An Analysis of Japanese Food Grain Policies

SPECIAL REPORT 323
APRIL 1971

Agricultural Experiment Station
Oregon State University
Corvallis
CONTENTS

Summary ........................................ 1
Introduction .................................... 2
Japanese Food Grain Policies ............. 2
Estimated Effects of Food Grain Programs .... 4
  Food Grain Prices ......................... 4
  Farm Income Transfer .................... 4
  Consumer Transfer ....................... 7
  Budgetary Balance ....................... 8

Potential Effect of the International Grains
  Arrangement ................................ 14

Implications for Pacific Northwest White Wheat Exports ........ 14

Implications of Food Grain Policies .......... 14

Broader Policy Changes ................... 16

Appendix A (Rice) .......................... 18
Appendix B (Wheat) .......................... 19

Bibliography ................................. 21

AUTHORS: William F. Payne is Assistant Professor, Department of
  Economics, South Dakota State University, and Gary L. Seevers is
  Assistant Professor, Department of Agricultural Economics, Oregon
  State University, Corvallis.

This study was conducted under Oregon Agricultural Experiment Sta-
  tion Project No. 892, 'Problems and Prospects Facing Oregon Wheat
  Growers.'
AN ANALYSIS OF JAPANESE FOOD GRAIN POLICIES

William F. Payne and Gary L. Seevers

SUMMARY

Although the basic structure of Japanese food grain policies was stable during the period analyzed in this study, 1963-1969, the prices administered under the policies changed rather dramatically. The guaranteed price support to rice and wheat producers increased 46 percent and 23 percent respectively. Government resale price of domestic rice was increased 30 percent, while the wheat (imported) resale price rose 3 percent. These changes occurred in the face of a 19 percent increase in rice import prices and a 6 percent decline in wheat import prices.

In combination, these price changes had significant effects on the three policy objectives estimated in this study. Farm income transfer was defined as the increase in total revenue to food grain producers above a hypothetical free trade situation. With free trade, domestic farm prices would have been equal to import prices. Farm income transfer rose from $743 million to $2,181 million between 1963 and 1968, and declined slightly to $2,110 million in 1969. The policies had a similar impact on consumer expenditures. Consumer transfer was defined as the increase in total expenditures on wheat and rice above what would have been spent if the same quantities had been purchased at import prices. This assumes changes in resale prices were passed along fully to consumers by the food distribution system. Consumer transfer increased from $871 million in 1963 to $1,856 million in 1969.

The third effect of policies was on the government budgetary balance associated with the food grain program. The resale of imported grains above import prices led to a net government revenue, mostly from wheat imports. In contrast, the resale of domestically produced grains below purchase (support) prices resulted in a net budgetary cost, mostly from the rice program. The net effect was to increase the budgetary deficit from only $190 million in 1963 to $1,001 million in 1968. The 1969 deficit was slightly less. The rise in support prices, designed to meet the objective of improving farmers' incomes, would have led to a larger deficit if resale prices for rice had not been increased along with support prices. This latter action, however, caused a conflict with the objective of maintaining low consumer prices and the broader objective of restraining general inflation.
Although there are several potential effects of Japanese food grain policy changes on Pacific Northwest (PNW) wheat exports, these do not appear to have sweeping consequences. The inelastic price nature of demand and supply of food grains suggests that changes in incomes and consumer preferences are the most important factors affecting Japanese food wheat imports.

Food grains are only one component of the overall food policy in Japan. Broader policy changes with respect to increasing meat consumption could have an effect upon PNW white wheat exports for feed. However, Japan's policy of diversifying sources of agricultural imports may prevent the PNW from realizing a significant increase in feed wheat exports.

INTRODUCTION

Japan imports more wheat on a cash basis from the Pacific Northwest (PNW) than any other country. Over 75 percent of all cash wheat exports from the PNW have been shipped to Japan in recent years. Foreign demand is especially important to white wheat producers because approximately 80 percent of PNW white wheat is exported each year. Of every four bushels of white wheat exported from the PNW during the 1960's, one bushel was shipped to Japan. Only India imported more white wheat from the PNW, and Indian shipments were exclusively on a concessional basis (government sponsored) under Public Law (PL) 480. With recent declines in PL 480 shipments, maintaining and expanding cash markets has become essential to the export-oriented wheat industry in the Pacific Northwest. The Japanese market is at the center of this challenge.

