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THE AGRICULTURAL INTERRELATION OF JAPAN, MANCHOUKUO AND CHINA

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1.

The Sino-Japanese conflict has now entered on a new phase in which Japan is faced with the necessity of making strenuous efforts to create a new order in East Asia which will ultimately provide the basis of permanent peace in the Far East. In other words, all East Asian political and economic problems now center on the efforts to bring the extensive areas of North, Central and South China into the Japan-Manchoukuoan economic unit, which is already in existence, in such a manner that the three countries Japan. Manchoukuo and China may form a closely-knit economic organisation for mutual aid and effective interdependence, thus establishing and consolidating a new economic structure, in both a qualitative and a quantitative sense. In the present article, I propose to consider, from the economic point of view, this organisation of mutual aid and interdependence, which I shall call the Japan-Manchoukuo-China economic bloc.

Seeing that bloc economy of this kind demands the establishment of an autarchy or the practical application of the doctrine of national self-sufficiency, to a greater or lesser degree, it may be regarded as a merely temporary and abnormal economic phenomenon by those advocates of free trade and commerce, who believe in the unrestricted circulation of goods between nations. The fact remains, however, that bloc economy, regardless of its merits or demerits, has now become a world-wide tendency, and Japan, like other countries, is merely shaping her course in accordance with a new world trend. It remains to be pointed out, however,

that there are two different types of bloc economy. One consists of economic blocs formed by countries which are popularly known as the "Haves." The bloc organisation of the British Empire is a typical example of this type of bloc economy. The British Empire, which has suffered most extensively from the economic panic arising from the chaotic condition in world markets in post-war days and from the rivalry of new-fledged industrial countries, has formed an Imperial economic bloc with a view to retaining the dominant position which it has hitherto held. This bloc is essentially conservative and defensive in that it aims primarily at selfsufficiency within the bloc by guarding itself against the encroachments of rising industrial countries, on the one hand, and by holding the Dominions and other possessions together, inclose unity on the other. In contrast, economic blocs formed by the so-called "Have-nots" do not aim solely at self-sufficiency. It is true that they are striving to develop all the resources within their economic areas and that they are endeavouring to attain self-sufficiency in respect of basic raw materials. But they are not aiming at placing the entire national economy on a basis of self-sufficiency. They aim at preparing the ground for the future development of bloc countries in the extra-bloc areas. The Japan-Manchoukuo-China bloc belongs in the latter category. While striving to provide an adequate supply of the basic raw materials within the bloc, it seeks to open the way for the development of Japanese economy in the wider sphere of world markets.

As the organisation of the Japanese economy has passed from a quasi-war to a war footing, with the progress of the current Sino-Japanese hostilities, it has become increasingly necessary for Japan to expand her ability to produce war materials, on the one hand, and to exercise rigorous control over imports, on the other hand; with a view to maintaining an equilibrium between overseas payments and receipts. In conjunction with these measures, control over the consumption of the goods manufactured from imported materials has been tightened. At the same time, it has become necessary,

not only to perfect the wartime economic system but to prepare the way for Japan's future development outside the bloc, and to make positive efforts to develop the basic material resources within the bloc itself, in order to attain self-sufficiency in the supply of these basic materials essential to our industrial existence.

Through a well-integrated establishment of a Japan-Manchoukuo-China bloc economy, Japan's efficient scientific knowledge and capital must be linked with the rich material resources and the development of the extensive arable areas of Manchoukuo and China, so as to develop the natural resources of these extensive areas as effectively as possible. In this way, Japan will be able to secure the material resources which she lacks, and at the same time contribute to the welfare of the Manchoukuoan and Chinese peoples. With this object in view, a five-year industrial development programme was launched in Manchoukuo the year before last, while in North and Central China, the work of developing material resources has been taken in hand — in North China, chiefly by the North China Exploitation Company and, in Central China, by the Central China Development Company.

Confining attention to the agricultural aspects of the problem, I propose to consider in the present article in what way the development of the agricultural resources of the continent, to be undertaken with the object of advancing the interests of Japan-Manchoukuo-China bloc economy, bears on Japanese agriculture, and how the agricultural interrelation of the three countries ought to be adjusted, if the common existence and prosperity of agriculture in Japan and on the continent is to make a worthy contribution to the establishment of a new order in East Asia.

2.

