generally lacking. Comparing South Manchuria and North Manchuria, North Manchuria has much nitrogen and organic matter, and is expected to become the granary of the world in the future.

In short, the soil of Manchoukuo is poor in the southern districts where civilization developed and cultivation has been undertaken since ancient times, and rich in the northern sections which have vast room for future development. The reckless cultivation of several centuries has deprived the cultivated lands of South Manchuria of organic matter. Only by planting beans as an alternate crop has the nitrogen in the soil been supplemented, and thus the primitive alternative cultivation has been able

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	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
Manchouli Velocity	2.4	1.1	3.7	3.2	5.9	3.0	3.0	3.4	3.4	2.8	2.8	1.9	3.0
Direction (Mostly)	W.SW.	SW.	SW.	W.NW.	NW.	N.E.W.	NW.	SE.	NW.	SW.	SW.	SW.	SW.
Harbin Velocity	5.2	5.3	6.2	6.4	5.8	5.4	5.1	4.1	4.1	6.0	6.2	6.0	5.5
Direction	S.SW.	S.W.	NW.W.	NW.SW.	S.SW.	SW.	S.SW.	S.SW.	W.SW.	S.SW.	S.W.S.	S.	S.SW.
Imenpo Velocity	4.6	2.1	3.0	3.5	2.8	3.7	2.6	2.3	2.6	2.6	2.9	3.0	2.8
Direction	W.SW.	SW.W.	W.NW.	SW.NW.	SE.SW.	SE.SW.	SW.W.	SE.SW.	SW.SW.	SW.W.	W.SW.	SW.W.	SW.W.
Sansing Velocity	4.4	4.0	4.6	3.6	3.6	4.2	2.9	3.5	1.8	2.6	3.2	3.4	3.4
Direction	SW.	SW.	SW.N.	SW.	SW.	SW.N.	SW.N.	SW.	SW.	SW.	SW.	SW.	SW.
Hsiungyocheng.. Velocity	3.6	4.1	4.1	4.8	4.0	3.4	3.1	2.2	2.6	3.2	3.7	3.8	3.6
Direction	SE.	SE.	NW.	SW.	SW.	SW.	SW.	SW.	SE.	SE.	NE.	NE.	SE.
Fenghuangcheng Velocity	1.5	1.8	2.3	2.3	2.1	1.9	7.6	1.2	1.5	1.7	1.6	1.9	1.8
Direction	NNW.	NNW.	N.	NNW.	E.	S.	NNE.	SSE.	NW.	NNE.	NW.	NNW.	NNW.
Kaiyuan Velocity	3.0	3.4	3.8	4.7	4.6	4.2	3.0	2.2	2.7	3.7	3.4	3.6	3.5
Direction	SW.	SW.	NW.	SW.	SW.	SW.	SE.	SE.	SE.	SW.	SW.	SW.	SW.
Chengchiatun ... Velocity	4.4	5.3	7.6	8.1	7.7	7.0	5.1	4.1	4.5	6.4	6.0	4.7	5.9
Direction	NW.	N.	NNW.	NE.	S.	NW.	N.	SW.	W.	SW.	NEE.	SE.	NE.
Kungchuling ... Velocity	3.1	4.0	5.4	6.0	5.4	4.9	4.1	3.4	3.7	4.9	4.1	3.9	4.4
Direction	SWW.	SW.	SWS.	S.	SW.	SW.	N.	W.	SW.	SSW.	SSW.	SW.	SWW.
Taonan Velocity	2.4	3.0	4.1	4.3	4.0	3.7	3.7	2.8	3.1	3.8	3.2	3.2	3.4
Direction	NNW.	NW.	SSW.	NNW.	N.	SW.	SW.	W.	SSW.	N.	N.	NW.	NW.
Tsitsihar Velocity	2.8	3.7	6.0	5.7	5.6	4.4	4.1	3.4	4.7	4.8	3.3	2.6	4.3
Direction	N.	NNW.	NW.W.	NW.W.	SSW.	NNW.	NNE.	W.	N.	N.	W.	NW.	NW.W.
Port Arthur Velocity	4.3	4.1	4.3	4.3	4.1	3.2	2.9	2.7	3.1	3.6	4.4	4.4	3.8
Direction	NNE.	W.	NW.W.	NNW.	SEE.	SE.	SEE.	E.	SEE.	NS.	NNE.	W.	NW.W.
Dairen..... Velocity	4.8	3.7	5.3	5.4	5.1	4.3	4.2	3.6	4.0	4.6	5.2	5.0	4.7
Direction	N.	N.	N.	NW.	SSW.	NW.W.	SSW.	S.	NE.	N.	N.	N.	N.
Mukden..... Velocity	3.4	2.6	3.3	3.6	3.4	2.8	2.4	1.9	2.0	2.6	2.7	2.4	2.7
Direction (Mostly)	SW.	NE.	SW.	SW.	SSW.	SW.	SW.	N.	SW.	NNW.	SSW.	SW.	SSW.
Hsingling Average Vel.	3.7	1.8	4.8	5.4	4.9	3.8	3.0	2.5	3.0	3.8	4.4	4.0	3.7
Direction (Mostly)	SW.	WSW.	SW.	SW.	SW.	SW.	SW.	SW.	WW.	SW.	SW.	SW.	SW.
Yingkow Average Vel.	3.7	3.7	4.5	4.9	4.6	3.9	3.4	2.8	3.2	3.9	4.2	3.6	3.9
Direction (Mostly)	N.	W.	N.	N.	S.	SE.	SE.	N.	SW.	N.	NNE.	N.	NNE.

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to continue. If proper fertilizers are given and crops are well selected in future, the utilization value of the agricultural lands of South and North Manchuria will be greatly increased. Also the lands which are not given any attention today because of their strong alkaline nature have much possibility of utilization by the adoption of irrigation or selection of special crops that can stand the alkali.

Topography.—The arable lands are affected by the climate and soil nature as above-mentioned, but also their utilization is restricted by topographic conditions. In Manchoukuo there are of course numerous mountain ranges, but most of them consists of plateaus and plains, the mountain ranges being mostly located around the outer parts of the territory. The only side that is not marked by mountain ranges is a portion of the southern side, facing the Gulf of Pechili and the Yellow Sea.

The mountain ranges that surround the territory also have on their outer bases the Amur River in the north, and the Yalu River, Tumen River and Sungari River in the east, marking the country's boundaries from Siberia and Chosen (Korea). These rivers developed plains along their courses. The mountains are not very high or steep, Mt. Changpaishan of the Changpaishan Range on the southeastern Korean border being the highest, 2,700 metres. Other mountains are much lower than Changpaishan. The slopes of the mountains are gentle and represent the so-called continental topography. When cultivation is stimulated, these mountain slopes will be cultivated up to the very tops.

Speaking of the mountain distribution in the east, the Changpaishan system, with the Changpaishan Range, branch Changpaishan Range, Hsiao-paishan (小白山) Range, Wangteshan (完達山) Range, Laosungling (老松嶺) Range and others, runs from northeast to southwest and forms the eastern mountain districts of Kirin and Fengtien Provinces; in the northwest, the Khingan (興安) Range system has the Small Khingan Range that runs southeast and the Great Khingan Range running southwest, and extends from the northern and northwestern mountain districts of Heilungkiang Province to the plateaus of Mongolia in the southwest the Yinshan (陰山) system forms the boundary between Jehol Province and North China, and at the same time forms plateaus with the Sunglingshan (松嶺山) Range and the Chilaotushan (七老圖山) Range. The central part surrounded by these mountain ranges is the so-called great plain of Manchuria. But the line from the south of Taonan eastward to the Paitoushan (白頭山) mountain via the neighbourhood of Kungchuling is a zone of low hills and divides the Liao River system and the Amur River system,

or South Manchuria and North Manchuria.

The Amur and Liao Rivers are the central arteries in the plains of South and North Manchuria. That is to say, in North Manchuria, various rivers originating in the Khingan Range system join to become the Nonni (嫩江) River, and joining the Hulan (呼蘭) River, Taoerh (洮兒) River, and the Sungari and Mutan (牡丹江) Rivers that start in the Changpaishan Range, meet the Amur River at the northeastern border. This, joining the Ussuri River, enters the sea after traversing the Littoral Province of the U.S.S.R. In South Manchuria, the rivers started from the Mongolian plateaus, the Laosungling (老松嶺) Range and the southern part of the Changpaishan Range gather together and become the Liao River, which enters the Gulf of Pechili. From the mountain districts of the southwest run the Taling (大凌) River, Hsiaoling (小凌) River, and Luan (灤) River into the Gulf of Pechili.

Water Utilization.—The plains of Manchoukuo appear to be dry zones with small rainfall, but numerous large and small rivers traverse them, and there is vast room for their utilization. The areas suitable for paddy-rice-fields are not few. But in the rainy season, the vast quantity of rain that falls upon these plains immediately floods them, and rivers overflow, submerging farms near the rivers. Unless proper river improvement and irrigation systems are adopted, it will be impossible to develop paddy-fields on any large scale.

The utilization of underground water for the cultivation of farms and gardens is sometimes seen in South Manchuria. But generally the underground water is found only at very low levels and consequently its utilization is difficult.

Natural Disasters.—Natural phenomena in Manchoukuo and Mongolia sometimes cause disasters that bring great damage to agriculture. Flood damage, and damage caused by dryness in early spring are not rare. Glanders and anthrax, terrible diseases that attack animals exist, but these can be conquered with the progress of civilization. Contagious diseases that attack human beings are numerous because the inhabitants generally lack sanitary ideas. But because of the natural elimination of a great many years, the percentage of illness and death among the native inhabitants is comparatively small. But others who have not such immunity require to take the utmost care and precautions. Of course this danger will be much lessened by the progress of sanitary ideas and the improvement of disease prevention facilities. The efforts in this direction by the disease prevention policy of the Kwantung Government, the South Man-

churia Railway Sanitary Laboratory (established in 1925), and the hospitals established by the South Manchuria Railway Company at various places, have contributed much to the improvement of sanitary conditions and the prevention of disease. Among contagious diseases, dysentery and typhoid fever may be called the endemics of Manchoukuo, and there are numerous cases annually. Cholera is brought from Shanghai and is not an original disease of Manchoukuo, but annually it claims many victims in Manchoukuo. Plague often appears in North Manchuria and Mongolia. Smallpox also is brought from China and claims many victims in various districts. But the last-mentioned three diseases are seldom contracted by Japanese and other foreigners because of their care to take preventive measures.

History of the Agricultural Development of Manchoukuo

Although Manchoukuo now is an agricultural country, the history of its agricultural development is quite new. Of course agricultural enterprises existed even in ancient times, but the races that originally rose in the territory were engaged in hunting and pasturing, and they did not establish any agricultural civilization. For the appearance of the great agricultural country as seen today the Han race were instrumental, which migrated to Manchuria after the middle of the 16th century, and the efforts of Japan, who shouldered the duty of maintaining peace and effecting economic development after the conclusion of the Russo-Japanese War, in the 20th century.

From the End of the Ming (明) Dynasty and the Beginning of the Ching (清) Dynasty to the Russo-Japanese War.—The Manchu race, the original inhabitants of Manchuria, made their livelihood by hunting and obtaining other natural products, and their principal products were ginseng, pearls or Chênchu (珍珠), animal skins and others. There were none who specialized in farming. If there was some farming in the latter period of the Ming Dynasty, in the middle of the 16th century, such was done by some Han people who migrated to the districts along the lower stream of the Liao River. But even those Han farmers were driven out by the Manchu race and their farms were destroyed in the period of war previous to the establishment of the Manchu dynasty, in the 16th century. At the beginning of the 17th century, after the establishment of the Ching or Manchu dynasty, the Manchu race advanced to China as the ruling

class and were stationed at various places in China as the so-called Eight Banners of Manchu for controlling the Han race. Thus temporarily many parts of Manchuria were utterly neglected and became devastated territories. But when the national establishment was completed and the economic construction period came, the Ching dynasty gave efforts to develop the agriculture of Manchuria, and they were obliged to encourage the immigration of the Han race into Manchuria. Thus the modern agriculture of Manchuria started with the coming of the Han people, in the middle of the 17th century. The Han race, who suffered from the immense population increase and the difficulty in making their livelihood in China, began to migrate to Manchuria in great numbers. The Ching dynasty, however, feared in the middle of the 18th century that Manchuria, the birthplace of their ancestors, might be entirely occupied by the Han race, and prohibited their entry into Manchuria.

Despite the prohibition, the Hans entered Manchuria, violating the law, and it was impossible to stop their flow into the country. One factor that stimulated their influx was the necessity felt by the Manchu Banner-men, who were the feudal owners of the land, to develop their lands by settling the Han people, for the purpose of increasing their income to meet their ever advancing standard of living. Thus in the middle of the 19th century, a part of the territory came to be publicly opened to the Han people.

Then towards the end of the 19th century, after the Sino-Japanese War, Manchuria was threatened by the oriental policy of Russia, and for protecting and guarding the northern frontier, it was necessary to give up the former policy of closing Manchuria to outsiders, and to encourage the settlement of the Hans. With this development, the agricultural development of the territory was greatly stimulated.

The history of the agricultural development of Mongolia is similar to that of the Manchurian plain. At the time of the establishment of the Ching dynasty, the autonomy of the various Mongolian kings was generally recognized, and those kings existing from the period of the Yuan (元) dynasty were the actual rulers. Under their control, the Mongolian races made a peaceful living by attending to livestock farming or nomadic activities. The Mongolian peoples originally did not farm, and as they were ignorant of economics, there was no industrial or economic progress. As the Han people migrating to Mongolian districts were very few, the agricultural development of Mongolia was much later than that of the Manchurian plains. However, Han immigrants gradually entered the ter-

ritory and began to bring economic pressure upon Mongolia, and consequently at the beginning of the 19th century, the Han race was prohibited to settle and cultivate farms in Mongolia. In Mongolia also, however, the Mongolian Bannermen were obliged to open their lands to the Han settlers because of their financial difficulties, and the prohibition law became virtually useless. In the middle of the 19th century, kings and princes of Mongolia opened their prohibited lands at many times, and inviting Han farmers, started farming for the improvement of local economy. There also were some kings and princes who suffered financially because of their luxurious life at Peking, and in order to fill their shortage of funds, they leased or even sold their lands to Chinese. In this manner the vast undeveloped fields of Eastern Inner Mongolia gradually went into the hands of the Han race, and became farmland. Particularly towards the end of the 19th century, agriculture in Mongolia was much developed as the Ching dynasty positively encouraged it in order to prepare against the southern advance of Russia. Offices opened then at the frontier districts for handling affairs respecting the encouragement of farming became Chih-hsien (知縣) of the Central Government, with the increase of the Han settlers and the population. Gradually the areas under the control of the Chih-hsien were expanded, and the actual power in local administration and economy came to be almost controlled by the Han race.

From the Russo-Japanese War to the Manchurian Incident.—Manchuria was already much developed by the Han race prior to the present century, but when the early progress is compared with the remarkable immigration of the Hans since Japan came to secure various rights and to undertake the maintenance of peace in Manchuria after the conclusion of the Russo-Japanese War, it is no exaggeration to say that it is entirely due to the efforts of Japan after the Russo-Japanese War that Manchuria has become such a great agricultural country, and an important link in world economy. The sacrifices which Japan made for the maintenance of peace and order in Manchuria for the object of guaranteeing the peace of the Far East after the Russo-Japanese War, have been enormous, but because of such efforts of Japan, the number of the Han people who were annually forced out of China by civil wars and tyrannic administration and settled in Manchuria in their efforts to find a land of peace and engaged in agricultural work, has reached an immense figure since the end of the Ching dynasty to the present. Consequently, the population of the territory rapidly increased.

The Han race is skilled in agricultural work, and as the lands of

Manchuria are favoured with various factors for cultivation, the majority of the Han immigrants settled as farmers. Especially as the National Government of China encouraged the migration of the Hans to Manchuria and Mongolia, they came to oppress the Manchus in every place. To-day more than 90 per cent of the agricultural workers in Manchuria are Hans. The population of Manchuria was about 15,000,000 at the time of the Russo-Japanese War, but according to the investigation made at the end of 1932, it had almost doubled, as shown in the following table (statistics of the South Manchuria Railway Company):

	Population
1907	16,778,700
1910	17,942,800
1915	20,112,100
1920	22,611,600
1925	25,502,300
1932	29,606,117

Also according to the investigation made by the South Manchuria Railway Company, the Chinese (Hans) who settled in Manchuria in the twenty years from 1907 to 1927, are estimated at 5,000,000.

What cannot be forgotten as the contribution made by Japanese to the agricultural development of Manchuria is the operations of the South Manchuria Railway Company. The opening of railways, which have great relation to the agricultural development of Manchuria, was first done by Russia towards the end of the 19th century, before the Russo-Japanese War, in constructing and operating the Chinese Eastern Railway. But since Japan succeeded to the Russian rights in South Manchuria after the Russo-Japanese War and the South Manchuria Railway Company was organized in 1906, there has been brought about epoch-making progress in agricultural development.

The primary contribution of the South Manchuria Railway Company towards the agricultural development of Manchuria is, of course, the facility for merchandizing agricultural products by giving them better transportation.

Besides providing transportation, however, the South Manchuria Railway Company established, as subsidiary enterprises and measures, warehousing facilities; banking facilities for produce; a mixed storage system for export beans, beancake and other important products for unifying grade and weight and facilitating preservation and business transactions; and harbour improvement at such export ports as Dairen, Yingkow and Antung.

These measures opened the way for Manchurian produce to go to world markets, and agricultural progress became notable, bean production being most increased. In the operation revenue of the South Manchuria Railway, the freight revenue is about seven times the passenger revenue as shown in the following table; in the freight revenue the first item is coal, and then come beans and beancake. (S. M. R. Company Business Report)

	Passenger Revenue (¥ 1,000)	Freight Revenue (¥ 1,000)
1907	3,594	6,160
1913	5,069	16,159
1919	14,244	46,306
1925	14,531	80,536
1930	11,461	77,937
1931	9,136	70,898

The export of soya beans, beancake, and bean oil has increased three to four times in the past twenty years.

The South Manchuria Railway Company has given considerable effort to attracting immigrants for the development of the agricultural lands of Manchuria; annually, at enormous expenses, the company has made known the conditions of Manchuria to outsiders, and carried immigrants at very low fares to the interior districts. Annually 40 to 50 per cent of the immigrants to Manchuria have landed at Dairen, and in 1927, 600,000 entered Manchuria through that port.

Moreover the company established various organs for improving the quality of the agricultural products and for increasing their crops. For instance, the company established the Agricultural Experimental Station for improving agricultural plants, and animals, for conducting experiments in improving methods of cultivation, for distributing superior seeds and saplings to Manchurian farmers free of charge or at low cost, and for educating the farmers in agricultural schools. Because of these efforts, the beans, pigs, and other products have been improved to a certain extent, and much benefit was gained by the Manchurian farmers.

Although the South Manchuria Railway Company thus has made great contributions directly and indirectly towards the agricultural development of Manchuria by the Hans, comparatively little benefit has been given to the agricultural enterprises of the Japanese themselves. Except the fruit tree cultivation along the South Manchuria Railway line and in the Kwantung Leased Territory, there is no notable Japanese activity in agriculture. Particularly before the Manchurian incident, the op-

pression of the Japanese by the Northeastern military leaders was extreme. The right of leasing agricultural lands in South Manchuria and Eastern Inner Mongolia stipulated in the Sino-Japanese Treaty of 1913 became virtually nominal, and it became practically impossible for Japanese to undertake agriculture outside the South Manchuria Railway zone. These facts also were important causes for not developing Japanese agricultural enterprises. Previous to the Manchurian incident, the Japanese households engaged in agriculture in Manchuria numbered only 730.

The contribution made by Koreans to the development of agriculture in Manchuria cannot be overlooked. Koreans had migrated into Manchuria since very ancient times because their native land was continuous, but their entrance into the interior of Manchuria commenced only after the Russo-Japanese War. Before the outbreak of the Manchurian incident, the Korean settlers in Manchuria were estimated at about one million. According to the investigation made by the Japanese Foreign Office, the following statistics are given:

	Japanese Settlers	Korean Settlers
1908	56,433	(unknown)
1910	76,333	51,070
1915	101,582	282,070
1920	160,062	459,427
1925	187,988	531,973
1930	288,784	607,119

The majority of these Korean settlers are agriculturists, and they entered Manchuria without any capital, but they developed such swampy lands as were not given any attention or were unable to be utilized by Chinese, and with their special talent they made such lands into fine rice paddy-fields, conquering all difficulties and hardships. Developing such rice fields, they gradually advanced into the interior districts of Mongolia. At present the majority of 100,000 hectares of rice paddy-fields which produce annually 150,000 to 160,000 metric tons of unhulled rice, has been developed by these Koreans. However, before the Manchurian incident, they were greatly oppressed by Chinese officials and landowners, and it was believed that their development would be prevented. The Wanpaoshan incident, which happened just before the Manchurian incident, is an example of such oppression, and the amount of damage caused the Korean farmers in various districts reached a big figure.

The agricultural development in Mongolia was suddenly brought about after the Russo-Japanese War, and particularly after the establish-

ment of the Republic of China, as the former policy of protecting the ancient kings of Mongolia was abolished, and the settlement of the Han race was encouraged. The Mongolians were more and more oppressed and obliged to retreat gradually to the inner desert districts, and the barren fields of Mongolia came to be rapidly cultivated by the Han settlers.

Manchuria was made a great agricultural country by the joint efforts of the Hans, Japanese, Koreans, and Russians, with the Hans as the main factor; Manchuria came to have intimate relations with the world economy through its export agricultural products.

Agricultural Products*

Outline.—The varieties of crops in Manchoukuo number from forty to fifty. Among the legumes and cereals are soya beans, Indian beans, green peas, kaoliang, millet, maize, wheat, barley, oats, buckwheat, paddy-field rice, and upland rice; industrial and garden crops are cotton, tobacco, hemp, castor, Indian mallow, flax, sesame, and perilla. Soya beans, kaoliang, millet, maize, and wheat constitute the greater portion of the agricultural production.

The crops cultivated and harvested in Manchoukuo are as shown in the following table:

Table 13

CULTIVATED AREAS AND CROPS OF AGRICULTURAL PRODUCTS

(Average for 1929-31)

Legumes and Cereals:	Three Provinces †		Kwantung Leased Territory and South Manchuria Railway Zone	
	Cultivated Area (Hectares)	Crop (Metric Tons)	Cultivated Area (Hectares)	Crop (Metric Tons)
Soya beans	4,102,990	5,124,760	31,923	17,595
Other legumes	337,020	353,190	54,467	160,193
Kaoliang	2,992,350	4,652,900	23,611	33,411
Millet	2,191,260	3,196,150	17,311	23,437

* All statistics under this item are given according to the former administrative districts of Manchoukuo, and therefore Hsingan Province is not made separate, and statistics for Jehol are not included. As the agricultural production of the Kwantung Leased Territory is small, figures given in the table do not include the Leased Territory, except in special items.

† Fengtien, Kirin and Heilungkiang Provinces.