In addition to holding a prominent position in the PNW export scene, Japan also follows domestic food grain policies that are closely related to her trade policies. This publication reports the findings of a study undertaken to analyze Japanese food grain policies.\(^1\) The basic premise of this work is that a better understanding of Japanese policies is necessary in order to anticipate changes in policies and the probable effects of these changes on Japanese food grain imports. Specifically, the study estimates the effects of policies on income transfers between consumers and producers, and on the budget of the Japanese government.

JAPANESE FOOD GRAIN POLICIES

Most developed countries follow policies designed to improve incomes for producers of farm products. This usually requires a close coordination between domestic policy and foreign trade policy. For example, price support programs may raise farmers' incomes, but protectionistic trade policies are necessary to prevent imports from flooding the domestic market.

The Japanese government conducts an extensive price-support and price-stabilization program in the production and marketing of food grains (9). Domestic producers are protected from international competition by means of state trading, which permits the government to directly control imports. Because food grains have traditionally been in short supply, the government has not encouraged wheat and rice exports.

Japanese agricultural policies have evolved from the Food Control system, set up during a period of food shortage when indirect controls could not stabilize supply and price. Established in 1942, the Food Control system was given the initial objectives of increasing food grain production, controlling distribution, and maintaining low consumer food grain prices.

After World War II other objectives were included in the Japanese agricultural policy. Rapid industrial growth placed the average income of Japanese factory workers far above that of farmers. To help alleviate this problem, agricultural policy was given the additional objective during the late 1950's of increasing farm income.

Japan's industrial development was dependent upon importing raw materials and exporting manufactured products. This created a critical need for foreign exchange to purchase raw material imports. Thus agricultural policy also assumed the objective of conserving foreign exchange, which was consistent with the earlier objective of increasing food grain production.

In recent years, with a rice surplus beginning to appear, the emphasis upon stimulating production has been reduced. Conserving foreign exchange has also decreased in importance as Japan obtains increasing amounts of foreign exchange from expanding export markets. Emphasis upon controlling the distribution of food grains has also been relaxed. As changing circumstances have altered the need to meet the original objectives of the Food Control system, the policy focus has changed.

Increasing farm income continues to be an important objective of Japanese food grain policy. Although maintaining low consumer foodstuff prices remains an objective, it is becoming more difficult as consumer incomes rise. Still another policy consideration has emerged during the 1960's. The rising cost of food grain programs to the government has become a source of concern to Japanese officials.

To attain the objectives of the Food Control system, the government has employed the following policies:

(1) Price supports to food grain producers, implemented by guaranteed government purchase at the announced support price.

Underlined numbers in parentheses refer to Bibliography, page 21.
(2) Resale of food grains purchased from producers, at a price below the support price.

(3) Government purchase of imported food grains at world prices, and resale to processors at higher prices. This process will be referred to as "skimming."

This study analyzes the above policies in relation to the objectives of the Japanese Food Control system. Particular emphasis is placed upon identifying the effect of Japanese food grain policies upon farmers' income, consumers' income, and the government budget.

ESTIMATED EFFECTS OF FOOD GRAIN PROGRAMS

Food Grain Prices

Before reporting the estimated effects of Japanese food grain policies, it will be helpful to review how the policies relating specifically to food grain prices have changed during the period studied. Figures 1 and 2 show trends in support prices, resale prices, and import (landed) prices for rice and wheat, respectively. Support prices for rice and wheat have been raised substantially over the period; however, rice prices have increased more than wheat prices. The purchase price of imported wheat has been relatively steady, as has the resale price of domestic and imported wheat.

Farm Income Transfer

The concept of farm income transfer is employed to quantify the income added to total farm income as a result of wheat and rice policies. This involves a comparison of (1) total money income received from food grains marketed under the price support programs, and (2) total money income which would have been received if domestic food grain prices had been equal to world food grain prices. Total farm income transfer for each year is then obtained by simply summing the additional income from the rice and wheat programs. This approach will provide an indication of the relative importance of each program in the total farm income transfer.

Rice Program

Farm income transfer from the rice program ($FITR$) is calculated by multiplying the quantity of rice sold to the government times the difference between the domestic support price and the price of imported rice. Price variables are expressed in U.S. dollars per metric ton, quantity variables in metric tons, and $FITR$ in U.S. dollars. All data are based on Japanese fiscal years (JFY), April to March.