The terms, "Japanese-Manchoukuo-China economic bloc," "East Asian economic co-operative organization," and "eco-

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nomic reconstruction based on East Asian co-operation," have come into popular use of late, but the implications of these terms are variously understood. Generally speaking, however, the terms seem to admit of the following two interpretations. One interpretation is that they indicate a close union of the three countries Japan, Manchoukuo and China in a single economic unit. If this policy of organizing these countries into one economic unit is to be carried out to the letter, it will become necessary for the component elements to refrain from asserting their own national interests too strongly. For instance, Japan would have to accept the situation without protest if various enterprises which had hitherto prospered in Japan were gradually transferred to Manchoukuo or China and became prosperous in their new home, as Monchoukuo and China become more closely integrated within the new bloc. It might then be logical to conclude that the prosperity of North China when secured at the sacrifice of some of Japan's interests is not in itself a matter for serious concern. According to the second interpretation of the foregoing terms, however, the national economy of each country within the bloc is to retain its respective status of independence, just as it maintains its separate existence as a State, though the bloc countries are called upon to establish a community of interests and to develop a relationship of interdependence through the proper division of industrial activity and collaboration as among the component elements. Although the three countries are required to contribute to the general interests of the bloc each in its own way, their industrial relations are to be so adjusted as to preclude the possibility of friction. That is to say, that when such industries as have shown little prospect of development in Japan, give promise of steady growth in the other two countries, they are to be positively encouraged, while such industries as are likely to compete with those which are already firmly established in Japan will have to be excluded from the continent, as far as possible.

In the present article, the question of the agricultural

interrelation of Japan, Manchoukuo and China will be studied in the light of the latter interpretation. Taking this interpretation of the bloc, it appears necessary to encourage positively the production in Manchoukuo and China of such agricultural crops as are calculated to help forward Japan's economic development. The increased cultivation there of such crops as may tend to compete with Japanese agriculture, however, will have to be curtailed, as far as possible. This may at first sight appear to be an excessively selfish demand on Japan's part, but as a matter of fact this is not the case. It is Japan, and Japan alone, who, as the only stabilising power in the Far East, has upheld the interests of East Asia, since the establishment of a world economy in the middle of the 19th century. Although the direct cause of the Manchurian affair and the present Sino-Japanese conflict was the anti-Japanese policy pursued by the former Manchurian rulers and the Nationalist Government of China, Japan's aim in the present war is essentially to emancipate the Far Eastern States and peoples from the hegemony of Western Such being the case, it is only proper that Manchoukuo and the new Administration is China should co-operate with Japan in developing their rich resources. thereby contributing to the expansion of the economic power of that country which is fighting for the regeneration and emancipation of East Asia. The great cause of East Asian revival and reconstruction also demands that, in developing their agricultural resources, they should avoid such measures as may give rise to friction with Japanese agriculture.

The true object of developing the agricultural resources of Manchoukuo and China is, on the one hand, aid for Japan's economic progress through the increased production of such agricultural crops as Japan lacks, and, on the other hand, the welfare of the Manchoukuoan and Chinese farmers, so that close ties of co-operation may be forged among the three countries by which their common interests and common prosperity may be promoted. Accordingly, the following points must be kept in mind in pushing forward the work of

developing the agricultural resources of the three countries:-

- (1) Care must be taken to grow in each area within the bloc such agricultural crops as are most suited to it, in accordance with the principle of the right crop for the right soil. As this will lower the cost of production, the competitive power of the Japan-Manchoukuo-China bloc in the world market will correspondingly increase. As already mentioned, this bloc is not a conservative or defensive one. It does not aim solely at self-sufficiency within the bloc. As it is also designed to lay the foundation for the future entry of the bloc countries into the world market, efforts must be made to lower the cost of agricultural production in accordance with the principle of the right crop for the right soil.
- (2) Such agricultural crops as are likely to cause friction with Japanese agriculture should not be grown indiscriminately, even if they are suited to Manchoukuoan or Chinese soil. Their growth must either be kept within the limits demanded by self-sufficiency and curtailed so that they will not harass Japanese agriculture. From the point of view of promoting the common interests of Japan, Manchoukuo and China, therefore, it is necessary to adjust and control properly the kinds, the quantity and the quality of the agricultural crops to be grown in each district. This necessity should not be interpreted in too negative a sense, however. For instance, although it is advisable not to encourage the production of rice — Japan being peculiarly suited to the cultivation of this grain — in Manchoukuo and China to such an extent and by such methods as are calculated to cause serious inconvenience to Japanese producers of rice. Furthermore, it is well to take due account of the fact that it may become necessary to import rice into Japan from Manchoukuo, if, in consequence of the increase of population in Japan, the quantity of rice produced here should be found inadequate to supply our domestic needs, just as other cereals are already being imported into this country from Korea and Formosa. The importation of rice under such circumstances will be necessary in order to

increase the competitive power of the Japan-Manchoukuo-China bloc in the world market.