Legumes and Cereals:	Cultivated Area (Hectares)	Crop (Metric Tons)	Cultivated Area (Hectares)	Crop (Metric Tons)
Maize	909,820	1,633,360	92,489	124,281
Wheat	1,421,500	1,413,070	1,411	1,231
Paddy-field rice	89,410	149,940	839	1,466
Upland rice	112,920	158,970	304	257
Other cereals	1,120,670	1,723,040	9,176	7,425
Total	13,277,940	18,405,380	231,531	369,296
Industrial and garden crops:				
Tobacco	48,960	—	42	175
Cotton	35,540	—	1,829	398
Others	237,190	—	Vegetable 9,923	104,868
			Fruits 4,449	8,652
			Others 373	276
Total	321,690	—	16,616	114,369
Grand Total	13,599,630	—	248,147	483,665

Thus, the planted area in the three provinces of Fengtien, Kirin and Heilungkiang totals about 13,600,000 hectares, and that in the Kwantung Leased Territory and the South Manchuria Railway zone 250,000 hectares, a total of 13,850,000 hectares. Of these areas, the portion planted in legumes and cereals reaches 13,500,000 hectares, or more than 97 per cent of the total. Classifying the area by the kinds of products, it will be seen that the area planted in soya beans is 4,130,000 hectares or nearly 30% of the total, and the areas taken up by kaoliang, millet and maize come next; the areas planted with these five kinds of crops take up nearly 90% of the entire cultivated area. (Respecting the agricultural policy of Manchoukuo, refer to the General Outline of Economic Construction Programme of Manchoukuo announced on March 1, 1933).

Cereals.—Respecting the production of agricultural crops of Manchoukuo, there is little information concerning the early years, and that available is not reliable. Fortunately, however, respecting cereal crops which take up the majority of the agricultural production, the South Manchuria Railway Company has been conducting investigations since 1924 to make crop estimates, generally three times a year. In recent years, the estimated harvest amounts are annually announced after examining the final prediction of crop according to the amount of shipments made by railway. From these statistics, the production condition of cereals since 1924 may be learned.

Table 14
CULTIVATED AREAS AND PRODUCTION OF CEREALS †

(I) CULTIVATED AREAS
(Hectares)

	Soya Beans	Other Legumes	Kaoliang	Millet	Maize	Wheat	Paddy-field Rice	Upland Rice	Other Cereals	Total
1924	2,165,959	*147,015	2,189,020	1,547,625	697,505	744,439	56,814	78,081	515,310	8,141,768
1925	2,676,453	*272,000	2,506,080	1,885,268	1,027,459	878,967	93,025	108,158	687,833	10,135,243
1926	3,334,586	403,050	2,375,635	1,908,894	1,098,751	894,060	110,724	117,552	770,929	11,014,181
1927	3,539,257	402,633	2,651,232	2,094,657	1,003,556	1,137,202	125,728	117,087	807,288	11,878,640
1928	3,740,421	421,615	2,893,484	2,167,513	986,790	1,315,752	81,942	101,045	1,162,250	12,870,812
1929	3,989,920	347,350	2,965,150	2,131,780	876,220	1,297,150	88,280	111,890	1,043,520	12,851,260
1930	4,118,450	350,220	3,031,420	2,209,670	865,520	1,381,200	98,140	108,380	1,086,320	13,249,320
1931	4,200,590	313,490	2,980,490	2,232,320	987,710	1,586,160	81,800	118,500	1,232,190	13,732,250
1932	3,878,610	300,580	2,661,360	2,156,690	979,990	1,395,150	62,980	105,270	1,124,250	12,664,880
1933	4,000,670	323,250	2,658,430	2,380,850	1,101,950	1,373,950	79,360	104,760	1,218,020	13,241,240

(II) PRODUCTION
(Metric Tons)

	Soya Beans	Other Legumes	Kaoliang	Millet	Maize	Wheat	Paddy-field Rice	Upland Rice	Other Cereals	Total
1924	3,448,260	*177,440	4,453,410	3,027,420	1,620,020	804,770	93,670	87,700	754,210	14,466,900
1925	4,173,580	*239,270	4,682,210	3,121,270	1,810,270	961,150	192,280	149,690	885,370	16,215,090
1926	4,775,840	415,290	4,526,420	2,967,470	1,703,920	967,900	180,380	133,490	822,570	16,493,280
1927	4,816,650	434,760	4,580,010	3,209,320	1,713,710	1,445,280	147,810	146,970	1,012,060	17,506,570
1928	4,834,030	470,730	4,613,350	3,274,320	1,742,630	1,469,820	149,720	144,560	1,254,380	17,953,540
1929	4,849,460	377,490	4,681,520	3,351,960	1,613,290	1,302,230	136,820	156,270	1,593,690	18,062,730
1930	5,297,820	369,270	4,779,690	3,276,480	1,585,680	1,356,660	154,350	157,840	1,722,760	18,700,550
1931	5,227,010	312,820	4,497,490	2,960,020	1,701,110	1,580,310	158,640	162,800	1,852,670	18,452,870
1932	4,267,890	277,670	3,729,360	2,615,370	1,541,850	1,133,090	109,790	137,310	1,550,390	15,362,720
1933	5,205,170	325,320	4,229,440	3,273,020	1,868,290	1,429,810	164,880	148,160	1,832,950	18,477,040

† Excludes the Kwantung Leased Territory and the South Manchuria Railway Zone.

The figures include estimates: figures for 1933 include estimates and forecasts.

* Indian beans only.

PRODUCTION OF CEREALS (in 1,000 Metric Tons)

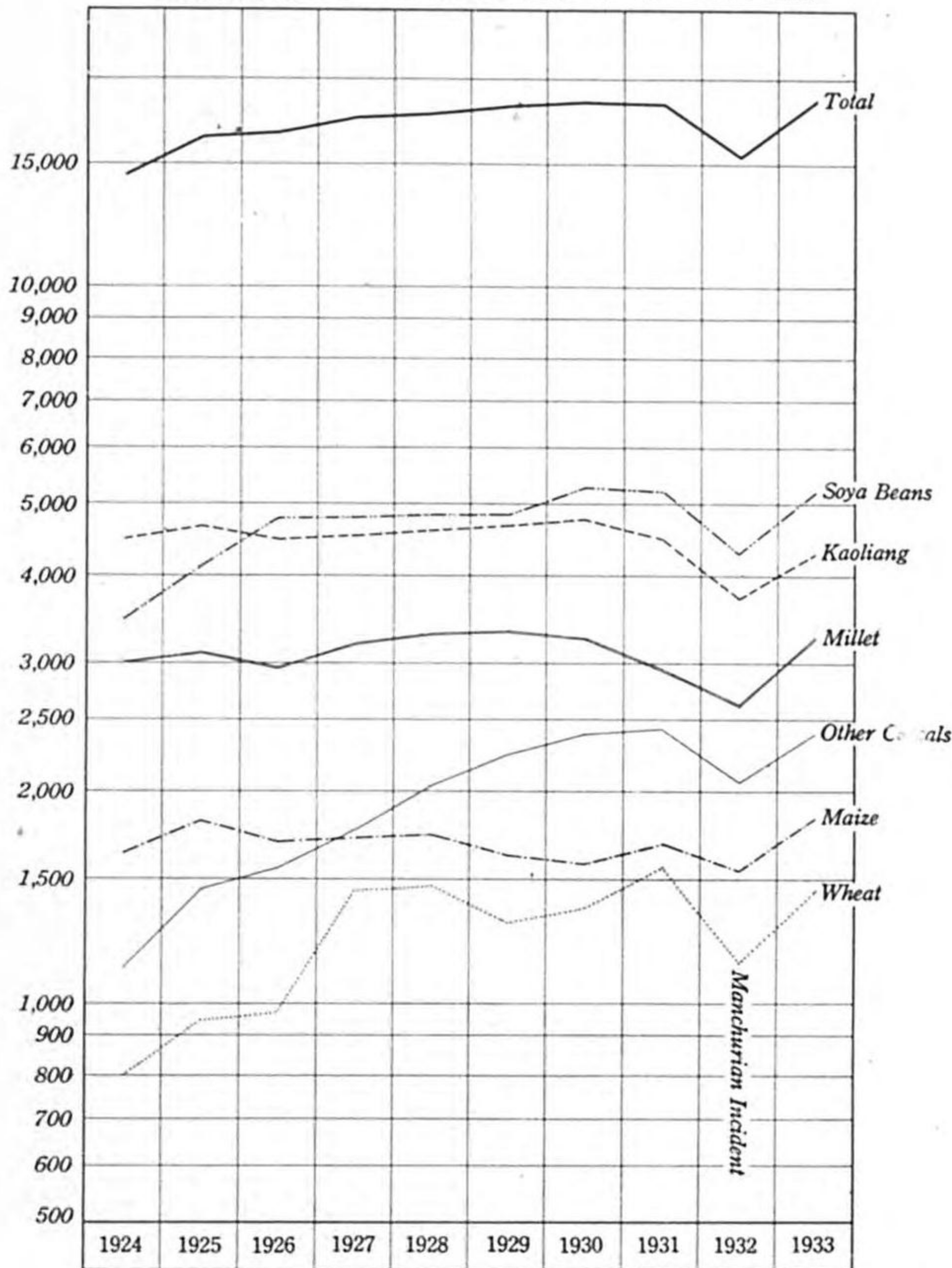


Table 15 (a)
CULTIVATED AREAS AND PRODUCTION OF CEREALS (1931)

BY PROVINCES:	Soya Beans		Other Legumes		Kaoliang		Millet		Maize	
	Cultivated Area (hectares)	Crop (metric tons)	Cultivated Area (hectares)	Crop (metric tons)	Cultivated Area (hectares)	Crop (metric tons)	Cultivated Area (hectares)	Crop (metric tons)	Cultivated Area (hectares)	Crop (metric tons)
Fengtien	960,030	1,173,390	158,760	157,460	1,593,160	2,514,130	610,860	844,450	504,470	897,900
Kirin	1,902,210	2,414,620	114,650	119,370	926,940	1,400,370	924,280	1,260,430	320,010	539,250
Heilungkiang	1,338,350	1,637,000	40,080	35,990	460,390	582,990	697,180	855,140	163,230	263,960
Grand Total	4,200,590	5,227,010	313,490	312,820	2,980,490	4,497,490	2,232,320	2,960,020	987,710	1,701,110
Kwantung Leased Territory and S.M.R. Zone	34,219	17,275	53,006	152,228	24,071	35,167	18,106	22,812	98,183	131,835
BY DISTRICTS: SOUTHERN PARTS:										
Districts south of Mukden	357,770	438,270	59,600	55,000	562,320	860,580	171,380	254,160	246,530	433,050
Mukden-Shanhaikwan Railway District	71,280	68,070	17,890	16,420	413,140	623,840	74,950	80,500	46,060	74,480
Kaiyuan District	291,100	378,830	24,990	25,060	281,830	499,500	144,520	216,060	95,740	173,750
Mukden-Chaoyangchen Railway District	122,009	169,460	14,200	19,580	73,020	141,000	58,160	106,320	55,090	112,940
Hsinking-Kungchuling District	383,390	474,730	44,000	48,840	287,020	456,360	188,820	300,220	66,880	125,270
Ssuningkai-Taonan Railway District	136,410	146,640	41,040	39,070	261,400	390,790	212,280	242,640	49,720	78,960
Kirin-Hsinking Railway District	287,690	397,880	11,960	14,850	99,650	196,510	158,410	224,450	51,050	85,950
Chientao District	76,910	99,680	6,430	7,710	15,760	26,390	66,700	103,720	22,340	39,740
Total	1,726,640	2,173,560	220,710	227,430	1,994,140	3,194,970	1,075,220	1,528,070	633,410	1,124,140
NORTHERN PARTS:										
Harbin District	11,280	14,040	2,440	2,290	40	50	7,140	8,960	2,520	4,160
North Manchuria Railway (C.E.R.) Eastern Line District	541,040	670,890	15,740	14,640	133,140	181,740	175,510	217,630	114,990	187,430
C. E. R. Western Line District	822,990	1,006,350	15,840	13,470	249,990	299,990	365,800	449,930	84,410	136,390
C. E. R. Southern Line District	403,640	504,550	32,290	30,680	336,360	464,180	222,000	278,610	55,160	91,010
Machichuankou-Hailun Railway District	305,200	378,450	9,970	8,970	99,740	129,660	186,510	229,410	39,890	64,620
Sungari River Lower Stream District	362,590	451,420	16,340	15,200	161,640	220,640	174,740	216,680	54,610	89,010
Other Districts	27,210	27,750	160	140	5,440	6,260	25,400	30,730	2,720	4,350
Total	2,473,950	3,053,450	92,780	85,390	986,350	1,302,520	1,157,100	1,431,950	354,300	576,970
Grand Total	4,200,590	5,227,010	313,490	312,820	2,980,490	4,497,490	2,232,320	2,960,020	987,710	1,701,110

Table 15 (6)
CULTIVATED AREAS AND PRODUCTION OF CEREALS (1931)

BY PROVINCES:	Wheat		Paddy-field rice		Upland rice		Others		Total	
	Cultivated Area (hectares)	Crop (metric tons)	Cultivated Area (hectares)	Crop (metric tons)	Cultivated Area (hectares)	Crop (metric tons)	Cultivated Area (hectares)	Crop (metric tons)	Cultivated Area (hectares)	Crop (metric tons)
	Fengtien	119,220	103,770	43,290	83,490	51,620	64,430	442,340	723,710	4,483,750
Kirin	565,540	567,890	34,330	66,860	58,680	86,070	345,140	549,230	5,191,780	7,004,090
Heilungkiang	901,400	908,650	4,180	8,290	8,200	12,300	444,710	579,730	4,057,720	4,884,050
Grand Total	1,586,160	1,580,310	81,800	158,640	118,500	162,800	1,232,190	1,852,670	13,733,250	18,452,870
Kwantung Leased Territory and S.M.R. Zone	1,571	1,467	837	1,527	284	291	10,084	8,745	240,451	371,347
BY DISTRICTS: SOUTHERN PARTS:										
Districts south of Mukden	30,250	21,740	22,710	42,220	18,140	20,910	174,260	307,940	1,642,960	2,433,870
Mukden-Shanhaikwan Railway District	11,180	9,410	700	1,110	6,810	8,490	69,830	110,890	711,840	993,210
Kaiyuan District	12,940	8,550	5,980	14,070	7,360	9,090	61,500	55,320	925,960	1,380,230
Mukden-Chaoyangchen Railway District	10,850	11,010	13,180	26,580	11,660	16,980	27,060	47,900	385,310	651,770
Hsinking-Kungchuling District	57,510	56,530	1,080	890	23,010	34,450	42,470	104,180	1,094,780	1,601,470
Ssuningkai-Taonan Railway District	39,600	35,600	2,960	4,640	9,940	12,100	111,170	193,400	864,520	1,144,740
Kirin-Hsinking Railway District	23,340	20,230	6,780	13,260	16,540	23,370	53,080	102,870	708,500	1,079,370
Chientao District	14,920	21,310	11,810	21,400	4,120	5,880	29,740	69,160	248,730	394,990
Total	200,590	184,380	65,200	124,170	97,580	131,270	569,110	991,660	6,582,600	9,679,650
NORTHERN PARTS:										
Harbin District	8,270	8,270	70	150	40	60	5,790	7,530	37,590	45,510
North Manchuria Railway (C.E.R.)										
Eastern line District	164,610	166,260	7,350	16,170	3,630	5,450	54,380	73,410	1,210,390	1,533,620
C. E. R. Western Line District	495,940	500,900	720	1,400	4,160	6,210	246,420	318,260	2,286,270	2,732,900
C. E. R. Southern Line District	157,420	157,420	1,350	2,840	6,730	10,230	130,500	169,650	1,345,450	1,709,170
Machiachuanku-Hailum Railway District	241,360	242,570	200	400	1,990	3,020	112,510	146,260	997,370	1,203,360
Sungari River Lower Stream District	254,470	257,010	3,810	7,620	4,370	6,560	59,580	77,450	1,092,150	1,341,590
Other Districts	63,500	63,500	3,100	5,890	—	—	53,900	68,450	181,430	207,070
Total	1,385,570	1,395,930	16,600	34,470	20,920	31,530	663,080	861,010	7,150,650	8,773,220
Grand Total	1,586,160	1,580,310	81,800	158,640	118,500	162,800	1,232,190	1,852,670	13,733,250	18,452,870

In viewing the cultivated area and production of cereals and legumes between 1924 and 1933, it is seen that the area planted in soya beans and wheat has greatly increased, while the area planted in kaoliang, millet and maize has made a fair increase, but the production remained about the same. Paddy-field and upland rice has increased in planted area and harvest, but the total amount is not large. The poor harvest in 1932 was due to the Manchurian incident, and the flood damage in the northern parts, as will be later explained.

The development of agricultural harvests and areas planted to various crops in recent years, according to the preceding tables, is as follows, the figures for 1924 being taken as 100:

Table 16
INDEX NUMBER OF CULTIVATED AREA OF CEREALS

	Soya Beans	Other Legumes	Kaoliang	Millet	Maize	Wheat	Paddy-field Rice	Upland Rice	Other Cereals	Total
1924	100	100	100	100	100	100	100	100	100	100
1925	124	185	114	122	147	118	164	139	133	124
1926	154	274	109	123	158	120	195	151	150	135
1927	163	274	121	135	144	153	221	150	157	146
1928	173	287	132	140	141	177	144	129	226	158
1929	184	236	135	138	126	174	155	143	203	158
1930	197	238	138	143	124	186	173	139	211	163
1931	194	213	136	144	142	213	144	152	239	169
1932	179	204	122	139	140	187	111	135	218	156
*1933	185	220	121	154	158	185	140	134	236	163

Table 17
INDEX NUMBER OF PRODUCTION OF CEREALS

	Soya Beans	Other Legumes	Kaoliang	Millet	Maize	Wheat	Paddy-field Rice	Upland Rice	Other Cereals	Total
1924	100	100	100	100	100	100	100	100	100	100
1925	121	135	105	103	112	119	205	171	117	112
1926	138	234	102	98	105	120	193	152	109	114
1927	140	245	103	106	106	180	158	168	134	121
1928	140	265	104	108	108	183	160	165	166	124
1929	141	213	105	111	100	162	146	178	211	125
1930	154	208	107	108	98	169	165	180	228	129
1931	152	176	101	98	105	196	169	186	246	128
1932	124	156	84	86	95	141	117	157	206	106
*1933	151	183	95	108	115	178	176	169	243	128

Soya beans take up about 30% of both the planted area and the harvest, and thus rank foremost among all the agricultural products. Next comes kaoliang which takes up 22% of the planted area and 25% of the total production of cereals. Millet is third with about 17% of both the

* Forecasts and estimates.

Table 15 (b)
CULTIVATED AREAS AND PRODUCTION OF CEREALS (1931)

BY PROVINCES:	Wheat		Paddy-field rice		Upland rice		Others		Total	
	Cultivated Area (hectares)	Crop (metric tons)	Cultivated Area (hectares)	Crop (metric tons)	Cultivated Area (hectares)	Crop (metric tons)	Cultivated Area (hectares)	Crop (metric tons)	Cultivated Area (hectares)	Crop (metric tons)
Fengtjen	119,220	103,770	43,290	83,490	51,620	64,430	442,340	723,710	4,483,750	6,564,730
Kirin	565,540	567,890	34,330	66,860	58,680	86,070	345,140	549,230	5,191,780	7,004,090
Heilungkiang	901,400	908,650	4,180	8,290	8,200	12,300	444,710	579,730	4,057,720	4,884,050
Grand Total	1,586,160	1,586,310	81,800	158,640	118,500	162,800	1,232,190	1,852,670	13,733,250	18,452,870
Kwantung Leased Territory and S.M.R. Zone	1,571	1,467	837	1,527	284	291	10,084	8,745	240,451	371,347
BY DISTRICTS: SOUTHERN PARTS:										
Districts south of Mukden	30,250	21,740	22,710	42,220	18,140	20,910	174,260	307,940	1,642,960	2,433,870
Mukden-Shanhaikwan Railway District	11,180	9,410	700	1,110	6,810	8,490	69,830	110,890	711,840	993,210
Kaiyuan District	12,940	8,550	5,980	14,070	7,360	9,090	61,500	55,320	925,960	1,380,230
Mukden-Chaoyangchen Railway District	10,850	11,010	13,180	26,580	11,660	16,980	27,060	47,900	385,310	651,770
Hsinking-Kungchuling District	57,510	56,530	1,080	890	23,010	34,450	42,470	104,180	1,094,780	1,601,470
Sauping-kai-Taonan Railway District	39,600	35,600	2,960	4,640	9,940	12,100	111,170	193,400	864,520	1,144,740
Kirin-Hsinking Railway District	23,340	20,230	6,780	13,260	16,540	23,370	53,080	102,870	708,500	1,079,370
Chientao District	14,920	21,310	11,810	21,400	4,120	5,880	29,740	69,160	248,730	394,990
Total	209,590	184,380	65,200	124,170	97,580	131,270	569,110	991,660	6,582,600	9,679,650
NORTHERN PARTS:										
Harbin District	8,270	8,270	70	150	40	60	5,790	7,530	37,590	45,510
North Manchuria Railway (C.E.R.) Eastern line District	164,610	166,260	7,350	16,170	3,630	5,450	54,380	73,410	1,210,390	1,533,620
C. E. R. Western Line District	495,940	500,900	720	1,400	4,160	6,210	246,420	318,260	2,286,270	2,732,900
C. E. R. Southern Line District	157,420	157,420	1,350	2,840	6,730	10,230	130,500	169,650	1,345,450	1,709,170
Machiachuankou-Hailum Railway District	241,360	242,570	200	400	1,990	3,020	112,510	146,260	997,370	1,203,360
Sungari River Lower Stream District	254,470	257,010	3,810	7,620	4,370	6,560	59,580	77,450	1,092,150	1,341,590
Other Districts	63,500	63,500	3,100	5,890	—	—	53,900	68,450	181,430	207,070
Total	1,385,570	1,395,930	16,600	34,470	20,920	31,530	663,080	861,010	7,150,650	8,773,220
Grand Total	1,586,160	1,586,310	81,800	158,640	118,500	162,800	1,232,190	1,852,670	13,733,250	18,452,870

In viewing the cultivated area and production of cereals and legumes between 1924 and 1933, it is seen that the area planted in soya beans and wheat has greatly increased, while the area planted in kaoliang, millet and maize has made a fair increase, but the production remained about the same. Paddy-field and upland rice has increased in planted area and harvest, but the total amount is not large. The poor harvest in 1932 was due to the Manchurian incident, and the flood damage in the northern parts, as will be later explained.

The development of agricultural harvests and areas planted to various crops in recent years, according to the preceding tables, is as follows, the figures for 1924 being taken as 100:

Table 16

INDEX NUMBER OF CULTIVATED AREA OF CEREALS

	Soya Beans	Other Legumes	Kaoliang	Millet	Maize	Wheat	Paddy-field Rice	Upland Rice	Other Cereals	Total
1924	100	100	100	100	100	100	100	100	100	100
1925	124	185	114	122	147	118	164	139	133	124
1926	154	274	109	123	158	120	195	151	150	135
1927	163	274	121	135	144	153	221	150	157	146
1928	173	287	132	140	141	177	144	129	226	158
1929	184	236	135	138	126	174	155	143	203	158
1930	197	238	138	143	124	186	173	139	211	163
1931	194	213	136	144	142	213	144	152	239	169
1932	179	204	122	139	140	187	111	135	218	156
*1933	185	220	121	154	158	185	140	134	236	163

Table 17

INDEX NUMBER OF PRODUCTION OF CEREALS

	Soya Beans	Other Legumes	Kaoliang	Millet	Maize	Wheat	Paddy-field Rice	Upland Rice	Other Cereals	Total
1924	100	100	100	100	100	100	100	100	100	100
1925	121	135	105	103	112	119	205	171	117	112
1926	138	234	102	98	105	120	193	152	109	114
1927	140	245	103	106	106	180	158	168	134	121
1928	140	265	104	108	108	183	160	165	166	124
1929	141	213	105	111	100	162	146	178	211	125
1930	154	208	107	108	98	169	165	180	228	129
1931	152	176	101	98	105	196	169	186	246	128
1932	124	156	84	86	95	141	117	157	206	106
*1933	151	183	95	108	115	178	176	169	243	128

Soya beans take up about 30% of both the planted area and the harvest, and thus rank foremost among all the agricultural products. Next comes kaoliang which takes up 22% of the planted area and 25% of the total production of cereals. Millet is third with about 17% of both the

* Forecasts and estimates.

planted area and production. Maize ranks fourth with 9% of the planted area and 9% of harvest. Wheat is fifth with 10% of the planted area and 7% of the total production. Paddy-field and upland rice are so small in quantity that the percentage is hardly worth mentioning. Further details may be seen in the following table:

Table 18

PERCENTAGE OF PRODUCTION AND CULTIVATED AREA OF CEREALS

	Production									
	Soya Beans	Other Legumes	Kaoliang	Millet	Maize	Wheat	Paddy-field Rice	Upland Rice	Other Cereals	Total
1924-28	26.7	2.1	27.7	18.9	10.4	6.8	0.9	0.8	5.7	100.0
1929-33	27.9	1.9	24.6	17.4	9.3	7.6	0.8	0.9	9.6	100.0
Cultivated Area										
1924-28	28.6	3.0	23.3	17.8	8.9	9.2	0.9	1.0	7.3	100.0
1929-33	30.7	2.5	21.8	16.9	7.3	10.7	0.6	0.8	8.7	100.0

Accurate information is not available respecting the percentage of these agricultural products shipped to markets, but when it is estimated that what is left after deducting the local consumption amounts—quantities used as foodstuffs, fodder and seed by farming households—from the production is the amount shipped to markets, it is seen that 82% of soya beans, 40% of other legumes, and 13.4% of cereals other than the above-mentioned two are shipped to market. Kaoliang, millet, maize and others are generally consumed by the farming households, and only small quantities are shipped to market.