The calculations yielded estimates ranging from $722 million in 1963 to $2,011 million in 1969 (the year ending March 31, 1970). $FITR$ has grown steadily and substantially over the 1963-1969 period, as shown in Figure 3. Appendix
Support price: brown rice, grade 3
Resale price: domestic rice

Resale price: imported rice
Average import price


Figure 1. Japanese rice prices, 1963-1969.

Support price: class 2, grade 3
Resale price: imported wheat
Resale price: domestic wheat
Average import price: food wheat


Figure 2. Japanese wheat prices, 1963-1969.

Figure 3. Total farm income transfer, Japanese fiscal years 1963-1969.
A gives the numerical estimates of $FIT_R$.

### Wheat Program

Farm income transfer from the wheat program ($FIT_w$) is calculated by subtracting the estimated value of wheat that would have been produced at the world price from the value of wheat actually sold to the government under the support program. Quality differences between domestic and imported wheat are a potential source of error in calculating $FIT_w$. Accurate measurement requires comparison of domestic prices with the import price of equal quality wheat. To correct for quality differences, the support price of Japanese wheat was compared to the landed price of Western White #2, which is most comparable to Japanese wheat. The landed price of W.W. #2 is below the average landed price of all classes of imported wheat. Thus $FIT_w$ would be biased downward if domestic prices were compared with the average import price of all wheat.

$FIT_w$ increased from $21 million in 1963 to $107 million in 1968. The 1969 transfer decreased to $99 million because of a smaller wheat crop. This is shown along with $FIT_R$ in Figure 3. Appendix B gives the numerical estimate of $FIT_w$.

### Total Farm Income Transfer

Total farm income transfer is a measure of additional income accruing to rice and wheat producers because of government price support activities. Figure 3 indicates that food grain price support programs have added over $2 billion annually to Japanese farm income in recent years. This is approximately $174 per person engaged in farming operations, or $488 per household selling food grains.  

The rice program dominates farm income transfer because of high support prices and the large quantity of rice produced. Average 1969 farm price for brown rice (grade three) was $374.53 per metric ton, compared to $165.00 per metric ton for imported rice. Average 1969 farm price for wheat was $148.10 per metric ton, compared to $71.76 per metric ton for imported food wheat.

### Consumer Transfer

Food grain price supports are a social transfer payment, with wheat and rice producers being supported by government budgetary deficits and higher consumer prices. Farm income transfer results in a government budgetary deficit, because food grains are purchased at the high support price and re-sold at a lower price. To help reduce the deficit, domestic wheat and rice are re-sold above the imported price of similar quality food grains. Thus, much

---

3/ Based on the following estimates:

- 5,400,000 farm households with 80 percent selling food grains (3).
- 2.8 members per farming household (4).
of the potential budgetary deficit from price support activities is transferred to consumers in the form of higher wheat and rice prices.

Additional expense is originally incurred by millers (for wheat) and processors (for rice). The exact additional cost is assumed to be passed on to consumers. Consumer transfer will involve a comparison of (1) expense resulting from purchasing grain at government resale price, and (2) expense which would have resulted from purchasing the same quantities of grain at import prices.

Rice Program

Consumer transfer from the rice program \( (CT_R) \) is calculated by determining the additional expense incurred because the government re-sells domestic and imported rice above the price of imported rice. Detailed purchase information was unavailable for rice, so quality adjustments were not made between domestic and imported rice. Figure 4 indicates that the consumer transfer from the rice program increased steadily from 1963 to 1967, rising from $803 million to $1,671 million. Since 1967 it has been relatively stable. Appendix A gives the numerical estimates of \( CT_R \).

Wheat Program

Consumer transfer from the wheat program \( (CT_W) \) is calculated by determining the additional expense incurred because the government re-sells domestic and imported wheat above the price of similar quality imported wheat. Like rice, the wheat program led to an increasing consumer transfer over the 1963-1969 period. But unlike rice, the transfer did not stabilize in the latter year; it actually increased sharply in 1969. Appendix B contains the numerical estimation of \( CT_W \).

Total Consumer Transfer

The combined effects of food grain policies on consumer transfer are given in Figure 4. Japanese wheat and rice programs have resulted in a consumer transfer of about $1.8 billion per year since 1967. This is an average of $18 per year for each of Japan's approximately 100 million consumers. Approximately 95 percent of total consumer transfer results from the rice program.