- (3) Efforts must be made to develop in Manchoukuo and China such agricultural production as will contribute to Japan's economic progress, care being taken to produce such raw materials there as are lacking in Japan.
- (4) From the point of view of national defence, care must be taken to see that army provisions especially forage which being bulky presents difficulties to transportation over long distances —, pack-horses, etc. are adequately provided on the spot.
- (5) The fact that the agrarian communities in Japan constitute an important source of the supply not only of productive and consumptive materials but of man-power must be taken fully into consideration in settling Japanese farmers on the continent and in seeking to promote the prosperity of continental agriculture.
- (6) In order to enhance the welfare of the farming population of the continent by means of agricultural development, it is necessary, first of all, to improve the natural environment, and, secondly, to reform the existing agrarian economic organisation. Radical methods of reform must be avoided, however. Only such methods of progressive reform as accord well with the standards of civilisation of Chinese and Manchoukuoan farmers should be applied when attempting to enhance the welfare of these farmers generally, lest they should be disorganised by the process of reform.

3.

The points enumerated above must be carefully considered in pushing the work of exploiting the agricultural resources of Manchoukuo and China. Fully alive to the urgent necessity of ensuring the harmonious operation of agricultural, forestry and fishery industries in Japan, Manchoukuo and China, not only for the sake of the development of the economic bloc formed by these countries but for the healthy

stimulation of Japanese agriculture itself, the Government called an "East Asian Agricultural and Forestry Conference" which assembled at the official residence of the Minister of Agriculture and Forestry, for a week beginning August 15th, 1938, with a view to drawing up collective plans of agricultural production for Japan, Manchoukuo and China and to establishing for each its spheres of production with regard to (a) rice, (b) wheat, (c) silk yarn and the like, (d) tea, (e) production and distribution of principal industrial materials and agricultural and forestry products, (f) forestry, (g) fisheries, (h) improved stock-breeding, increased production of cattle and cattle sanitation, (i) horse-breeding, (j) corn and other fodder and (k) fertiliser. These plans have been drawn up with due regard to the principles set forth above. In carrying out the work of developing the agricultural resources of East Asia, therefore, besides taking the above-mentioned points into careful consideration, full regard must be paid to the trends of agricultural development in Japan proper, which is so vitally interested in the exploitation of East Asian agricultural resources. We must ensure that the continental agricultural policy contributes to the healthy growth of Japan's national economy and to the security of her national defence but without impeding the development of her agriculture.

Let us now consider the way in which Japanese agriculture has developed. Partly because arable land is limited in area and partly because there is a surplus in the farming population, it is imperative to obtain as much agricultural produce as possible from this limited arable land, in order to support the large agrarian population. In consequence, Japanese agriculture has necessarily been very intensive. In Japan, arable land averages less than 1.1 cho (one cho being 2.45 acres) per farm family. To support his family with the revenue from this small tract of land, the Japanese farmer has had to cultivate such agricultural crops as will yield the largest possible revenue per unit area, ever mindful, of the possibility of increasing productivity. With an excessively large farming population and with a very limited area of arable land, Japan, in the absence of extensive pasture land, has had to develop an intensive agriculture devoted to the production of foodstuffs. The country could not afford to develop branches of agriculture like the cultivation of cotton or sheepbreeding. Sericulture is the only branch of agriculture, concerned with the production of raw materials, which has developed in Japan, and this is because

the revenue per unit area accruing from it is very high. It was inevitable that Japan should have given exclusive attention to the intensive production of foodstuffs, to the neglect of those branches which produce raw materials, and this course has, indeed, been the right one. It is due to the efforts made in the past to develop the intensive production of foodstuffs and to the maintainance of increased productivity per unit area of arable land that Japan is now able to maintain her large farming population and is practically self-sufficient in the supply of agricultural foodstuffs. Japan's farming population represents 48 per cent. of her total population as against Britain's 8 per cent., Germany's 30 per cent., and France's 38 per cent.

