PROBLEMS OF THE RICE TRADE BETWEEN BURMA AND JAPAN

——A Case Study on Exports of Primary Products in Underdeveloped Countries——

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I. EXPORT, INVESTMENT, AND SAVINGS IN UNDERDEVELOPED COUNTRIES

As a heritage of colonial days, most underdeveloped countries today have an economic structure, sometimes called "export economy," in which the exports of a few primary products account for a large portion of the total exports, and in which the national economy on the whole depends upon the trends in the export of these products. On the other hand, all countries are now striving towards economic development in order to raise in the shortest time possible the per capita national income.

Investment is necessary to raise per capita income. Ragner Nurkse stated that the problems of capital formation in underdeveloped countries are found both in demand and supply. In regard to demand, he noted that "the inducement to invest" is low owing to "the small buying power of the people, which is due to their small income."[1] But, if the demand for investment is given by the development plan, this difficulty might be eliminated. The real problem, however, is the supply of capital, that is saving formation. It is important to remember that underdeveloped areas are in the classical world of Say's law, as Nurkse says,[2] and that, in general, there is no deflationary gap through excessive savings. Investment necessarily requires corresponding savings, and since underdeveloped countries are seldom producing capital goods domestically, investment means the importation of such goods. Unless savings are transferred from foreign countries, export earnings

1 Ragner Nurkse, *Problems of Capital Formation in Underdeveloped Countries*, Oxford, B. Blackwell, 1953, p. 5.

2 *ibid.*, p. 8.

must pay for the capital goods imported; it means that savings to meet investment must be supported by exports. One of the fundamental problems for underdeveloped countries carrying out a development plan is, therefore, how to refrain from dispersing export earnings into consumption, and transform them in savings readily available for investment. This is achieved forcibly. Since most of these countries have not yet well established taxation structures, they adopted the system of State monopoly over exports and/or imposition of export duties, at the risk of neglecting equity.

After World War II, exports of primary products compared to manufactured products have been stagnant. For raw materials, an explanation may be found in the adoption of raw materials-saving techniques and the substitution of synthetic and other artificial materials. In regard to agricultural consumer goods, the reason may be that the income elasticity of demand for these goods is low, and that advanced countries are protecting their own domestic agriculture. At any rate, imports of capital goods for economic development increase, exports of traditional, primary products are stagnant, and the result is an unfavourable balance of trade for the underdeveloped country. There would not be much difficulty if trade deficits were offset by the import of foreign private capital. But foreign private investors rarely consider it profitable to invest capital in countries where political conditions are insecure and economic prospects uncertain. Therefore, it is now common that the unfavourable balance of trade is accommodated by foreign aid or the reduction of development expenditures. It would, however, be preferable to promote exports to advanced countries. But the low income elasticity of demand for primary products, which is one factor of the stagnation of their exports, is a given condition. On the other hand, as agricultural protectionism in advanced countries is an "operational factor," its adequacy should be scrutinized.

II. RICE MARKETING IN BURMA

Burma is one of the most typical examples of an "export economy." After World War II, because of the decrease in the exports of mining products the dependence of her economy upon rice has remarkably increased. (See second column, Table 1.) Therefore, Burma's economy as well as her plan for economic development depend now entirely on the export of rice. The failure of the Pyidawtha Plan, adopted in December 1952 was chiefly attributable to the fact that it had been based upon the too high export prices of rice estimated in the com-

prehensive Report: Economic and Engineering Development of Burma, New York, Knappen Tippetts Abbett McCarthy Engineers, 1953, presented by the Knappen Tippetts Abbet. (See third column, Table 1.)[1]

Table 1. BURMESE EXPORTS OF RICE

(1) Years	(2) Value of Rice Exports / Value of Total Exports (%)	(3) Export Price of Rice per Long Ton (in kyats)	
		Actual	Plan**
1938–39	45.6		
1946–47	80.6		
1947–48	78.5		
1948–49	81.8		
1949–50	87.7		
1950–51	77.7	554	563
1951–52	74.0	702	720
1952–53	78.9	837	840
1953–54	79.3	663	785
1954–55	75.7	518	800
1955–56	76.6	454	787
1956–57	75.4	447	773
1957–58	74.2	443	760
1958–59	72.1	443	747
1959–60	70.9	407	733
1960–61	66.5		
1961–62	69.6*		

Sources: Ministry of Finance and Revenue (ed.), *Economic Survey of Burma* (every fiscal year), *passim*; U. Thet Tun, *A Review of Economic Planning in Burma*, Rangoon, Centra 1 Statistical and Economics Department, 1959, Table 9, p. 18 (mimeograph); and Knappen Tippetts Abbett (ed.), *op. cit.*, Vol. I, Part II, Table III-5A, p. 46.

Notes: * Provisional
** Intermediate estimate by K.T.A.

The State Agricultural Marketing Board (S.A.M.B.) established in 1946 was entrusted with the authority of taking all the necessary measures for the marketing and export of rice. The Board changed its name to the Union of Burma Agricultural Marketing Board (U.B. A.M.B.) on January 30, 1963, but purposes and functions remained practically unchanged.[2]

1 *cf.* U. Thet Tun, *A Review of Economic Planning in Burma*, Rangoon, Central Statistical and Economic Dept., 1959, p. 15. (mimeograph); Knappen Tippetts Abbet (ed.), *Comprehensive Report*, Vol. I, New York, 1953. See also Katsu Yanaihara, "Biruma no Bōeki Kōzō no Tokushitsu to Henka (Characteristics and Changes of Burma's Foreign Trade Structure)," in Noboru Yamamoto (ed.), *Biruma no Keizai Kaihatsu* (Economic Development in Burma), Research Reports Series No. 14, Tokyo, Institute of Asian Economic Affairs, 1961.

2 *The Nation*, Rangoon, February 5, 1963.

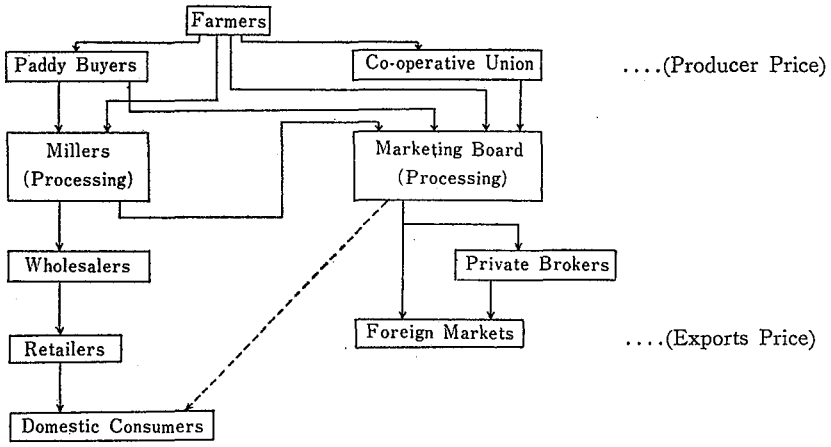
The West African countries in the British Commonwealth have similar marketing boards. In Ghana, Nigeria, Sierra Leone and Gambia they are engaged in the export of agricultural products like cocoa, groundnut, oil palm produce, cotton, oil seeds, etc. Their main function is to monopolize the purchasing and export of specific products, by buying from domestic producers at the "official producer price," and exporting to the world market. There is, therefore, no direct link between the producer price and the world market price. These boards are in the position of a perfect monopolist in regard to purchasing and export, because there is no domestic demand for these products, and producers are forced by law to sell to the board.

Rice, however, is one of the most important consumption goods for the Burmese people as well as in the foreign market. The U.B.A.M.B., when purchasing rice cannot, therefore, exercise a monopoly power in so perfect a manner as its equivalents in West Africa. The producers can reserve some portion for their individual consumption, and they have the option of either selling their rice to the Board or to private brokers. But when the domestic price seems to be too high, the Board can bring it down by selling some of its stock on the open market. Thus, through the control of the total supply of rice, it can indirectly influence the market price. The Marketing Board of Burma is obliged to buy all the rice offered by the farmers at the official producer price, if quality meets the standard. In this point, it is not different from its counterparts in West Africa; its monopoly power in export may, however, be a little weaker as long as Burmese private exporters are allowed to trade in rice. But these exporters are no more than intermediate agents for the Board, in the sense that they are not allowed to buy rice for export from any other source. Therefore, there is no significant difference between the U.B.A.M.B. and the marketing boards in the West African countries.