Budgetary Balance

Budgetary balance is a measure of net government deficit or surplus resulting from the wheat and rice programs. This involves the calculation of (1) government budgetary deficit caused by re-selling domestic grain below the purchase (support) price, (2) government revenue gained from re-selling imported grain at a profit, and (3) government handling cost of imported and domestic grain.

Rice Program

Table 1 indicates budgetary balance of the rice program for the period 1963-1969. The budgetary deficit was only $224 million in 1963, but it rose
Figure 4. Total consumer transfer, Japanese fiscal years 1963–1969.
<table>
<thead>
<tr>
<th>Japanese fiscal year</th>
<th>A - Domestic rice handling cost (dollars)</th>
<th>B - Imported rice handling cost (dollars)</th>
<th>C - Purchase minus resale domestic rice (dollars)</th>
<th>D - Resale minus purchased imported rice (dollars)</th>
<th>E - Budgetary balance of total rice program (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>199,284,160</td>
<td>2,933,426</td>
<td>44,153,740</td>
<td>21,876,701</td>
<td>-224,494,625</td>
</tr>
<tr>
<td>1964</td>
<td>202,945,840</td>
<td>6,256,461</td>
<td>126,768,000</td>
<td>44,337,025</td>
<td>-291,633,276</td>
</tr>
<tr>
<td>1965</td>
<td>207,245,540</td>
<td>8,753,435</td>
<td>406,507,750</td>
<td>72,173,904</td>
<td>-550,332,821</td>
</tr>
<tr>
<td>1966</td>
<td>244,805,500</td>
<td>6,651,814</td>
<td>630,800,100</td>
<td>53,399,644</td>
<td>-828,857,750</td>
</tr>
<tr>
<td>1967</td>
<td>267,136,200</td>
<td>3,974,934</td>
<td>475,371,500</td>
<td>30,734,025</td>
<td>-715,748,609</td>
</tr>
<tr>
<td>1968</td>
<td>265,809,507</td>
<td>1,734,942</td>
<td>739,252,467</td>
<td>13,414,500</td>
<td>-993,382,416</td>
</tr>
<tr>
<td>1969</td>
<td>266,304,000</td>
<td>485,000</td>
<td>450,912,000</td>
<td>3,750,000</td>
<td>-713,951,000</td>
</tr>
</tbody>
</table>

\(^{a/}\) Japanese Fiscal Year, 1969, estimated.

\(^{b/}\) E = D-C-B-A.

to $993 million in 1968 when a record domestic crop was harvested. The 1969 deficit declined to $713 million, primarily because domestic production declined substantially from the previous year.

Domestic price support and handling costs dominate the budgetary deficit. Costs associated with price support activities range from $44 million to $739 million, with the 1969 cost being $450 million. Handling costs have ranged from $199 million to $267 million, with 1969 handling cost being $266 million.

Rice imports have declined from a high of 902,416 metric tons in 1965 to 50,000 metric tons in 1969. The result has been corresponding declines in handling cost and "skimming" revenue. Handling costs have declined from $8 million to $485 thousand, while "skimming" revenue has been reduced from $72 million to $3 million.

Government "skimming" operations cause the budgetary deficit to be negatively related to imports. Increasing imports result in increasing government revenue. However, government price support policy causes the budgetary deficit to be positively related to domestic production. So increasing domestic production and decreasing imports result in a larger budgetary deficit.

Wheat Program

Government budgetary balance from the wheat program (BBw) has been subject to considerable variation, from a $33.8 million surplus in 1963 to a $7.8 million deficit in 1967. Table 2 emphasizes the contributions of imported wheat toward obtaining a budgetary surplus. A high import dependency rate has contributed substantially to the budgetary surplus. Just as in the rice program, an increase in imports or a decrease in domestic purchases will improve the budgetary balance.

