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**WELFARE OR GROWTH? SRI LANKA'S
PROBLEM IN PEASANT AGRICULTURE**

By

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WELFARE OR GROWTH? SRI LANKA'S PROBLEM
IN PEASANT AGRICULTURE*

By Neville Edirisinghe

Sri Lanka has contrived to feed her population adequately through a strategy of importing sufficient food supplies and subsidizing consumption. Attempts to maintain consumer welfare have been part and parcel of an overall development theme that aims at ensuring basic needs of the people. Food policy has been successful in maintaining adequate nutritional standards. But cheap food to consumer has been increasingly expensive to the Treasury. With funds limited for investment, the economy has been nearly stagnating. The rising population makes the problems of development more and more complicated. What should be the strategy ahead? One crucial question emerges: Should there be a change in the "adequate welfare" policy? Answers are diverse and complex. This paper attempts to evaluate the effects of consumer welfare policies on the food sector and consider some of the problems arising from the present set of policies.

I. History of Dietary Adequacy

Food data available in Sri Lanka for the last two decades show an average food availability to sustain a level of nutrition generally considered adequate. Apparent per capita daily caloric and protein consumption discerned from Food Balance Sheets is shown in Table 1. The aggregate data in food balance sheets as well as findings of a comprehensive cross-section survey point to an average daily per capita supply of approximately 2200 calories and 48 grams of protein. These amounts are considered adequate compared with the FAO/WHO 1973 recommendations modified to suit the average Sri Lankan (1). Although the average picture appears reasonably good in terms of nutrition in the country, a close examination of the patterns of food intake in different income groups shows the existence of pockets of malnourishment and undernourishment. Table 2 bears evidence to this. In meeting the energy and protein needs, cereals play the most dominant role. Consumption patterns over the years indicate that rice and wheat contributed nearly 57 percent of the calories, with rice accounting for 44 percent. Other locally grown cereals, roots and tubers have been contributing less than 3 percent to the total caloric supply. The relative contribution of cereals and other foods towards protein intake follows similar trends as seen for calories.

*Paper presented at "The First Meeting of the Working Group on Food Security Issues," The Resource Systems Institute, East-West Center, Honolulu, Hawaii, June 18-30, 1979.

TABLE 1. SRI LANKA: APPARENT PER CAPITA DAILY CALORIC AND PROTEIN CONSUMPTION; 1955-60, 1965-73 AND 1969/70

	Food Balance Sheets 1955-60 ^{a/}			Food Balance Sheets 1965-73 ^{b/}			Socio-Economic Survey 1969/70 ^{b/}		
	Calories	Per- cent	Protein cent	Calories	Per- cent	Protein cent	Calories	Per- cent	Protein cent
CEREALS	1200	56.4	22.6	1289	57.9	28.3	1220	53.8	27.5
Rice	950	44.7	16.3	976	43.8	19.0	917	40.5	17.8
Other Cereals	250	11.7	6.3	313	14.1	9.3	303	13.3	9.7
ALL OTHER FOODS	925	43.5	24.7	936	42.0	19.5	1044	46.1	25.5
Total	2125	100	47.3	2225	100	47.8	2264	100	53.0

Sources: a/ T. Jogaratnam and T. T. Poleman, Food in the Economy of Ceylon (Cornell International Agriculture Development Bulletin No. 11, October 1969).

b/ Neville Edirisinghe and T. T. Poleman, Implications of Government Intervention in the Rice Economy of Sri Lanka (Cornell International Agriculture Mimeograph 48, January 1976).

TABLE 2. SRI LANKA: PERCENTAGE OF ADEQUACY OF ENERGY AND PROTEIN BY SECTORS--ACCORDING TO INCOME CLASSES--ALL ISLAND SOCIO-ECONOMIC SURVEY, 1969-1970

Sectors	Nutrients	Income Classes											All Classes									
		Below Rs. 200			Rs. 200-399			Rs. 400-599			Rs. 600-999			Rs. over 1,000								
		Below Rs. 100	Rs. 100-149	Rs. 150-199	Total	399	599	799	999	1,000												
Urban	Energy (cals.)	78	87	92	86	94	109	106	111	113	98	Energy (cals.)	89	97	100	95	106	118	117	131	101	
	Protein (cals.)	77	87	94	99	99	109	114	123	130	109	Protein (cals.)	85	97	101	97	106	117	123	140	107	
	Percentage	2.9	6.6	11.5	21	37.5	17.9	8.4	5.1	8.1	100	Percentage	9.2	17.5	17.7	44.4	37.9	12.0	3.7	1.1	0.9	100
Rural	Energy (cals.)	103	107	107	106	110	113	140	140	173	110	Energy (cals.)	111	117	119	118	123	160	164	239	128	
	Protein (cals.)	111	117	119	118	123	125	160	164	239	123	Protein (cals.)	85	97	101	97	106	117	123	140	107	
	Percentage	8.8	26.8	25.8	61.4	33.5	4.0	0.8	0.1	0.2	100	Percentage	9.2	17.5	17.7	44.4	37.9	12.0	3.7	1.1	0.9	100
Estate	Energy (cals.)	88	96	98	94	103	111	114	115	120	103	Energy (cals.)	88	96	98	94	103	111	114	115	120	103
	Protein (cals.)	84	94	98	99	113	122	127	130	136	113	Protein (cals.)	84	94	98	99	113	122	127	130	136	112
	Percentage	8.1	16.8	17.7	42.6	37.7	12.0	4.1	1.6	2.0	100	Percentage	8.1	16.8	17.7	42.6	37.7	12.0	4.1	1.6	2.0	100