The marketing of rice produced in Burma is shown in Figure 1. What is purchased by the Board amounts to approximately one-third of the total supply of rice, and almost the total of what is exported overseas. It is, therefore, safe to say that the domestic market is nearly free, whereas export comes under the perfect monopoly of the Marketing Board.

The core of the problem is the practical aim and meaning of the marketing board. According to Jonathan V. Levin, the five objectives of the U.B.A.M.B. are as follows: (i) The Burmanization of "the rice-export marketing functions performed before the war by various non-

Figure 1. FLOW OF RICE MARKETING IN BURMA



Burmese groups—the European port millers and the Indian and Chinese export traders" (Nationalization is promoted in all underdeveloped countries, and Burma achieved it quite successfully.), (ii) "Taxation of the cultivator in place of the old land tax; absorption of landlord income which might otherwise accrue to the cultivator through reduced rents and nationalized land," (iii) "The encouragement of expanded rice cultivation through maintenance of a stable, guaranteed price to the cultivator," (iv) "The stabilization of the entire economy," and finally, (v) "the gaining of bargaining advantages through the monopoly sale of Burmese rice abroad."[1] This last objective is not practical for reasons that will be given later. Concerning the third objective, it is doubtful whether the expansion will be stimulated by stabilizing the producer price. Furthermore, it is not always sure that stabilization of producer income will necessarily follow stabilization of the producer price.[2] But if it could necessarily happen that a stable price results in a stable income for the producer, then the stabilization of the entire economy, objective (iv), would be attained by stabilizing the producer price of rice, objective (iii), wherever the great majority of the people live from its cultivation. Concerning the second objective, it still remains

1 Jonathan V. Levin, *The Export Economies*, Cambridge, Mass., Harvard University Press, 1960, pp. 221-224.

2 *Cf.* P.T. Bauer, *West African Trade*, Cambridge, Cambridge University Press, 1954, pp. 271 ff.; P.T. Bauer and F.W. Paish, "The Reduction of Fluctuations in the Incomes of Primary Producers," *Economic Journal*, Vol. 62, No. 248, London, Macmillan, December 1952, pp. 750 ff., and K. Yanaihara, "Nishi-Afurika no Marketing Board no Antei Seisaku to Kikin (The Stabilization Policy of the West African Marketing Board and Their

problematical whether the difference between the official producer price and the export price can be understood to be a substitute "tax" for the old land tax. But it means that the Government imposes savings on specific producers for the sake of economic development for all. In conclusion, the practical aim and meaning of the marketing board focuses on forced savings and stabilization of the producer price.

If the stated purpose of the marketing board is the stabilization of the producer price, the board will accumulate some surplus by exporting the product when its world market price is high. If the price is low it will operate in such a way as to subsidize the producers from the surplus so far accumulated. Thus, expenditures and revenues of the marketing board will become balanced in the long run. Historically, however, the marketing boards in West Africa accumulated a huge amount of surplus, by maintaining the producer price at a low level, and thereby imposing savings. It seems, for example, that in recent years only the Cocoa Marketing Board of Ghana gave more importance to the stabilization of the producer price than to the accumulation of surplus. This change in attitude became conspicuous when native Ghananians took over from the Englishmen. Since 1953, the stabilization of the cocoa price appears to have been successful. It must be noted, however, that although the Cocoa Marketing Board showed a deficit in some years, when export duties are included the aggregate sum of forced savings has always been positive.[1]

This is not to deny the importance or the necessity of compulsory savings for effectively enforcing the development programme in underdeveloped countries. The best way, however, is progressive taxation. If the existing tax structure or other conditions are not favourable, savings may well be primed through export duties. The operation of a marketing board better confine itself to the role of stabilizing the producer income by protecting it against the fluctuations of the market price. In Burma, the Marketing Board determines its producer price by a kind of parity method. The paddy price was about 100 kyats per 100 baskets in the years 1938-41. With these years as base, the

Funds)," *Mita Gakkai Zasshi*, Vol. 51, No. 4, April 1958, pp. 35-53.

1 *cf.* R.H. Green, "The Ghana Cocoa Industry: an Examination of Some Current Problems," *The Economic Bulletin*, Vol. 5, No. 1, Accra, The Economic Society of Ghana, May 1961, pp. 16-32; and K. Yanaihara, "Yushutsu ni okeru Kyōsei Chochiku —Gāna no Kokoa Yushutsu no Rei— (The Forced Saving through Export— A Case Study of Ghana's Cocoa Export)," *Mita Gakkai Zasshi* (Mita Journal of Economics), Vol. 55, No. 1, Tokyo, Keio Gijuku Keizai Gakkai (Keio University, Faculty of Economics), January 1962, pp. 1-27.

Table 2. CONTRIBUTIONS OF THE S.A.M.B. TO THE NATIONAL BUDGET

(in millions of kyats)

Years	(1) Rehabilitation Contribution	(2) Contribution for Capital Outlay	(3) Income Tax	(4) Total Contribution	(5) G.N.P.	(6) Annual Revenue of Government General Budget	(7) (4)/(5) %	(8) (4)/(6) %
1953/54	353	100	—	453	4,589	933	9.9	50
1954/55	364	100	50	514	4,813	1,106	10.7	46
1955/56	53	—	50	103	5,162	760	—	—
1956/57	150	100	50	300	5,429	1,209	—	—
1957/58	100	100	50	250	5,299	1,129	—	—
1958/59	55	10	50	115	5,493	1,045	—	—
1959/60	125	20	50	195	5,991	1,439	—	—
1955/56 —1959/60	483	230	250	963	27,374	5,582	3.5	17.2

Source: Kazuo Saito, "Biruma no Beikoku Keizai to Nōsanbutsu-Hanbai-Chō (Rice Economy and the State Agricultural Marketing Board in Burma)," *Ajia Keizai* (The Asian Economy), Vol. 4, No. 8, Tokyo, Institute of Asian Economic Affairs, August, 1963, p. 21.

general consumer price index in 1948 was 311 per cent and the consumer price index for foodstuffs 305. Taking these figures into consideration, the S.A.M.B. in the same year fixed its producer price at 300 kyats per 100 baskets or three times more than that of the base years.[1] In the following years, the new official price was, however, kept unchanged in spite of the aggravation of inflation. The actual producer price remained comparatively low, and the S.A.M.B. made considerable profits. Since 1948, the Board has the duty to return to the Government's general budget about 70 per cent of its profits as a "rehabilitation contribution." Since 1954, a "contribution for capital outlay" is levied and is earmarked for investment in the development plan. (In Burma, the fund for the investment plan is accumulated in the general budget.) Income taxes are imposed on State enterprises like the Marketing Board. These taxes paid by the government sector amount to no less than 80 to 85 per cent to the total proceeds of the Government from income taxes, and the S.A.M.B. is the largest contributor.[2] (See Table 2.) Besides, the Government imposes duty on rice

1 Nōrin Suisangyō Seisansei Kōjō Kaigi (Agriculture, Forestry and Fisheries Productivity Conference) (ed.), *Sekai no Kome* (Rice of the World), No. 9, Shōhin Keizai Sōsho, No. 19, Tokyo, 1959, p. 97.

2 Shigeru Tamura, "Biruma Kinyū no Tokushitsu (The Characteristics of Burma's Finance)," in Hideo Kurosaki (ed.), *Biruma no Kinyū Jijō* (Financial Conditions in Burma), Research Reports Series No. 25, Tokyo, Institute of Asian Economic Affairs, 1962, p. 90.

exports. In conclusion, it is quite evident that neither the primary purpose nor the function of the Board is so much the maintenance of a stable producer price of rice or a stable producer income, as to siphon savings from export earnings into the hands of the Government for public finances and especially for the realization of the economic development plan. The success or failure of the development plan, therefore, depends directly upon whether more rice will be exported or not.