The percentage of shipments for export is 80% for soya beans (including beancake which is calculated at the rate of 46 metric tons of beancake to 49 metric tons of soya beans), 40% for other legumes, 7% for millet, and less than 5% for kaoliang, maize, wheat and others. That is to say, while the majority of the shipments of soya beans to market, as estimated after deducting the local consumption, is exported as beans, beancake or bean oil, the cereals are mostly consumed in Manchoukuo.

Table 19

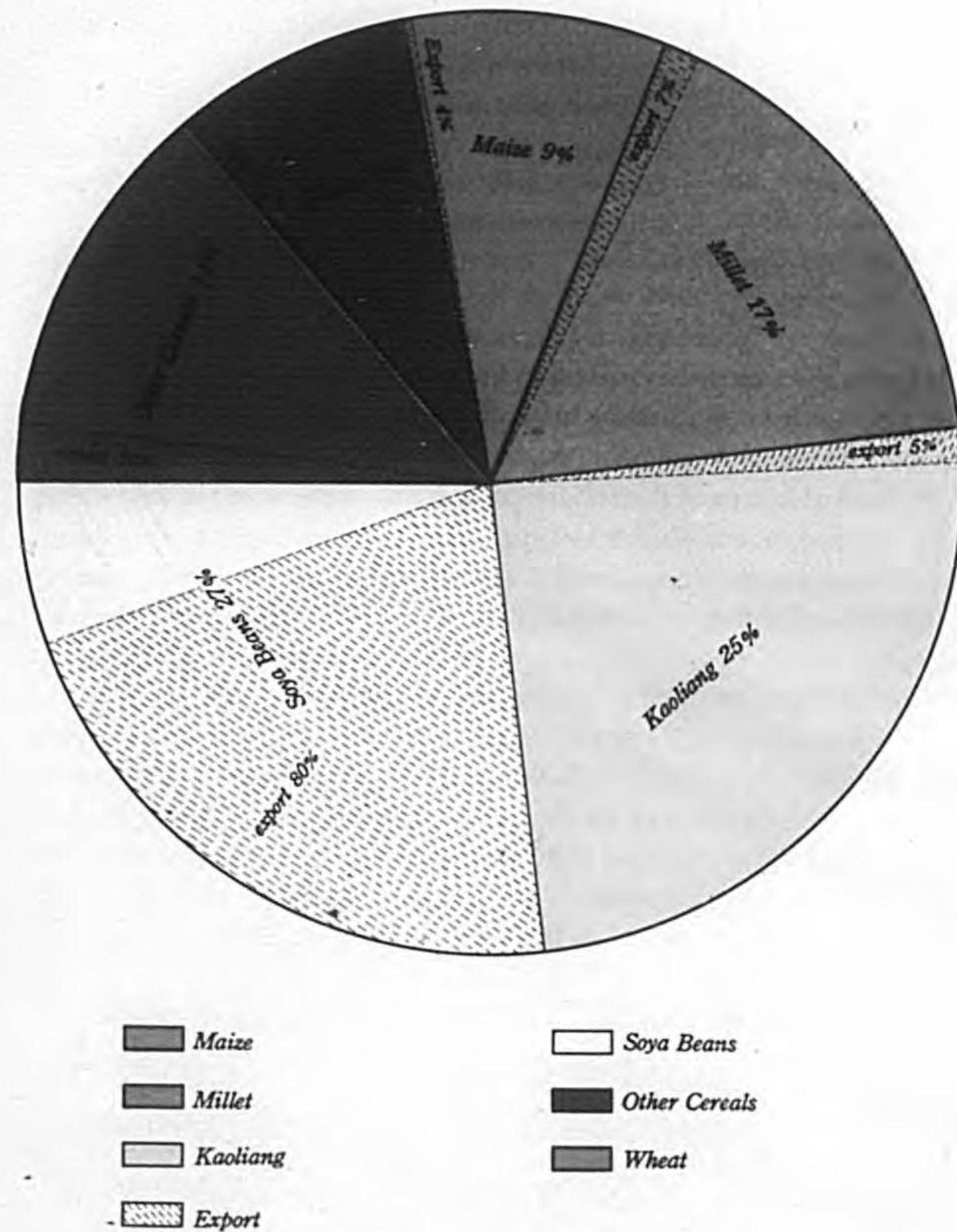
PERCENTAGE OF THE EXPORT OF CEREALS TO PRODUCTION

(Average of 1929-31)

	Production (metric tons)	Export (metric tons)	Percentage
Soya Beans	5,142,355	2,548,018	49.5
*Beancake		1,510,878	29.4
(Calculated in soya beans)			
Total		4,058,896	78.9

* Beancake is calculated in soya beans at the rate of 49 metric tons of soya beans to 46 metric tons of beancake.

PRODUCTION AND EXPORT OF CEREALS
(Average of 1929-31)



Other Legumes	513,383	206,669	40.3
Kaoliang	4,686,311	212,797	4.5
Millet	3,219,587	222,208	6.9
Maize	1,757,641	71,587	4.1
Wheat	1,414,301	18,512	1.3
Other Cereals	2,041,098	150,749	7.4
Total	18,774,676	4,941,418	26.3

Cereal Production in 1932 and Crop Forecasts for 1933.—The cereal crop for 1931 was more or less reduced because of the effect of the Manchurian incident. But the effect of the Manchurian incident was more strongly felt in 1932, and because of the suspension of the coming of immigrants from the southern district of Shantung, the requisition of farmers and farm horses by troops and bandits, and the flight of farmers in interior districts, the total cultivated area decreased by 1,068,000 hectares or about 8% in 1932, although annually there was shown the opening up of uncultivated lands of 2 to 3% formerly. The decrease of the cultivated area was 5% in the southern districts, but it was 14% in the northern parts. The regions that showed the greatest decrease in cultivated area were the North Manchuria Railway (C. E. R.) eastern line districts and Huhai (Machia-chuankou-Hailun) railway district.

The agricultural crops slightly decreased in 1931 compared with those of the previous year, but in 1932 there was a decrease of more than 3,000,000 metric tons compared with the figure for the average year, and while the decrease of crops was 9% in the southern part of Manchoukuo, it was 17% in the northern parts.

Table 20
CULTIVATED AREA AND CROPS OF CEREALS IN 1932
Cultivated Area (Hectares)

	Southern	Northern	Total
Soya Beans	1,755,730	2,122,880	3,878,610
Other Legumes	203,060	97,520	300,580
Kaoliang.....	1,818,350	843,010	2,661,360
Millet	1,042,110	1,114,580	2,156,690
Maize	601,900	378,090	979,990
Wheat	168,250	1,226,900	1,395,150
Paddy-field Rice.....	60,120	2,860	62,980
Upland Rice	93,340	11,930	105,270
Other Cereals.....	520,980	603,270	1,124,250
Total	6,263,840	6,401,040	12,664,880

	Production (Metric tons)		
Soya Beans	2,187,480	2,080,410	4,267,890
Other Legumes	189,670	88,000	277,670
Kaoliang.....	2,805,440	923,920	3,729,360

Millet	1,354,720	1,260,650	2,615,370
Maize	1,011,150	530,700	1,541,850
Wheat.....	136,890	996,200	1,133,090
Paddy-field Rice	105,730	4,060	109,790
Upland Rice	122,450	14,860	137,310
Other Cereals.....	855,630	694,760	1,550,390
Total	8,769,160	6,593,560	15,362,720

The great decrease of the crops in 1932 was partly due to the Manchurian incident, but it must not be overlooked that the atmospheric condition in 1932 was extremely damp and the damage caused by the exceptionally great flood in northern parts of Manchoukuo was very serious. The cultivated area in northern parts of Manchoukuo which was damaged by the flood was 9.1% of the entire cultivated area in northern parts of Manchoukuo in the previous year or about 650,000 hectares, and the damaged agricultural products are estimated at 668,000 metric tons or 9% of the expected harvest quantity calculated on the basis of the cultivated area in the previous year. The condition of the flood damage in northern parts of Manchoukuo was as follows according to the investigation made by the Harbin Office of the South Manchuria Railway Company :

Table 21

	Cultivated Area where no harvest was gathered—due to the flood.		Imaginary Crops for the area	
	(hectares)	(%)*	(metric tons)	(%)*
North Manchuria Railway (C.E.R.) southern line district	86,190	6.4	93,010	6.4
Harbin vicinity	1,850	4.9	1,930	4.9
C. E. R. eastern line district.....	34,500	2.9	36,980	2.9
Sungari River lower stream district..	101,040	11.1	103,960	11.2
Machiachuan kou-Hailun Railway district	203,440	17.2	206,790	17.2
C. E. R. western line district.....	45,150	3.2	46,430	3.2
Tsitsihar-Koshanchen Railway district.....*	154,560	17.6	159,270	17.6
Other Northern parts of Manchoukuo districts	23,040	12.7	20,030	12.7
Total.....	649,770	9.1	668,400	9.0

The agricultural production condition in 1933 was generally very favourable, and it is predicted that compared with the harvest of the previous year, an increase of 20% or 3,114,000 metric tons will be shown, or about the same harvest as in 1931. Particularly in southern parts of Man-

* The percentage for the cultivated area is of the total cultivated area of the previous year; the percentage for the crops is of the harvest assumed amount calculated on the basis of the cultivated area in the previous year.

choukuo the weather condition was favourable and all products ripened well. As the harvesting and other processes of crop handling were done under favourable conditions, the quality was excellent and the harvested quantity increased. But in northern parts of Manchoukuo, although the weather condition was generally good, the harvest cannot be said to have been good, because the weather was too dry in the plant growing season and too moist in the ripening season, and the weeding and tilling were not properly done on account of the shortage of farming workers and domestic animals.

Table 22

ESTIMATED CULTIVATED AREAS AND CROPS OF CEREALS IN 1933

	Cultivated Area (hectares)		
	Southern	Northern	Total
Soya Beans	1,810,860	2,189,810	4,000,670
Other Legumes	195,280	127,970	323,250
Kaoliang	1,779,190	879,240	2,658,430
Millet	1,063,220	1,317,630	2,380,850
Maize	589,920	512,030	1,101,950
Wheat	173,580	1,200,370	1,373,950
Paddy-field Rice	70,200	9,160	79,360
Upland Rice	92,400	12,360	104,760
Other Cereals.....	525,100	692,920	1,218,020
Total	6,299,750	6,941,490	13,241,240
Estimated Production (metric tons)			
Soya Beans	2,502,470	2,702,700	5,205,170
Other Legumes	198,920	126,400	325,320
Kaoliang.....	3,080,040	1,149,400	4,229,440
Millet	1,529,660	1,743,360	3,273,020
Maize	1,073,820	794,470	1,868,290
Wheat	152,920	1,276,890	1,429,810
Paddy-field Rice	145,390	19,490	164,880
Upland Rice	130,660	17,500	148,160
Other Cereals	909,650	923,300	1,832,950
Total	9,723,530	8,753,510	18,477,040

Soya Beans.—The economic foundation of Manchoukuo is based on agriculture as already pointed out, and what represents agriculture and constitutes the motive power in the economic field of Manchoukuo is soya beans. The annual production of soya beans in Manchoukuo reaches more than five million metric tons, and takes up more than 60 per cent of the world soya bean production. About 80 per cent of the soya bean production is exported to foreign countries (when beancake is included), and the export of beans and bean products reaches almost 60 per cent of the total value of Manchoukuo exports. Possessing markets in all parts of

the world, soya beans have thus become the most famous product of Manchoukuo. The majority of the enormous military expenditure of the former military government was defrayed by cornering the soya beans, as already known. Consequently the production of soya beans and the market demand for the beans greatly influence the economic field of Manchoukuo. Thus it is quite natural that Manchoukuo is commonly called the 'Land of the Soya Bean.'

The soya beans of Manchoukuo were originally brought over from central China, and their cultivation in the country is quite old, but until recently, their utilization was limited only to the local consumption as a foodstuff and the production was not large. Some seventy years ago, oil came to be expressed out of soya beans, and the bean oil thus obtained has been used as cooking oil, lighting oil, and lubricating oil for cart axles, and the residue left after expressing the oil was utilized as fodder for domestic animals. With these uses newly added, the bean production greatly increased. Then with the appearance of the demand in Japan after the Sino-Japanese War, and in Europe after 1908, the soya beans of Manchoukuo became an international commodity, and production rapidly increased.

Not only because the soil and climate of Manchoukuo are favourable for the production of soya beans, but also because the bean cultivation will obtain atmospheric nitrogen and supplement the low nitrogen content in the soil, it is necessary to cultivate soya beans as an alternate crop in Manchoukuo. Thus the soya bean production districts are found all over Manchoukuo. In 1931, the total area cultivated to soya beans reached 4,200,000 hectares, and the total production was 5,230,000 metric tons, or nearly 30 per cent of the total agricultural production of the country. The principal bean production districts in South Manchuria are the regions along the Liao River, and this crop has been cultivated since quite early days in the fertile plain including the districts of the Chingho, Chaiho, Fanho, Tatzuho, Hunho, and Hsinkaiho. In North Manchuria, the principal bean districts are the fertile plains along the Sungari River, and the bean production in North Manchuria has greatly increased since the opening of the Huhai (Machiachoukou-Hailun) and Tsiko (Tsitsihar-Koshanchen) railway lines. Today the production of North Manchuria is surpassing that of the Liao region. When the bean production is divided between South and North Manchuria, it is seen that formerly South Manchuria was the important production district, but in recent years with the development of North Manchuria, the proportion became 3 for South Manchuria to 2 for North Manchuria. The main bean producing district has moved

northward. This tendency is expected to increase in view of the fact that most of the uncultivated lands are found in North Manchuria.

The distribution and consumption of the beans, amounting annually to more than five million metric tons, of course differ according to years, but judging from the conditions of the past several years, it may be said that what is consumed as foodstuff (450,000 to 460,000 tons), fodder (250,000 tons), and seed (230,000 tons) constitute 15 to 20 per cent of the total production; the quantity consumed at bean oil mills reaches 30 to 40 per cent; what is exported as beans is estimated at 40 to 50 per cent. Then 80 to 90 per cent of the bean oil and beancake is exported. Therefore, about 80 per cent of the total bean production is exported.

The utilization of soya beans is extensive, but mainly it can be divided into foodstuff, fodder, and oil extracting material. The soya bean's use as foodstuff and fodder has been known in all Oriental nations. Passing through the oil mills, the soya beans become bean oil, beancake, or lecithin. (Refer to Chapter on Industry for details).

The export of soya beans recently is about 2,500,000 metric tons, valued at 150,000,000 Haikwan taels annually, and constitutes 38 per cent of the total export of Manchoukuo. The recent increase of the export has been phenomenal, and in the recent ten years it has more than doubled. The above is the export of soya beans alone, but when the export of bean oil and beancake is added, the total reaches 240,000,000 Haikwan taels, or about 60 per cent of the total export. Thus 80 per cent of the total bean production is exported as already noted.

The principal destinations of the soya beans are Europe, Japan, and China. The shipment to Europe takes up 60 to 70 per cent of the total export amount, to Japan about 20 per cent, and to China about 15 per cent. Europe and particularly Germany are the most important buyers of soya beans. Soya beans exported to Japan are mostly consumed as food, but those shipped to Europe are used for extracting oil. Oil becomes food or industrial material, while the beancake is used as animal fodder. The important consumer of soya beans shipped to Europe is Germany, consuming about 60 per cent of the amount shipped to Europe, and next come Denmark, England, Sweden and others.

Respecting beancake and bean oil, detailed explanations are given in the chapter on Industry. The export of beancake in recent years is about 1,600,000 metric tons valued at 80,000,000 Haikwan taels annually, and the export of bean oil is 200,000 metric tons valued at 35,000,000 Haikwan taels. The principal destinations of beancake are Japan (80%), and

China (10%); the important destinations of bean oil are Europe (50%) and China (more than 40%). The total production of beancake in Manchoukuo is about 60,000,000 pieces or 1,700,000 metric tons, and thus nearly 90 per cent of the total production is exported. (Respecting the export of soya beans, beancake, and bean oil, refer to the item of exports in the present chapter).

Kaoliang.—Kaoliang or Hungliang (紅糧), is a common name for Shushu (蜀黍). Its production is almost similar to that of soya beans, being about five million metric tons a year. It occupies an important position in Manchoukuo's products, together with soya beans. It is not only consumed as food by the inhabitants, but also used for making kaoliang spirit, fodder for domestic animals, and also in making Fentiaotzu (粉條子) or bean noodles by mixing with green peas. Its stalks are also utilized as fuel and building material, and for making coarse matting. More than 90 per cent of its total production is consumed in Manchoukuo, and it is one of the most indispensable products of the country. Therefore its crop influences greatly the economic field of Manchoukuo just as much as the soya beans, possessing important relations with the livelihood of the farmers.

Unlike soya beans, kaoliang is almost entirely consumed as the daily foodstuff of the people, and therefore the increase of its production has not been so great as in the case of soya beans. On the other hand, its demand is not influenced by conditions in foreign countries as in the case of soya beans, and its production has steadily increased with the increase of population in the country. Its production and cultivated area have been thus showing a very steady and gradual progress. Since about 1925, the production and cultivated area of kaoliang had been surpassed by soya beans, which replaced it as the foremost agricultural product of the country. In the total agricultural production, kaoliang takes up about 25 per cent in recent years, and in the total cultivated area, it takes up 23 per cent. Thus it still occupies a very important position. In 1931, the total cultivated area of kaoliang reached 2,980,000 hectares, and the total production 4,500,000 metric tons, representing more than 22% in both cases in the whole country.

Kaoliang is cultivated in all parts of the country, both South and North Manchuria, because it has a very strong resistance power to alkaline soil, and being deep rooted, it stands dryness. The main producing districts are the localities south of Mukden and along the Mukden-Shanhai-kwan Railway line in South Manchuria, and Kaiyuan, Hsinking-Kung-

chuling and Ssupingkai-Taonan Railway districts come next; in North Manchuria, the North Manchuria Railway southern line district comes first, followed by the C. E. R. western line district and the Sungari River lower stream region. The production is 3,200,000 metric tons in South Manchuria and 1,300,000 metric tons in North Manchuria, and thus South Manchuria produces two and a half times as much as North Manchuria.

As mentioned above kaoliang is mostly consumed by the inhabitants, and the export is only 200,000 to 300,000 metric tons a year. The main destination of the exported kaoliang is China. Thus it may be estimated that the total consumption of kaoliang in Manchoukuo is 4,200,000 metric tons. Of this quantity 3,800,000 tons (86%) are consumed as the foodstuff of the people, 45,000 tons are used as seed, 270,000 tons for brewing purposes, and 40,000 to 50,000 tons for miscellaneous purposes, it is estimated.

Kaoliang is thus the main foodstuff of the people, and it is cooked, or ground to make noodles or dumplings. It is also used as fodder for domestic animals, and for making kaoliang spirit. Starch is produced from kaoliang.

Kaoliang stalks are indispensable for the inhabitants of Manchoukuo and particularly for the farming households. Not only are they used as fuel, but they are also used for thatching the roofs and making the walls of their houses; they are cut open and the outer skin is removed to make matting. This matting is used for making walls, building houses, and also for making tun (囤) or native storehouses. Thus the use of kaoliang stalks is extensive and varied. There is also the possibility of using kaoliang stalks as material in the pulp industry in Manchoukuo where they are produced in enormous quantity. (Refer to the Chapter on Industry). The ashes of kaoliang stalks are scattered over the farms as fertilizer by the inhabitants.

Millet.—Millet is regarded as one of the five principal cereals in China since very early days. In Manchoukuo also it constitutes one of the three important crops, the others being soya beans and kaoliang, and its annual production is estimated at about three million metric tons. It is not only consumed as food but is used for making Huangchu (黃酒), a spirit. Millet stalks are indispensable to horses and cattle as fodder. Manchurian millet is recently exported to Korea to the extent of more than 200,000 metric tons annually. Koreans are selling at high prices the rice they produce, and buying as their food Manchurian millet which is cheaper and more suitable to their taste than rice. Thus the millet of Manchoukuo

has important relation with the food problem of Japan.

Millet being one of the main foodstuffs of the Manchurian inhabitants, its production is slowly but steadily increasing. In 1931 the total cultivated area of millet was 2,230,000 hectares, and the production 2,960,000 metric tons, taking up 16 to 17% of the total agricultural products. Millet has strong adaptability to climate, and stands dryness, also possessing strong resistance to alkaline soil. It is produced everywhere in both South and North Manchuria, about 1,500,000 metric tons being produced annually in each section. The main producing centres are the area south of Mukden, Hsinking-Kungchuling district, Ssuping-kai-Taonan Railway district, Kirin-Chaoyangchen Railway district and Kaiyuan district in South Manchuria; and the C. E. R. western line district, C. E. R. southern line district, and Machiachuankou-Hailun Railway district in North Manchuria.

Millet being mostly consumed as a foodstuff of the inhabitants and for other local requirements, the quantity exported to foreign countries is comparatively small. It is estimated that more than 90 per cent of the total production is consumed in Manchoukuo. Of the local consumption quantity, 86 or 87 per cent or 2,400,000 to 2,500,000 metric tons are consumed as a foodstuff, 20,000 tons as seed, and 200,000 tons for miscellaneous purposes. Thus the millet left for export is estimated at about 300,000 tons.

The export of millet once was quite large and reached 500,000 metric tons, but recently it decreased and is about 200,000 to 300,000 tons, valued at 15,000,000 Haikwan taels. In 1931 it was particularly small, being less than 200,000 tons. The chief destination of the millet export is Korea as already mentioned.

Maize.—It is also called Paomi (包米), and is an important foodstuff. In South Manchuria it is generally ground for food, while in North Manchuria it is used as material for alcoholic beverages. Also it is mixed with green peas in making noodles. The stalk is used as fuel, and the leaves are fed to domestic animals. The cultivated area is 800,000 to 900,000 hectares, and the annual production is 1,700,000 metric tons. The main producing districts are the southern and south-eastern sections of South Manchuria, and the crop is mostly cultivated in these districts because there are large numbers of Shantung immigrants there whose main foodstuff is maize. The maize production is mostly consumed locally, and the export amounts to only about 60,000 metric tons.