Total Budgetary Balance

Total budgetary balance has been in continuous deficit from 1963 to 1969. Occasional budgetary surpluses from the wheat program have not offset continuous and generally increasing rice program deficits. Figure 5 illustrates that the deficit increased rather dramatically until 1968. The 1969 deficit was $704 million, down from the 1968 high of $1 billion. The budgetary deficit involves a government expenditure of approximately $7 for each of Japan's estimated 100 million consumers. Total cost of the food grain programs per consumer

---

5/ Total budgetary balance does not include government expenditures for food grain research, education, land development, or advisory services.
Table 2. Budgetary Balance, Wheat Program, Japanese Fiscal Years 1963–1969<sup>a/</sup>

<table>
<thead>
<tr>
<th>Japanese fiscal year</th>
<th>A Domestic wheat purchased (m.t.)</th>
<th>B Food wheat imported (m.t.)</th>
<th>C Domestic wheat handling costs (dollars)</th>
<th>D Imported wheat handling costs (dollars)</th>
<th>E Purchase minus resale domestic wheat (deficit) (dollars)</th>
<th>F Resale minus purchase imported wheat (surplus) (dollars)</th>
<th>G Budgetary balance of total wheat program (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>363,000</td>
<td>2,556,789</td>
<td>6,276,270</td>
<td>11,096,464</td>
<td>10,272,900</td>
<td>61,490,775</td>
<td>33,845,141</td>
</tr>
<tr>
<td>1964</td>
<td>715,000</td>
<td>2,391,150</td>
<td>12,362,350</td>
<td>10,377,591</td>
<td>23,552,100</td>
<td>51,983,601</td>
<td>5,691,560</td>
</tr>
<tr>
<td>1965</td>
<td>801,000</td>
<td>2,648,624</td>
<td>13,849,290</td>
<td>11,495,028</td>
<td>31,631,490</td>
<td>54,455,704</td>
<td>-2,520,099</td>
</tr>
<tr>
<td>1966</td>
<td>737,000</td>
<td>3,090,327</td>
<td>12,742,730</td>
<td>13,412,019</td>
<td>34,933,800</td>
<td>62,671,832</td>
<td>-1,588,282</td>
</tr>
<tr>
<td>1967</td>
<td>718,000</td>
<td>2,742,765</td>
<td>12,414,220</td>
<td>11,903,600</td>
<td>39,260,240</td>
<td>58,228,901</td>
<td>-5,349,159</td>
</tr>
<tr>
<td>1968</td>
<td>748,880</td>
<td>2,779,871</td>
<td>12,948,135</td>
<td>12,064,640</td>
<td>44,431,050</td>
<td>61,629,740</td>
<td>-7,814,086</td>
</tr>
<tr>
<td>1969</td>
<td>669,196</td>
<td>3,203,144</td>
<td>11,570,399</td>
<td>13,901,645</td>
<td>42,708,088</td>
<td>77,419,970</td>
<td>9,239,858</td>
</tr>
</tbody>
</table>

<sup>a/</sup> 1969 estimated.

<sup>b/</sup> G = F - E - D - C

Figure 5. Total budgetary balance, Japanese fiscal years 1963-1969.
Potential Effect of the International Grains Arrangement (I.G.A.)

The International Grains Arrangement went into effect July 1, 1968, for a period of three years. This arrangement replaced the International Wheat Agreement (I.W.A.) which expired July 30, 1967. The I.G.A. resulted from agreements reached in the Kennedy Round negotiations conducted within the framework of the General Agreement on Tariffs and Trade (10).

The I.G.A. consists of two parts: a Wheat Trade Convention and a Food Aid Convention. The Wheat Trade Convention set minimum and maximum prices for 14 major wheats moving in world trade. The minimum prices were higher than those established under the I.W.A. For instance, the minimum prices for most wheats, under the new arrangement, were about 20 cents per bushel higher than the minimum under the I.W.A.

Failure to maintain the minimum prices has led to the collapse of the Wheat Trade Convention. Although a detailed analysis of factors leading to the collapse is beyond the scope of this study, the previous framework can be employed to study the potential impact of the I.G.A. upon FIT$_w$, CT$_w$, and BB$_w$ within Japan.

Japanese fiscal year 1966 was chosen to illustrate the potential effect of the I.G.A. Raising world wheat prices 20 cents per bushel would have increased the 1966 landed price of Western White #2 from $77.90 to $85.25 per metric ton. The estimated area that would have been planted in wheat at a price of $81.88 per metric ton increased to 114,899 hectares. This raised estimated 1966 production from 162,340 to 279,434 metric tons.