III. RICE MARKETING IN JAPAN

As described above, rice is the most important item of Burmese exports, upon which the success of capital formation, and consequently, of the development plan, depends heavily. In Japan, on the other hand, there exists a large demand for rice, because it is one of the most important foodstuffs of the people. There exists, therefore, a possibility of rice trade between the two countries that can be analyzed from the price viewpoint, if we neglect differences in rice quality to be discussed later. But first in the present chapter some problems concerning the production and the marketing of rice in Japan are to be presented.

Postwar years in Japan according to the food situation can be divided into three periods.[1] The first period is characterized by a grave food shortage which continued almost until 1948. One of the principal purposes of the Food Regulation Act of 1942 had been to protect the consumers at the sacrifice of the producers, by fixing the consumer price, *i. e.* the price at which rice was rationed, at a level lower than if it had been left to market mechanism. By alleviating the burden of individual households that had to spend on rice a large portion of their income, such consumer protective policies contributed to the stabilization of the national economy at large. Japan underwent a serious structural change in its supply of rice by foregoing the two colonies of Formosa and Korea, important suppliers of rice. The years 1948 to 1955 form an intermediate transition period. After 1955, when the third period started, the productivity in rice cultivation showed a remarkable increase that reversed the relationship of supply and demand. If the black-market rice is added to the rationed one, supply even exceeds demand! Thus, the main purpose of the Food Regulation

1 Kokusai Shokuryō Nōgyō Kyōkai (Japan FAO Association) (ed.), *Nihon ni okeru Beikoku Jijyō* (The Rice Conditions in Japan), Tokyo, Japan FAO Association, 1963, pp. 4 ff. (Eng. trans. *Marketing and Warehousing of Rice in Japan*, Tokyo, Japan FAO Association, 1963, p. 4 ff.)

System became the protection of the producers at the sacrifice of the consumers, and further, the stabilization of the domestic agriculture at large, since rice is the main income for many small farmers.

Figure 2. FLOW OF RICE PRODUCED IN JAPAN

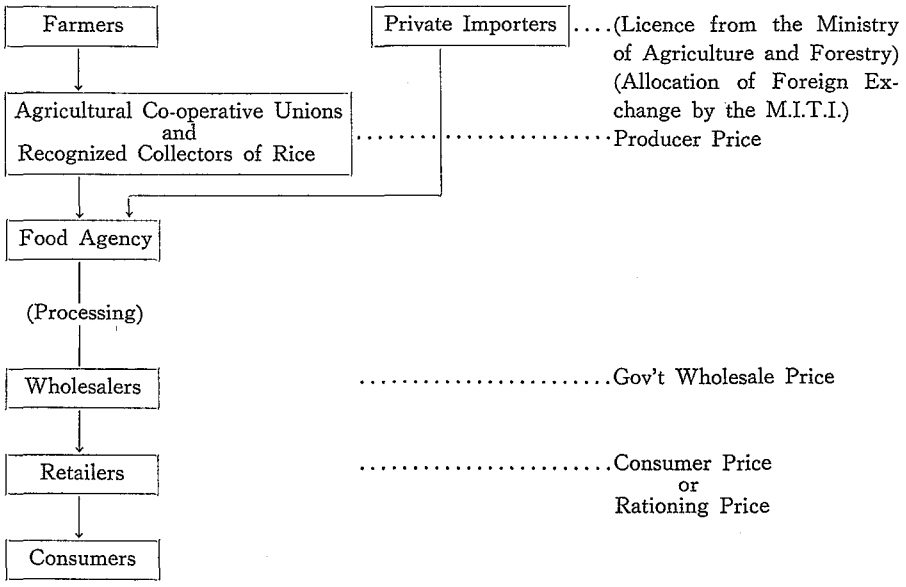


Figure 2 shows the present marketing process of rice produced in Japan. The Government determines three kinds of price, namely, (1) the producer price (*i.e.* the Government's buying price), (2) the Government's wholesale price, and (3) the consumer price (*i.e.* the rationing price). What is economically significant is the determination of the first and the third prices, since the wholesale price is determined almost automatically by deducting from the rationing price some margin for retail distribution. The Government is in the domestic market a perfect monopolist as well as a perfect monopsonist, because it is authorized by the Food Regulation Act to determine both the producer and the consumer prices regardless of supply and demand. The monopoly power of the Japanese Government is far stronger than that of previously mentioned marketing boards, that behave as near-monopsonists, because they can manipulate the producer price only, while the export price is given. Moreover, the purposes and functions of the Japanese Food Regulation System are entirely different from those of the Union of Burma Agricultural Marketing Board. In Japan, the producer and consumer prices are determined on different principles. From 1955 to

1959, the first was determined by the "parity method." For the rice produced in 1960, however, the "cost and income compensation method" was adopted, and has been maintained ever since. It takes as standard the per unit cost of production of the marginal farm, where the cost of family labour input is estimated according to the average wage-rate in manufacturing industries. In other words, the Government determines the producer price, "by taking into full account the cost of production, the index number of prices and all the other economic conditions, so that the price will be high enough to make the reproduction of rice possible."[1] It should secure to the producers of rice, and consequently, to the farmers in general an income as high as the one received by urban dwellers.

On the other hand, in the determination of the consumer price, primary importance is given to the stabilization of the consumers' family income by taking family expenditure and other economic conditions into consideration.[2] The price is based on the consumer price in the past, when the family income is thought to have been relatively stable, multiplied by the rate of increase in its income (the family expenditures). The Government's financial situation and other economic conditions in general affect also its final determination.

At any rate, the validity of the Food Regulation System itself is open for question, because the present relationship of rice demand and supply as well as the other economic surroundings are quite different from what they were during the last war when the system was established. Since 1961, the current food regulation policy has been much discussed by politicians and economists.

In 1960, when the "cost and income compensation method" was first adopted, the average producer price or the Government's buying price of the 1st to 4th grade unpolished rice was ¥10,405 per 150 kilogrammes (including packaging cost). In 1961, it was raised to ¥11,052.5, that is ¥647.5 or 6.2 per cent higher than the price of the preceding year. This considerable raise was due to the fact that both wages and prices of goods and services had already increased markedly following the current high rate of economic growth. Another reason was that the "cost and income compensation method" was applied in a way somewhat different from the previous year, because the Government now intended to readjust the wide income differential between the manufacturing and agricultural sectors. In 1962, the average pro-

1 Food Regulation Act, Art. 3.

2 Food Regulation Act, Art. 4.

ducer price of unpolished rice was further raised to ¥12,177 per 150 kilogrammes, following the upward trend of wages and the general price index. On the other hand, from 1957 to the end of 1962 the average consumer price (the rationing price) of polished rice was kept unchanged at the average level of ¥850 per 10 kilogrammes. In the meantime, the Government's selling price to the wholesaler was lowered enough to compensate for the rise in wholesale costs. (See Table 11) In December 1962, the average consumer price of polished rice was raised to ¥955 per 10 kilogrammes. At the same time, a new grade of "special rice" was introduced and priced 60 yen higher than the price of ordinary rice.[1]

In recent years, because of the comparatively high purchasing price (producer price) of the rice domestically produced and its comparatively low rationing price (consumer price), the Government's Special Account for Food Regulation usually registered a deficit. In fiscal year 1960, the deficit amounted to about ¥28.1 billion (or about U.S. $78.1 million).

The Government is bound by the Food Regulation Act to buy up all the rice farmers' crops tentatively offered before the harvest. Although this kind of forward transaction is the most substantial, it purchases also all the rice offered only when the crop is in. Therefore, like marketing boards in other countries, the Japanese Government practically buys up all the rice offered by the farmers, without regard to any previous engagement to purchase. (Note, however, that unlike the Burmese, Japanese farmers are not allowed, at least legally, to sell their rice to anybody else but the Government.) Accordingly, it must be emphasized that the richer the harvest, the higher the Government's buying price (producer price), the more attractive the advances which the government pays to the farmers when they enter the contract to sell the future rice, and the more rice the farmers offer, the greater the deficit of the Special Account for Food Regulation.