Source: B. V. de Mel, "Sri Lanka Nutrition Intervention Projects Using Extruded Products" (Paper presented at a conference on "Use of Extruded Products," 1975).

The role of rice cannot be overemphasized because of its historical significance as the most preferred cereal. Entry of wheat flour into the national diet is a crucial change. Particularly so, since no wheat is grown in Sri Lanka. Its entry and growth in importance have been the direct result of the attempts by successive governments to maintain adequate food supplies by relying on imports. Chart 1 pictures the relative importance of food imports in maintaining adequate food supplies. Rice imports have had the upper limits dictated by the requirements for distribution under the rationing scheme. The deficit in carbohydrates has been met by adjusting the wheat imports. For most of the period, wheat prices have had a relative price advantage over rice in the international market (Chart 2). Since caloric supply from rice and wheat has no significant difference, it made economic sense to exploit the price differentials and supply low-cost calories. With increasing population and larger demand for food, wheat imports also increased substantially.

During the recent past rice imports decreased significantly due to reductions in ration distribution and increased domestic production. Yet, price changes in the international market have largely prevented financial benefits that should accrue due to reduced imports. Maintenance of adequate consumption through imports has caused a heavy drain on scarce foreign exchange. The key relationships which determine the level of welfare for most of the country's population--the export of tea and other commodities to finance the importation of foodstuffs--are depicted in Chart 3. The country has been importing nearly half of her food requirements. In each year, a large proportion of the foreign earnings has been committed to feed the people. With a high degree of dependence on food imports, and meager foreign earnings subject to wide fluctuations, the country generally receives the worst effects of food price increases in the international market.

II. Subsidies on Consumption

Sri Lanka has an outstanding record of successfully operating a nutrition intervention program through direct participation of the State. Public distribution of food arose as a wartime measure. With the contraction of food imports, it was imperative that measures to ensure equitable distribution of available supplies had to be implemented; hence the rice rationing scheme and a food subsidy. With the end of the war, the entire removal or considerable loosening of controls in the midst of a backlog demand and excess money supply were causing a postwar inflation. Cost of living was rapidly increasing. In order to prevent these forces from affecting the low income groups too adversely, the food subsidy was continued. Continuation of the rationing scheme was the logical consequence. "It looks as if the subsidy on rice forced the government to continue rationing so that the rich would not unduly benefit by a subsidy meant for the poor!" (2). Yet, the rich did enjoy the subsidy both directly and indirectly. For nearly two decades almost everybody, rich and poor, was entitled to the ration. Only a few dispensed with the entitlement. Large quantities at low prices left little demand for off-ration. Even prices of quality rice tended to remain relatively low.