The impact of higher world wheat prices and greater domestic production would have decreased farm income transfer (wheat) 13 percent, from $85 million to $74 million. Consumer transfer (wheat) would have registered a 38 percent decline, from $74 million to $46 million. The greatest potential impact of I.G.A. upon Japanese wheat policy is reflected in the budgetary balance. The government budgetary balance (wheat) for 1966 under I.G.A. prices would have been a $21,161,525 deficit, compared to the non-I.G.A. surplus of $1,588,282.

Implications of Food Grain Policies

Although Japanese food grain policies have been successful in raising  

6/ For similar estimates of the annual budgetary and excess food costs resulting from E.E.C.'s common agricultural policy, see Kruer and Bernston (5). The Kruer and Bernston study includes costs of all agricultural programs, so the results are not directly comparable with those of the present study.
farm incomes, they also have resulted in steadily increasing budgetary and consumer costs. Increasing costs represent growing pressures to alter food grain policies. For instance, the 1969 support price of rice was held at the 1968 level. However, the rice resale price and wheat support price continued to be increased. Assuming that pressures invoked by the present policies lead to further changes, how may this affect PNW white wheat exports?

Based upon the framework of this study, the principal effect of the present policies will be on Japanese wheat production. Rice production and demand were assumed to be nonresponsive to price, based on available empirical studies. Wheat acreage decreased by 50 percent between 1963 and 1969, although production and government purchases of that production decreased by a smaller percentage. The cause of this decrease has been rising nonfarm job opportunities that more than offset the increase in wheat price supports. It was estimated that if wheat prices had been set at world prices, wheat production would have been nearly zero in Japan. In view of the probable expansion in nonfarm job opportunities, a leveling off of wheat price supports can be expected to further diminish wheat production. Since Japanese wheat is comparable to Western White and other non-bread wheats, this could lead to greater imports of Western White wheat. Indeed, the strong position of white wheat in Japanese imports during the past decade has probably been influenced by declining domestic production.

Rice price policies do not affect wheat imports in this study. However, the development of nearly a year's surplus of rice could generate indirect effects. First, the Japanese may launch a concessional export program to developing countries of Asia. This could reduce concessional wheat exports from the PNW, which have constituted about two-thirds of total exports. Concessional exports have been shipped almost exclusively to developing Asian countries.

A second indirect effect could arise if policies are changed to make rice a feed grain in Japan. By affecting feed grain imports, the potential for expanding PNW exports for this market (which has been minor to date) would be reduced. The third possible indirect effect arises because new policies may be adapted to deal with the rice surplus problem. Already a program has been implemented to divert land from rice production (6). Although participation has been weak, such a program could bring about a reduction in rice production. If this land were diverted to wheat (which seems improbable), the need for imports would decline.

In summary, although there are several potential effects of food grain policy changes on PNW exports, these would not appear to have sweeping consequences. Indeed, given the inelastic price nature of demand and supply of food grains, the more important factors affecting food wheat imports are changes in incomes and consumer preferences. These factors have been contributing to a decline in per capita consumption of rice.

---

7/ This assumes no major changes in the present structure of rice programs.
8/ This is discussed further in the following section.
Unlike rice, per capita wheat consumption has been increasing. However, future dietary patterns within Japan are expected to reflect a shift away from white wheat products toward bread and other products made from hard wheats. While this expectation bears careful monitoring, no trend in that direction has so far emerged. The proportion of white and soft wheats to total Japanese food wheat imports has been relatively stable at 25 percent throughout the 1960's.

**Broader Policy Changes**

Food grains are only one component of overall food policies in Japan. In 1966 the Ministry of Agriculture and Forestry predicted that total consumption of meat, milk and dairy products, and fruits would more than double within 10 years. The consumption of soybeans, green vegetables, sugar, and fats and oils was also predicted to increase by more than 50 percent. Consumption of wheat and eggs was expected to increase substantially, but rice consumption was expected to remain about the same (8). This prediction reflects a substantial change in Japanese dietary habits.

Japanese economic growth in commerce and industry has generated new consumer purchasing power. The result has been rising food prices, because food supplies are constrained by production problems and state control of imports. This has led the government to adopt the following objectives to deal with growing consumer purchasing power: (1) Increase of the per capita supply of all food in total, to lessen nutritional deficiencies and help satisfy economic demand, and (2) increase of supplies of high-cost energy faster than supplies of low-cost energy (2). High-cost energy refers to fruits, vegetables, and animal products, which absorb larger amounts of consumer purchasing power.