Wheat.—The wheat production is greater in North Manchuria than in

South Manchuria because of climatic conditions, and it is one of the principal products of North Manchuria. The Machiachuankou-Hailun Railway district, C. E. R. western line district, and the Sungari River lower stream regions are the main wheat producing territories. In Manchoukuo the total wheat producing area is 1,500,000 to 1,600,000 hectares and the annual production is 1,500,000 to 1,600,000 metric tons. Nearly 90 per cent of the production is produced in North Manchuria which has the prospect of producing more wheat in the future as there are yet vast undeveloped fertile lands.

The wheat flour industry is an important agricultural industry as is the bean oil industry using soya beans. Everywhere there are found the old-fashioned flour mills called Mofang (磨房), but recently in and around Harbin there have developed many modern wheat flour milling plants. The flour industry is promising in Manchoukuo. (Refer to the Chapter on Industry). Wheat was formerly exported in fairly large quantity, but today the wheat export is small. On the other hand, the export of wheat flour and bran has increased, each reaching about 1,000,000 Haikwan taels recently.

Upland Rice.—Upland rice is called Chingtzu (粳子) in Manchoukuo, and is the kind of rice raised on dry farms. The quality is poor, but it grows rapidly and suits the climate of Manchoukuo. The cultivated area is about 100,000 hectares, and the annual production is 150,000 to 160,000 metric tons.

Paddy-field Rice.—The paddy-field rice cultivation was started in Manchoukuo by Koreans, and its history is quite new. The cultivation has not yet become large, and the total cultivated area is about 80,000 to 90,000 hectares and the annual production 160,000 metric tons. But there are one million hectares of undeveloped land suitable for paddy-field rice cultivation, and the future of this crop is promising. The main producing centres at present are the area south of Mukden, Mukden-Chaoyangchen railway district, Kirin-Chaoyangchen railway district, and Chientao district. In the districts along the Liao, Sungari, Mutankiang, Mullen, Nonni, Yalu, Tatzuho, and Hunho rivers there are vast areas suitable for paddy-fields. The paddy-field rice production in Manchoukuo is at present consumed by the farmers for their own needs, and by Japanese residents.

Other Crops.—Other important crops are legumes other than soya beans, true millet, pai (稗) or barn-yard grass, buckwheat, and barley. Their total cultivated area is 2,000,000 hectares and the annual production is 2,200,000 metric tons.

Important varieties of legumes other than soya beans are Indian beans and green peas. The production of Indian beans is estimated at 250,000 to 260,000 metric tons a year, and the main producing district is Central Manchuria, the production being almost entirely consumed locally. The Indian bean export is about 80,000 metric tons valued at 6,000,000 Haikwan taels, the main destination being Japan to which 80% of the export is shipped. The annual production of green peas is 30,000 to 40,000 metric tons, and is locally consumed in making bean noodles. Central Manchuria is the principal producing district, and the export amounts to about 2,000 metric tons valued at 1,400,000 to 1,500,000 Haikwan taels. There are also various other kinds of beans and peas, but their production is small, and they are mostly locally consumed.

The production of true millet is estimated at about 130,000 metric tons. As it stands dryness, and its period of growth is short, it is used as the main foodstuff of the Mongolians, and its production is mostly consumed locally. The main producing centres are Mongolia and the districts bordering on Mongolia, northeastern parts of South Manchuria, Harbin district, and Tsitsihar district.

Pai is produced in fairly large quantity and is mostly consumed locally as foodstuff and fodder. The main producing district is the region bordering on Inner Mongolia.

Buckwheat is cultivated as a crop for famine relief, and the annual production is not uniform. It is produced all over South and North Manchuria, but Fengtien Province is the main producing centre. The production is mostly consumed in the country, but 3,000 to 4,000 metric tons are annually exported, the main destination being the Netherlands.

Barley is fairly produced, and is locally consumed, mostly. The export is small. It is consumed in making malt for brewing kaoliang spirit, and as foodstuff and fodder.

Industrial and Garden Crops.—Among these crops, the most important are cotton, hemp, tobacco, sesame, Indian mallow, hops, perilla, and fruits. Their production condition is not clearly known, but according to the statistics compiled by the South Manchuria Railway Company, their total cultivated area is 300,000 to 400,000 hectares, the total production quantity being unknown.

Cotton.—Districts producing cotton in Manchoukuo are the district between Tashihchiao and Heishan on the S.M.R. line; Chinchow, Chihshih, Peichen, Peishan, and others along the Mukden-Shanhaikwan Railway line. The annual production is estimated at 15,000 metric tons, about

Upland Cotton
Cultivated
in
Manchoukuo



Egyptian Cotton
Cultivated
in
Manchoukuo



Above two, Cotton cultivated at the Kungchuling Agricultural Experimental Station.

Under, Rice fields in Aikawa-mura, Kwantung Leased Territory.

30% of which is consumed by the farmers themselves, and the remaining portion is shipped to market. The varieties planted are mostly the native Oriental species, and their fibre is coarse, and the majority of the production is used for stuffing purposes. The cotton produced in Manchoukuo can only be used in spinning thick yarns above 20 S. About 3,000 metric tons of the Manchurian cotton are used for spinning purposes annually. About 10,000 metric tons of Chinese, Indian, and American cottons are imported annually into Manchoukuo. (Refer to the Chapter on Industry respecting the cotton policy of Manchoukuo.)

Hemp, Jute, and Flax.—Manchoukuo is a great consumer of hemp, jute, and flax, and the requirements are mostly supplied by the domestic production, but also annually large amounts of jute and gunny bags are imported from India. Manchoukuo produces hemp, Indian mallow, flax and jute. The cultivated area of Indian mallow is about 20,000 hectares, and the production is estimated at 10,000 metric tons, which is mostly consumed locally and only about 25% is shipped to market. The fibres of Indian mallow are used in making cloth and rope, and its seeds are used for extracting oil. Indian mallow is mostly cultivated in the eastern mountain districts of Fengtien and Kirin Provinces for obtaining the fibre, and in the plains for obtaining the seeds.

The cultivated area of jute is 24,000 hectares, and the annual production is estimated at 15,000 metric tons. Liaoyang, Chinchow, and Newchwang are the principal producing centres. It is used in making gunny bags, as a substitute for hemp.

Flax cultivation is suitable to North Manchuria, and it is a new crop recently introduced. Although it is an important product for the fibre industry, the production is yet small.

Hemp is mainly produced in the Ssupingkai-Taonan Railway line district, and its seeds are used for extracting oil.

Sesame and Perilla.—The annual production of sesame is 50,000 metric tons, and its seeds produce cooking oil. It is mostly produced in the Liao River region in South Manchuria. Perilla also is used for expressing oil, and the oil is used for medical, lighting, and industrial purposes. The annual production is estimated at 20,000 to 30,000 metric tons. It is mainly produced in Central Manchuria and Eastern Inner Mongolia. Besides supplying local needs, it is exported to a fairly large amount, the important destination being Japan.

Tobacco.—The main tobacco producing territory is the southern and eastern sections of Kirin Province, and also it is fairly extensively planted

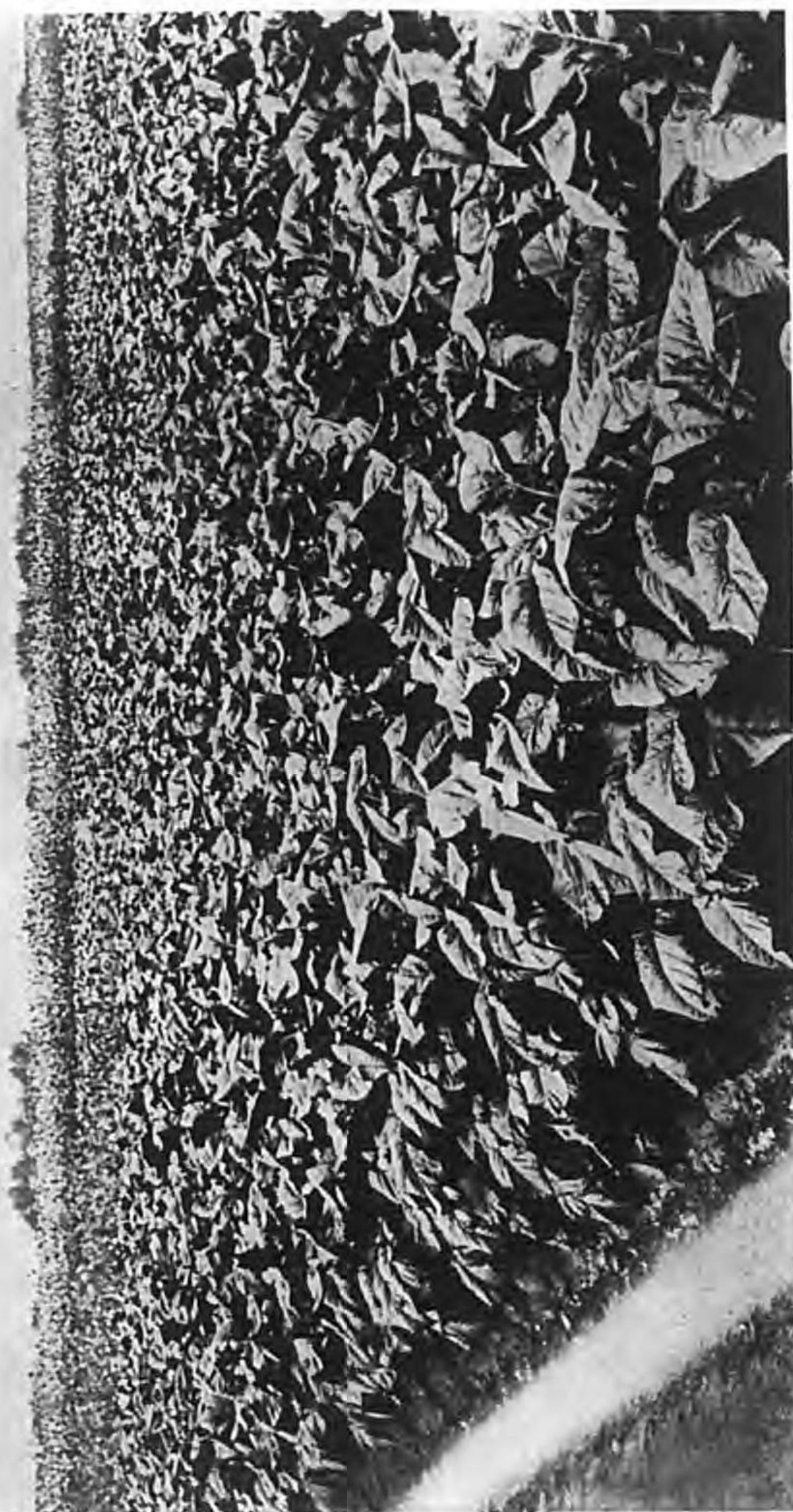
in the northern and eastern parts of Fengtien Province. The annual tobacco production in Kirin Province is 19,000 tons, and that in Fengtien Province 5,000 tons, or a total of about 30,000 tons including the production in other districts. Generally the quality of tobacco produced is inferior and the demand is not large. But recently it has been proved by the experiments conducted at the Tobacco Experiment Stations maintained by the South Manchuria Railway Co. at Fenghuangcheng (鳳凰城) and Telishu (得利寺) that the cultivation of yellow tobacco of the American variety is profitable and promising, and at present at Fenghuangcheng, Wafangtien (瓦房店), and Anshan (鞍山), about 500 tons of yellow tobacco is produced annually.

Sugar Beets.—The soil and climate of Manchoukuo are suitable for the cultivation of beets, and in North Manchuria, Russians commenced their cultivation more than thirty years ago. In South Manchuria the S.M.R. Agricultural Experimental Station has been trying their cultivation since 1914. The result of the experiments has been favourable, the sugar content reaching 17.8 per cent. But the knowledge and technique of the native farmers have not been developed to undertake the production of such a crop. At present the production is extremely small. The entire sugar requirement of Manchoukuo is now supplied by imports. (Refer to the Chapter on Industry).

Other Crops.—Other industrial and garden crops worthy of notice are hops of the northern mountain regions, licorice of Jehol Province, poppies in the mountain regions of Kirin and Jehol Provinces, and fruits in the districts south of Mukden. Excepting the fruit production in the southern section, the production condition of these crops is not known. Respecting the fruit production, it must be mentioned that the fruit gardens operated by Japanese and Manchurians in the districts south of Hsiungyocheng have been rapidly increasing, and the total area reaches 4,000 hectares, with an annual production of 5,000 metric tons. Apples and pears are most promising, and good results are expected of the cultivation of grapes, peaches, and cherries.

Silk and Tussah Silk

Silk.—There were formerly some farmers in Manchuria who undertook sericulture, but there were no sericulturists in the true sense. But in recent years, the prospect of sericulture in Manchuria has been assured of success by the results of experiments conducted at the Hsiungyocheng Agricultural Experiment Station of the South Manchuria Railway Company and the Kwantung Government Agricultural Experiment Station. Since then



Tobacco Experiment Farm at Fenghuangcheng.

sericulture has commenced to make rapid progress. At present it is not developed beyond the stage of being conducted as a side enterprise, but it is much developed in the Kwantung Leased Territory, with an annual production of 40 tons.

Tussah Silk.—The tussah silk culture in Manchoukuo is more than a hundred years old, and now tussah silk is one of the important exports of Manchuria. Tussah silk is produced largely in Fengtien Province south of the Liao River, and the Liaotung peninsula is considered the foremost district. The well-known tussah silk districts are Kaiping (蓋平), Hsiu-yen (岫巖) and Antung (安東).

The amount of tussah silk cocoons produced in Manchoukuo is not clearly known, but it is estimated at about 8,600,000,000 cocoons. Fengtien Province produces 7,600,000,000 cocoons, or 230,000 baskets, valued at about ¥10,000,000. The Antung district produces about 70,000 baskets of cocoons, valued at ¥3,300,000, it is estimated. The central tussah cocoon markets are at Antung and Kaiping, and it is estimated that at Antung about 70,000 baskets are collected annually, and at Kaiping about 40,000 baskets. The markets at Haicheng, Huangtukan (黃土坎), and Sungshu (松樹) collect about 7,000 baskets each. One basket of tussah silk cocoons contains generally from 32,000 to 33,000 cocoons. The weight of one cocoon varies from 4.6 to 7.5 grammes.

Export of Agricultural Products

General Outline.—It was mostly after the Russo-Japanese War that the agricultural products of Manchuria came to be exported to foreign countries. The progress of the export trade since then has been phenomenal. In recent years the annual export of agricultural products reached 150,000,000 to 220,000,000 Haikwan taels, one half of the total export of Manchoukuo. When the export of beancake, bean oil, bran and other manufactured products is added, the total reaches 300,000,000 Haikwan taels, or 80 per cent of the total export, as already mentioned. The destinations of the exported agricultural products are given in detail in the Chapter on Foreign Trade, and here will be given only the export amounts of the principal agricultural products during the last decade.

Table 23 (a)
EXPORTS OF PRINCIPAL AGRICULTURAL PRODUCTS

	1927		1928		1929		1930		1931	
	Quantity (Metric Tons)	Value (H. K. Taels)	Quantity (Metric Tons)	Value (H. K. Taels)	Quantity (Metric Tons)	Value (H. K. Taels)	Quantity (Metric Tons)	Value (H. K. Taels)	Quantity (Metric Tons)	Value (H. K. Taels)
Soya Beans...	1,035,649	54,472,998	1,183,698	57,532,086	1,364,907	70,153,634	1,386,509	79,683,902	1,355,722	76,600,025
Other Legumes	76,494	3,911,717	78,897	4,185,690	91,271	5,213,498	89,997	5,725,720	116,833	7,221,031
Kaoliang.....	809,310	31,603,518	146,588	4,884,041	59,495	2,053,664	144,660	5,301,744	205,259	9,795,147
Millet.....	—	—	417,206	15,875,489	118,211	5,590,550	485,413	16,924,832	388,916	14,269,555
Maize.....	183,960	6,478,493	175,456	10,798,949	241,205	15,684,888	272,613	19,986,395	350,417	24,854,420
Wheat.....	77,976	4,783,051	38,999	2,220,351	9,882	368,912	12,803	841,261	581	43,663
Other Cereals.	84,737	5,290,373	79,964	6,009,808	113,797	8,183,982	105,552	8,417,613	117,023	9,324,044
Bean Oil.....	124,263	16,605,939	159,117	22,078,572	143,820	22,830,694	151,441	25,570,679	182,315	34,406,048
Beancake.....	1,649,221	63,793,641	1,866,914	71,873,678	1,691,131	63,412,209	1,595,807	63,386,920	1,939,368	87,386,161

Table 23 (b)

	1927		1928		1929		1930		1931	
	Quantity (Metric Tons)	Value (H. K. Taels)	Quantity (Metric Tons)	Value (H. K. Taels)	Quantity (Metric Tons)	Value (H. K. Taels)	Quantity (Metric Tons)	Value (H. K. Taels)	Quantity (Metric Tons)	Value (H. K. Taels)
Soya Beans...	1,722,235	98,068,170	2,382,297	146,277,289	2,781,580	168,245,197	2,027,402	116,343,177	2,835,071	157,472,301
Other Legumes	146,237	8,784,535	114,116	8,348,367	169,764	13,297,973	219,688	19,937,783	230,555	19,608,320
Kaoliang.....	108,596	4,715,776	81,987	3,699,781	193,183	7,669,849	143,406	6,407,160	301,803	15,299,647
Millet.....	500,466	18,814,957	480,094	19,216,327	231,075	16,429,563	255,230	24,703,365	180,320	10,931,289
Maize.....	396,156	31,397,978	318,608	22,795,639	88,267	3,833,475	66,618	3,049,985	59,877	2,926,405
Wheat.....	37,499	2,711,019	113,423	7,458,385	48,858	3,077,476	6,131	394,357	548	34,104
Other Cereals.	136,967	9,677,911	159,104	13,119,540	161,176	12,932,701	139,286	10,930,397	151,784	11,863,791
Bean Oil.....	178,085	32,928,739	129,897	23,746,646	118,775	21,492,545	137,064	26,926,579	187,376	36,795,498
Beancake.....	1,999,028	84,958,824	1,656,513	73,253,469	1,414,004	65,228,278	1,517,515	65,961,912	1,896,721	79,966,857

Export of Soya Beans, Beancake, and Bean Oil in Recent Years.—The importance of soya beans, beancake, and bean oil in the economy of Manchoukuo has already been pointed out and particularly they occupy an overwhelming position in the export trade (refer to the item of soya beans), but in recent years the demand in foreign countries for Manchurian soya beans (including beancake and bean oil) has much decreased because of the world economic depression and other causes, and the future is gloomy. As the rise or fall of the demand in foreign countries for Manchurian soya beans, beancake, and bean oil has serious effects upon the economy of the country, the export condition of these three items in recent years will be explained.

Viewing the export of soya beans, beancake, and bean oil on the basis of the average for three years (October, 1926, to September, 1929), previous to the world economic panic, it is seen that the export of soya beans and bean oil showed a tendency to increase until the season of 1931-32 (from October, 1931 to September, 1932; the season always commences in October and ends next September), and that of beancake alone showed a decrease, although the rate of decrease was slight. But in the 1932-33 season, all three items showed remarkable decreases; soya beans decreased 300,000 metric tons, 12%, compared with the figure for the previous year, although an increase of 60,000 tons or 2% was shown when compared with the figure for the basic year (2,220,000 tons); beancake showed a decrease of 650,000 tons or about 40% compared with the basic year (1,700,000 tons); bean oil showed a decrease of 61,000 tons or 45% compared with the basic year (136,000 tons). When the figures for beancake and bean oil are compared with those for the previous year, the export in the 1932-33 season showed decreases of 12% and 50% respectively. Thus quite a remarkable reduction in the export amount was suffered, as shown in the following table:

Table 24
EXPORT OF SOYA BEANS, BEANCAKE, AND BEAN OIL THROUGH THE FOUR PORTS OF DAIREN, YINGKOW, ANTUNG, AND VLADIVOSTOK

Year	Soya Beans		Beancake		Bean Oil	
	Quantity (Metric Tons)	Index	Quantity (Metric Tons)	Index	Quantity (Metric Tons)	Index
Average 1926-27 to	2,223,008	100	1,698,895	100	135,713	100
1928-29.....	2,235,298	101	1,515,560	89	135,187	100
1929-30.....	2,476,665	111	1,658,065	98	145,188	107
1930-31.....	2,571,206	116	1,561,796	92	149,780	110
1931-32.....	2,284,544	103	1,050,692	62	74,863	55

The decrease of the demand in foreign countries for these three items of Manchurian staple products was expected as a reflection of the world depression since October, 1929, but what was the cause of the effect of the depression not appearing except for beancake until the 1931-32 season? The cause is generally considered to be the favourable development for buyers of the fall of the silver quotation. But this condition differs according to nations, and cannot be treated generally. Then again the reduction in the 1932-33 season also slightly differed according to nations. Thus it is necessary to view the export condition according to destinations. The principal destinations of these three items are Japan, China, and Europe (mainly Germany) as shown in the following table:

Table 25

DESTINATIONS OF THE EXPORT OF SOYA BEANS, BEANCAKE,
AND BEAN OIL THROUGH THE FOUR PORTS

Year	Japan		Europe		China		Others		Total	
	Quantity (Metric Tons)	(%)	Quantity (Metric Tons)	(%)	Quantity (Metric Tons)	(%)	Quantity (Metric Tons)	(%)	Quantity (Metric Tons)	(%)
1926-27 to 1928-29..... average	462,684	20.8	1,384,206	62.3	283,195	12.7	92,923	4.2	2,223,008	100
1929-30 to 1931-32..... average	515,334	21.2	1,382,579	57.0	441,812	18.2	87,998	3.6	2,427,723	100
1932-33.....	450,229	19.7	1,645,637	72.0	132,717	5.8	55,961	2.5	2,284,544	100
(Beancake)										
1926-27 to 1928-29..... average	1,288,474	75.9	17,209	1.0	358,398	21.1	34,814	2.0	1,698,895	100
1929-30 to 1931-32..... average	1,129,144	71.5	40,646	2.6	383,024	24.3	25,660	1.6	1,578,474	100
1932-33.....	720,684	68.6	70,690	6.7	234,737	22.3	24,581	2.4	1,050,692	100
(Bean Oil)										
1926-27 to 1928-29..... average	332	0.2	81,708	60.2	45,062	33.3	8,611	6.3	135,713	100
1929-30 to 1931-32..... average	2,730	1.9	73,633	51.4	62,735	43.7	4,287	3.0	143,385	100
1932-33.....	122	0.2	34,026	45.4	38,542	51.5	2,173	2.9	74,863	100

Japan is importing about 20% of the soya beans exported from Manchoukuo, about 70% of the beancake, and only a small quantity of the bean oil; thus Japan is the greatest buyer of beancake. The greatest consumers of beancake are Japanese farmers as it is used as fertilizer. But as a competitor of beancake as fertilizer there is sulphate ammonia. By the effect of the fall of the prices of agricultural products, the Japanese farmers' revenue in 1930 was reduced by about ¥ 1,200,000,000. Thus despite the movement started for popularizing the use of beancake as fodder, it was difficult to stop the reduction of consumption of beancake in Japan, and the export of beancake to Japan declined as shown in the following table. As the bean cost decreased on account of the fall of the silver quotation and the consumption in Japan is not affected much, the beans being mostly consumed as food, the export of soya beans to Japan did not show any decrease up to the 1931-32 season compared with the figure for the basic year, but yet it decreased when compared with the figure for the 1929-30 season.