One source of Japan's strength lies in the fact that, in spite of the intensive industrialisation of the country as a sequel to the development of Japanese capitalism, she is still capable of maintaining a large farming population and continues to be self-supporting in the matter of foodstuffs. The large agrarian population not only provides an important domestic market for urban commerce and industry but constitutes a valuable source from which urban commerce and industry can draw a plentiful supply of cheap labour. Britain offers a singular contrast to Japan in this respect. In that country, the farming population has dwindled so greatly that it cannot be drawn upon to replenish the depleted ranks of urban labour. The result is that the composition of urban labour remains the same year in and year out and its constant demand for high wages goes on weakening the economic power of the country. A farming population representing 48 per cent. of Japan's total population is by itself a great source of strength in national defence. The fact that she has a multitude of farmers of good physique and inured to hardships and privations is Japan's great asset, especially in time of war. At present when there is a tendency for the birth rate in urban districts to decline, it is particularly important to try to maintain the farming population at a high level.

By arguing in this way, however, I do not mean to imply that this augmented farming population should in future be kept in rural districts and encouraged to follow the plough. Many a second, third or other son of agricultural families have sought work in urban districts or abroad in the past, thereby relieving their agricultural communities of the burden of surplus population. These young men should find their spheres of activity elsewhere in future, preferably on the continent of Asia, where they should go as colonists. It is especially important that farm villages which are already over-populated should be encouraged to settle part of their inhabitants on the continent. However, care must be taken to avoid any marked diminution in Japan's farming population considered as whole. In devising measures to develop the

agricultural resources of Manchoukuo and China, therefore, they must not be allowed either to impede the development of Japanese agriculture, to weaken Japan's self-sufficiency in the matter of the supply of foodstuffs, or to impair her ability to feed a large farming population.

As already stated, Japanese agricultural policy in the past has been directed chiefly to the maintenance and development of that branch of agriculture which is concerned primarily with the production of foodstuffs. For a supply of basic materials such as raw cotton and wool, Japan has relied on foreign countries. That is to say, she has hitherto pursued the policy of making purchases of raw cotton and wool in the world market wherever they could be obtained most cheaply. This policy now faces a need for radical revision. Influenced by the world-wide tendency to develop bloc economy, Japan has now fully awakened to the necessity of producing agricultural raw materials within the economic bloc to which she belongs. By so doing she can make good any remaining defects in her agricultural economy. This need is accentuated by the restrictions imposed on the import of materials "not urgently required," which has been adopted with a view to balancing overseas receipts and payments—a policy which is being still more rigorously applied as wartime economy develops.

4.

The five-year industrial development plan for Manchoukuo was drawn up and launched in April, 1937, and forms an important integral part of the quasi-wartime economic system of Japan. Its chief object is to make up the leeway in Japan's heavy industries by rapidly increasing the production of war materials, especially iron, coal and liquid fuel, in Manchoukuo; in consonance with the general principle of providing these materials on the spot. The scheme which has been inaugurated to increase the production of agricultural and stock-farming produce, and which forms part of the greater five-year industrial development plan, is concerned chiefly with the husbanding of such resources as are required in time of national emergency. It also aims at placing Manchoukuo as far as practicable on a self-sufficiency basis supplying at the same time certain of Japan's requirements. It is hoped that this policy will lay the foundations for the agricultural development of Manchoukuo.

This increased production scheme covers the following crops:-

- 1. Rice, wheat, oats, rusan (fodder for cattle), henafu (a kind of hemp), castor-beans and raw cotton, are thus to be developed locally, as they are essential in times of emergency.
 - 2. Yellow leaf-tobacco and beet-root, which will also foster self-sufficiency.
- 3. Kaoliang, soya beans, millet and corn, which can contribute directly to the stabilization of the national economy.
- 4. Horses, sheep, cattle, pigs and dressed-meat, with a view to meeting wartime needs on the spot and to supply Japan's deficiencies in this respect.

Of the above-mentioned agricultural products, those mentioned in (1) are crops designed for military use, in a wide sense. They are also known as crops in special demand. Those mentioned in (2) are crops the increased production of which will be applied to the reduction of imports, while those mentioned in (3) are crops in public demand. By far the greatest efforts have been directed to the increased production of the crops referred to in (1), while those mentioned in (2) and (3) have received much less attention. Concerning the crops referred to in (3), attention has been confined to the matter of improvement of quality, nothing positive having been done so far toward increasing production. It is true that some efforts have been made to increase production per unit area, but no increase has been made in the acreage of land under cultivation. Indeed, in some cases, the areas devoted to these crops have been reduced. Generally speaking, in this programme for increased production of agricultural crops, priority has been given to the question of increasing the yield from the land already under cultivation, little or no attention being given to the question of putting waste land under cultivation to augment the areas of planting. The reason for this is to be sought in the consideration that has been to the necessity of reserving suitable areas for the future settlements of Japanese immigrants. As the production of the crops mentioned in (1) has been increased in accordance with the above policy, the natural result has been that part of the areas devoted hitherto to the crops mentioned in (3) have had to be given over to the cultivation of crops for military use.1)