Every year about 1.5 to 2 million tons of rice is illicitly traded on the black-market. One of the reasons is that the farmers can withhold more rice than they need for their household consumption, because under the present system it is left to their own decision how much rice they sell to the Government and how much they consume domestically. But recently, the price of black-market rice in the rural districts is a little lower than the Government's average buying price.

1 Planning Section, Minister's Secretariat, Ministry of Agriculture and Forestry (ed.), *Nōgyō no Dōkō ni kansuru Nenji Hōkoku 1962* (Annual Report on Recent Trend of Agriculture 1962) Tokyo, Part II, Chap. II, p. 119.

Since December 1962 the consumer price of ordinary-grade rice (*i. e.* the rice other than the special and the economical grade) has been ¥975 per 10 kilogrammes in the most densely populated prefectures of Tokyo, Kanagawa, Aichi, Kyoto, Osaka, and Hyogo. The prices paid here for the non-rationed (black-market) rice domestically produced have not been much different from the official consumer price, and ranged between ¥960 and ¥990 per 10 kilogrammes. It is therefore evident that the cultivation of rice, and hence, the producers of rice, have been protected through the deficit of the Special Account for Food Regulation, which eventually must be borne by the general taxpayer.

Figure 2, which shows the marketing system of rice in Japan, partly illustrates the present system of rice importation. The importer must obtain an import permit from the Ministry of Agriculture and Forestry. Next, he must apply to the Ministry of International Trade and Industry for the necessary foreign exchange. The needed foreign currency is allocated to competent importers according to the Foreign Exchange Fund Allocation System.[1] Liberalization of exchange control is an imminent problem, since Japan is expected to declare in the near future to be a so-called Article 8 nation of the International Monetary Fund. (The ratio of Japan's import liberalization was 89 per cent as of April 1963.) Rice, however, will be one of the last items in the F.A. System. Besides the exchange control, an *ad valorem* duty of 15 per cent is legally imposed on imported rice, but the importers are, at present, temporarily exempted from this duty, because they are obliged to sell to the Government all the rice imported.

Thus the Government virtually stands as a monopolist of rice imports. Its buying price from importers is outside its control, because the price auctioned must be below the limit of the price estimated previously on the basis of the international market price. In this respect, the position of the Japanese Government is quite similar to that of the marketing boards. As the Government, however, is a perfect monopolistic supplier in the domestic market, it adjusts the price of

1 At present, foreign goods are imported into Japan under three formulas: the Automatic Approval (A. A. System), the Automatic Foreign Exchange Fund Allocation System (A. F. A. System), and the Foreign Exchange Fund Allocation System (F. A. System). The foreign exchange fund which comes under the last category is most strictly regulated, and the import of articles which must be paid from this fund is permitted only to "competent" importers. The norm of competence is judged from the past record of importation, financial standing, capacity, reputation and so forth, of the applicants.

imported rice to the official price of home-produced rice. Since the former is lower than the latter, the Government can make a profit on rice as well as on imported wheat that also comes under the Food Regulation Act. The profits that accrue from both imported rice and wheat are an important source of the fund which makes up for the deficit of the Special Account for Food Regulation, resulting from the handling of home-produced rice and wheat. In fiscal year 1959, such profits amounted to approximately ¥22.4 billion. In summary, there is no link between the price of imported rice and that of domestically produced rice, and the domestic production is protected by the Government.

IV. COMPARISON OF PRICES BETWEEN BURMESE AND JAPANESE RICE

1. International Comparison

Tables 3 and 4 give the available data for an international comparison of the prices of rice. Both tables are no doubt useful, but neither is adequate from the viewpoint of the international division of labour. For our purpose we need the price that would be determined through price mechanism in the domestic market without any intervention, if there were no foreign trade. But since the actual economies are far from free and closed, we will estimate as closely as possible the would-be price.

Table 3. COMPARISION OF THE PRICES OF RICE ON THE JAPANESE MARKET

—Producer Price—

(in yen per 60 kilogrammes)

Price \ Years	1956	1957	1958	1959	1960
(a) Domestic Rice*	3,788	3,898	3,880	3,886	3,902
(b) Foreign Rice**	3,095	3,041	3,120	3,118	2,904
Price Index (a)=100	82	78	80	80	74

Source: Planning Section, Minister's Secretariat, Ministry of Agriculture and Forestry (ed.), *Nōgyō no Dōkō ni kansuru Nenji Hōkoku 1961 —Kaisetsu-Ban—* (Annual Report on Recent Trend of Agriculture 1961 —Commentary Edition—), Tokyo, 1961, Appendix Statistics, Table C-13, p. 275.

Notes: * This price is the producer price of 3rd-grade unpolished rice naked, not packed.

** These prices are average c.i.f. prices based on the quantity and value of all rice, except broken rice, as given in the custom-house statistics for each calendar year.

Table 4. INTERNATIONAL COMPARISION OF THE PRICES OF RICE BURMA AND JAPAN

—Consumer Price—

(in U.S. $ per M/Ton)

(1) Year	(2) Japanese Rice*		Burmese Rice					
			(3) Paddy**		(4) Milled Rice***			
	Price	Index	Price	Index	Price	Index	Price	Index
1955	212	100	30	14.1	132	62.0		
1956	212	100	30	14.1	91	42.9		
1957	236	100	30	12.7	91	38.5		
1958	236	100	30	12.7	88	37.2		
1959	236	100	30	12.7	89	37.7		
1960	236	100	30	12.7	88	37.2	117.15	49.5
1961	236	100	32	13.1	91	38.5	127.54	53.8
1962	236	100	32	13.1	91	38.5	111.61	47.0

Sources: Compiled from the two Tables: "Yunyū Keiyaku Kakaku (Import Contract Price)" and "Sekai Shuyō Koku no Kome Kakaku (The Rice Price in Some Important Countries)," in Statistics Section, Ministry of Agriculture and Forestry (ed.), *Poketto Nōrin Suisan Tōkei 1963* (Manual of Statistics of Agriculture, Forestry and Fishery 1963), Tokyo, Nōrin Tōkei Kyōkai (Agricultural and Forestry Statistics Association), 1962, pp. 150, 159.

Notes: * The basic rationing price for water-field rice plant of what was called, until September 1957, "70 per cent polished rice," and, since, "perfectly polished rice."

** The S.A.M.B. minimum producer price of "Ngasein" of average quality at port. In 1955-60, for instance, the guaranteed minimum price was 300 kyats per 100 baskets (4,600 pounds). The figure of U.S. $30 per metric ton was obtained by using the I.M.F. par rate of exchange, $0.21 per kyat.

*** (I) Contract prices, f.o.b. Rangoon, under bilateral trade agreement with India, for "Ngasein," small mills special, 42 per cent broken.

(II) Contract prices c.i.f. between Burma and Japan for milled rice 15 per cent broken.

2. *Estimation of the Price of Rice in Burma*

A typical agricultural household in the delta districts of Burma after World War II is supposed to consist of five members, of whom three are of productive age, and to cultivate about ten acres of land. The income and expenditures of such a family are shown in Table 5. By dividing its cash expenditures of 1,055 kyats by the saleable crop of 285 baskets, we have 370 kyats per 100 baskets, which we shall regard as the cost of production in Burma. In 1948, the S.A.M.B. fixed its purchasing price (producer price) of paddy at 285 kyats per 100 baskets in the up-country and 300 kyats at the port; these prices were kept

Table 5. INCOME AND EXPENDITURES OF A TYPICAL FARMING HOUSEHOLD IN BURMA (after World War II)

Total Crop		350 baskets
Allowances		
Domestic Consumption	45 baskets	
(9 baskets per capita per annum)		
Consumption of Hired Labour	5 〃	
Seeds	15 〃	
Subtotal	65 〃	
Saleable Crop		285 〃
—do— (Cash income)		855 kyats
Cash Expenditure		
Wages to Hired Labour	180 kyats	
Consumption Expenditure	761 〃	
Rents	30 〃	
Payment of Interests on Debts	84 〃	
Subtotal	1,055 〃	
Total		(−) 200 〃

Source: Nōrin Suisangyō Seisansei Kōjō Kaigi (Agricultural, Forestry and Fisheries Productivity Conference) (ed.), *Sekai no Kome* (Rice of the World), *No. 9*, Shōhin Keizai Sōsho, No. 19, Tokyo, Agricultural, Forestry and Fisheries Productivity Conference, 1962, p. 49.