Table 26

EXPORT OF SOYA BEANS, BEANCAKE, AND BEAN OIL
TO JAPAN THROUGH FOUR PORTS

Year	Soya Beans		Beancake		Bean Oil	
	Quantity (Metric Tons)	Index	Quantity (Metric Tons)	Index	Quantity (Metric Tons)	Index
1926-27 to 1928-29..... average	462,684	100	1,288,474	100	332	100
1929-30.....	527,165	114	1,201,257	93	7,245	2,182
1930-31.....	506,800	110	1,214,695	94	806	243
1931-32.....	512,033	111	971,478	75	138	42
1932-33.....	450,229	97	720,684	56	122	37

The above is the export to Japan as seen from the standpoint of Manchoukuo, but almost the same situation is revealed when it is viewed from the standpoint of Japan, as seen in the figures given below. But it cannot be overlooked that the decrease shown in the 1932 season was due to the advance of the silver quotation and the fall of the yen value.

The import into Japan of Manchurian soya beans and beancake was as follows according to the monthly reports of the foreign trade of Japan:

Year	Soya Beans		Per Ton Price (¥)	Beancake		Per Ton Price (¥)
	Quantity (Metric Tons)	Value (¥)		Quantity (Metric Tons)	Value (¥)	
1930-31	468,553	25,624,359	55	905,838	35,987,039	40
1931-32	511,137	28,335,214	55	712,436	29,862,715	42
1932-33	424,308	38,386,688	90	495,295	31,520,062	64

China imports 15% of the soya beans, 24% of beancake, and more than 40% of bean oil exported from Manchoukuo. In the export to China, the low silver quotation did not affect the trade as much as in the case of other countries, but these three items have much more importance to the Chinese people than to others and consequently there has been a steady demand in China even after the world depression began. In 1932, the export of these three items of Manchurian products to South China and particularly to Shanghai greatly increased as the shipment of agricultural products to Shanghai from the Yangtze River region was suspended due to the great reduction of production in the region on account of flood damage. The increase of the export to South China in the 1931-32 season was more than sufficient to meet the decrease of export to other countries. Thus the export of the three items to China continued to show an increase on the whole up to the 1931-32 season. The tariff relation change between China and Manchoukuo after October, 1932 suddenly altered the situation, and in the 1932-33 season the export to China was greatly reduced as shown in the following table:

Table 27

EXPORT OF BEANS, BEANCAKE, AND BEAN OIL TO CHINA THROUGH FOUR PORTS

Year	Soya Beans		Beancake		Bean Oil	
	Quantity (Metric Tons)	Index	Quantity (Metric Tons)	Index	Quantity (Metric Tons)	Index
1926-27 to average	283,195	100	358,398	100	45,062	100
1928-29						
1929-30	297,432	105	255,092	71	15,450	34
1930-31	427,564	151	385,297	108	63,512	141
1931-32	600,441	212	508,683	142	109,242	242
1932-33	132,717	47	234,737	65	38,542	86

Europe is the greatest consumer of Manchurian soya beans. The European nations are consuming 60 to 70 per cent of the export soya beans, a majority of the export bean oil, and only a small quantity of beancake, and 70% of the export to Europe is shipped to Germany. The bean ship-

ment to Europe has not been reduced even after the world panic, as it may be regarded that the export was increased to take advantage of the low silver quotation. The export of bean oil, however, was reduced, probably because it is a product of soya beans. In the oil milling industry of Germany, the greatest consumer of Manchurian beans in Europe, it is seen that the soya bean consumption reached annually 800,000 to 1,000,000 metric tons, which equals 35 to 50% of oil extraction material consumed in the oil and fat industries of the country, and that there are produced annually 150,000 metric tons of bean oil and 700,000 to 800,000 tons of beancake. Thus an increase of the export of soya beans to Europe brings about a reduction in the export of bean products. Up to the present, however, the export of soya beans to Europe has not shown any sign of decline, but as the favourable condition brought about by the low silver quotation is lessened, some fear must be felt for the future of the export of Manchurian beans to Europe, because the world depression would not leave the German oil and fat industries outside its effects, and control of the import of oil and fat and their materials was effected by the Government of Germany since April 12, 1932.

Table 28

EXPORT OF SOYA BEANS, BEANCAKE, AND BEAN OIL TO EUROPE THROUGH FOUR PORTS

Year	Soya Beans		Beancake		Bean Oil	
	Quantity (Metric Tons)	Index	Quantity (Metric Tons)	Index	Quantity (Metric Tons)	Index
1926-27 to average	1,384,206	100	17,209	100	81,708	100
1928-29						
1929-30	1,309,994	95	17,658	103	104,276	128
1930-31	1,452,311	105	38,350	223	76,437	94
1931-32	1,385,434	100	65,931	383	40,187	49
1932-33	1,645,637	119	70,690	411	34,026	42

It will be seen that because of the effect of the fall of the silver quotation and the great flood in the Yangtze region, South China, the decrease of demand in foreign countries that should have naturally appeared as a reflection of the world depression, was delayed until the 1932-33 season. But the silver quotation reached the bottom price in 1931 and an upward tendency was shown since that time, and in foreign countries occurred the change in the relation between the Chinese and Manchoukuo Customs tariffs, and the control of oil and fat and their materials in Germany.

Thus due to the seriousness of the world depression, the export of the three items in the 1932-33 season has decreased despite the fall of prices as shown in the following table. The decline of export has also resulted in lowering the prices of the three items.

Table 29

DAIREN EXCHANGE SPOT DEAL QUOTATIONS ON SOYA BEANS, BEANCAKE AND BEAN OIL*

(in silver dollar)

Year	Soya Beans (with bag)			Beancake			Bean Oil		
	Highest	Lowest	Average	Highest	Lowest	Average	Highest	Lowest	Average
1926-27	6.530	5.960	6.068	2.210	1.830	2.036	20.000	15.550	17.702
1927-28	6.640	5.600	6.160	2.220	1.750	1.989	21.000	16.350	18.157
1928-29	7.600	5.910	6.347	2.415	1.865	2.081	21.500	15.150	17.209
1929-30	8.340	6.880	7.010	2.660	2.160	2.336	23.850	17.450	19.686
1930-31	7.950	5.490	6.160	2.500	1.700	2.005	20.500	14.600	17.030
1931-32	6.350	4.420	5.182	1.870	1.450	1.686	16.900	11.100	13.675
1932-33	5.700	4.060	4.865	1.805	1.185	1.593	15.250	11.500	13.866

Live-Stock Farming**

General Outline.—Live-stock rearing is carried on throughout Manchoukuo, and every farming household keeps some live-stock. They comprise cattle, horses, mules, donkeys, sheep, goats, and pigs, as well as chickens, ducks, geese, honey bees and others. Also most households in the country keep several dogs as a means of protection.

Live-stock is inseparable from the agricultural life of Manchuria, and the farmers utilize farm waste for feeding their domestic animals. Animal manure constitutes the only kind of fertilizer they use. Every kind of farm work, ploughing, harrowing, tilling, transporting, husking, etc., is dependent on animal power. Thus, domestic animals are utilized to the utmost. The number of domestic animals in Manchoukuo is shown in the following table:

* The quotation is given for one piece (about 27.6 kilogrammes) of Beancake, and for 60 kilogrammes for other items.

** Not much information respecting the number of animals is available, and the statistics for the previous year are mostly used as it is assumed that not much increase or decrease has occurred. Provinces mentioned in this item are the former administrative districts.

Table 30
ESTIMATE OF THE NUMBER OF LIVE STOCK, 1931 (in Thousands)

	Cattle	Horses	Donkeys	Mules	Sheep	Pigs	Total
Fengtien Province	517	669	322	349	518	3,444	5,819
Kirin Province	430	735	269	84	182	2,274	3,974
Heilungkiang Province	658	1,034	152	46	1,940	1,789	5,619
Total	1,605	2,438	743	479	2,640	7,507	15,412
Eastern Inner Mongolia	1,120	810	70	100	3,200	1,000	6,300
Kwantung Leased Territory and S.M.R. Zone.	268	9	24	27	9	143	240
Grand Total	2,752	3,257	837	606	5,849	8,650	21,952

Table 31
NUMBER OF DOMESTIC ANIMALS CLASSIFIED BY DISTRICTS (1931)

Districts	Cattle	Horses	Mules	Donkeys	Sheep	Pigs	Total
Southern Section:							
District South of Mukden	271,810	327,780	129,320	141,220	243,020	1,243,000	2,356,150
Mukden-Shanhaikwan Railway District	58,150	59,450	11,490	79,500	129,920	775,040	1,113,550
Kaiyuan District	56,900	135,680	101,310	69,240	48,700	601,890	1,013,720
Mukden-Chaoyangchen Railway District	60,920	77,000	48,390	23,920	17,780	354,370	582,380
Hsinking-Kungchuling District	38,350	62,010	82,380	39,500	55,770	644,810	922,820
Ssupingkai-Taonan Railway District	63,800	78,950	12,830	23,200	63,750	231,700	474,230
Kirin-Chaoyangchen Railway District	51,400	62,380	71,340	6,400	8,870	139,410	339,800
Chientao District	65,590	24,270	3,100	6,300	4,450	242,170	345,880
Total	666,920	827,520	460,160	389,280	572,260	4,232,390	7,148,530
Northern Section:							
Harbin Vicinity	7,600	16,220	2,800	700	3,400	51,500	82,220
North Manchuria Eastern Line District	131,200	198,620	47,750	17,250	51,750	467,400	913,970
North Manchuria Western Line District	300,680	483,870	87,200	21,080	239,000	958,400	2,090,230
North Manchuria Southern Line District	89,310	257,840	64,060	23,820	50,600	730,900	1,216,530
Machiachuankou-Hailun Railway District	98,440	244,250	31,760	15,200	73,000	482,200	944,850
Sungari Lower Stream District	83,410	177,270	30,770	8,730	34,550	412,700	747,430
Other Northern Districts	227,710	232,400	18,200	2,680	1,616,000	171,700	2,268,690
Total	938,350	1,610,470	282,540	89,460	2,068,300	3,274,800	8,263,920
Grand Total	1,605,270	2,437,990	742,700	478,740	2,640,560	7,507,190	15,412,450

The number of domestic animals in Manchoukuo is great as shown in the above table. The future prospect of the live-stock farming is very promising, because (1) Manchoukuo is sparsely populated and there is room for raising animals, (2) Manchurian people are a race that has very close relation with animals, and their agriculture is expected to develop with the use of domestic animals, (3) in regions which have not yet developed as purely farming districts there are vast areas of land suitable for raising animals, and (4) the abundance of fodder and pasture. But in order to achieve favourable development of live-stock farming, it is necessary to remove the following two great obstacles:

1. Poor quality of animals. Animals at present existing in Manchoukuo are mostly those that have survived the process of natural elimination, and they have the good points of standing coarse feed and abusive treatment, but their economic value is small as they have not been artificially selected.
2. Manchoukuo is a source of animal diseases such as are seldom seen in the world.

Improvement of species and prevention of animal diseases are indispensable factors to insure the future progress of the stock farming industry. Respecting these points, the S.M.R. Agricultural Experimental Station at Kungchuling and the Animal Diseases Laboratory at Mukden are making scientific experiments and also giving actual service, but further studies are regarded as necessary. (Regarding the live-stock farming policy of Manchoukuo, refer to the General Outline of Economic Construction program of Manchoukuo announced on March 1, 1933)

Principal Domestic Animals.—Cattle.—The cattle found in Manchoukuo are mostly Mongolian cattle, although in the eastern part of Fengtien Province there are some Korean cattle, and in the Kwantung Leased Territory some Shantung cattle. The producing centres of Mongolian cattle are Palinchi (巴林旗), Wuchumupi (烏珠穆沁), Arhkoerhchi (阿爾科爾旗), Chalute (札魯特), Talaihan (達賴罕), and other districts. Besides Mongolia, Kirin, Chinchow (錦州), and Chinchow (金州) are famous cattle producing centres.

The economic value of the Mongolian cattle is inferior as their rear part is undeveloped, but it is sturdy and gentle, lives on poor food, and also strongly resists disease. Consequently the Chinese keep cattle for farm work, while the Mongolians keep them for obtaining milk and also for work. The meat is not regarded as important, being considered only

a by-product.

Horses.—The so-called Chinese horses used in Manchoukuo are in reality Mongolian horses. Generally their stature is small, being about 1.3 metres high and weighing about 260 kilograms, and the shape is slightly different according to localities. The fore part of the body is low, and the middle is long, with sloping haunches and square shoulders. Thus they do not have a good appearance, but they are gentle in nature, and strong. They are capable of working long hours, and live on scanty, poor food.

Horses are mainly supplied by Mongolia; those supplied to Northern parts of Manchoukuo come from the districts around Hulunbuir and also from Outer Mongolia to the markets at Tsitsihar, Hailar, and Manchouli, while those supplied to southern parts of Manchoukuo come from Eastern Inner Mongolia. Of these horse supplying districts, Wuchumupi (烏珠穆沁) is most famous, and horses from this district are used for military purposes. Talaihan (達賴罕旗), Chalutewangchi (札魯特王旗), and Arhkoerhpiwangchi (阿爾科爾沁王旗) also are famous horse producing districts. Besides Mongolian horses, there are native horses produced in the Nungan and Changchun districts.

Donkeys.—Among the Chinese donkeys there are large and small species, but Manchurian donkeys are all of small species, being less than one metre in height and weighing about 130 kilograms. They are hardy and can exist on poor food. Their strength is great in proportion to their size. Not only are they used for farm work, but also domestic work and as pack animals.

Mules.—The mules generally produced in Manchoukuo are about 1.3 metres in height, and those produced in the Changchun district are about 1.4 metres high. Nunganhsien, Kirin Province, is the main mule producing centre, followed by Huaite (懷德) and Lishuhsien (梨樹縣), Fengtien Province; Changchunhsien, Kirin Province; and Hulanhsien (呼蘭縣), Lanhsihien (巴彥縣), and Payenhsien (蘭西縣), Heilungkiang Province. Mules are used for farm work and also as pack animals. They are sturdy and do heavy duty. They can be used for a long period, and as they are able to stand rough treatment, their price is higher than that of horses.

Sheep.—The sheep reared in Manchoukuo belong to the fat variety of the long-tailed species. The coat is a mixture of wool and coarse hair.

As sheep producing districts of Mongolia, Chienyang (乾陽), Talaihan

(達賴罕), Palin (巴林), Kolapi (喀喇沁), and Wuchumupi (烏珠穆沁) are among the most famous. In the pasture districts of Mongolia, there is no part that has no sheep.

The sheep in Manchoukuo and Mongolia are kept for obtaining meat and hides, and their wool and villoids are regarded merely as by-products. Consequently the quality of the wool obtained is very poor, inferior in tension and elasticity, containing much coarse and dead hair, and not uniform. As it contains sand and other foreign matter, the weight is irregular, and deals cannot be made smoothly. The wool is used only for making low grade rugs.

An attempt made at the Kungchuling Agricultural Experiment Station of the South Manchuria Railway to improve the wool of Manchurian sheep has succeeded, and it is proved that wool suitable for making clothing can be produced. The result of the improvement effected is as shown in the following table :

	Sex	Volume of Wool per head k.g.	%
Mongolian breed	Female	1.13	100.0
Merino-Mongolian cross-breed	"	2.26	200.0
Ditto, improved breed	"	2.71	240.0
Merino	"	6.18	547.0
Mongolian breed	Male	1.86	100.0
Merino-Mongolian cross-breed	"	3.88	209.0
Ditto, improved breed	"	4.51	242.7
Merino	"	8.02	430.9

Pigs.—Pigs are the most valuable domestic animals for the Manchurians. Manchurian farming households invariably keep scores of them. Pigs are sold at various shops, where also hogs are fattened. Thus pigs are produced and distributed everywhere, but the districts where they are produced in particularly large quantities are Kirin, Changchun, Tsitsihar, and Suihua.

Pasture Products.—The production of leather, hides and wool in Manchoukuo is not definitely known, but judging from the number of animals and the shipments of hides and wool, it can be assumed that the production reaches quite a large quantity. The production as estimated according to the shipments to important markets and the production conditions is as follows :

Table 32
HIDES AND WOOL PRODUCTION
(Hides in pieces: wool in kilogrammes)

Year	Sheep Hides		Goat Hides		Cattle Hides		Dog Hides		Cat Skins		Rabbit Skins		Wool
	Raw	Tanned	Raw	Tanned	Raw	Tanned	Raw	Tanned	Raw	Tanned	Raw	Tanned	
1926	109,250	2,450	240,150	1,250	159,500	4,100	540,800	4,500	90,100	2,300	422,000	4,000	2,350,000
1927	100,850	2,550	234,950	1,250	175,200	4,100	482,200	5,400	102,400	2,300	396,500	5,000	1,284,000
1928	101,500	2,500	224,900	1,500	145,100	4,100	442,300	4,000	113,750	2,300	384,600	5,000	1,257,000
1929	85,600	2,500	275,600	1,500	154,700	3,500	507,600	1,100	112,450	1,800	362,500	5,000	1,266,000
1930	131,395	157,766	18,615	112,150	187,355	192,817	200,336	419,532	31,148	134,900	27,085	244,320	830,655
1931	173,885	164,330	19,330	113,000	232,392	195,932	241,133	427,492	18,969	127,496	29,047	223,120	1,469,787
By Markets: (1931)													
Tashihchiao	—	—	—	—	250	330	—	—	—	—	—	—	811
Anshan	50	—	100	—	1,700	—	850	—	150	—	150	—	3,000
Liaoyang	—	1,500	—	2,500	—	—	—	26,000	—	8,000	—	5,000	—
Mukden	—	100,000	—	100,000	—	90,000	—	300,000	—	110,000	—	200,000	162,000
Tiehling	785	600	60	50	5,000	2,000	2,700	1,700	275	170	25	—	300
Kaiyuan	500	—	—	—	—	1,160	4,400	—	1,190	—	230	—	612
Changtu	320	—	120	—	—	410	3,500	—	600	—	250	—	390
Ssuingkai	500	—	300	—	1,300	—	8,000	—	1,900	—	300	—	600
Kungchuling	230	—	—	—	10,000	5,000	5,000	—	3,000	—	—	—	12,674
Hsinking	4,500	1,500	—	—	—	3,000	9,000	15,000	8,000	4,000	6,000	3,000	1,200
Yingkow	4,200	—	500	—	5,200	—	1,000	450	—	—	—	—	—
Penhsihu	—	—	1,500	—	850	—	1,200	—	300	—	112	—	—
Chengchiatun	6,000	4,000	6,650	350	2,092	232	1,983	142	904	226	4,980	3,320	24,000
Tsitsihar	1,800	1,500	100	100	6,000	3,000	3,500	1,200	200	100	13,000	1,800	7,200
Harbin	155,000	55,000	10,000	10,000	200,000	80,000	200,000	80,000	2,000	2,000	2,000	2,000	1,257,000
Kirin	—	—	—	—	—	5,000	—	3,000	—	3,000	—	8,000	—

Figures in the above tables are not for the production in the entire country. The figures for 1926-1929 are those shipped to the markets at Mukden, Hsinking, Yingkow, Chengchiatun and Taonan; figures for 1930 and 1931 are the production based upon the shipments to the detailed markets in the table.

The quality of the hides produced in Manchoukuo is not good, just as the wool is poor. Furthermore, the art of leather making is yet primitive, and good leather is not produced in Manchoukuo. Although the production of raw hides is large, the leather making industry is still undeveloped. Thus, while raw hides are exported, Manchoukuo imports finished leather.

The quantity of animal bones shipped to markets in Manchoukuo reaches from about 70,000 to 80,000 metric tons a year, and Chinchow, Mukden, and Dairen are the central markets.

The method of manufacturing bone meal is extremely simple, and this product has many advantages as fertilizer. Manchuria is very favourably situated for bone meal manufacturing, but at present the industry is much depressed.

Export of Pasture Products.—The live-stock resources of Manchoukuo are extremely rich, but as the qualities have not yet been improved, the utilization of hides and wool thus produced is greatly restricted, and also the market is limited. The export amount is only about 10,000,000 Haikwan taels. Among the important pasture products now being exported, hides (both raw and tanned) constitute the largest item with 5,500,000 Haikwan taels, and next come pig bristles, wool, horse hair, and bone meal. Other pasture products exported are small.

These exported pasture products are shipped to China, Japan, the United States, and European countries. Pig bristles and wool are mostly shipped to China, and hides mainly to Japan and the United States. Respecting the export amounts of important pasture products, refer to the Chapter on Foreign Trade.

* Agricultural Operation Zone

Manchuria has many different natural and social conditions according to various parts. For instance, the Kwantung Leased Territory, the southern end, has many harbours, and has been developed since very early days, and particularly since the leasing of the Territory by Japan commerce and industry developed and civilization advanced, under the good administration given by Japan. In the districts near the Kwantung Leased

Territory there was developed an intensive horticultural zone by Japanese and Hans. But in Mongolia, the Mongols are still leading a very primitive life, engaged in nomadic work. In the mountain districts of the Khingan Range, the remnants of the hunting races are yet to be seen. Thus the history of agriculture of several thousand years may be seen reproduced geographically in Manchoukuo. Therefore, in Manchoukuo are found several agricultural operation zones. By a general classification there are (1) intensive farming operation zone, (2) loose farming operation zone, (3) farming and pasturing mixed zone, (4) live-stock farming zone without pasturing, (5) pasturing zone, (6) farming and forestry mixed zone, and (7) forestry zone. (1) includes the Kwantung Leased Territory and the South Manchuria Railway Zone where Japanese and Hans are engaged in cultivating vegetables, fruits, and horticultural products, or cultivating tobacco, or engaged in the dairy industry; in short, this is the zone utilizing modern agricultural technique; the area cultivated by one household is very small, and farm distribution is also limited. (2) is found all over Manchoukuo, and the Eastern Inner Mongolia district bordering on Manchoukuo, operated mainly by the immigrated Hans; in South Manchuria maize, millet, kaoliang, and beans are cultivated alternately every three or four years, and in North Manchuria, kaoliang and soya beans are the main crops, and millet and wheat are alternately cultivated every three years; because of the cold weather in winter, only summer crops are produced, the per household cultivation area is much larger than in (1) and increases as it goes farther west. Classifying by provinces, it is found that the per household area is 2.957 hectares in Fengtien Province, 5.887 hectares in Kirin Province, and 8.709 hectares in Heilungkiang Province according to the Agriculture and Commerce Statistics of 1919. (3) is the unopened Mongolian lands (Chelimu (哲里木) League and southeastern parts of Chaowute (昭烏達) League) bordering on the open districts of Inner Mongolia, where the immigrated Hans and the Mongolians who learned farming technique from the Han farmers are cultivating cereals according to the fallow system while the Mongols are mostly conducting live stock farming by pasturing; this zone, however, is gradually becoming a farming zone with the increased settlement of Han farmers. (4) includes the district south of the eastern base of the Khingan Range, Chelimu League, and northwestern part of Chaowute League, where Mongols, forming villages, are raising cattle, sheep and horses by the pasturing system. (5) includes the west base of the Khingan Range, Hsilinkuole (錫林郭勒) League, and Outer Mongolia, where

Mongols are leading their primitive nomadic life, leading their cattle, horses, sheep and other animals. (6) and (7) are found in the Eastern Changpaishan (長白山) districts and northern Khingan Range districts, where forestry is the main work with the occasional addition of primitive farming called 'Brandwirtschaft'; those engaged in hunting also live in this zone.

Features of Agricultural Management

Features of agriculture in the farming zone are roughly as follow :

1. Management is loose. As the winter season is long and temperature falls much, the cultivation is done only for summer crops. Fertilizers are applied only once in two or three years in South Manchuria; in North Manchuria fertilizers are not used at all, or only a mixture of human and animal excrements with grass and earth is given once in three or four years. Chemical fertilizers are not yet used, it may be said. Particularly in northern parts, the land is very fertile and undeveloped areas are enormous, and as the population is scarce the management naturally becomes slack. The soil is adhesive and farming implements drawn by animals have to be used, but as the soil is dry, weeds may be easily killed by disturbing the earth between the furrows, and thus much labour is saved. Generally weeding or intermediate ploughing three times a season is sufficient. Implements used are crude, made by the farmers themselves of wood and stone, and only in a few parts is iron used. The investment in implements is small being only about 4% of the entire agricultural investment.