CHART 1. SRI LANKA: PER CAPITA DAILY SUPPLY OF CALORIES, 1950-1971 *

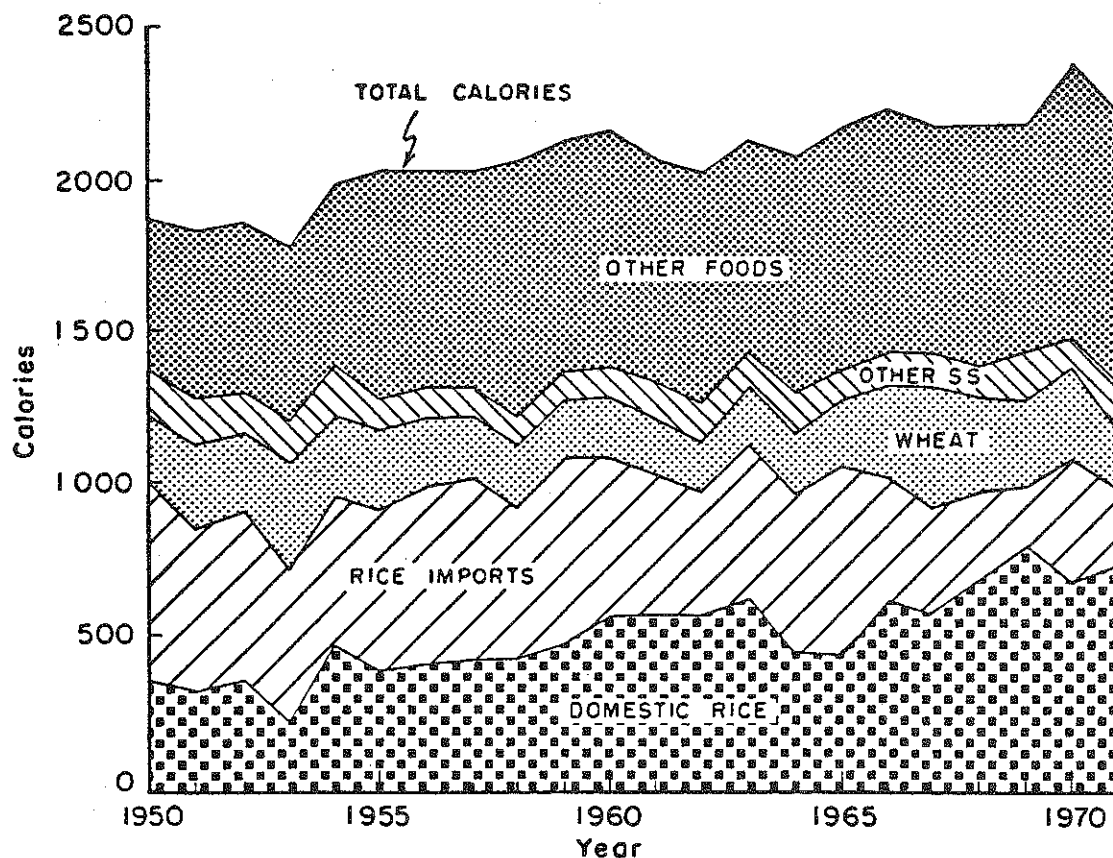
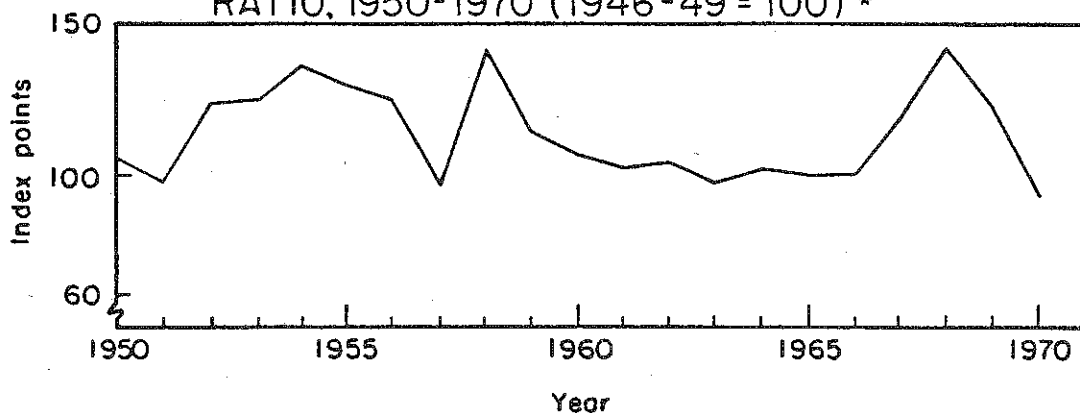