Notes: According to a report of the Committee for Land and Agricultural Programmes, the total revenue from 10 acres of land is 850 kyats and the expenditures for seeds and hired labour are about 300 kyats.

Table 6. WHOLESALE PRICE INDEX OF AGRICULTURAL PRODUCES IN BURMA

(1938-40=100)

Period	All Commodities	Cereals	Pulses	Oil-seeds	Other Foodstuff*	Other Non-foodstuff**
1955/56	462	319	603	687	837	815
1956/57	499	310	663	811	1,009	937
1957/58	535	322	570	816	1,183	1,120
1958/59	479	326	556	756	706	996
1959/60	518	350	553	837	907	927
1960/61	557	360	660	896	1,145	950
Oct., 1960 -June, 1961	554	355	624	901	1,168	947
Oct., 1961 -June, 1962	553	381	734	876	887	1,013

Source: Ministry of Finance and Revenue, *Economic Survey of Burma, 1962*, Table 50, p. 83.

Notes: * Chillies, onion and jaggery.
** Tobacco and cotton.

unchanged for ten years. With this producer price of 285 kyats and the cost of production of 300 kyats per 100 baskets, farmers are not to produce more rice than they need for their household consumption. As explained above, in 1948 the S.A.M.B. determined the producer price by a kind of parity method. The prewar price adopted as base may have been a proper compensation for the farmers. But there is no doubt that the decrease in the purchasing power of the 1948 price was considerable during the decade until 1957, when the wholesale price index of agricultural products was 23 per cent, and the general retail price index 15 per cent higher than their corresponding 1948 price index. In order to increase exports through a stimulus to the production of high-quality rice, the S.A.M.B. decided in 1959 to pay a premium to the farmers: 25 kyats per 100 baskets of 1st-grade rice and 15 kyats for 2nd-grade rice. Until then, there was little inducement for farmers to improve quality, because the Board used to buy all rice without regard to differences in quality. In spite of this new measure, the producer price was still relatively low, since rice, as a cereal, belonged to the lowest, priced agricultural products (See Table 6).

Calculating the virtual tax which the Board levies upon rice producers, J.V. Levin figures out that, "If the price paid the cultivator in the absence of the S.A.M.B. would have risen in about the same proportion as the export price of rice, the S.A.M.B. tax upon the cultivator would be equal to the difference between the price the cultivator received under S.A.M.B. operations and his prewar price raised by the same proportions as the increase in the rice export price."[1] In other words, if we draw a diagram with the years along the horizontal axis and the price indices along the vertical axis, then (Levin continues) "the vertical distance between the paddy price index and the rice export price index indicates the 'tax' upon the cultivator based upon the assumption of a normally proportionate paddy price." All this means that in the absence of the S.A.M.B. the present producer price would have gone up to the level of the present export price minus processing and marketing cost from the up-country paddy to the rice at the port. Levin presents still another way of calculation based upon a parity price conception. The "tax" is regarded as the excess of the cost of living over the producer price, regardless of the export price. If we draw again a diagram, with the years posted horizontally, and both the paddy price index and the cost of living index in Rangoon vertically, then, according to Levin, "the vertical distance

1 Levin, *op. cit.*, pp. 244-246.

between the former (price index) and the latter (cost of living index) provides a measure of the 'tax' upon the cultivator." According to this conception, it follows that the producer price of rice would, if not interfered with by the S.A.M.B., rise in proportion to the increase in the cost of living. Levin says, also, that "through its price policy, the S.A.M.B. siphoned off all or almost all of the savings which accrued to the cultivator from the diminished land tax, the legislatively reduced rents, and the other parts of the agricultural programme (as the result of the land reform)."[1] According to this way of reasoning, had it not been for the S.A.M.B., there would have been increased savings but no effect upon the cost of production.

Table 7. PADDY PRODUCTION IN BURMA

	1936/37-1940/41 (Average)	1959/60	1960/61	1961/62 (Estimates)
Crop (1,000 tons)	7,420	6,916	6,682	6,485
Index	100	93	90	88
Yield per Acre				
(Baskets)	28.17	31.53	30.39	29.17
(Pounds)	1,296	1,452	1.398	1,342
Index	100	112	108	104
Sown Acreage	12,832	10,667	10,709	10,826
Index	100	83	83	84

Source: Ministry of Finance and Revenue, *Economic Survey of Burma, 1962*, Tables 7, 8 and 9, pp. 13, 15, 16.

There are more problems on the supply side. The recent annual production of paddy in Burma has not yet recovered its prewar level of about 7.4 million tons (See Table 7). The total sown acreage of rice is also smaller than before the war. U. Thet Tun attributes this decline to prolonged insecurity or to lack of incentive to produce, or both.[2] The phenomenon has to be analyzed under its various facts: labour, land and price.[3]

In regard to labour, few labourers now come from India, although many did before the war, and some moved to the near-by cities because of insecurity. From the viewpoint of the land, almost all arable land had already been brought into cultivation before the war, and for

1 Levin, *ibid.*, p. 248.

2 U. Thet Tun, *op. cit.*, p. 19.

3 Katsu Yanaihara, "Biruma no Bōeki Kōzō no Tokushitsu to Henka (Characteristics and the Changes of Burma's Foreign Trade Structure)," in Noboru Yamamoto (ed.), *op. cit.*, pp. 345-350.

security reasons some farmers gave up the cultivation of land far from the village. Furthermore, it was common that farmers had no other choice but to run away if they could not repay the debt for which their land was put up as security. Under the Land Utilization Act of December 1948, only a genuine agricultural holding of less than 50 acres is permitted to private citizens, and all remaining land became the ownership of the Government. Creditors are now unable to own or cultivate abandoned lands of more than 50 acres. The result is that, especially in the vicinity of cities, land is apt to be idle, because farmers found jobs in the cities.

The postwar yield of paddy per acre is just a little higher than in prewar years (see Table 7). One would wish to know the relation of producer price to supply, but it is difficult to know precisely to what extent stagnant production is attributable to low price. Some argue that in postwar years, except for fluctuations due to unfavourable weather, the trend of rice production has not been downward, and therefore, that the present producer price is not improperly low. But the reason for the relatively stable rice production is partly found in the fact that farmers had to stick to rice production because they needed rice for their domestic consumption and because it was not easy to find a more profitable crop.

Paddy and rice for domestic consumption are found in the free market. As mentioned before, the U.B.A.M.B., although it has rarely done so, can affect more or less indirectly the consumer price in this free market through its selling operation at the official price.[1]

Table 8 gives the prices of the three types of rice for the years 1950-1960. The problem is to determine which of these three prices is the most suitable for price comparison from the standpoint of the division of labour between Burma and Japan.

Let us first consider the shape of the supply curve. If we assume that the output of rice is proportionate to changes in the supply of labour, we can analyze the effects of fixing a low producer price and the impact of forced saving or tax upon the labour supply instead of on production. If Burmese farmers behave like coolies and are reluctant to offer more labour when their income reaches at a certain point, then the labour supply curve is backward-bending: a lower producer price induces a greater amount of production within some range. Even if, on the contrary, farmers behave as modern labourers and

1 In 1948, the selling price at Rangoon was fixed at 328 kyats per long ton. *cf.* Kazuo Saitō, *op. cit.*, p. 11.

Table 8. PRICES OF BURMESE RICE

(in kyats)

	(1) Producer Price of Paddy (per 100 baskets)	(2) Producer Price of Rice		(3) Export Price of Rice (per L/ton)
		(per 100 baskets)	(per L/ton)	
1950–51	300	800	239	554
1951–52	300	800	239	702
1952–53	300	800	239	837
1953–54	300	800	239	663
1954–55	300	800	239	518
1955–56	300	800	239	454
1956–57	300	800	239	447
1957–58	300	800	239	443
1958–59	300	800	239	443
1959–60	300	800	239	407

Source: Arranged by the Table 10 in K. Saito, *op. cit.*, p. 17.