Increasing the supply of animal products could have an effect upon PNW white wheat exports. The geography of Japan severely limits land area for cultivation of feed grains. Thus, any significant increase in the supply of livestock products must be obtained either by permitting more imports from other countries or by increasing imported feed grains to supply domestic livestock producers. The Japanese government has chosen the latter approach, and is beginning to stimulate livestock production. The decision to stimulate livestock production could have an impact on the PNW by increasing feed wheat sales.

In 1969 Japan imported 420,198 metric tons of feed wheat from the United States, including 30,156 tons of white wheat. This compares with feed wheat imports from the United States of 376,550 metric tons in 1968, and 433,660 metric tons in 1967. White wheat was not included in the 1967 and 1968 feed wheat imports. While the 1969 quantity was insignificant compared to food wheat exports, there is potential for increasing feed wheat sales because of the expected

---

9/ For a roughly chronological listing of policy decisions leading to the new food strategy, see Barse (2), pp. 22-24.
growth in total Japanese feed grain imports. However, wheat will have to be competitively priced to share in the expanding Japanese feed grain market. Appendix B, Table 3, contains a detailed listing of Japanese feed wheat imports, by country of origin.

An important consideration involves how Japan's regulated imports of feed grains will be allocated to various geographic regions. Japan's long-term policy of diversifying sources of agricultural imports can prevent the expansion not only of PNW feed wheat exports, but also of total U.S. exports. This policy appears to be based on the following objectives: (1) Providing a hedge against supplies being shut off by major suppliers; (2) improving Japan's bargaining strength with existing countries; and (3) encouraging other countries to purchase Japan's industrial products. The policy of diversifying import supply is being implemented by Japan's foreign aid programs in all developing regions of the world. The commodities on which major emphasis is being placed are corn, grain sorghum, cassava (for animal feed), oil seeds, tropical fruits, and silk. Most of these products compete directly with wheat as a source of livestock feed. By 1975 Japan is expected to import 1.5 to 2 million metric tons of corn and 200,000 to 300,000 metric tons of grain sorghum from southeast Asia. An equivalent amount also may be imported from Australia.

Thus, continued analysis of Japanese food policies is necessary if Pacific Northwest wheat producers and members of the grain trade are to continue benefiting from the Japanese market. In terms of impact on PNW white wheat exports, the broader food policy has potential implications, particularly on the market for feed wheat.

---

10/ In 1968 feed wheat accounted for 15 percent of total Japanese feed grain imports.

11/ For a listing of major corn and sorghum supply centers, see Pike (8).
APPENDIX A

RICE

Table 1. Farm Income Transfer, Rice Program, Japanese Fiscal Years 1963-1969

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>FITR (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>721,790,520</td>
</tr>
<tr>
<td>1964</td>
<td>867,889,470</td>
</tr>
<tr>
<td>1965</td>
<td>1,144,039,680</td>
</tr>
<tr>
<td>1966</td>
<td>1,640,627,400</td>
</tr>
<tr>
<td>1967</td>
<td>1,883,658,000</td>
</tr>
<tr>
<td>1968</td>
<td>2,073,720,164</td>
</tr>
<tr>
<td>1969</td>
<td>2,001,488,000</td>
</tr>
</tbody>
</table>


Table 2. Consumer Transfer, Rice Program, Japanese Fiscal Years 1963-1969

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Domestic (dollars)</th>
<th>Imports (dollars)</th>
<th>Total (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>874,847,280</td>
<td>44,337,025</td>
<td>919,184,305</td>
</tr>
<tr>
<td>1965</td>
<td>994,315,390</td>
<td>72,094,014</td>
<td>1,066,409,404</td>
</tr>
<tr>
<td>1966</td>
<td>1,375,199,750</td>
<td>53,399,664</td>
<td>1,428,599,414</td>
</tr>
<tr>
<td>1967</td>
<td>1,640,470,500</td>
<td>30,734,025</td>
<td>1,671,204,525</td>
</tr>
<tr>
<td>1968</td>
<td>1,621,303,841</td>
<td>13,414,500</td>
<td>1,634,718,341</td>
</tr>
<tr>
<td>1969</td>
<td>1,760,544,000</td>
<td>3,750,000</td>
<td>1,764,294,000</td>
</tr>
</tbody>
</table>