CHART 2. SRI LANKA: INDEX OF RICE/WHEAT FLOUR COST RATIO, 1950-1970 (1946-49 = 100) *



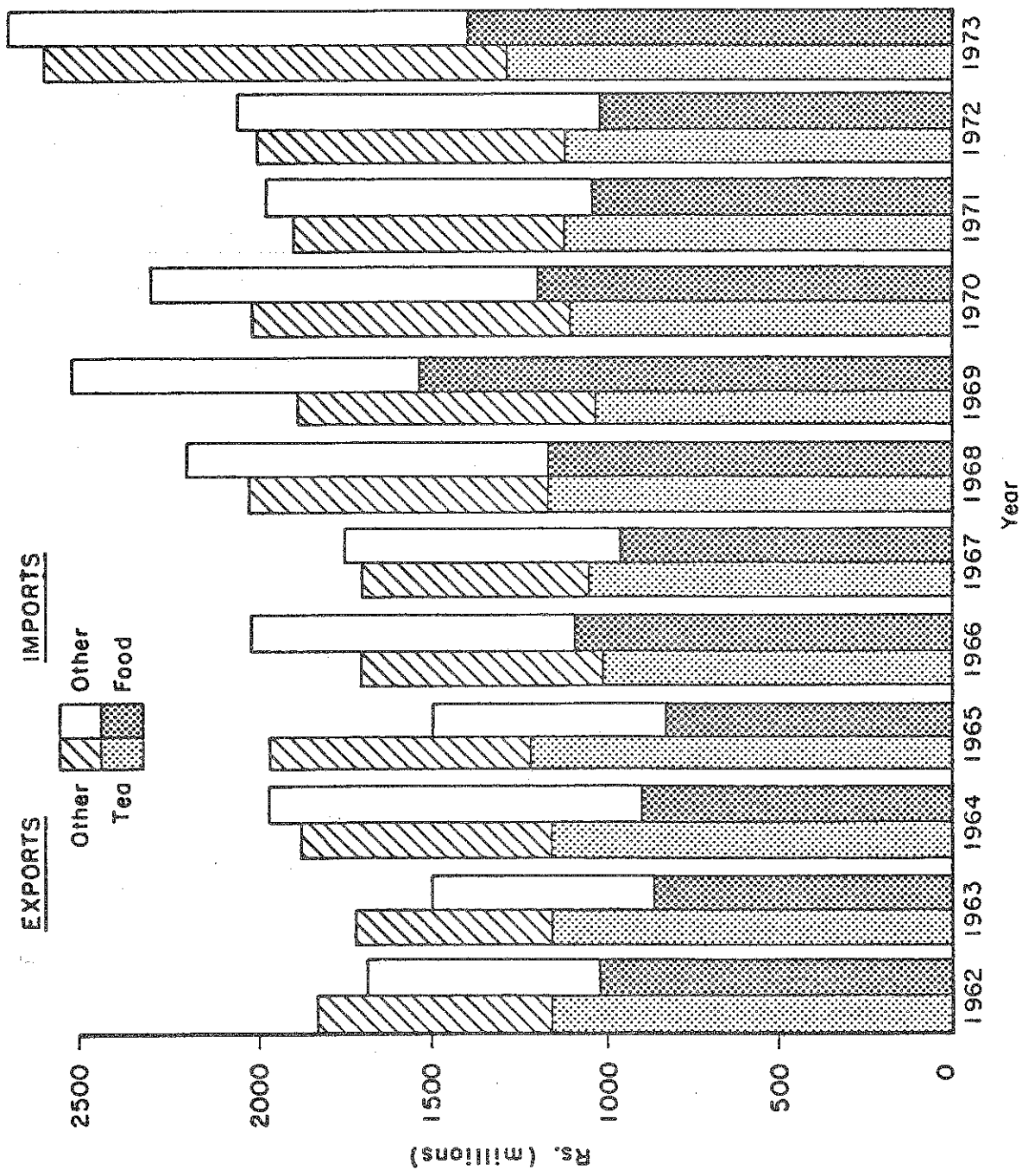
*Source: Department of Census and Statistics, Statistical Abstracts.

T. Jogaratnam and T. T. Poleman, Food in the Economy of Ceylon (Cornell International Agriculture Development Bulletin 11, 1969).

FAO, Food Balance Sheets (Rome, 1955).

Central Bank of Ceylon, Annual Reports.

CHART 3. SRI LANKA: VALUE OF EXPORTS AND IMPORTS 1962-1973



Source: Central Bank of Sri Lanka, Annual Reports.

In order to harness available domestic supplies for the rationing scheme, the government also took to direct purchases of surplus stocks of paddy from producers. These two forms of direct government involvement in rice procurement and distribution have ever since continued as cornerstones of government policies of consumer welfare and production increase. In the operation of these programs, there have been changes from time to time. Most of these changes were the direct result of movements of wheat and rice prices in the international market. More specifically, these influences were such that whenever a sharp rise in the world price of rice occurred, it was followed by a change in the rice ration--either in the quantity issued and/or the price charged--and a further intensification of the domestic food production effort.

Ration rice is distributed weekly to consumers who hold ration books or token cards. In the early part of 1960s nearly two kilograms of rice per person per week were issued under the ration at a heavily subsidized price. There was a 50 percent reduction in the basic ration in 1967 but in order to relieve the pressure on low incomes, the ration entitlement of two pounds of rice was issued free of charge. During the food crisis in 1973-74, a further reduction of the basic ration was seen, and the free ration was entitled only for non-income-tax payers. Most recent changes in income qualification to receive the free ration allow only about 50 percent of the population to obtain it.

Basically, the rice subsidy is the loss that accrues to the government in the purchase and sale of rice. The concept of a net food subsidy arises because the government engages in the purchase and sale of a number of food items such as sugar, wheat flour, lentils and dried fish, some of which are sold at a profit. Since the losses incurred in the sale of rice form the bulk of gross food subsidy, the net food subsidy virtually represents the net cost of the government rice distribution scheme. The opportunities for profits from sale of other foodstuffs to reduce the food subsidy has always been minimal. On the other hand, the experience has been for the food subsidy to continuously increase. Rising import prices, increased producer subsidy by way of increased guaranteed prices for domestic rice and expansion in the number of food items receiving a subsidy are the basic factors leading to higher food subsidies.

III. The Economic Dilemma

Subsidies on food consumption form only one part of a long-standing, broad-based program of social welfare. The other dominant parts come in the form of free education and free health services. The wartime introduction of food subsidies was already discussed. Free education was introduced in 1944; as early as the mid-thirties, issues on needs of broad-based health care were receiving high priority. With complete self-government, these forms of social welfare gathered greater momentum, resulting in large-scale allocation of resources for successful operation of the programs. Success, they did achieve. The coverage was extensive and almost everybody has had access to these welfare programs.