2. Soil nourishment is maintained by planting alternate crops, and despite the slack management as mentioned above, the per area harvest is quite large, being not inferior to that in Japan, famous for intensive cultivation. The harvest per area of soya beans and wheat is greater than in Japan. Compared with the figures for European and American countries the per hectare harvest in Manchoukuo is not at all inferior.

Table 33, (a)

MANCHOUKUO MAIN CROPS COMPARED WITH THOSE OF OTHER COUNTRIES

(in kilogrammes. average for 1926-29)

	Soya beans	Millet	Maize	Wheat	Paddy-field* rice	Upland rice*
Manchoukuo	1,247.6	1,582.4	1,389.7	1,670.9	1,029.6	1,825.6
Japan	1,080.6	1,482.1	1,580.0	1,600.0	1,847.3	866.9

* unhulled.

Table 33, (b)

(in kilogrammes average of 1923-1927)

	Wheat	Maize		Wheat	Maize
Manchoukuo	1,670.9	1,389.7	Norway	1,610	—
Germany	1,840.4	1,740	Netherlands	2,730	—
Austria	1,360	—	Poland	1,140	1,020
Belgium.....	2,620	—	Portugal	730	1,050
Denmark	2,660	—	Roumania	850	1,110
Spain	930	—	Sweden	1,980	—
France	1,400	—	Switzerland	2,170	2,770
England	3,200	—	Soviet	750	1,250
Hungary	1,280	—	Canada	1,230	2,540
Ireland	2,410	—	U. S. A.	970	1,710
Italy	1,200	1,690	Japan.....	1,600	1,580

Such good harvests in Manchoukuo are due to the facts that because of the extreme cold temperature in winter the weathering process is facilitated deep into the soil, and the soil is rich in potassium and sulphuric acid, while soya beans which increase the soil nourishment by securing the atmospheric nitrogen, kaoliang and maize which have long, slender roots, and millet which has comparatively short and compound roots, are alternately cultivated every three years, and thus the nourishment of the soil is maintained. It is almost unbelievable that in South Manchuria where the organic matter in the soil is extremely limited, the roots of kaoliang and millet are uncarthed in order to obtain fuel, and thus there is no prospect of restoring organic matter to the soil, yet the nourishment of the soil is not reduced even though such a method of cultivation has been followed a great many years.

3. Dry farming. Manchoukuo belongs to the dry zone or semi-dry zone, and the rainfall is small while the evaporation quantity is large. Excepting only small areas along rivers and streams, the majority of lands are cultivated as upland farms. Crops are kaoliang, maize, millet and wheat which stand dryness, or soya beans and groundnuts which have deep, long roots. Much attention is paid in cultivating the soil and managing the farms so as not to lose the moisture in the soil. Examining the agricultural method of the native people, it is seen that much care is first given not to err in selecting the time for planting. If the seed is planted late, the temperature rising and evaporating the moisture in the soil makes the soil too dry for the seeds to germinate. The ploughing is deep, the seed is planted immediately after ploughing, and then the soil is firmly pressed down so that the melting water in the lower soil is fully utilized. Weeding and intermediate ploughing are done two or three times per season to disturb the soil and thus to interrupt the capillary process in

the soil and prevent evaporation of the underground moisture, while keeping water from the weeds. After harvesting the soil is left without any ploughing until next spring. By these means, not only is evaporation of water prevented, but also the underground water is frozen immediately after the harvest by the sudden fall of temperature, and is retained until next spring. These are the special farming methods that the natives have evolved from their long experience.

4. Farming with aid of domestic animals. Working animals are indispensable to the Manchurian farmers. Because the soil is very adhesive it cannot be ploughed with hand-operated implements. In the dry zone, in order to retain the rainfall deep in the soil, and to prevent the evaporation of the underground water, it is necessary to plough deep with animal power. As the seed planting season in spring is very short, ploughing has to be done quickly. So ploughing with animal power is necessary. Domestic animals are used not only for such purposes, but also for drawing water, hulling cereals, transportation, and riding. Animals are very valuable for riding in the great plains of Manchoukuo where transportation facilities are limited. Then they perform the important task of drawing carts to transport agricultural products to market in winter. Animal excrement is utilized as fertilizer. Therefore in the labour required for one hectare of cultivated land, the portion done by animals is quite large, as in one year, 20 to 30 animals and 50 men are generally used for one hectare. The working animals are usually horses, cattle, mules, and donkeys. They are all mild in temperament and stand the cold climate. They have characteristics fitting the climate and natural conditions of Manchoukuo because of long natural selection. At the same time, the native farmers are quite skilful in raising and training them, utilizing to the utmost the special characteristics of each animal.

As the climate is extremely cold in winter, the people require heat-producing foodstuffs. As it is impossible to obtain fish, the demand for meat is great. Pigs, and chickens and other fowls are kept by utilizing the left-overs of farms and households for obtaining meat and also fertilizer. Also goats, sheep, honey bees, and watch dogs are kept by farming households. In this manner the number of domestic animals kept is large. In the farming and pasturing mixed zone, the pasturing zone, and the nomadic zone, the animals form the centre of management. According to the investigation of the North Manchurian Economics, made in 1922-23 by Shanoff, the domestic animals, kept by 70 farming households of the upper and middle classes in North Manchuria, averaged 7.7 horses, 1.7

mules, 0.7 cattle, 0.3 donkey, 1.1 cows, 0.5 calf, 7.5 pigs, 1.0 sheep and 0.4 goat, or a total of 20.9 animals, and 17.1 chickens and 2.3 ducks and geese, or a total number of 19.4 fowls for each household. The distribution of domestic animals according to households is as follows :

	Owning families	Percentage of the total number of families investigated		Owning families	Percentage of the total number of families investigated
Horses	69	99%	Sheep	2	3
Mules	39	56	Goats	2	3
Cattle	30	43	Chickens ...	69	99
Donkeys ...	15	21	Ducks	21	30
Pigs	68	97	Geese	7	10

Also he estimated that the animal labour annually required for one hectare is about 32 heads. In South Manchuria the animal labour required annually for one hectare is about 22 heads. According to the investigation made in the Kwantung Leased Territory in 1930, the number of domestic animals for 10 hectares is 1.54 cattle, 0.18 horse, 0.78 mule, 0.94 donkey, 6.91 pigs, 11.67 chickens, and 1.20 ducks.

5. Family labour management. The agricultural management in Manchoukuo is made on the foundation of the family labour. The scale of management is decided by the size of the family. The Han race is of the large family system, and often one family has quite a large number of people. Thus the area cultivated by one family sometimes reaches several tens of hectares, and such are called the great farming families. Actually they are jointly operated by the several families of the same blood. In such cases the distribution of labour and working efficiency is somewhat more rationalized than in the case of small scale farms. Even though the area for cultivation by one person increases, yet the labour of all the members of the family forms the foundation. Thus the per household cultivation area is not very large. The Agriculture and Commerce Statistics of 1918 give the following figures :

Table 34

PER FARMING HOUSEHOLD CULTIVATION AREA AND PERCENTAGE OF LARGE, MEDIUM AND SMALL FARMING HOUSEHOLDS

	Cultivation Area per one Farming Household (Hectares)	Small Farmer		Medium Farmer		Large Farmer	Total
		Under 0.6 (h.a.)	Above 0.6 (h.a.)	Above 1.8 (h.a.)	Above 3.8 (h.a.)	Above 6.8 (h.a.)	
		%	%	%	%	%	%
Fengtien	2.957	19.9	2.4	23.8	20.0	14.9	100
Kirin	5.887	17.2	15.3	24.3	21.4	21.8	100
Heilungkiang	8.709	5.8	9.8	16.3	22.9	45.2	100
Average	4.333						
Jehol Special District...	2.547	28.9	28.8	16.5	14.9	10.9	100
Total Average	3.992						

The above table will show that the per household cultivation area is much different between southern and northern parts of the country. In the districts along the railway lines in South Manchuria, the per household area is small being about 1 hectare. In the above table, of the total farming households, 80.6% in Fengtien Province, 78.2% in Kirin Province, 54.8% in Heilungkiang Province, and 89.1% in Jehol Special District belong to the medium and small farmers. The number of persons in one family averages 7 in the S. M. R. line districts, 7.5 in the Kwantung Leased Territory, and 8 in the average of 50 hsiens along the Chinese Eastern (North Manchuria) Railway lines in North Manchuria.

6. Great difference in seasonal business and leisure of agricultural labour. Cultivation is restricted to summer, as the spring and autumn seasons are extremely short. Temperature rises and falls suddenly, and seed planting and harvesting labour have to be done in a very short period. Thus in spring and autumn, the farmers are extremely busy. In the rainy season also they are busy weeding and ploughing because the growth of weeds is very rapid. But in winter no farming work is done as the farms are all frozen, and the farmers' most important task is to ship out their agricultural products. The shortage of labour in the busy season is met by medium and small farmers by mobilizing their women and children. The Han race has the custom that women and children do not engage in farming labour, and therefore their work is limited to the busy seasons. Large farming families hire men and do not use their women and children in such work. The extra labour in the busy season is supplied by the seasonal immigrant labourers coming from Shantung and also by poor native farmers. The monthly average of daily wages of the farming labourers employed at the Kungchuling Agricultural Experimental Station during the 14 years from 1918 to 1931 given below will explain the seasonal demand for farm labourers.

Month	Daily Wages	Month	Daily Wages
January	0.298 yen	July	0.385 yen
February	0.287	August	0.337
March	0.284	September	0.382
April	0.316	October	0.413
May	0.337	November	0.354
June	0.417	December	0.302

Facilities for Agricultural Progress

Agricultural facilities active at present are mostly operated by the South Manchuria Railway Company, and the Kwantung Government

is cooperating. The establishment of Manchoukuo is yet new, and the Bureau of Agriculture and Mining (農鑛司), the supreme organ for agricultural administration, and the agricultural sections in all provincial offices are now in the stage of drafting their plans.

Agricultural Facilities of the South Manchuria Railway Company.—The expenditure of the South Manchuria Railway Company annually for agricultural facilities, reaches a big amount. Even excluding the investments in affiliated agricultural companies, the amount of such expenses in the estimated account for 1932 reached about a million yen. Generally classifying the activities of the company's agricultural facilities, they are as follow :

1. Investigation and research works
2. Production and distribution of improved species
3. Agricultural guidance and assistance
4. Agricultural education
5. Agricultural management

For the activities mentioned in (1) to (3), there are maintained the Agricultural Experimental Station, Nurseries, Experimental Farms, Nursery Farms, Seed Farms, Sheep Breeding Farm, Pig Breeding Farm, Chicken Breeding Farm, and Animal Diseases Laboratory. To control these activities there is the Bureau of Agricultural Affairs, and also experts are stationed at various places to give necessary service. (4) is undertaken by the Agricultural Training Schools at Hsiungyocheng (熊岳城) and Kungchuling. (5) is done by the Toa Industrial Company (capital ¥10,000,000), and the Dairen Agricultural Company (capital ¥10,000,000) which are affiliated organizations of the S. M. R. Company. The activities of the principal ones of these facilities will be briefly explained.

The Main Agricultural Experimental Station at Kungchuling.—The Experimental Station established in 1913, is conducting various experiments, investigations and researches concerning the improvement and increased production of agriculture, live-stock farming and forestry, and is also raising improved seeds, saplings, and breeds. Important results obtained by the efforts of the Station include the improvement of the quality of soya beans, wheat, and upland rice, the raising of new varieties of sugar beets, and the improvement of sheep and pigs.

The Branch Agricultural Experimental Station at Hsiungyocheng.—The branch station was opened in 1909, and has obtained successful results in producing new paddy-field rice species and conducting experiments with fruit trees, cotton, and silk worms.

The Chengchiatung Experimental Farm.—Chengchiatun (鄭家屯) is situated at the entrance to Eastern Inner Mongolia, and is the centre of the agricultural zone of the district. The experimental farm is experimenting with soya beans, kaoliang, millet, lucerne and willow, and also raising new species of soya beans whose cultivation is encouraged. It was established in 1916.

The Fenghuangcheng (鳳凰城) Tobacco Experimental Farm.—At this farm the cultivation of American yellow tobacco is experimented in, and experiments in improving it are conducted. The results have been satisfactory and the farm is guiding the tobacco cultivation in the district. The farm was established in 1918.

The Liaoyangcheng (遼陽城) Cotton Experimental Farm.—A portion of the Liaoyang Nursery Farm established in 1911, became independent in 1928 as the Cotton Experimental Station. At the farm the experiments in cotton formerly made, have been greatly extended.

The Tangkwangtzu (湯崗子) Alkali Experimental Farm.—Since 1914, the farm is experimenting in the utilization of alkaline soil, and the relation between fertilizers and the alkaline soil. Also the farm undertook experiments in paddy-field rice, and confirmed that paddyfield rice has strong adaptability to alkaline soil. In Manchoukuo there is much alkaline soil, and in many places land is barren because of the strong alkaline content. The utilization and improvement of such alkaline soil is a serious problem for Manchoukuo. As in the neighbourhood of Tangkwangtzu there are many spots where alkali oozes out of the ground, the farm was established at this point.

Nurseries.—To plant trees in the South Manchuria Railway zone for fostering water resources, improving scenery, and for the sanitation of the inhabitants, the Railway Company first opened a nursery at Dairen in 1908. Later, nurseries were established at various places. Saplings produced at these nurseries are distributed for afforestation and also nurseries are conducting experiments in saplings for timber. At the end of 1931 there were 18 nurseries, established at Chousuitzu (周水子), Dairen, Wafangtien (瓦房店), Hsiungyocheng, Tashihchiao (大石橋), Yingkow, Anshan, Liaoyang, Mukden, Tiehling, Kaiyuan, Ssupingkai (四平街), Kungchuling, Tatun (大屯), Yungan (Fushun) (撫順永安), Hsintun (Fushun) (撫順新屯), Penhsihu (本溪湖), and Antung. The number of saplings distributed by the nurseries since their establishment reaches 73,800,000. Also at the nurseries at Wafangtien and Hsiungyocheng, fruit trees are raised and distributed. In a recent year, 15,000 apple

saplings were distributed.

Nursery Farms (for original species).—These farms were established for the purpose of producing and distributing new or improved species secured after study at the experimental stations. They are at Kaiyuan, Ssupingkai and Tatun, where superior species of soya beans and millet are raised and distributed.

Seed Farms.—Seed farms are at Tamuyutun (大木倉屯) and Fushun where the production and distribution of superior varieties of paddy-field rice are undertaken.

Sheep Breeding Farms.—Sheep Breeding Stations are maintained at Kungchuling, Lishantun (里山屯), and Shali (沙里). Superior sheep breeds are produced and distributed at these farms. At the end of 1931, the sheep kept at these farms reached 3,639 head.

Pig Breeding Farms.—There are 14 pig breeding farms, at Wafangtien, Anshan, Tiehling, Fushun, Chengchiatun, Tashihchiao, Liaoyang, Kaiyuan, Ssupingkai, Tatun, Penhsihu, Fenghuangcheng, Taonan (洮南), and Hailung (海龍). By crossing Berkshire pigs with the native breeds, improved breeds are being produced at these farms.

Chicken Breeding Farm.—It was established at the end of 1930 at Wafangtien, for the purpose of raising and distributing improved varieties of chickens to encourage the chicken raising which is conducted by Japanese in South Manchuria as a side or family business. The scale of the farm is small.

Animal Diseases Laboratory.—It was opened at Mukden in 1925 for conducting investigations into animal diseases, and also produces serums, vaccines and preventive medicines for animal diseases.

Meteorological Observatories.—Meteorological observation is conducted at all Agricultural Experimental Stations, Experimental Farms, and nurseries, but special observatories are established at various places where there is no such facility. At present such observatories are established at Taonan, Tsitsihar, Harbin, Tungwha (敦化), and Lishantun (里山屯).

Agricultural Training Schools.—These schools were opened at Kungchuling and Hsiungyocheng in 1928. At these schools Japanese and Manchurian young men desiring to engage in agricultural work in Manchoukuo are collected and given practical training in such matters. The expenses of the students are mostly paid by the schools. The term is one year at Hsiungyocheng and two years at Kungchuling.

Activities of the Bureau of Agricultural Affairs.—The Bureau of Agricultural Affairs of the South Manchuria Railway Company not only

controls all agricultural experimental facilities of the company, but also conducts various special investigations, gives direct and indirect financial aid to farmers, and guides them in managing their farms. The bureau is thus aiding and giving funds to paddy-field rice cultivation enterprises; is raising and guiding the cultivation of tobacco, cotton, hops (忽布), flax, lucerne and fruit trees; is leasing agricultural lands at low rents or giving funds to the operators of farms, pastures, and forests. The bureau also is giving various other facilities for the development of agriculture.

Activities of Affiliated Agricultural Companies.—Recognizing the need of developing agricultural companies of modern organization besides fostering the development of the former agricultural enterprises of the native Han people, in effecting the agricultural progress of Manchoukuo, the South Manchuria Railway Company invested in the formation of agricultural companies. These companies are undertaking modern agricultural management, but their results have been unsatisfactory, and at present the question of whether it is possible to expect any agricultural progress by this method is much discussed. One of the companies established by the Railway Company is the Toa Industrial Company, established in 1912 with a capital of ¥10,000,000 (¥2,500,000 paid-up), and the Toa Company undertook to operate farms to produce and sell agricultural products, banking affairs, and various enterprises in connection with farming, live-stock farming, and forestry.

The second of the companies is the Dairen Agricultural Company, established in 1929. This company does not directly operate farms, but bringing in Japanese immigrants made them land-owning farmers. The capital is ¥10,000,000 (¥5,000,000 paid-up). Buying private lands and leasing Government lands, the company adjusted and divided them and settled Japanese immigrants upon them. The Company is also advancing or supplying funds and goods to these farmers, as may be necessary for the operation of their farms. But it has not yet shown any satisfactory result.

Facilities by the Kwantung Government.—Japanese administration was first applied to the Liaotung peninsula, the southern end of Manchuria, in 1905, during the Russo-Japanese war. At first the administration was under the control of the Army, and undertook only the maintenance of peace in the Kwantung territory. The origin of the administration for fostering agricultural progress was laid by issuing the regulations of the Kwantung Government-General Agricultural Experimental Station in November, 1906, and the establishment of the Agricultural Experimental

Station at Dairen. The facilities which are active at present are as follow.

Kwantung Government Agricultural Experimental Station.—Established in 1906, it is now located at Chinchow (金州), and its activities are experiments and studies regarding agricultural products and pasture products, analysis and examination concerning agricultural and pasture products, distribution of seeds, saplings, animal breeds, fowl breeds and grass-plants, lending breeding fowls and animals, and lectures and practice in agriculture and stock farming.

Sericultural Experimental Station.—Established in 1917 at Port Arthur, the station distributes mulberry saplings and silk worm eggs, conducts experiments and investigations, and gives lectures and training courses.

Nursery Farms.—The nursery farms of the Kwantung Government were opened in 1907, to guide the afforestation work in the territory. They are at present located at Port Arthur, Dairen, and Chinchow. Also there are 32 nurseries conducted by autonomous bodies, to which the Kwantung Government gives subsidies. These nurseries raise and distribute saplings for afforestation to foster water sources, and to produce timber. The distribution is made free of charge.

Kwantung Government Stud Farm.—It was established at Chinchow in 1916, with the object of improving horses in the Kwantung Leased Territory and the South Manchuria Railway zone. Studs are sent to breeding stations in the Kwantung Leased Territory and the South Manchuria Railway zone, south of Mukden, for breeding purposes, and also the farm conducts various experiments.

Meteorological Observatories.—The observatories were established at various places in Manchuria in 1904, and at present there are five observatories at Dairen, Port Arthur, Yingkow, Mukden, and Hsinking which are engaged in meteorological observations.

Chinchow Agricultural School.—This school was established by the Kwantung Government at Chinchow in 1913, and gives agricultural training to both Japanese and Manchurians.

Other Activities of the Kwantung Government for Fostering Agricultural Development.—The Kwantung Government established the above-mentioned facilities for conducting various investigations and studies, for giving advice and subsidies, and for giving agricultural education, but besides these, the Kwantung Government has numerous officials and also is giving subsidies, for the improvement and progress of agriculture in Manchoukuo, at a large annual expenditure.

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Forest of Hsin-kai-ling.

CHAPTER XI

FORESTRY

Forest Area and Timber Species.—The territory of Manchoukuo is considered as a remnant of the great forest zone that once extended through North China, that is to say, a remaining part of the vast, dense forest that extended in a wide sweep from India to the eastern coast of China, and then through Hopei (河北) Province and Shanhaikwan (山海關) to Siberia. In the reign of the Manchu Government of China, Manchuria being the home of the Manchu dynasty, it was regarded as the territory of that imperial house, and timber-cutting and land cultivation were prohibited from the Chienlung (乾隆) period. Later, however, the land was opened to cultivation and utilization. Fertile flat and sloping lands were subsequently developed as agricultural fields, while great forests were seriously damaged by fire. But magnificent virgin forests still exist in North Manchuria, "Seas of Forests" as they were called by the Tunguse race in early days.

The Manchurian forests extend from the northern section of the Temperate Zone to the Frigid Zone, and lie in the same latitude as Hokkaido, Japan, or the State of Washington, U. S. A.

An exact survey of the forest lands of Manchoukuo was prevented by the insufficient facilities for maintaining peace and order, and by the extremely disorganized administration; and the vastness of the area, further, made any attempt at a survey impossible.

The Government of Manchoukuo has not yet undertaken any investigation of the forest lands as its establishment is yet new, although entertaining the desire to make a thorough study of them.

According to estimates made by the Agricultural Bureau of the South Manchuria Railway Company, however, the forest lands in Fengtien, Kirin and Heilungkiang Provinces total 359,000 square kilometres, or 31 per cent of the entire area of the three provinces. The standing timber in these three provinces is estimated at 4,172 million cubic metres. The species of timber are quite numerous, useful varieties reaching 29 different kinds.

Needle-leaved species constitute about 40 per cent of the timber, and of these, eight important species are Korean pine, Korean fir, Korean silver fir, spruce, larch, Korean larch, abies sibirica, Ledeb and Manchurian red

pine. Among the needle-leaved species, Korean pine, fir, and spruce are particularly numerous. There are 21 principal broad-leaved species, among which lime, oak, and birch are most numerous.

The principal forest zones in Manchoukuo are as follows:

1. The great forest zone on the right bank of the Yalu River and along the Hunho (渾河) River, at the base of the Changpaishan Range. Fine forests on the right bank of the Yalu River are located in the upper regions of various branch streams between Maoerhshan (帽兒山) and Erhshihssutaokou (二十四道溝). The timber species change from the broad-leaved to the needle-leaved as the forest goes farther from the Yalu River into the interior.
2. The great forest zone extending from the Tumen River district to Laoyehling (老爺嶺), Kirin Province, commonly called the Chientao forest zone. Estimating the standing timber volume, there is more of the broad-leaved species than of the needle-leaved, the former taking up 62 per cent and the latter about 38 per cent. Good forests are found at Hunchun-hsien (琿春縣), and Wangching-hsien (汪清縣).
3. The forest zone along the upper stream of the Sungari River, of which one end connects with the Changpaishan Range and the other reaches Kirin and Hata (哈達), extending over five hsien of Kirin and Fengtien Provinces. In these districts, the virgin forest of Mengkiang-hsien (濛江縣) is regarded as promising. Throughout this zone, the timber species are almost the same as in the Chientao forest zone. The broad-leaved species take up about 55 per cent and the remaining 45 per cent consists of the needle-leaved species.
4. The forest of the Hurka Valley, beside the Hsiaopaishan, Mukotehsiangshan (穆克特享山) and Wantashan (完達山) Ranges, and extending from Tunhwa (敦化) in the south to Sansing (三姓) in the north. In this zone, the needle-leaved species are more numerous than the broad-leaved.
5. The forest of the Lalin (拉林) River valley, commonly called the Ssuhochuan (四合川) forest zone.
6. The forest along the eastern line of the North Manchuria Railway between Pogranichnaya on the border of the U. S. S. R. Littoral Province and Harbin. The topography of this district is complicated on account of the various spurs of the Changpai-

shan Mountain Range, compared with the western regions. The timber species along the railway line are greatly varied, numbering about twenty. In the entire zone, the broad-leaved species take up two-thirds of the forest.