# APPENDIX B

## WHEAT

### Table 1. Farm Income Transfer, Wheat Program, Japanese Fiscal Years 1963-1969

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>FIT&lt;sub&gt;W&lt;/sub&gt; (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>21,635,430</td>
</tr>
<tr>
<td>1964</td>
<td>55,343,804</td>
</tr>
<tr>
<td>1965</td>
<td>73,938,200</td>
</tr>
<tr>
<td>1966</td>
<td>85,059,510</td>
</tr>
<tr>
<td>1967</td>
<td>98,523,462</td>
</tr>
<tr>
<td>1968</td>
<td>107,546,657</td>
</tr>
<tr>
<td>1969</td>
<td>99,107,928</td>
</tr>
</tbody>
</table>


### Table 2. Consumer Transfer, Wheat Program, Japanese Fiscal Years 1963-1969

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Domestic Imports</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(dollars)</td>
<td>(dollars)</td>
</tr>
<tr>
<td>1963</td>
<td>6,639,270</td>
<td>61,490,775</td>
</tr>
<tr>
<td>1964</td>
<td>10,589,150</td>
<td>51,983,601</td>
</tr>
<tr>
<td>1965</td>
<td>12,335,400</td>
<td>54,455,709</td>
</tr>
<tr>
<td>1966</td>
<td>11,408,760</td>
<td>62,671,832</td>
</tr>
<tr>
<td>1967</td>
<td>12,486,020</td>
<td>58,228,901</td>
</tr>
<tr>
<td>1968</td>
<td>15,988,588</td>
<td>61,629,740</td>
</tr>
<tr>
<td>1969</td>
<td>15,204,133</td>
<td>77,419,990</td>
</tr>
</tbody>
</table>

Table 3. Japanese Feed Wheat Imports by Country of Origin

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>361</td>
<td>972</td>
<td>884</td>
<td>962</td>
<td>1,163</td>
<td>1,114</td>
<td>932</td>
</tr>
<tr>
<td>United States</td>
<td>---</td>
<td>267</td>
<td>277</td>
<td>363</td>
<td>423</td>
<td>377</td>
<td>420</td>
</tr>
<tr>
<td>White wheat</td>
<td>---</td>
<td>18</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>30</td>
</tr>
<tr>
<td>Hard wheat, 13%</td>
<td>---</td>
<td>47</td>
<td>69</td>
<td>162</td>
<td>166</td>
<td>178</td>
<td>172</td>
</tr>
<tr>
<td>Hard wheat, ord.</td>
<td>---</td>
<td>202</td>
<td>208</td>
<td>200</td>
<td>253</td>
<td>199</td>
<td>174</td>
</tr>
<tr>
<td>Dark northern spring</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>44</td>
</tr>
<tr>
<td>Canada</td>
<td>206</td>
<td>322</td>
<td>206</td>
<td>223</td>
<td>236</td>
<td>77</td>
<td>---</td>
</tr>
<tr>
<td>Manitoba #4</td>
<td>---</td>
<td>180</td>
<td>206</td>
<td>223</td>
<td>236</td>
<td>77</td>
<td>---</td>
</tr>
<tr>
<td>C.G. #5</td>
<td>127</td>
<td>142</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>C.G. #6</td>
<td>79</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Australia</td>
<td>155</td>
<td>358</td>
<td>401</td>
<td>376</td>
<td>504</td>
<td>658</td>
<td>694</td>
</tr>
<tr>
<td>FAQ (West)</td>
<td>34</td>
<td>296</td>
<td>387</td>
<td>304</td>
<td>448</td>
<td>397</td>
<td>396</td>
</tr>
<tr>
<td>FAQ (Victoria)</td>
<td>---</td>
<td>19</td>
<td>14</td>
<td>51</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>FAQ (NSW)</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>1</td>
<td>15</td>
<td>72</td>
</tr>
<tr>
<td>Queensland</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>15</td>
<td>49</td>
<td>240</td>
<td>188</td>
</tr>
<tr>
<td>Offgrade</td>
<td>121</td>
<td>43</td>
<td>---</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>38</td>
</tr>
<tr>
<td>France</td>
<td>---</td>
<td>25</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>17</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>1</td>
</tr>
</tbody>
</table>