There has been a long debate on what the accomplishments have been due to expenditure on social welfare. Those who show the positive effects point to the social indicators, prominent among them: life expectancy, mortality rates and literacy rates (3). The average life-span of a Sri Lankan increased from 43 years in 1946 to 66 in 1971 (Table 3). By 1977 the Crude Death Rate had been reduced to 7.4 per thousand from 37.4 per thousand in 1946. Improvements in the adult literacy rate is equally impressive--rising from 58 percent in 1946 to 78 percent in 1971. The rate of growth of population has now declined to around 2 percent from the high rates of the early 1950s that brought about the population "explosion."

Along with a host of other factors, adequate nutrition contributes directly toward raising the quality of life. The contribution of state-sponsored programs of food distribution is considered substantial. The rice rationing scheme has assured a regular supply of a certain amount of the staple food at a subsidized price to almost the entire population. Since 1967, a portion of the ration has been given free of charge. Table 4 records the contribution of ration rice toward total intake of calories during 1955-1970. Up to 1967, ration rice has accounted for nearly 36 percent of caloric consumption. The contribution since 1967, though lower in percent terms, has a greater significance because all that benefit had accrued to the consumers without any cost. Subsidized staples bring indirect benefits too: enhancement of real incomes, particularly among low income groups, usually result in greater food consumption. Table 5 shows the relative advantage of rationed rice to various income groups in 1969/70. As one would expect, those in the lower income categories receive highest benefits. Other social welfare policies--free education, free health services, subsidized public transport and labor regulations affecting wage rates--may also have contributed indirectly through their effects on real incomes, towards maintaining relatively stable and satisfactory nutritional standards.

What of the negative side of the welfare policies? One writer summarizes the viewpoints that consider the past performance in Sri Lanka as a development failure (3):

Its pattern of development was regarded as a classic illustration of economic mismanagement. It had reversed the order of priorities which was considered essential for economic growth; misallocated its resources by financing massive social welfare programs; . . . it had through schemes of redistribution seriously undermined the structures of incentives which the society needed to accelerate development.

The rate of growth of the GNP has been hovering around 4 percent almost throughout the period.

TABLE 3. SELECTED SOCIAL INDICATORS

	1946	1953	1963	1973
Adult literacy (%)	58	65	72	78 ^{a/}
School enrollment (% , ages 5-14)	41	58	65	86 ^{a/}
Life expectancy (years)	43	56	63	66 ^{a/}
Infant mortality (per 1000)	141	71	56	46
Death rate (per 1000)	19.8	10.7	8.6	7.4 ^{b/}
Birth rate (per 1000)	37.4	38.7	34.3	27.9
Natural population growth (%)	1.8	2.8	2.6	2.0

a/ 1971

b/ 1977

Source: Paul Isenman, "The Relationship of Basic Needs to Growth, Income Distribution and Employment: The Case of Sri Lanka."

Central Bank of Ceylon, Economic and Social Statistics of Sri Lanka (1978).

TABLE 4. SRI LANKA: CONSUMPTION OF RATION RICE, 1955 TO 1970

Year	Per Capita Ration Rice Consumption (lbs.)	Calories Per Day From Ration Rice	As a Percent of Total Calories	Proportion of Ration Rice in Total Rice Consumption (percent)
1955	149	664	31	72
1956	161	718	33	72
1957	163	727	34	73
1958	167	744	36	80
1959	174	776	37	72
1960	179	798	37	74
1961	180	802	38	77
1962	179	798	40	81
1963	188	838	40	74
1964	185	825	40	85
1965	192	856	40	81
1966	181	807	36	78
1967	98	437	20	48
1968	96	428	20	45
1969	97	432	20	44
1970	112	499	21	47

Sources: Jones and Selvaratnam, Population Growth and Economic Development in Ceylon (Colombo: Hansa Publishers and Marga Institute, 1972).

Sri Lanka, Department of Census and Statistics, Statistical Abstracts.

TABLE 5. SRI LANKA: APPARENT PER CAPITA DAILY
CALORIC INTAKE FROM RICE, BY INCOME CLASS, 1969/70

(calories)

	Income Class (Rupees)						All Groups
	0 to 200	200- 399	400- 599	600- 799	800- 999	1000 and over	
Rationed Rice	430	424	403	393	368	323	417
Outside Ration Rice	416	515	591	593	617	597	500
Total Caloric Intake	2064	2272	2436	2512	2540	2641	2264
Calories From Rationed Rice as a Percent of Total Calories	20.8	18.7	16.6	15.6	14.5	12.2	18.4

Source: Sri Lanka, Department of Census and Statistics, Preliminary Report on Socio-economic Survey of Ceylon 1969/70 (Colombo 1971).