7. The Sansing district in the northern part of Kirin Province, enclosed by the Sungari, Amur, and Ussuri Rivers, extending northward to the junction of the Amur and the Ussuri. This district, extensive in area, possesses splendid virgin forests in various parts. But because of the lack of transportation facilities, only the Laoyehling (老爺嶺), Amutashan (阿穆達山), and Lungchaokou (龍爪溝) districts of Fangcheng-hsien (方正縣) are regarded as promising areas at present. The broad-leaved species constitute about 65 per cent of the standing timber, on the whole.
8. The Great Khingan Range district, a large forest zone covering the main and branch ranges of the Great Khingan, starting at the Taorho Valley and Soyoerhchishan (索岳爾濟山) Mountain in the south, and following the western line of the North Manchuria Railway to the bank of the Amur in the north.
9. The Small Khingan Range district, a forest zone adjoining the Great Khingan Range and running along the Amur south-eastward to the main stream of the Sungari.

The volume of standing timber in these forest zones ranges from 9,800 to 18,600 cubic metres for each thousand square kilometres. It is excellent timber, about 200 years old, more than three feet in diameter, and more than 90 feet in height.

Manchurian timbers are extensively utilized, and not only are used as building material and for manufacturing furniture, but also are widely used in ship-building, box-making, and axle-making, as well as for manufacturing paper and wood veneer.

The forests of Jehol Province have not yet been surveyed or investigated, but this province has no prospect of development except in livestock farming and mining.

Brief History of the Forestry Industry.—The history of exploiting the forests of Manchuria dates back more than sixty years, but it was only after 1870 that any systematic attempt in forestry enterprise was started. In 1877, the Lumber Tax Office (木稅局) was established at Tatungkou (大東溝) in the Yalu River district of South Manchuria. At that time, the Manchu dynasty encouraged lumbering as a means of increasing its annual revenue, and under this policy, Tatungkou became the great

centre of lumber supply to North China. Later, in 1890, Russia formed a lumber company in the Yalu River district. A Japanese lumber company also was established in competition with the Russian organization. But after the Russo-Japanese War, the lumbering right in this region was given to the Yalu Timber Company (鴨綠江採木公司), then a joint Sino-Japanese enterprise.

Lumbering was long prohibited in Kirin Province, but with the increase of immigrants from Shantung entering the district, this prohibition was not continued. Gradually the forests were divided and privately owned forests came into existence. Already in 1907, a lumber company was established by the authorities of Kirin Province. Later, and especially during the Great War, several large lumber companies were organized with Japanese and Chinese capital.

The forests standing along the North Manchuria Railway (Chinese Eastern Railway) lines were first utilized in the construction and operation of the railway. The North Manchuria Railway obtained the supply of lumber for building and other purposes, and fuel, from these forests. Also, the company gave various facilities for the development of lumbering enterprises in these regions with a view to encouraging the settlement of Russians along the railway lines. As a result of this policy, the forests leased by Russians and the North Manchuria Railway Company itself are most numerous in this forest zone.

The lumbering industry of Manchuria became suddenly active during the Great War, and absorbed a vast amount of native and foreign capital. But at present, lumbering enterprises, either under foreign capital or native capital, are suffering from depression. Various causes may be mentioned for this depression.

After the abrupt and extraordinary increase of lumber demand during the Great War, there followed a sudden decrease in demand with the close of the war; this is one of the great causes for the present depression. Another important cause is the management policy of the lumbering enterprises, which is based upon the conditions of the boom period. At the same time, the oppression of the Mukden Government cannot be overlooked. The former Three Eastern Provinces' Government, desiring only to regain lost rights, denied lumbering rights to foreigners, and also took measures to close lumbering works operated by provincial banks. Furthermore, the government increased the taxes on lumber; for example, Kirin Province made the total tax on lumber more than 30% ad valorem by levying additional taxes that reached the same amount as the original

lumber tax. In addition, the railway freight rate was increased, while peace and order were not maintained—these conditions also helped the industry to the present depression.

On the other hand, the former government of Manchuria gave no attention to the development or protection of forests. The loan of 30,000,000 yen made by the Japanese Government in 1918 for the purpose of developing the forests and mines of Kirin and Heilungkiang Provinces was wasted by the Peking Government in waging civil wars. Meanwhile, the forests and forestry industry of Manchuria were left unprotected and unaided.

Present Condition of the Forestry Industry.—From the foregoing facts, it may be seen that despite the existence of enormous forest resources and the great possibilities of their utilization, the forests of Manchoukuo are not developed, except in a limited section. The present condition of lumber production further proves this. The lumber production districts are mainly divided into the Yalu River district, Kirin district, Chientao district, and North Manchuria district. But the total production of all these districts averaged only 1,096 thousand cubic metres per year in the seven years from 1925 to 1931.

Manchoukuo, being a great forest country, is showing an export surplus every year in the lumber trade, but as the lumber production is still limited, the export amount is naturally small.

The operating methods in the forestry industry of Manchuria have been extremely primitive, due to the absolute rejection of foreign capital as already explained. Furthermore, as the railway freight rate is high and transportation facilities are limited, the markets in South Manchuria are being gradually encroached upon by American lumber as well as lumber from the U.S.S.R. Littoral Province.

The present condition of the industry according to various production districts is as follows:

Forests of the Yalu River Valley.—The forests of the Yalu River Valley, of which those on the right bank belong to Manchoukuo and those on the left bank to Korea, are mostly deciduous, with a sprinkling of evergreens. The Yalu timber trade is supplied from this locality.

This forest zone was for a long time neglected by the Chinese Government, and Russia was the first to attempt its exploitation as she advanced eastward, by forming a timber corporation in 1902. In the following year, a joint Sino-Japanese company was established, and these two organizations became rivals, reflecting the antagonism, which existed between the

two countries, i.e., Japan and Russia. Later, however, in accordance with the Sino-Japanese Treaty concluded after the close of the Russo-Japanese War, the present Yalu Timber Company was established in 1905 with a capital of 3,000,000 yuan, Peiyang silver.

The Yalu Timber Company (鴨綠江採木公司) is a joint enterprise of the Japanese and Manchoukuo Governments, possessing the lumber rights in the vast district which extends for a distance of 193 kilometres from Maoerhshan (帽兒山) on the right bank of the Yalu to Ershihssutaokou (二十四道溝). Besides the lumber rights above-mentioned, the company also has the sales monopoly over timber felled on the Manchurian side of the Yalu, outside the above-mentioned district.

The lumber market of the Yalu River Valley existed formerly at Tatungkou, but with the establishment of the Yalu Timber Company at Antung, and the Forestry Bureau of the Korean Government at Shingishu, the marketing centres moved to Antung and Shingishu, Antung practically becoming the greatest lumber market in the Yalu Valley.

The lumbering industry of the Yalu River Valley is centered at Antung (安東). The Japanese lumbering enterprises at Antung consist of 21 mills, with a total capital of ¥3,260,000, the Yalu Lumber Company (鴨綠江製材公司) being the most prominent.

The present markets for uncut lumber are Tsingtao, Tientsin, and Chefoo, while the markets for sawn lumber are Korea, Mukden, Fushun, Yingkow and other South Manchurian points. But the markets for the Yalu River lumber are at present suffering from considerable depression because of the general economic depression.

Forests of Kirin-Tunhwa District.—In this district are included the Sungari River basin and the western slope of the Hurka River Valley. In the northern part, there are magnificent forests of broad-leaved trees, and in the southern part mixed forests. The forests of this district show the greatest volume of standing timber for area among all the forests of Manchoukuo. Formerly the lumber of this district was shipped by the Sungari River, but since the opening of the Kirin-Changchun Railway in 1912 and the Kirin-Tunhwa Railway in 1928, shipment has been greatly facilitated, and not only has the lumbering area increased but also the markets in South Manchuria have been greatly developed.

In this district there are many lumbering enterprises in which Japanese capital is invested. The most important is the joint Japanese-Manchurian enterprise under control of the Kyoyei Kigyo Kaisha (共榮企業會社) which is divided into the Funing-kungssu (富寧公司), Huangchuan-

kungssu (黃川公司), Huasen-kungssu (華森公司), Fengtsai-kungssu (豐材公司), and Hsinglin-kungssu (興林公司). The lumbering area of these five companies totals 6,814 square kilometres. These timber lands were obtained since 1917 partly independently and partly as security for loans made to the former government.

But as these lumbering rights were greatly constricted by the former government, and also the development of the industry was seriously hindered by the extremely high lumbering tax or such a high railway freight rate as 3 sen per kilometre ton, despite the favourable prospects of the lumbering industry in this district, its progress has been slow. As the Hsinking-Tumen Railway was opened to traffic in 1933, it is expected that the lumbering industry of the district will be greatly improved in future, with the enforcement of the policy of the new government.

Forests of the Chientao District.—The forests along the Tumen (圖們) River constitute this district. The timber species are not much different from those of the Yalu River Valley. Lumber from this district finds markets in Korea and North China, the Seishin region of Korea being the central market.

As the Hsinking-Tumen Railway has already been opened to traffic, and transportation across the Sea of Japan is now being perfected, the forests of this district are expected to show some development in future as the forests of the Chi-tung district are doing. In this district are the Funing-kungssu (富寧公司) and other lumbering enterprises, in which Japanese capital is invested.

Forests of North Manchuria.—The North Manchuria district includes the forests along the North Manchuria Railway, and the forests of the Lalin (拉林) River Valley. The lumber rights in it are mostly in the hands of the North Manchuria Railway and Russian operators, and were obtained prior to the Russian revolution.

The lumber of this district is consumed mainly by the North Manchuria Railway, and it also controls the markets at Harbin, Tsitsihar and other North Manchuria centres. The demand in the Harbin district is mainly supplied by lumber produced in the forests along the eastern line of the North Manchuria Railway.

Among the lumbering enterprises operated by Russians along the eastern line of the North Manchuria Railway, there are those operated by Kavarusky, Skydelsky and others. Of those operated by Japanese there is the Nakashoji-kungssu (中東海林公司).

In the Sansing district extending from the lower stream of the Sungari

River to the confluence of the Ussuri, Amur and Sungari Rivers, and the North Manchurian districts of the Great and Small Khingan Ranges, there are yet vast virgin forests that have not yet been touched, only limited sections being locally utilized. In the Great Khingan Range, however, the Chamien Lumber Company (札免公司) was established in 1922 under the joint capital and management of Japan, China, and Russia. But since 1925 there have been controversies between the former Manchurian government and Shefchenko Bros. respecting the lumber rights and investments, and at present no lumbering work is done, although at one time the Japanese side started to undertake lumbering on a small scale.

Along the western line of the North Manchuria Railway, there are many forest lands leased by Russians, among which may be mentioned the Wolontzoff and Yeshimaheff forest lands.

Forestry Policy of Manchoukuo.—Manchoukuo is yet new and is busily engaged in adjusting and improving various administrative facilities. The Government is giving special efforts for the industrial development of the territory as shown in the accounts of other Chapters.

The fundamental policy the Government has adopted in respect to the forestry industry aims:

1. To preserve and protect forests by prohibiting reckless felling, encouraging protection and afforestation, and adopting rational management.
2. To adjust forest land rights in the next five years, by suspending the issue of forest land rights for the present.

Under the former government, no systematic facilities were given for the protection and improvement of forests, and also respecting the exploitation of forest resources, no steps were taken, except oppressing and hindering the investment of foreign capital. The value of forest resources can only be increased by making proper periodical felling and adjustments, and also supplementation. Thus it is quite natural that the new Government of Manchoukuo has based its basic policy on this point.

Then, regarding the forest land rights, the areas formerly designated are quite vague, and consequently there were cases of two or three different rights being issued to the same area. In planning for the development of the forestry industry, it is proper for the new Government to adjust the formerly issued forest land rights.

Under these policies, it is reported that the Manchoukuo Government has decided to unify all forest lands situated in the districts along the Hsinking-Tumen Railway, where the existing forestry companies are

centered and the rights and interests have been most complicated in the past, and to establish a great forestry and lumbering company under a joint Japanese-Manchurian management.

The proposed company is to be formed by preferential investment by Manchoukuo, the South Manchuria Railway Company, and the holders of the existing forest rights. By the establishment of the new company, all forest rights held by the Kyoyei Kigyo Kaisha and other Japanese companies in this district will be unified.

In such a manner, the forestry industry in Manchoukuo will be practically controlled and unified by the new company, the Yalu Timber Company (joint Japanese-Manchurian management), and the Nakashojikungssu (joint Japanese-Manchurian management). It is also reported that strict control will be exercised over the exploitation and utilization of the State-owned forests in the future.

To mention the plant nursery farms in Manchoukuo, the South Manchuria Railway Company operates 16 nursery farms, with a total area of 149 hectares, along the railway lines, and Manchoukuo has 18 nursery farms, totalling 248 hectares in area, belonging to State railways, and also other nursery farms operated by provincial and hsien governments, totalling 200 hectares in area. But the work of afforestation is not yet making much progress.

In the market of the Orient, Japan and China are both great lumber consuming nations. In Manchoukuo, on the other hand, the distance from the Kirin district to seaports has recently been shortened to two-thirds of the former distance, by the opening of the Hsinking-Tumen Railway, and the forests along this railway line total in area to 11,000 square kilometres, with an aggregate volume of standing timber estimated at two hundred million cubic metres.

With favourable lumber markets near at hand, and with an enormous volume of standing timber within the country, the forestry industry of Manchoukuo is bound to show its value when the world economic condition is restored to normalcy and the demand for lumber increases.

Forests of Kwantung Leased Territory.—The forests and wild fields of the Kwantung Leased Territory comprise at present 939 square kilometres. The reckless cutting of timber in the past centuries, uncontrolled grazing of animals on forest lands, and frequent forest fires have turned many mountains in the territory absolutely bare of trees.

Since the territory came under Japanese control after the Russo-Japanese War, attention has been directed by the Japanese authorities to

the preservation and protection of forests, and to afforestation. Government afforestation has commenced, and gradually the formation of commercial forests is being planned. The Government also encourages afforestation by local communities and individuals. Thus the forest area has increased to 934 square kilometres.

In the South Manchuria Railway Zone, the Railway Company has been encouraging afforestation by maintaining nursery farms of saplings, and is giving aid toward afforestation undertaken by Manchurians both in and out of the Railway Zone.

Table 1

FOREST AREA AND STANDING TIMBER IN MANCHOUKUO

Forest Area (sq. kilometres)	Estimated Standing Timber		Principal timber species	
	(cubic metres)	(cubic metres per sq. kilometre)		
Right Bank of the Yalu and the Hunho valley...	8,957	100,824,000	11,256	Korean pine, Korean fir, Korean larch, silver-fir, maple, birch, oak, ash Doronoki.
Sungari valley	14,249	243,213,000	17,069	
Tumen valley	8,256	116,982,000	14,169	Korean pine, fir, spruce, larch, lime, oak, elm, ash, birch.
Hurka valley	6,297	117,135,000	18,602	
Lalin valley	6,285	83,615,000	13,463	Korean pine, fir, spruce, maple, birch, Doronoki, elm, ash, Siberian cork-tree, Man- churian walnut.
North Manchuria Railway Eastern Line district...	24,151	249,964,000	10,383	
Sansing district.....	52,472	727,746,000	13,869	Korean pine, fir, spruce, Siberian cork-tree, ash, birch, oak, lime.
Great Khingan Range...	138,843	1,558,282,000	11,223	Larch, Japanese birch, Sibe- rian red pine, willow, alder.
Little Khingan Range...	99,174	973,926,000	9,820	
Total	358,684	4,171,687,000	11,631	

Table 2

ANNUAL LUMBER PRODUCTION IN MANCHOUKUO

	(cubic metres)						
	1925	1926	1927	1928	1929	1930	1931
Yalu lumber	537,793	347,029	534,250	393,091	264,050	245,537	405,827
Kirin lumber.....	304,442	125,748	161,495	277,430	290,100	282,439	273,796
Chientao and Hunchun lumber.	157,367	60,831	93,564	133,066	103,180	74,437	89,265
North Manchurian lumber	391,288	406,007	291,893	620,781	413,146	256,755	140,524
Total	1,390,890	939,615	1,081,202	1,424,368	1,070,476	859,168	909,412

Table 3

AREAS OF FORESTS AND AFFORESTATIONS IN KWANTUNG
LEASED TERRITORY

(in hectares)

Year	Natural Forests.			Afforestations		Total
	Owned by Government	Owned by Individuals	Total	Owned by Government and public organizations	Owned by Individuals	
1927	78,433	15,690	94,123	1,108	798	1,906
1928	78,433	15,690	94,123	1,395	1,157	2,552
1929	78,359	15,531	93,890	1,289	706	1,995
1930	78,359	15,531	93,890	1,428	649	2,077
1931	77,963	15,395	93,358	1,448	971	2,419

CHAPTER XII
AQUATIC PRODUCTS INDUSTRY

Fisheries

In proportion to the vast area of Manchoukuo, its coast-line is extremely short. The waters are not suited for the habitation of fish as there are only small bays at various points which easily freeze in winter on account of their shallowness. Moreover, the transportation facilities to the consuming markets being imperfect, the aquatic products industry of Manchoukuo has not yet developed. But the Kwantung Leased Territory at the southern end of Manchuria is particularly favoured for this industry, and having important consuming centres near at hand, the fisheries have made fair development from an early period.

There are numerous rivers and lakes in Manchoukuo, and the production of fresh water fish reaches quite a large amount. In the northern parts of Manchoukuo, far from the sea, fresh water fish occupies an important economic position.

The aquatic product districts of Manchoukuo may be divided into the following :

- A. Coasts of the Yellow Sea and the Gulf of Pechili.
- B. Kwantung Leased Territory.
- C. River and lakes.

Fisheries on the coasts of the Yellow Sea and the Gulf of Pechili.—

The Yellow Sea is really a huge gulf, and the Gulf of Pechili is a portion of its upper end. Both the Yellow Sea and the Gulf of Pechili are shallow, and the greatest depth within a line drawn from the tip of Shantung peninsula to Taiseito Island, Chosen, is about 70 metres, while the Gulf of Pechili is generally about 55 metres deep. The bottom of these seas is flat, as though the plain of Manchoukuo had been submerged. The bottom is generally covered with sandy mud. Into the Gulf of Pechili run the Liaoho, Paiho, Huangho and numerous other rivers of all sizes, and the Yellow Sea, also, has the Yalu and other rivers. Consequently the sea water is generally of low salinity. Cold and warm currents do not exist in these seas, and there are only local currents and tidal currents causing the movement of the sea-water. In short, these seas are shallow and appear

as if they were lakes. When the wind blows the seas are disturbed to their bottoms, and the sea-water turns yellowish as the name, Yellow Sea, indicates. In both summer and winter they are sensitive to the effect of the atmospheric temperature, and the rise and fall of temperature are great.

These topographical and other natural conditions restrict and characterize the habitation of fish. Fishing is not done in the Gulf of Pechili in winter as it is believed that the fish do not remain there in the cold weather, moving to other regions, but when the spring season comes and the temperature rises, it becomes the spawning area of sea-bream and guchi. In the Yellow Sea region, as the temperature rises, Spanish mackerel, *Scomberomorus niphonius*, sardines, and other warm water fish are caught, but when the temperature falls, varieties that favour cold water, such as cod, come up to the shore. The gathering, departure, and movement of fish are constantly seen, according to the characteristics of the different varieties of fish. Thus the method of fishing also changes according to the fishes' movement and the sea's condition. The fishing methods besides line-fishing are few, including wind-netting, set-netting, and drag-netting. The annual catch is small, being worth about two or three million yen a year.

The fishing methods used in this district are primitive. Bottom-netting by motor boats which has recently much developed off the Kwantung Leased Territory and the coast of Shantung peninsula has not developed in these waters. The causes for the undeveloped state of the fisheries include the low grade of culture of the fishermen, their lack of economic power, imperfect fishery policy, and disadvantageous geographical conditions, the last mentioned being considered the most important cause. Furthermore, along the coasts of these seas there is no good harbour permitting free entrance of fishing boats because of the existence of the wide ebb tide zone running two or three nautical miles, which is almost dry at ebb tide. Even at Antung and Yingkow which have good land transportation connections and consuming markets near at hand, boats have to pass through the dangerous river mouth region and go up-river for considerable distances, and moreover the harbours are frozen for three or four months in winter.

All statistics respecting the aquatic products industry of Manchoukuo being imperfect, it is impossible to give reliable figures, but along the coast of the Yellow Sea, a distance of 240 kilometres from Tatungkou (大東溝) in Antung-hsien to Chien-shantzu (尖山子) in Chung-hsien (莊河縣), there are about 2,500 fishing households with a population of about

7,500 who are mostly engaged in both agriculture and fishery; 393 large junks and 2,100 small sampans; and the value of the annual catch is estimated at about ¥350,000. Along the coast of the Gulf of Pechili, a distance of 600 kilometres running north from Fuchow (復州) on the boundary of the Kwantung Leased Territory to Kaiping and west from Yingkow to Panshan (盤山), Chinchow (錦州), and Suichung (綏中), there are about 1,400 fishing households with a total population of about 8,300; large junks numbering 230 and 1,200 small sampans; the value of the annual catch is estimated at about ¥1,000,000.

Table 1

FISHERIES ON THE PECHILI COAST*

Districts	Fishing Households	Fishing Population	Number of Vessels	Value of Fish Caught (Yen)
Coast of Fuchow	230	1,500	250	85,000
Coast of Kaiping	247	2,300	350	199,000
Coast of Yingkow District	534	2,980	550	586,000
Coast of Chihnsien District	392	1,550	280	137,000
Total	1,403	8,330	1,430	1,007,000

Table 2

QUANTITY AND VALUE OF FISH CAUGHT ON THE YELLOW SEA COAST**

	Quantity (Metric tons)	Value (Yen)
Sea-slug	3	6,000
Grey Mullet.....	27	5,000
Whitebait	2	200
Sea-bass	33	6,050
Oyster	300	30,000
Shellfish	60	21,000
Hair-tail	33	4,400
Shrimp	150	150,000
Crab	30	1,000
Others	1,050	127,500
Total	1,688	351,150

Fisheries on the Coast of Kwantung and Surrounding Seas.— Though the area of the Kwantung Leased Territory is only 3,500 square kilometres, its coast-line, including islands, stretches for 1,300 kilometres. The coast is, furthermore, highly indented. The eastern coast is on the

* Reported by Yingkow Consulate in 1924.

** Reported by Antung Consulate in 1924.

Yellow Sea, and the western coast on the Gulf of Pechili. Thus the Kwantung Leased Territory is situated in a favourable position for fishing in both the Yellow Sea and the Gulf of Pechili. There being abundant fish, the Kwantung Leased Territory coast is the best fishing locality in Manchoukuo.