Notes: 1. Both (1) and (2) are prices at the port of shipment for export.
2. 100 baskets of Paddy=4,600 pounds
100 baskets of Rice=7,500 pounds

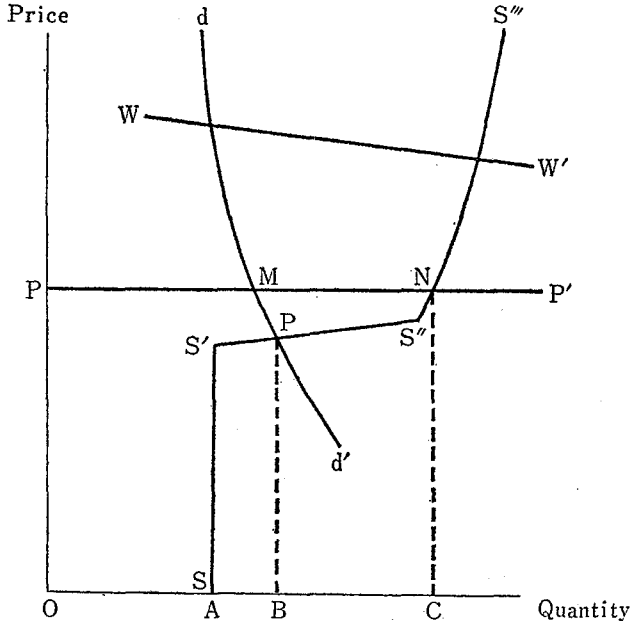
produce more for a higher producer price, then, even if the labour supply curve slants upward and to the right as the price rises, the supply of labour (*i. e.* the output of rice) would be inelastic to the downward price movement below a certain level, where it is difficult for the rice cultivators to shift production to other crops or find another employment. According to Levin, much of the paddy land in Burma cannot be readily shifted to the production of other crops.[1] He admits, however, the possiblity in the longer run of reducing rice production and shifting to more profitable crops or occupations. P.T. Bauer and B.S. Yamey state that such statutory marketing boards as the S.A.M.B. give the maximum disincentive effect on production.[2] It means that they assume the shape of the supply curve of labour or of output which normally rises upward and to the right. Unlike the case of cocoa in Ghana almost entirely exported, in the case of rice it does not seem to be a proper method of analysis to establish a two-sector model of subsistence economy and exchange economy, and limit the impact of the marketing board upon the latter.

A tentative supply curve of rice (s−s‴) is given in Figure 3. The lowest part (s−s′) is rigidly vertical. It implies that farmers will always produce rice in a quantity just sufficient to meet their own

1 Levin, *op. cit.*, p. 254.

2 P.T. Bauer and B.S. Yamey, *The Economics of Underdeveloped Countries*, London, J. Nisbet, 1957, p. 200.

Figure 3. DEMAND AND SUPPLY OF RICE IN BURMA



needs (represented by O−A on the horizontal axis) irrespective of the price. The second part of curve (s′−s″), corresponding to A−C on the horizontal axis, is elastic to a change of price. Expansion of the cultivated area, increase in the quantity of rice exported, and increases of the export price were in positive correlation until around the 1920's. This suggests that the increased foreign demand for Burmese rice raised the price of rice and that the higher price stimulated production. The notable increase in these years was physically possible by the use of additional land and by the existence of surplus labour.[1] After mobilization of the rural unemployed, the need for more labour was largely satisfied by labourers from Upper Burma, and about 1,860 by immigrants from India. Thus additional input of surplus productive factors made for a rapid increase in rice production. That is why the supply for a market where the influence of the foreign market is predominant, is thought to be price-elastic, once farmers' needs are satisfied. The last portion of the supply curve (s″−s‴) is again rather price-inelastic, due to the reasoning that the production has remained

1 K. Yanaihara, *op. cit.*, especially Section I-1, 'The Structure of Commodity Trade,' in Noboru Yamamoto (ed.), *op. cit.*,pp. 311-327. *cf.* Hla Myint, "The 'Classical Theory' of International Trade and the Underdeveloped Countries," *Economic Journal*, Vol. 68, No. 270, London, Macmillian, June 1958, pp. 317 ff.

almost the same for many years at the prevailing producer prices, and the marginal cost of rice-growing is now much higher than it was before the 1920's, because there is no labour immigration from India, and no more readily available land.

The $(\alpha-\alpha')$ curve represents the domestic demand schedule for rice.[1] The curve $(p-p')$ represents the demand schedule of the U.B. A.M.B., that is, its producer price. These curves are the aggregate or social demand schedule of rice in Burma. The curve $(w-w')$ shows the foreign demand for Burmese rice; Burma must be interpreted as a giant rice producer competitive in the world market. This $(w-w')$ curve does not represent in any sense the aggregate or social demand schedule on the world rice market. Levin writes, "..... Since Burma supplied almost one-third of the rice internationally traded, and produced about 6 per cent of the total world crop, variations in the volume of Burmese rice production could have some short-run effect on the world price."[2] Thus, he regards Burma as an oligopolist supplier in the world market; but one expects that the influence will not be strong, since rice cannot be stored and Burma cannot manipulate her own supply in the world market. Therefore, the $(w-w')$ curve in the diagram slants down mildly towards the right.

The current quantity of rice produced is represented as the distance between O and c which is vertically below the point of intersection N of the $(p-p')$ and the $(s-s''')$ curve. M represents the intersection point at which the $(p-p')$ and the $(d-d')$ curves cross each other. Then, under the assumption that the domestic consumers' demand price becomes equal to the Board's producer price, the distance between M and N represents the excess supply, that is to say the quantity of rice currently exported. Finally, point P, at which the $(d-d')$ and the $(s-s''')$ curves intersect, represents the price that can most properly be used in comparing the costs of production in Burma and Japan. The distance between O and B, B corresponding to P, gives the supply of rice at this price level. In the analysis below, however, the Board's present producer price will be substituted for the price (P−B) in the diagram. This is permissible for the following two reasons. First, these two prices, (P−B) and (N−C), cannot be widely different, as long as the slope of the supply curve is very mild in the area between P and N, that is as long as the supply curve is

1 More strictly, the curve $(d-d')$ represents the demand of the brokers, supported by the demand of the final consumers.

2 Levin, *op. cit.*, p. 253.

very elastic to the price. In the second place, the (P−B) price, which would prevail domestically if there were no foreign trade, is always lower than the (N−C) or Board's purchasing price as long as the supply curve in this area goes up towards the right. Therefore, the substitution of (N−C) for (P−B) is safe, when we can expect Burma to have a comparative advantage over Japan in rice production.

In the following paragraphs, some consideration will be given to the qualitative differences between Burmese and Japanese rice. The representative Burmese rice exported is the "Ngasein" type C, often called "rice for curry." It has a long grain and does not suit the taste of the Japanese people. For some years immediately after the war, when the shortage of food was very serious, Japan had no choice but to import foreign rice of long grain and inferior quality. Japanese prefer, however, the short grain referred to as "rice for pudding." The Burmese "Midon" type D is of this type. "Ngasein" and "Midon," with 15 per cent brokens each, are officially classified as high-ranking foreign rice in Japan. For the sake of convenience, we neglect the product differentiation between "Midon" and purely Japanese kinds of rice.

According to a survey made in July 1960, the price of "Ngasein" was 812 kyats per 100 baskets (7,500 lbs.) at the port of shipment, and 774.5 kyats at the buying-depot up-country.[1] In 1963, the U.B.A. M.B. fixed its purchase price of "Ngasein" and "Ngasein-net paddy" at 300 kyats per 100 baskets (4,600 lbs.) for the first quarter, 310 kyats for the second quarter, and 315 kyats for the third quarter of the year. The price for "Kaukkyi paddy" was 315 kyats, 325 kyats, and 330 kyats for the respective quarters, and for "Emata" was 320 kyats, 330 kyats and 335 kyats.[2] Since the price and supply curve of the "Midon" variety are not given, we assume that both move in the same direction and with the same intensity as other varieties. In order to compare the Burmese and Japanese rice prices, we take the producer price of 320 kyats per 100 baskets or 251 kyats per metric ton, as the price of Burmese rice, and the year to be compared 1960.