The opportunity cost of the food subsidy has been a matter of grave concern. The arguments against recurrent heavy expenditure on subsidy payments take the general form that "the resources available for expenditure on development were largely determined by the subsidy on rice." (4) The Central Bank at one stage pointed out more precisely "that already in early 1952, the rate of actual spending on rice and flour subsidies has exceeded that on the total of Government's development projects under the Colombo Plan." (5)

Table 6 provides justification for the concern over the food subsidy. Of the total current expenditure, 15 to 20 percent has been to meet the net food subsidy; 40 to 45 percent to meet total current social services and net food subsidies. Placing the food subsidy in relation to other government financial operations leads to one reasonable conclusion: a diversion of resources from any form of welfare expenditure--be it from the food subsidy or the health or the education bill--to capital expenditure would have been of greater benefit from the point of view of economic growth. Yet, some have doubted whether resources so diverted would find their way to developmental activity or be drained away through other forms of consumption which perhaps may have benefitted a lesser number of people than in the case of the food subsidy (4).

The conflict between equity and growth is complex and not easy to resolve. Yet, one has to look at what the future holds. Sri Lanka has attempted and at least partially succeeded in adopting a poverty-oriented growth strategy that aimed at meeting certain basic needs and decreasing income disparities much before the development economists began to recommend such growth strategies for developing countries. Reality shows that the population will continue to increase, though not at the high rates observed in the past. Some of the more optimistic projections indicate at least 20 million people by the turn of the century (1). A larger amount to feed is one problem; to gainfully employ the increasing numbers is another. Both problems have already reached serious proportions. Annual addition to the labor force has been at a rate over 1.6 percent. Nearly a million, out of a labor force of over 7 million, are already seeking their first jobs (6) and thousands are seeking better jobs. Finding avenues of employment has been the preoccupation of all governments but no proud records. It will continue to be the biggest problem; for how long, could only be a guess. It is in the context of these issues that one has to consider the alternatives. It is not practical to consider the extremes but there could be judicious changes to activate the economy towards greater growth and more employment.

IV. The Dilemma: Food Security or Self-reliance?

Subsidized consumption has been the main issue concerning this paper. It is, therefore, useful to consider whether there has been any disincentive from subsidized food affecting domestic food production. Opinions differ. Some argue that large quantities of food

TABLE 6.

MAJOR SOCIAL EXPENDITURES IN RELATION TO TOTAL CURRENT EXPENDITURES AND TO GDP, 1963/64 - 1976/77

Year	Total Current Expenditure Adjusted ^{a/} (Rs. mn)	% of Total Current Expenditure Adjusted				% of GDP			
		Health Current	Education Current	Total Current Social Services & Net Food Subsidies	Total Current Social Services & Net Food Subsidies	Health Total	Education Total	Total Social Services	Total Social Services & Net Food Subsidies
1963/64	1504	9.84	20.35	30.92	74.60	2.05	4.60	7.20	4.76
1964/65	1470	10.48	22.38	33.66	18.98	2.03	4.62	7.10	3.48
1965/66	1531	10.43	21.69	32.85	18.12	2.05	4.36	6.71	3.33
1966/67	1573	10.81	22.12	33.75	12.83	2.08	4.73	6.75	2.25
1967/68	1819	10.67	21.83	32.89	16.29 ^{b/}	2.03	4.13	6.33	2.80 ^{b/}
1968/69	2026	10.37	20.48	31.96	16.25 ^{b/}	2.11	3.82	6.57	2.81 ^{b/}
1969/70	2332	10.12	20.24	31.43	14.02 ^{b/}	2.16	4.03	6.66	2.57 ^{b/}
1970/71	2631	9.05	18.36	28.39	13.12 ^{b/}	2.07	4.10	6.62	3.10 ^{b/}
1972	2829	8.98	18.35	28.28	13.97 ^{b/}	2.03	4.12	6.77	2.87 ^{b/}
1973	3276	8.00	17.19	26.13	13.98 ^{b/}	1.76	3.56	5.84	2.71 ^{b/}
1974	4164	7.05	14.07	22.01	21.16 ^{b/}	1.54	2.91	4.83	4.09 ^{b/}
1975	4727	6.85	13.86	21.60	22.24 ^{b/}	1.72	2.97	5.11	4.40 ^{b/}
1976	5121	7.34	13.39	23.88	16.63 ^{b/}	1.90	3.48	5.83	3.25
1977	5706	7.17	15.32	23.61	12.79 ^{b/}	-	-	-	-

a/ Total current expenditure adjusted = total current expenditure - gross food subsidy + net food subsidy.

b/ Food imports, which determine much of the cost of the food subsidy, were valued at the official exchange rate and are thus increasingly understated.

Source: P. Isenman, "The Relationship of Basic Needs to Growth, Income Distribution and Employment: The Case of Sri Lanka," (mimeo.).

at heavily subsidized prices have had a dampening effect on their open market prices. Had the prices been better, there may have been higher output. There are no precise estimates of the relationships. But others point out that there has been substantial growth rates in the paddy sector aided by an incentive price scheme and provision of certain input subsidies, such as the subsidy on fertilizer.