In May, 1938, this programme for the increased production of agricultural products was radically revised and alterations were made in the list of crops selected for increased production. The revision covered increased production and the methods by which such increased production was to be secured. In July of the same year, there was a further, though partial, revision of programme. Various causes contributed to these revisions, one of which was the

¹⁾ The Manchuria Economic Annual Report (for 1938), compiled by the Inquiry Section of the South Manchuria Railway Company, p. 272.

unsatisfactory results obtained during the past year, and another was the sudden change which came over the Far Eastern situation due to the outbreak of the Sino-Japanese conflict in the middle of that year and further to the tension which this development caused in Soviet-Japanese relations. The former cause, when subjected to analysis, appears to be due, in the first instance, to a general decline in the productivity of arable land throughout Manchoukuo and more especially to miscalculations made regarding the productivity of land in South Manchoukuo. In the second place there was considerable under-estimation of the damage caused by the drought which afflicted an extensive areas in Manchoukuo, and by the floods which ravaged certain districts in South Manchoukuo. In the third place there was an over-estimation of the amount of yield per unit area. In the fourth place we must mention unexpectedly great difficulties attending the change-over of crops for cultivation. A fifth point was the fixing of the prices of certain agricultural products at an unduly low level. A sixth cause was the shortage of seed, and a seventh the insufficient supply of technical skill and its general inadequacy. latter cause indicated first, the need for the development of the export trade of Manchoukuo as one member of the Japan-Manchoukuoan bloc, in order that she might obtain exchange funds, second, the need for the restriction of imports, and third, the necessity of winning the hearty cooperation of the natives of Manchoukuo.23 The crops covered by the revised plan, classified according to the objects of their increased production, are as follows:-

- 1. Soya beans, buckwheat, perilla ocimoides, peanuts, wheat, kenafu, raw cotton, leaf-tobacco and beet-root, with a view to increasing exports and reducing imports.
- 2. Kaoliang, millet, corn and tusser to further stabilize the national economy.
- 3. Rice, barley, oats, *rusan* (fodder for cattle), flax and castor-beans to meet military needs in wartime and in times of peace.³⁾

²⁾ Ibid. p. 254.

³⁾ Ibid. p. 272.

Under the revised plan, buckwheat, castor-beans, perilla ocimoides and peanuts were newly added to the list, while the methods designed to increase production were also altered. Under the old plan, attention was chiefly directed to increasing production per unit area of land already under cultivation, leaving the acreage of the farm land for planting as it was. Under the revised plan, not only is production per unit area to be increased but more land is to be put under cultivation to increase output. The policy nevertheless remains unchanged as regards the setting apart of promising virgin soil for future settlement by Japanese immigrants. Consequently, the extension of the areas for planting will now chiefly take the form of reclaiming small lots of waste land in comparative proximity to existing villages.

It is hardly necessary to say that it is important, for the consolidation of the Japan-Manchoukuoan economic bloc, to reserve such promising uncultivated lands for settlement by Japanese immigrants. At the same time, earnest efforts ought to be made to increase the production of agricultural crops of various kinds (1) to ensure an adequate supply of materials for military use in wartime and in times of peace, (2) to develop the exports of agricultural products and check their imports and (3) to stabilise the domestic economy of Manchoukuoan farmers. In devising measures for increasing agricultural production in Manchoukuo, however, the need of economic harmony between Japan and Manchoukuo must be kept constantly in view and sufficient care must be taken that portion of Japanese agriculture concerned with the production of foodstuffs is not seriously menaced. Otherwise there is a danger that it will cause a marked decrease in Japan's farming population. Inasmuch as the unrestricted cultivation of rice in Manchoukuo tends to exert pressure on the Japanese producers of rice, resulting in decreases in Japan's farming population, it is advisable that rice production in Manchoukuo should be properly controlled, either through the adoption of a license system for the cultivation of rice or through the establishment of a rice monopoly system while the rice supply in Manchoukuo still remains several hundred thousand koku short of the demand. This phase of the problem was given due attention in drafting the Rice Control Law, which was promulgated in Manchoukuo last autumn. Under this Law, the Government's perÌ