3. *Estimation of the Price of Rice in Japan*

The production cost used as basis for determining the producer price in Japan should first be studied. Table 9 shows, as an example, how the 1961 producer price was determined by the "cost and income

1 Kazuo Saitō, *op. cit.*, p. 11,

2 *The Nation*, January 17, 1963.

compensation method." The "original cost of production" depends upon the calculation of the "adjusted cost of production" per *tan* (a Japanese measure of land, equivalent to 991.7 square metres), and, in 1960, was ¥17,930. It is close to the ¥17,558 per *tan* which is equal to the cost of production of ¥5,936 per 150 kilogrammes in Table 10. The annual average of the original cost of production for 1958-1960 was ¥17,140 per *tan*. The excess of ¥8,576 of the adjusted cost of production of ¥25,716 over the original cost of production can be regarded as a kind of governmental subsidy to rice production.

Since, however, rice is actually supplied at the basic price of

Table 9. THE CALCULATED FORMULA OF THE STANDARD PRICE OF JAPANESE RICE

Basic Price

$$¥25{,}716\frac{(\text{annual average of the adjusted cost of production per 991.7 sq. metres for 1958-1960})^{(1)}}{2.43\ koku \text{ or } 438.35 \text{ litres}^{(2)}} = ¥10{,}583$$

Standard Price (third grade rice, naked)

¥10,583 plus ¥32.5 (cost of transportation) = ¥10,615.50

¥10,615.5 (basic price) minus ¥255 (seasonal adjustment) minus ¥45 (expected loss in refining) minus (△¥8) (adjustment for difference in grade) = ¥10,322.50

Source: Planning Section, Minister's Secretariat, Ministry of Agriculture and Forestry (ed.), *Nōsanbutsu Kakaku no Genjō-bunseki* (Analysis of Agricultural Price), Tokyo, Nōrin Tōkei Kyōkai (Agricultural and Forestry Statistics Association), 1962, Appended Table, p. 47.

Notes: 1. Cost of Production per 991.7 sq. metres of field

	Original Cost	Adjusted Cost
1958	¥16,718	¥25,787
1959	¥19,771	¥25,628
1960	¥17,930	¥25,734
Average	¥17,140	¥25,716

1) Average Wages in the city, adjusted
Male and Female.....¥96.96 × 0.9065 = ¥87.89
Male.....¥119.35 × 0.9065 = ¥108.19

2) Interest on Capital
Interest on borrowing.....8.25%
Interest on own capital: Before April.....5.9%; After April 5.5%
Including of interest on the producers' own labour

3) Rent
As estimated in the survey of the cost of production.

2. Productivity of Rice per 991.7 sq. metres in Japan

	Average Yield	Standard Deviation	
1958	2.79 *koku*	−0.46 *koku*	=2.33 *koku*
1959	2.91 〃	−0.46 〃	2.45 〃
1960	2.96 〃	−0.46 〃	2.50 〃
Average			2.43 〃

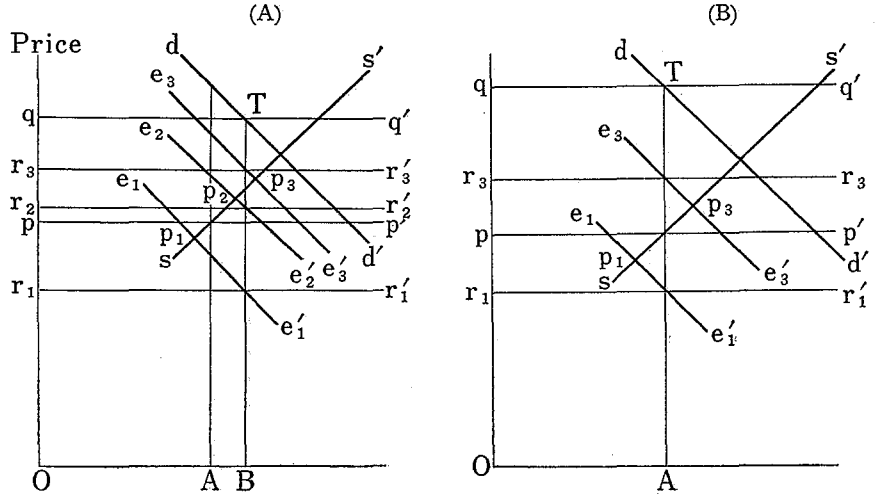
Table 10. COST OF PRODUCTION OF JAPANESE RICE

(In yen per 150 kilograms)

Item \ Crop Years	1959	1960	Percentage of 1959	1961	Percentage of 1960
Number of Farms Surveyed	2,852	5,044		4,867	
Seeds and Saplings	73	86	117.8	90	104.7
Fertilizer	1,102	1,107	100.5	1,152	104.1
Miscellaneous Materials	164	195	118.9	239	122.6
Irrigation	166	179	107.8	194	108.4
Preventives	152	161	105.9	163	101.2
Farming Tools	493	545	110.5	748	137.2
Buildings	183	188	102.7	202	107.4
Cattle Breeding	403	366	90.8	322	88.0
Labour	2,884	2,978	103.3	3,402	142.4
Rental	148	152	102.7	187	123.0
Subtotal(1)	5,768	5,957	103.3	6,699	124.6
By-products(2)	749	739		753	
Cost of Production Exclusive of By-products (1)−(2)	5,019	5,218		5,946	
Capital Interest	275	293		300	
Rent	399	425		437	
Cost of Production(3) (except tax)	5,693	5,936	104.3	6,683	112.6
cf. Taxes(4)	602	570		591	
cf. Cost of Production (including tax) (3)+(4)	6,295	6,506		7,274	

Source: Statistics Section, Ministry of Agriculture and Forestry (ed.), *op. cit.*, p. 148.

Figure 4. DEMAND AND SUPPLY OF RICE IN JAPAN



¥10,615.5 per *koku* (a Japanese measure, equivalent to 180 litres), this basic price or the standard price of ¥10,322.5 can be considered as the marginal cost of production. Therefore, the above determined "governmental subsidy" can also be regarded as a kind of reasonable profit for the farmers, and hence, a constituent part of the cost of production.

Figure 4 (A) shows presumable schedules of supply and demand for rice in Japan. The curve (s−s′) represents the supply schedule of domestic rice, and the curve (d−d′) the consumers' aggregate demand schedule. The curve (p−p′) represents the producer price (*i.e.* the Government's purchasing price). Right below the point of intersection of the supply curve (s−s′) and the Government's purchasing price or its demand curve (p−p′) is the point A; the distance between point A and point O represents the current supply of domestic rice. The consumer price curve (q−q′) (*i.e.* the Government's rationing price) is horizontal and below the point of the (d−d′) curve just corresponding to point A, because some portion of the aggregate supply consists of imported rice, and because the Government's rationing price is determined in order that the consumers' family income may be stabilized through a low price. Point B on the horizontal axis corresponds to point T, intersection of the (d−d′) and (q−q′) curves. The distance AB represents the foreign supply, and OB the aggregate supply in the Japanese rice market. Let us assume that the Government's wholesale price to the wholesaler is established so that it be equal to the rationing price minus all the market expenses including the intermediaries' margins. Then some point on the wholesalers' demand curve (e−e′), affected by the final consumers' demand curve (d−d′), must correspond to the intersection of (B−T) and the Government's wholesale price (r−r′). Let P symbolize the point where the domestic supply curve (s−s′) and the wholesalers' demand curve (e−e′) cross each other. This very price P is the would-be producer price looked for.

In 1961, for example, the Government's wholesale price was lower than the producer price, and the stock was sold at a loss. In such a case, the price P (for example P_1) lies at a higher level than the Government's wholesale price (for example r_1), as long as the wholesalers' demand curve slants down towards the right. On the contrary, in 1960, the Government's wholesale price was higher than the producer price. In this case, P can either be higher or lower than the wholesale price: P_2 can be traced above r_2 and P_3 below r_3.