What were the incentives and how successful have they been? The incentives and direct assistance have taken many forms. Large scale opening up of land and settlement schemes, expansion of irrigation facilities, subsidies on inputs, credit facilities through government institutions, extension services, guaranteed floor prices for farm produce and crop insurance schemes are some of the major forms of direct assistance. Of particular interest is the guaranteed floor price scheme. Guaranteed prices for paddy in general have been well above the import prices. If prices tended to fall below the floor level, the farmers could sell their surplus to the government sponsored agencies.

The overwhelming emphasis has been on rice--for good reasons. The greatest scope for import substitution was seen in the rice sector: greater the domestic supply, the lesser the burden on hard-earned foreign exchange. The rice sector also has the largest potential for employment generation. Population census of 1971 show that out of a total employment of 1.8 million in the agricultural sector--agriculture, forestry and fishing--the paddy sector contained 803 million, while the export sector including tea, rubber and coconut had 740 million.

The overall impact of government investment and farmer response can be seen in the growth rates of output, area and yields. Table 7 shows the rates of growth during the period 1961-1975 for paddy and major subsidiary food crops. During this period, the area prepared and made available for paddy cultivation increased by 30 percent, with paddy output registering a 44 percent increase. The rate of growth of output has been 2.6 percent with growth rates of 1.06 and 1.53 percent for net harvested area and yield per acre, respectively.

Since almost all of the emphasis has been on rice, self-sufficiency is usually viewed as self-sufficiency in rice. Often, a narrow definition of the self-sufficiency ratio as the proportion of locally produced rice to total supply (including imports and local supply) finds popular usage. To consider total cereal requirements against domestic potential to meet them, would be of more practical use for planning imports and production. Self-sufficiency ratio of cereal in the 1950s had been around 40 percent which has substantially increased to reach around 60 percent in the early 1970s.

TABLE 7. SRI LANKA: GROWTH RATES OF PADDY AND SUBSIDIARY FOOD CROPS, 1961^{a/}-1975^{b/}

	Acreage		Growth Rate (percent)	Production		Growth Rate (percent)
	1961 (thousand acres)	1975		1961 (thousand tons)	1975	
PADDY						
Total Area	1179.0	1535.8	1.9	910.0	1306.0	2.6
Net Harvested Area	1216.0	1425.8	1.06			
SUBSIDIARY CROPS						
Manioc	97.9	310.4	8.5	269.7	770.2	7.7
Potatoes	1.4	6.8	11.8	2.1	40.5	23.0
Maize	27.7	91.2	8.8	8.1	18.0	5.8
Green Grain	9.3	16.1	3.9	1.7	5.0	7.7
Sorghum	3.5	9.1	7.0	1.0	2.9	7.5
Cowpea	6.8	16.3	6.3	1.0	3.7	9.6

a/ Average for period 1960-1962.

b/ Average for period 1974-1976.

Sources: Department of Census and Statistics, Statistical Abstracts.

Department of Agriculture, Agricultural Statistical Information (1976).

Central Bank of Ceylon, Economic and Social Statistics of Sri Lanka (1978).

Growth rates required to meet the increasing demand for food grains are given in Table 8. Assuming a minimum constant rate of cereal consumption at 132 kg. per capita, and population growth at 2 percent, the paddy equivalent of cereals in 1990 would be 3.6 million tons. If the paddy output growth rates seen during the 15 years prior to 1975 are expected to continue during the 15 years after 1975, the output in 1990 would only be 2 million tons, leaving a deficit of approximately 1.6 million tons of paddy or 1 million tons of rice. To replace all wheat with locally produced rice and eliminate rice imports, paddy output has to grow at the rate of 6.8 percent annually -- a leap of over 4 percent from past achievements. If incomes increase leading to higher levels of food grain consumption, needless to say, the growth in output has to expand at a larger rate. To be "self-sufficient" in rice alone paddy output has to increase from 2.6 to 5 percent per annum.

Does the past performance commensurate the heavy investment on this sector? There have been sizeable improvements to area, yields and output. Yet, looking at the expansion of irrigated area in particular and other forms of incentives and assistance, one would tend to conclude that the rice sector should have performed better. The poor performance in the use of available land and relatively low levels of productivity compared with some other Asian countries are generally pointed as indication of the rice sector failing to keep pace with expectations. Although, the total area under paddy has increased from 900,000 acres in 1952 to 1.5 million in 1976, the cropping intensity -- the ratio of annually sown area to total paddy area -- has not shown a significant increase. The cropping intensity which was 120 percent in 1952 increased only to 136 percent in 1974, a relatively good year of production. The average paddy yields, although have been on an increasing trend, are yet to reach a level of 1 ton per acre. If the country is to be self-reliant in rice, it is imperative that productivity has to reach levels close to those obtained in countries like South Korea and Taiwan. Considering the emphasis placed on the rice sector for food output and employment, a review of the performance of the rice sector at all regional levels is required in order to identify the constraints on maximizing land use and yields.