mission is required for laying out new paddy fields. It has also been arranged that the Manchoukuo Cereal Provisions Company (Manshū Ryokoku Kaisha) should monopolise the purchase of rice from rice producers and that the supply and distribution of rice should be undertaken by rice distribution guilds formed by rice dealers. Although the official permit system has thus been adopted in Manchoukuo for the planting of rice, it is hardly necessary to say that, should the demand for rice in Japan expand considerably in future, in consequence of an increase in population, so that it cannot be met by domestic production combined with the present quantity of rice imported from her overseas possessions, Manchoukuoan rice would have to be imported into Japan, in such a manner that it would not injure the interests of home producers of the cereal, while preventing an excessive rise in the price of rice in this country.

As regards raw cotton and wool, of which Japan has a limited supply, increased production in Manchoukuo must be positively encouraged. A ten-year plan has already been laid down to encourage the cultivation of cotton in Manchoukuo and it is now being applied vigorously. Its objective is to expand the planted areas by some 300,000 tsubo and to increase the production of ginned cotton to 150,000,000 kin.⁴ As a first step, the Manchoukuo Raw Cotton Association was established as an organ to encourage the cultivation of cotton, while the Manchoukuo Raw Cotton Company was set up to take charge of the disposal of the raw cotton produced, but later the Manchoukuo Raw Cotton Association was incorporated with the Agricultural Bureau of the Department of Industry, and the Manchoukuo Cotton Company was reorganised as the Noji Gassaku Menka Sosha (Agricultural Collective Production Cotton Company), a company which is vested with the monopolistic right to

⁴⁾ According to the latest figures available, the total area of land under cotton in Manchoukuo is 82,000 cho, the total production of raw cotton being given as 95,000,000 kin. (The figures are those for the third year of Kangten).

The Noji Gassaku Sha (Agricultural Co-operative Society) which is to fulfil the important mission of implementing the policy of increased agricultural production, which forms part of the five-year industrial development plan of Manchoukuo, is pledged to "advance the development of agricultural resources in accordance with the programme laid down by the State, to promote the welfare of the farming population under the direction of the Government, and to ensure the

smooth supply of produce."⁵⁾ In order to ensure the success of this policy, it is imperative that efforts should be made (1) to foster the productivity of land through the improvement and increased production of self-supplying fertilisers and through a reform of manuring methods, (2) to safeguard the crops from the ravages of harmful insects and from various natural calamities, and (3) to fix land rents at a proper level and to establish the right of cultivation through the promulgation of a rational Farm Land Law.

5.

The agriculture of North China differs widely from that of Central and South China both in natural and in the social factors involved. It is in the latter areas rather than in the former that we find a striking resemblance to conditions in Japanese agriculture especially in respect to various natural factors. Scarcity of rainfall characterises the climate of North China. The annual rainfall over the plains of that territory is about 500 millimetres, or about a third of the rainfall in Japan. Consequently, farm land in North China is semi-arid. Moreover, most of this rain falls in the rainy season, which sets in towards the end of June, leaving the other seasons of the year with very little moisture. The climate is therefore too dry in the sowing season in spring, a circumstance which often impedes the proper germination of the sown crops. Irrigation must thus play a very important part in the agricultural development of North China. The soil consisting of yellow ocherous elements, is fertile and easy of tillage, but fertility is dependent on a sufficient supply of water. 50 it will be seen that the nature of soil renders irrigation all the more necessary. One harvest a

⁵⁾ General policy of the Noji Gassaku Sha, fixed at a Cabinet Conference of the Manchoukuoan Government on June 28th of the fourth year of Kangteh.

⁶⁾ Lack of moisture causes the suspension of capillary action between the surface of the ground and the subsoil. The soil becomes dried up, turns light brown and ceases to nurture plants.

year is the rule in the districts in North China where irrigation facilities are not available, while in well-irrigated areas there are three harvests in two years.