Our conclusion concerning the Japanese price compared with the price of Burmese rice is that it will be safer to choose whichever is

lower, of the Government's wholesale price or the producer price; since the lowest of both government prices is always lower than P.

Table 11 gives the Japanese Government's producer price, its wholesale price and its rationing price for 1960 and 1961. If we neglect imports, the diagram can be simplified as in Figure 4 (B). The case P_2 can be eliminated. The analysis presented above establishes that out of the three prices for 1960 the price to be chosen is ¥10,405 per 150 kilogrammes, *i.e.* the lowest Government's wholesale price and producer price. This price is equal to ¥69,367 per metric ton. As seen in the preceding section, the price of Burmese rice in 1960 was 251 kyats per metric ton. In yen, this amounts to ¥18,976,[1] and gives us Table 12. The cost of rice in Burma is almost one-fourth (27.4 per cent) of the Japanese cost.

Table 11. PRICE OF JAPANESE RICE

Crop Year		1960	1961
Government's Purchasing Price (Average of 1st to 4th Grades)	Per 150 kgs. of Unpolished Rice, Packing Charge Included	¥10,405.00	¥11,052.50
Government's Wholesale Price (Average of 1st to 4th Grades)	Per 150 kgs. of Unpolished Rice, Packing Charge Included	¥10,877.50	¥10,815.00
Government's Rationing Price (Average in the Crop Year)	Per 10 kgs. of Polished Rice	¥850.00	¥850.00

Source: Planning Section, Minister's Secretariat, Ministry of Agriculture and Forestry (ed.), *op. cit.*, Part II, Table II-1, p. 119.

Table 12. COST OF THE BURMESE AND JAPANESE RICE

	Per Metric Ton	Index
Japanese Rice	¥69,367	100
Burmese Rice	¥18,976	27.4

V. DIVISION OF LABOUR FOR RICE PRODUCTION BETWEEN BURMA AND JAPAN

As Burma has not yet established substantial manufacturing industry, the production of industrial products would cost her so much that the resulting price would be almost prohibitive. Burma has no comparative advantage in manufacturing goods. On the other hand, the price of rice in Burma is only 27.4 per cent of that of Japan;

1 Conversion at the I.M.F. par rate of one U.S. dollar: 4.76190 kyats=360 yen.

we may safely conclude that Burma has a comparative advantage over Japan in the production of rice. According to the principle of comparative advantage, Japan should curtail her present production of rice and import more from Burma, which, in turn, should specialize in rice production. The Japanese Government, however, intends to narrow the income differentials between rice-producing farmers and manufacturing labourers through the "cost and income compensation method." The difference in comparative costs is thereby eliminated and the gain from international trade is foregone. This illustrates well some problems standing in the way of trade expansion between Japan and underdeveloped countries, including Burma.

Japan has so far exported to these countries much more than it imported. The resulting international balance of payments in Japan's favour is remarkable. Theoretically, exports and imports between any two nations need not necessarily be balanced. But as a matter of fact, most of these countries press Japan to import more; some countries are even restricting imports saying that they buy too much from Japan, while Japan buys too little from them.

According to the Japanese Ministry of International Trade and Industry, the obstacles that bar a larger volume of trade between Japan and the underdeveloped countries are "on the one hand, the comparatively high prices and inferior and uneven qualities of the primary products of these countries, their uncertain capability to provide these goods and unstable shipment; on the other hand, on Japan's part, on insufficient domestic demand for these products and the competition with other advanced countries." Some of the fundamental solutions are "closer investigation of these and other problems in the primary countries; financial and technical assistance to foster the production of such commodities as may be profitably imported by us, like, for instance, technical training and gift of useful tools and equipment in these fields of production; as well as the cultivation of a new or greater demand for such primary products, through further studies and publicity of their use." The same report continues: "Some of the measures to promote trade with underdeveloped countries, like dispatches of investigation missions, technical training and procurement of necessary facilities, have since 1961 been subsidized by the Government up to three-quarters of the total expenditure involved. The actual outlay of this subsidy was ¥111,046,000 in 1961, ¥32,762,000 in 1963, and its planned value in 1963 is ¥47,753,000."[1] These import promotion policies mean

1 The Ministry of International Trade and Industry (ed.), *Keizai Kyōryoku no Genjō*

ultimately that, in spite of the possibility of importing a commodity at the international market price, Japan imports it at a higher price. This "cost" to Japan can be considered as economic co-operation.

The situation would be different if the Food Regulation System were to be abolished, and import of rice liberalized. Firstly, without any "cost" of import promotion, Japan's imports from underdeveloped countries would increase. Secondly, there would be a drop in the domestic price of rice, which, in turn, would reduce the wage rates paid to labourers in general. Consequently, Japanese enterprises would be stronger in competing with other advanced industrial countries. Finally, the total exports of Japan would expand.

In spite of these advantages, and although Japan is now forcibly urged from abroad to liberalize its regulations on importation and foreign exchange transactions, the abolition of the Food Regulation System and liberalization of rice import do not come up for consideration. The principle seems to be: "Under present price conditions, the aggregate demand for foreign rice will not increase very much, because its demand as staple food of the Japanese people is quite unlikely to increase, although its demand as a raw material for some processed goods may increase."[1] Implicitly it is assumed that rice protection could not be improved nor abolished.

There are two important reasons accounting for the difficulty of liberalizing rice imports. In the first place, some consider it dangerous for Japan to depend on foreign countries for such an important foodstuff. They are afraid that these agricultural countries may not be adequate as long-run and stable suppliers of rice, because of unpredictable weather conditions, economic and political unrest, hostilities, etc. But this opinion is not very convincing, since there would more than one country supplying rice. Even if any one of them, Burma for example, would be unable to supply enough rice for one reason or another, Japan would probably be able to import from some other countries. The fact that a war could stop all foreign trade is a non-economic factor beyond the prediction capacity of an economist. Without doubt, continued policies to protect domestic agriculture are effective in securing enough food for the nation. Since, however, Japan depends

to Mondaiten (Economic Co-operation and its Problems), Tokyo, 1962, p. 294-295.

1 Nihon Keizai Chōsa Kyōgikai (Japan Economic Research Institute), *Teikaihatsukoku Keizai to Nihon —tokuni Tōnan Ajia o Chūshin to shite—* (Economic Conditions of Underdeveloped Countries and Japan —Especially on the Relation between Southeast Asian Countries and Japan—), Tokyo, Japan Economic Research Institute, 1963, p. 26.

heavily upon imports not only for rice but also for other kinds of primary products and finished goods, and because agricultural products are not the only items of which imports would stop in case of war, the economy of Japan as a whole would suffer a tremendous damage if a war broke out anywhere. But no sensible man would advocate a completely autarkic economy, as was the case of Japan a century ago.

In the second place, the abolition of the Food Regulation System and the liberalization of rice imports would directly result in a lower producer price. Farmers, however, would object to such a drop, and politicians would find it difficult to enforce a policy seemingly against the interest of the agricultural producers, because the latter can exercise a strong political influence by their significant number of votes. From a different point of view, this is a problem of unemployment for those now engaged in agriculture. A lower producer price would induce farmers to stop marginal cultivation of rice, shift to more profitable crops, and, in the long run, for some to seek industrial employment. In the short run, at least, the transition from agriculture to manufacture would necessarily involve a "frictional unemployment" problem. Further, some officials in charge of enforcing the Food Regulation Act would be temporarily thrown out of employment. Another possible trouble is that free competition in the trade of rice could give wholesalers a somewhat oligopolistic position over the great number of farmers, and induce them to exploit the powerless individual farmers.

No doubt many serious problems would result from the abolition of the Food Regulation System and the liberalization of rice imports. But each of these problems could be solved. Unemployment, for example, should be looked at from the viewpoint of a full-employment policy, and not be an excuse for interfering with free trade and sacrificing the advantages of an international division of labour.[1]

1 "Actually, there is no reason to tie a commercial policy and an employment policy together; unemployment provides an argument for a full-employment policy, not for sacrificing the advantages of specialization and division of labour." (Harry G. Johnson, *Money, Trade and Economic Growth*, London, George Allen and Unwin, 1962, p. 41.)