It was, however, after the conclusion of the Russo-Japanese War when Japanese fishermen began to operate on the Kwantung coast, that the fishery industry made notable progress. Prior to that time, the fishery administration was not sufficiently enforced and there were no facilities for fishery activities. Furthermore, the fishing enterprise was not soundly established, and native fishing methods were inadequate. Consequently the industry was quite primitive.

For instance, when the amount of fish caught in 1905, immediately after the Kwantung Leased Territory was placed under Japanese control, is compared with the present quantity, only some 25 years later, it is seen that the quantity increased from 1,400 metric tons to 35,000 metric tons, while the value increased from ¥170,000 to more than ¥4,000,000.

But judging from the conditions and fish habitation in the Yellow Sea, the Gulf of Pechili, and the eastern Sea of China, the fishery industry based in the Kwantung Leased Territory has made only its initial development. When fishing equipment, fishing methods, and fishing boats are improved, and new fishing grounds are exploited, its future development is expected to be immense.

The fisheries of the Kwantung Leased Territory mean not only the fisheries along its coast, but also include the fishery activities conducted with the Kwantung Leased Territory as the base of operations.

The foremost fishery base in the Kwantung Territory is Dairen, followed by Port Arthur; other bases are Yingchengtzu Bay (營城子灣), Shuangtao Bay (雙島灣), Yangtouwā Bay (羊頭窪灣), Hsiaopingtao (小平島), Laotientan (老店灘), Takushan (大孤山), Kuanglutao (廣鹿島), Changtzutao (獐子島), and Haiyangtao (海洋島). Of these bases, those allotted to Japanese fishermen are limited to Dairen, Port Arthur, and Laotientan.

Fishermen and Fishing Boats.—According to the statistics compiled by the Kwantung Government, the number of fishermen and fishing boats and equipment in the Kwantung Leased Territory are as shown in the following Tables 3, 4, and 5. The Japanese fishermen are those permanently residing within the Kwantung Leased Territory, and those coming temporarily from Japan proper are not included. Fishing boats and equipment

coming temporarily from Japan proper likewise are excluded from the following :

Table 3

	NUMBER OF FISHING HOUSEHOLDS						Grand Total
	Wholly engaged			Partially engaged			
	Japanese	Manchurian	Total	Japanese	Manchurian	Total	
1927	92	4,975	5,067	6	3,621	3,627	8,694
1928	73	5,105	5,178	8	3,710	3,718	8,896
1929	82	5,694	5,776	9	3,555	3,564	9,340
1930	89	5,648	5,737	27	3,795	3,822	9,559
1931	87	5,625	5,712	30	3,757	3,787	9,499

Table 4

	NUMBER OF FISHING POPULATION						Grand Total
	Wholly engaged			Partially engaged			
	Japanese	Manchurian	Total	Japanese	Manchurian	Total	
1927	273	13,522	13,795	12	7,507	7,519	21,314
1928	241	13,244	13,485	8	8,662	8,670	22,155
1929	141	19,664	19,805	15	10,246	10,261	30,066
1930	328	14,583	14,911	38	9,375	9,413	24,324
1931	372	14,592	14,964	29	8,413	8,442	23,406

Table 5

	NUMBER OF FISHING BOATS AND IMPLEMENTS								
	Fishing boats						Implements		
	Ships without motor			Ships with motor equipment	Ships for transport of fish	Total	Nets	Hooks	Others
	Junks	Sampans	Japanese type						
1927	1,017	4,597	192	15	87	5,908	9,511	27,421	2,304
1928	970	4,727	201	199	77	6,174	10,688	24,926	2,337
1929	957	4,999	195	82	49	6,282	12,591	24,239	1,950
1930	1,093	4,791	161	115	68	6,229	10,975	34,386	2,689
1931	1,092	4,679	179	133	72	6,155	11,319	32,569	2,868

Catch.—The exact quantity of fish caught is difficult to ascertain. The quantity caught by Manchurian fishermen is often reported much smaller than the actual catch. Again, quite a quantity of fish is taken to China proper by junk without being landed in the Kwantung Leased Territory. Under such conditions it is impossible to obtain exact figures. The following Tables 6 and 7 show the amount of fish caught in recent years, but because of the above-mentioned circumstances, these figures are believed to be from 50 to 100 percent below the actual catch.

Manchurian fishermen in the Kwantung Leased Territory formerly

followed their own native methods of fishing, but in recent years they are obtaining good results by imitating the methods used by Japanese fishermen. Their catch is showing a tendency to gradually increase.

The varieties of fish caught by the Japanese are quite different from those taken by the Manchurians. Japanese fishermen fish mainly for sea-bream, cybium niponium, prawns, and other fish that appeal to the taste of the Japanese, and show a tendency to disregard entirely hair-tail, cod, guchi, and others that appeal to Manchurian taste. The sea-bream in the Yellow Sea has been almost recklessly caught by the Japanese in the past, and its future catch cannot be expected to be large.

Table 6

Caught By	1927		1928		1929		1930		1931	
	Quantity M.T.	Value Yen	Quantity M.T.	Value Yen	Quantity M.T.	Value Yen	Quantity M.T.	Value Yen	Quantity M.T.	Value Yen
Japanese	4,185	920,920	7,731	1,418,942	14,964	1,758,303	13,390	1,439,255	12,104	1,070,269
Manchurian	19,300	2,593,194	28,483	2,878,238	33,153	2,723,868	22,468	2,408,959	23,097	2,080,481
Total	23,485	3,514,114	36,214	4,297,180	48,117	4,482,171	35,858	3,848,214	35,201	3,150,750

Table 7

PRINCIPAL FISH CAUGHT AND THEIR RESPECTIVE VALUES, 1930, 1931

	1930		1931	
	Quantity M.T.	Value Yen	Quantity M.T.	Value Yen
Sea-bream	568	286,141	328	187,305
Cod	7,677	554,820	7,399	547,081
Hair-tail	4,531	542,314	4,574	503,959
Guchi	6,695	740,540	8,612	557,583
Cybium niponium	258	75,909	382	113,747
Sole and Halibut	5,268	421,353	4,234	268,141
Sea-bass	405	106,533	298	79,084
Ray	1,332	78,216	1,271	53,758
Grey mullet	235	66,348	172	39,976
Shark	659	67,623	666	32,404
Guarnard	1,188	94,758	957	56,944
Sea-slug	1,614	142,225	1,669	134,851
Oyster	399	59,450	443	53,777
Shrimp	462	172,862	706	188,537
Others	4,568	439,122	3,490	333,603
Total	35,859	3,848,214	35,201	3,150,750

Fresh Water Fisheries.—While Manchoukuo's coast fishery on the whole is insignificant, in the interior of the country there run numerous large rivers, and the fresh water fish are rich in variety and quantity.

Particularly in the northern parts of Manchoukuo there are immense quantities of great varieties of fish. Those districts, however, being sparsely populated, the fishery industry has not yet developed, and consequently there are practically no statistics available respecting the catch or other conditions of the industry, only individual observations and reports on local conditions being obtainable. Thus there is no information on which reliable descriptions of rivers and lakes can be based. Only the vast volume of water carried by rivers and lakes, the slow flow of the rivers, and the size and well-developed condition of the fish caught, foreshadow the great possibilities of the future development of the industry.

(a) *Southern Parts.* The southern parts of Manchoukuo do not possess many rivers and lakes, there being only the Yalu, Liao, Taling, Puho and other rivers. The fishing district of the Yalu River is mainly between a point about 30 kilometres above Antung, and Lungyenpu (龍巖浦) on the lower stream. The varieties of fish caught in this district are carp, white-bait, eels, sheet-fish, shrimps, grey mullet, crucian and others, the annual catch being estimated at 2,300 metric tons. The Liao River has in ordinary times a comparatively small volume of water, and although fish varieties found are generally the same as those in the Yalu River, fishery is done only on a small scale. The annual catch in the Liao River is estimated at 2,000 metric tons (not including 224,000 river crabs), valued at ¥ 470,000.

(b) *Northern Parts.* The northern parts of Manchoukuo abound in rivers and lakes, and have many varieties of fish. Particularly, fish are abundant in the Second Sungari, or Sunghuachiang (the upper course of Sungchiangho) Nonni, Mutankiang, and Ussuri Rivers, and also in the Hulun, Peir, Chingpo and Hsingkai Lakes. The important varieties of fishes are Aohuayu (鰲花魚), Futiaoyu (鮎條魚), Pêngtouyu (鰲頭魚), Liku (鯉骨) Chiyu (Fu) (鯽魚(鮎)), Pienhuayu (Kengtzyu) (遍花魚, 鯉子魚), Tsaokenyu (草根魚), Kouyu (狗魚), Niennyu (鯰魚), and others, and the annual catch is estimated at 18,000 metric tons. The amount of fish caught according to lakes and rivers is given in Table 8.

Table 8

Estimated Quantity of Fish Caught in Principal Rivers and Lakes of Northern Parts of Manchoukuo.

	(metric tons)
Dalainor and Boimor	5,000
Amur and its tributaries	1,600
Sungari and its tributaries	9,800
Ussuri and its tributaries	1,600
Total.....	18,000

Prepared Aquatic Products.—Manchoukuo being so vast in area and comparatively short in coast-line, esteem of fresh fish has not developed among the Manchurian people, and the aquatic products consumed in Manchoukuo are almost entirely prepared products.

In recent years, the prepared aquatic products in the Kwantung Leased Territory reached from ¥ 1,200,000 to ¥ 1,300,000 a year, an amount equal to more than 40 percent of the total value of the fish caught. Nearly 80 percent of the prepared aquatic products is made by Manchurians.

Among the prepared products made by Japanese, "kamaboko" (boiled fish hash) constitutes the greater portion, amounting to about ¥ 170,000 to ¥ 180,000 per year. There are also prepared globe-fish, halibut, gurnard, guchi, sea-urchin, sea-slug, and others, but these are made for Japanese consumption, and amount to only about ¥ 200,000 per year.

Among the products made by Manchurians are dried and salt cod amounting to ¥ 500,000 a year, and dried and salt hair-tail amounting to ¥ 200,000 a year, besides dried ray, shell-fish ligaments, jelly-fish, halibut, and others. But the methods used by Manchurians in making these dried, salt and other prepared products are yet quite primitive as old-fashioned ways are still followed.

Prepared aquatic products cannot be expected to be much exported to Japan in future, but have very promising prospects for export to China proper, as prepared cod, guchi, ray, trepang and others are table delicacies of the Chinese. As the markets for these prepared aquatic products, there is not only Manchoukuo itself, but also Central and Southern China, where the demand is almost unlimited. The Kwantung Leased Territory is excellently situated for the development of this industry as not only is the supply of cheap labour abundant and the salt price low, but climatically also it is well favoured.

Aquatic Products in Foreign Trade.—The production of aquatic products in Manchoukuo reaches a fairly large amount, but it cannot yet be called active. It cannot supply the entire demand in Manchoukuo. Some kinds are produced in comparatively large quantities, but there are others which are not produced at all. On the whole, more aquatic products are imported into Manchoukuo than exported. The import surplus averages about 2,000,000–3,000,000 H. K. Taels per year, as shown in the following table:

Table 9
IMPORT AND EXPORT OF AQUATIC PRODUCTS

	Import		Export		Total	
	Quantity (Metric tons)	Value (H.K. Taels)	Quantity (Metric tons)	Value (H.K. Taels)	Quantity (Metric tons)	Value (H.K. Taels)
1929	29,600	4,403,861	9,710	859,229	39,310	5,263,090
1930	22,687	4,415,827	6,493	725,010	29,180	5,140,837
1931						
Japan.....	5,717	1,930,713	454	79,853	6,171	2,010,566
China.....	2,235	441,155	6,606	852,087	8,841	1,293,242
U.S.S.R. ...	1,252	452,463	—	—	1,252	452,463
Others ...	361	150,404	1,332	133,902	1,693	284,306
Total ...	9,565	2,974,735	8,392	1,065,842	17,957	4,040,577

Salt Manufacture

Sandy beaches are found everywhere on the shores of the Liaotung peninsula, and the coast is favourable for salt manufacture on account of the climatic conditions. Particularly the neighbourhoods of Yingkow and Fuchou-hsien (復州縣) are most suited for salt manufacture, and the Kwantung Leased Territory also is known for the existence of many good salt fields.

It was in 1862 that sun-evaporation salt manufacture was started in old Manchuria, and the salt fields in the Erhtaokou (二道溝) district, in the Kaiping (蓋平) administrative district, were the first salt fields in old Manchuria. Three years later more salt fields were opened in the Pitzuwo (貔子窩) district within what is now the Kwantung Leased Territory, and then gradually they came to be laid out all along the Liaotung peninsula coast. Thus the Liaotung peninsula became famous for its sun-evaporation-salt manufacture.

However, the industry was suppressed by the effect of the Sino-Japanese War, and then, as the Liaotung peninsula was leased by Russia, a heavy tax was levied upon the export of salt to China, this measure of the Russian authorities resulting in the closing of the markets in China and finally in the decline of the industry. At the time of the Russo-Japanese War, the salt fields of the Kwantung Territory were practically neglected, except those at Pitzuwo and Pulantien (普蘭店). Immediately after the close of the war and the establishment of the Japanese administration, the industry enjoyed a revival. Neglected salt fields were reopened, and new fields were opened by Japanese. New life was given to the

salt industry in the Kwantung Leased Territory, and it progressed to its present prosperity.

The present annual salt production in Manchoukuo reaches about 500,000 metric tons, the Kwantung Leased Territory and Manchoukuo producing between 200,000 and 300,000 metric tons each.

Salt Manufacture in Manchoukuo.*—Although China adopted the government salt monopoly system, the former Three Eastern Provinces permitted the manufacture and sale of salt freely to the people. But in 1908, Kirin and Heilungkiang Provinces adopted the salt monopoly system for unifying the affairs of salt supply and sale, and these provincial governments purchased from salt producers the quantity of salt required for supplying the needs in the two provinces and prohibited the transportation and sale of salt by the public. Fengtien Province, however, permitted the private sale of salt, and only levied taxes on salt manufacture and sales, establishing the Salt Supervision Offices in the producing districts and the Chissuchu (緝私局) at the principal places for handling salt affairs. The salt system of Manchoukuo is not different from the former system on the whole, but for the unification of the salt system, there are established the Yenwushu (鹽務署) and the Kirin and Heilungkiang Yungyunshu (吉黑樵運署). The Yenwushu is at Yingkow and under its jurisdiction are the Iwussu (場務局) and the Cheyen Chissuchu (掣驗緝私局) for handling affairs concerning the salt tax and salt administration. The Kirin and Heilungkiang Yungyunshu is at Hsinking, and it has the Yungyunssu (樵運局), Yentsang (鹽倉), Chissuchu (緝私局) and Chissutui (緝私隊), for handling the salt monopoly in Kirin and Heilungkiang Provinces. (Refer to the Chapter on Finance for salt administration)

The salt-fields producing the salt of Manchoukuo are the Liaotung-yeni (遼東鹽場) and the Liaohsiyeni (遼西鹽場). Although the area of these salt-fields cannot be ascertained exactly, it is estimated at about 16,000 hectares, tafu (大副) being calculated at about 400 hectares and hsiaofu (小副) at about 200 hectares. The total annual production is about 300,000 metric tons, and the salt-field area, production amount, and supply and demand situations in three recent years are given in the following Tables 10 and 11.

* The salt manufacture in the Kwantung Leased Territory is not included in this item as it is under an independent salt system.

Table 10

AREA AND PRODUCTION OF MANCHOUKUO SALT-FIELDS

Salt District	Salt-Fields in 1932			Salt Field Area (hectares)	Production (Metric Tons)		
	Operating fields (fu)	Fields where Production is Suspended (fu)	Total (fu)		1930	1931	1932
Liaotungyeni							
Yinkaii	1,109	61	1,170	6,002	154,993	126,376	143,580
Fuhsieni.....	481	455	936	3,926	62,384	36,048	63,472
Chunghoi	226	87	313	*1,953	18,103	11,841	8,435
Liaohsiyeni							
Panshani	41	187	228	*1,423	5,542	3,846	636
Chinhsieni	176	59	235	*1,466	16,333	15,519	5,327
Hsingsuii	144	34	178	*1,111	9,984	6,660	3,608
Total	2,177	883	3,060	*15,881	267,339	200,290	225,058

Table 11

SALT SUPPLY AND DEMAND IN MANCHOUKUO IN 1932

(in Metric Tons)

	Yingkaii	Fuhsieni	Chunghoi	Chinhsieni	Hsingsuii	Panshani	Total
Brought from Previous Year.....	148,189	201,222	19,705	32,808	3,568	11,847	417,340
Amount Produced in the Year.....	143,580	63,472	8,435	5,327	3,608	637	225,059
Total	291,769	264,694	28,141	38,135	7,176	12,484	642,399
Sales Amount:							
Kuanyen	30,485	30,614	—	—	—	—	61,099
Shangyen.....	74,588	559	3,545	1,891	764	601	81,948
Lingyen	67	766	522	279	328	—	1,962
Yuyen	1,092	45	201	12	32	—	1,382
Chingyen (refined salt)	19,489	15,120	—	—	—	—	34,609
Caked salt & Sulphuric acid salt	1,368	14	2	1,275	237	39	2,935
Stolen and lost salt	162	13,064	3,364	22,979	3,394	11,843	55,766
Others	2,291	1,519	2	2	4	—	3,818
Total	129,542	62,601	7,636	26,438	4,759	12,483	243,459
Balance carried over	162,227	202,093	20,505	11,697	2,417	1	398,940

Lake Salts.—Besides the salt produced in the coast districts, there is another supply, of lake salt, produced at the Northern Manchoukuo and Mongolian salt lakes. The lake salt obtained in such districts is a wonderful natural gift, as salt is one of the most important daily necessities. The output of lake salt is not definitely known, but it is not only supplying local needs but also is exported to the neighbouring territories of Chihli, Kansu, Shanhsi and other provinces of China proper.

Among the Northern Manchoukuo salt lakes, Payin-nor and Pain-Tsagan-nor are both situated 137 kilometres southwest of Hailar. The former lake produces about 500 metric tons of salt per year and the latter about 25 metric tons. The method of obtaining lake salt is very primitive, and the Mongolians gather salt by scraping it up at waterless spots.

* Estimated.

Banba-nor, Panza-nor, Sabuta-nor, Hara-nor, and Dori-nor are located northwest of Hailar and form a group of salt lakes. At these lakes, salt once was gathered, but not at present. Chubeluto lake is 165 kilometres south of Hailar, and once produced about 600 metric tons of salt per year, and is regarded as able to produce 3,000 metric tons annually.

Salt Manufacture in Kwantung Leased Territory.—At the time of the establishment of the Japanese administration, the salt-fields in the Kwantung Leased Territory operated by Japanese and Chinese totalled only 1,250 hectares, with a production of 3,000 metric tons, while now 7,000 hectares or more produce 250,000 metric tons. Looking over the increase of the production, it is seen that for ten years, from 1907 to 1915, the annual production averaged about 6,000 metric tons, but in 1916 it suddenly increased to 120,000 metric tons, in 1924 to 240,000 metric tons, and in 1926 to nearly 300,000 metric tons. As recently producing restriction has been adopted, the annual production is reduced to about 250,000 tons.

The salt output varies considerably on account of the weather and other conditions, but judging from the present capacity, it is believed possible to obtain an annual production of 300,000 metric tons if weather conditions are favourable, and thus the Kwantung Leased Territory salt industry has a significant bearing upon the future development of the soda industry in Japan and Manchoukuo. The salt-field area, salt production, and salt export of the Kwantung Leased Territory are as shown in Table 12, and the production of prepared salt and remanufactured salt is given in Table 13.

Table 12

SALT PRODUCTION AND EXPORT OF KWANTUNG LEASED TERRITORY

	Area of Salt fields (Hectares)			Salt Production (Metric Tons)			Salt Exported to (Metric Tons)			
	Japanese	Manchurian	Total	Japanese	Manchurian	Total	Japan Proper	Korea	Others	Total
1906.....	—	1,257	1,257	—	27,684	27,684	2,164	8,972	13,458	24,594
1910.....	1,698	1,465	3,163	50,841	41,971	92,812	21,162	19,782	8,740	49,684
1915.....	2,632	1,480	4,112	49,814	24,253	74,067	27,556	22,202	11,602	61,360
1920.....	2,814	1,523	4,337	102,969	82,209	185,178	54,441	19,020	1,735	75,196
1925.....	4,597	1,582	6,179	153,909	95,954	249,863	93,981	64,070	1,009	159,060
1926.....	4,618	1,583	6,201	190,225	108,913	299,138	65,036	65,722	2,534	133,292
1927.....	5,324	1,596	6,920	158,589	76,664	235,253	39,102	70,038	5,524	114,664
1928.....	5,323	1,590	6,913	165,039	83,651	248,690	49,605	72,204	26,963	148,772
1929.....	5,351	1,596	6,947	165,676	83,264	248,940	13,278	59,584	22,675	95,537
1930.....	5,661	1,286	6,947	162,913	86,554	249,467	98,135	44,286	12,168	154,589
1931.....	5,983	953	6,936	174,616	50,507	225,123	108,981	82,871	1,468	193,320

Table 13

PRODUCTION OF PREPARED SALT AND REMANUFACTURED SALT*

	Prepared Salt				Remanufactured Salt			
	In Kwantung Leased Territory		Outside Kwantung Leased Territory		In Kwantung Leased Territory		Outside Kwantung Leased Territory	
	Factories	Production (Metric Tons)	Factories	Production (Metric Tons)	Factories	Production (Metric Tons)	Factories	Production (Metric Tons)
1929	1	35,731	—	—	—	4,209	7	25,494
1930	1	48,115	—	—	—	3,256	7	33,099
1931	1	31,126	—	—	8	2,514	7	29,587
1932	1	36,299	—	—	8	3,586	7	33,276

* This table is based on an investigation made by the Kwantung Government, and the statistics of the salt industry of Manchoukuo including the Kwantung Leased Territory for 1932, issued by the S. M. R. Economic Research Committee.

CHAPTER XIII

MINING

General Outline

Extensive deposits of coal, iron, and a variety of other important minerals stand high among the great natural resources of Manchoukuo. While the varieties of metallic minerals are not numerous, they include gold, as well as iron, in abundance, which are extremely valuable assets of the new state. The non-metallic minerals include large deposits of, besides coal, oil shale, magnesite, zechstein, limestone, fireclay, steatite, and several others which are likely to play a prominent part in the establishment of industry in the country on modern lines.

Nearly half a century ago Czarist Russia laid plans to exploit these rich mineral resources of Manchuria, on the strength of the privileges acquired with the agreement for the construction of the Chinese Eastern Railway, now re-named the North Manchuria Railway. From about 1890 to 1904, when the Russo-Japanese War broke out to put an end to Russian schemes of expansion in Manchuria, the Czar's government obtained in both North and South Manchuria a variety of mining rights, preferential mining privileges, and the right to operate mines jointly with Chinese. The Fushun, Yentai, and Chalainor coal mines figured among the most important of these rights.

In the sequel to the Russo-Japanese War, Japan took over from Russia the mining rights in the Kwantung Leased Territory, a voice in the disposition of mining rights in the neutral zone, and the mining rights in mines situated along the South Manchuria Railway outside the Kwantung Leased Territory, in accord with the Portsmouth Treaty of September, 1905, and the Sino-Japanese Treaty of December, 1905. Respecting the Fushun and Yentai coal mines, the Chinese Government protested, but Japan's rights in those coal mines were confirmed by the Sino-Japanese agreement concluded in 1909, which also recognized the Japanese mining right in mines along the Antung-Mukden Railway. The Penhsihu Colliery and Iron Works was established according to the terms of this agreement. Again, by the treaty respecting South Manchuria and Eastern Inner Mongolia signed in 1915, the right of Sino-Japanese joint operation of nine