Accordingly, crops grown in this district are largely restricted to those suited to dry farming. The principal foodstuff crops are millet, kaoliang, corn, wheat and soya beans. Kibi (millet), rice and sweet potatoes are also cultivated. Among the commodity crops planted in that country are cotton, peanuts, sesame, tobacco, castor-beans, hemp, flax, and fruit. In drawing up plans to increase the production of these agricultural products in North China, with a view to advancing the interests of the Japan-Manchoukuo-China bloc, attention must first be directed to such products as Japan lacks, for example, raw cotton and wool. production of these commodities should be increased in North China, and by exporting them to Japan, the purchasing power of the farmers in that country will be increased, so that Japanese industrial goods may find a better market. This policy will also help North China to develop its own commercial and industrial enterprises. North China has superior natural and geographical advantages as compared with Korea and Manchoukuo in connection with the cultivation of cotton. The only question is how to encourage the cultivation of cotton in this district.

It was, therefore, only natural that the production of raw cotton should have been taken up as the first item for consideration at the Sino-Japanese Economic Conference, which was called upon to discuss and frame a general policy to be pursued in developing the economic resources of North China. According to the plan for the increased production of raw cotton, drawn up on the basis of the results of debate at the Conference, the output of raw cotton in North China is to be increased to 10,000,000 piculs in nine years' time starting from 1938. As raw cotton production in North China totalled 4,870,000 piculs in 1936, the output will be doubled in this interval, if the scheme is carried out. Of this total of 10,000,000 piculs, it is planned that 3,000,000

piculs should be exported to Japan. If this plan is realized, about 30 per cent. of the total quantity of raw cotton consumed by the Japanese spinning industry will be supplied from North China.

One thing calling for attention in this connection is that, in North China agricultural enterprises are conducted on a small scale; and as practically all available land is already under cultivation in the principal agricultural districts, this increased production of raw cotton necessitates a reduction in the acreage of land now being used for other agricultural crops. Thus, the question naturally arises as to which crops should suffer a reduction in the acreage hitherto allotted to them. It may appear advisable at first sight to reduce the acreage of land allocated to extensive foodstuff crops such as millet, kaoliang and corn, but a closer study will show that the matter is not so simple as it appears to the casual observer. As it is, North China is not self-supporting in these foodstuffs. It obtains these staples from Manchoukuo, financing the imports with the wages earned by large numbers of coolies who go to Manchoukuo every year. Now that Manchoukuo has restricted the entry of coolies from North China, it must be difficult for North China to make such heavy purchases of these agricultural foodstuffs from Manchoukuo as it has hitherto done. Furthermore, as the restriction of the entry of coolies into Manchoukuo will have the effect of increasing the farming population of North China, it is imperative that the production of these foodstuffs should be increased in North China itself through intensive agricultural management and without reducing the present acreage of land for the crops concerned. It may appear proper that peanuts and soya beans should be sacrificed on the altar of raw cotton, but as this may impair the cycle of crop rotation, which has hitherto been pursued in order to support the rural population, the detrimental effects of this policy must be minimized by providing better fertiliser, better irrigation facilities and higher technical skill. It is hardly necessary to point out that large-scale capitalistic management is preferable in the cultivation of cotton, but it is impossible to introduce this form of cotton planting everywhere, as agrarian communities in North China are generally densely populated and there are numerous petty yeomen to be considered. Consequently, the intensive cultivation of cotton must be linked to the Noji Gassaku Sha, which should exercise proper control over the production and other phases of the enterprise. It must direct the co-operative cultivation of raw cotton in order to reap results commensurate with such large-scale agricultural enterprises. Inasmuch as extensive areas of waste land still exist in low-lying marshy districts or in alkaline zones in North China, Japanese technical skill should be brought to bear in putting them under cultivation so that they may be converted into effective cotton plantation areas.

There is a similar need for increasing the production of wool. The wool-producing centres in China are the pasture lands of the outlying districts, and the sheep-raising enterprise is chiefly carried on by uncivilised Mongols. The present number of sheep in China is computed roughly at 34,900,000, and the annual production of wool is estimated at 523,000 piculs. Of this total, only 112,000 piculs are produced in the five provinces of the North, and yet North China occupies a dominant position in the wool industry, for practically all the wool produced in China brought to the North China market and 90 per cent, of all Chinese wool destined for export passes through Tientsin. As Chinese wool is generally of poor quality, close attention must be paid to improving the breeds of sheep and to putting the sheep-breeding enterprise itself under more effectual control. At the same time, the sheep-breeding areas of the nomads in the outlying provinces over which Japanese influence extends must be given better protection, by means of the establishment of a suitable land policy, for history records that in the recurrent struggles which have taken place between the Chinese and Mongolian races over Mongolian land issues, the nomads have invariably lost. The result has always been a gradual diminution in stock-breeding enterprises.

With a view to strengthening the anti-Comintern defence line, through the settlement of Japanese colonists in the area, and by improving agricultural technique, the Mongol-Sinkiang Administration has recently decided to offer to prospective Japanese settlers extensive areas, capable of being converted into paddy fields, out of the 12,000,000 cho of waste lands along the Yellow River in former Suiyuan Province and in the Ordos district south of the River, and it is expected that concrete plans in this connection will shortly be drawn up. This is a very welcome development, but much will have to be done in the way of providing these districts with sufficient irrigation facilities and in studying and carefully selecting such agricultural crops as are suited for cultivation in a soil which is always excessively dry for want of sufficient moisture. The amount of rainfall in Mongol-Sinkiang is so small that it averages a more 350 millimetres a year. Moreover, even this scanty rainfall varies greatly from year to year. The rainfall was only 35 millimetres in 1917 and 50 millimetres in 1928. As a natural consequence, the territory is subject to periodic droughts. The soil consists of yellow ochre and alluvion, it is true, but it shows a fairly strong alkaline reaction.

On the contrary, the territory of Central and South China is suited to the cultivation of rice, for, although the temperature is either tropical or subtropical the monsoons bring regular and plentiful rainfalls in the spring and summer months. Moreover, there are many rivers, canals and other water ways, large and small, while the soil consists of alluvion with thin strata of yellow ochre. Consequently, rice, wheat, barley, *kaoliang* and corn constitute the main crops. Tea, sugar and fruit are also produced plentifully, to say nothing of the large output of cocoons. Central China agriculture bears a striking resemblance to Japanese agriculture, while South China agriculture resembles Formosan agriculture in many respects.

Thus, rice is bound to remain the chief crop of Central and South China, while the sericultural and the tea industries will need to be carried on actively as well. To increase production here without proper control will necessarily give rise to serious friction with Japanese agriculture. About 80 per cent. of China's population is agricultural, but owing to the low productive power of Chinese agriculture, the country has not yet attained self-sufficiency in rice. In 1934, China imported rice to the value of 65,000,000 yuan and in 1935 to the value of some 89,000,000 yuan. Inasmuch, however, as rice is the main crop of Chinese farmers generally, the objective of the increased production plan must be to increase production to a level which will place China on a self-sufficiency basis, and at the same time supply the needs of the Japanese army on the spot. As to the raw silk industry and with America the largest consumer, the production in China of cocoons of the same quality as those

produced in Japan will necessarily constitute a menace to the Japanese sericultural industry. In default of any suitable substitute, however, the mere suppression of sericulture will place the livelihood of the farmers in Central and South China in serious jeopardy. Hence the need of proper adjustment as between the Japanese and the Chinese sericultural industries. In order to adjust them properly, due account must be taken of certain points of difference between the Chinese and the Japanese cocoons, which may be ascribable to climatic reasons, to the condition of the soil, to the various species of mulberry, to methods of raising silk worms, to different varieties among silk worms, and even to differences in national traits, customs, etc. Following this, the policy to be pursued by the newly established Central China Filature, a company under Sino-Japanese joint management, must be fixed with due regard for Chinese taste in silk, and a Sino-Japanese Silk Cloth Company must be established to study the new uses of Chinese raw silk and silk cloth and to endeavour to find new markets for them. Steps must be taken to stop the manufacture in China of the same kinds of raw silk for export as are produced in Japan, in order to avoid competition with Japanese raw silk. It is also necessary to restrict the production of raw silk in the country as a whole, taking the quantity which was produced prior to the outbreak of the Sino-Japanese conflict as a general upper limit for production.

6.

So far, I have dealt with the problems of the agricultural interrelation of Japan, Manchoukuo and China, as viewed from the standpoint of the bloc economy of these countries. This Japan-Manchoukuo-China economic bloc is by no means a merely conservative or defensive measure. As it is intended *inter alia* to furnish the basis for Japan's future economic development in the world at large, positive efforts must be made at once to develop within the bloc those

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branches of agriculture which are concerned with the production of the raw materials, in which Japan is deficient, and at the same time to stabilise the domestic economy of the Japanese, Manchoukuoan and Chinese farmers. It is also important to strive to retain the features of strength in Japanese agriculture, namely, its capacity to support a large farming population and its ability to guarantee a self-sufficiency in foodstuffs to the nation. Wise and practical methods must, therefore, be devised to secure the mutual adjustment of the agricultural interests of the three countries.