Presently it appears that self-sufficiency is harder to achieve than generally expected. If rice is to have any serious impact on consumption of imported wheat, a very large leap in production is required. All hopes are now on the accelerated program of the Mahaweli Ganga Development Scheme. According to the Master Plan of the scheme, it has been planned for the development of 360,000 hectares under irrigation, including about 260,000 hectares of new land and 100,000 hectares of existing land. It is generally believed that even under the present programs to accelerate its completion, it may take a decade or more before its full effects are felt on the agricultural scene.

TABLE 8. SRI LANKA: GROWTH RATES REQUIRED TO ACHIEVE
GIVEN RATES OF CEREAL CONSUMPTION IN 1990

Per Capita Consumption (kilograms)	Required Paddy Output (M tons)	Required Growth Rate ^{a/} (percent)
132 ^{b/}	3.6	6.8
154 ^{c/}	4.2	8.2
100 ^{d/}	2.7	5.0
115 ^{e/}	3.1	5.9

^{a/} Base year as 1975 (average 1974-76) with 1.3 million tons paddy output.

^{b/} Per capita total cereal consumption observed in the past.

^{c/} Per capita cereal consumption to meet 110 percent of energy requirements.

^{d/} Per capita rice consumption observed in the past.

^{e/} Per capita rice consumption if 50 percent of wheat consumption is to be reduced.

Under the present circumstances, what steps could be taken towards reducing the food deficit? The recent changes in the rice ration entitles the free ration only to those households earning less than Rs 3600 per annum. This step has been intended to reduce imports and the rice subsidy. It is also expected that with lesser quantities moving in the ration distribution there would be an increased demand for non-ration rice. This would, therefore, lead to higher prices given normal conditions of supply and provide sufficient incentives for greater production. Though the rice ration has been reduced, wheat flour at subsidized prices has been made available in unlimited quantities. This step, in effect, has tended to nullify the expected gains. Large scale consumption of wheat flour has already begun. The food authorities were anticipating the monthly wheat flour consumption to increase upto a region of 75,000 tons from the normal monthly average of around 35,000 tons under earlier conditions. In terms of per capita consumption, the new quantities represent around 65 kilograms of wheat flour consumption per year - over a 100 percent increase. Compared with the past average quantity of 132 k.g. of cereal consumption, the new wheat consumption level suggests a reduction in overall rice consumption by at least a 30 percent. It is not surprising that the country is now faced with large scale storage requirements at the government purchasing centres which have been kept constanting busy due to large surplus stocks with the producers. In fact, in 1978 the country with a food deficit was forced to export a sizeable quantity of rice from the government stocks!

The decision to reduce the rice ration commitment and ensure unlimited supplies of wheat flour at a subsidized price contains economic and political justification. For a given amount of foreign exchange, much more wheat than rice can be imported. It allows a gradual move away from the long standing rationing scheme. On the other hand, cheap wheat flour imports fill the food deficit which otherwise would create political problems. What could be the implications of this set of policies on the rice sector and the subsidiary food sector?

Firstly, the rice sector. It was already shown how depressed demand for rice in the open market could bring about pressure on the government agencies that are set up to purchase paddy surplus at preset prices. Any surplus output over and above what the private sector wishes to handle, will be a burden on the state agencies. The issue is more complicated because of the increased guaranteed prices for paddy which contributed to increasing open market rice prices. It is doubtful that the private sector would invest on expansion because of the trend towards higher wheat flour consumption in the country. The need to adhere to administrative procedures, lack of coordination among connected institutions, insufficient transport, milling and storage facilities have usually been responsible for keeping the operations of the public sector at levels lower than the desired ones of efficiency. Marketing bottlenecks depress prices and have disincentive effects on the producers. No government will be pleased to see continued discontentment in the paddy sector. This would result in greater investment in the public sector to bring it to higher levels of efficiency. Even if the government procurement scheme operates to absorb all paddy surplus, disposal

of the stocks may pose problems because of the limited quantities of rice that move in the rationing scheme. If the anticipated growth rates in paddy output are in fact realized in the coming years, the only alternative left for the government sector to dispose of the stocks would be to export the rice surplus. What economic advantages would accrue to the country in adopting such a strategy would not only depend on the comparative prices of rice and wheat in the international market, but also on the level of internal prices paid to farmers and other marketing costs. With the present level of support prices to farmers and additional costs that may be involved in meeting export standards, it is doubtful whether such a strategy would bring about net benefits.

The second aspect concerns the subsidiary food crops such as maize, millets, sorghum and cassava. Already due to past food policy, the importance of these foods in the diets has become minimal. Often, recommendations have been made to revitalize the subsidiary food sector both as a measure of income generation in the rural sector and minimizing the dependence on foreign markets for the country's food supply. The cheap wheat policy hardly provides any incentive for the subsidiary food sector. There is a large potential in this sector to expand. Past experience provides ample proof (Table 7). Self-sufficiency in chillies, potatoes, maize (in terms of the requirements of the feed industry) and black gram has been achieved in a comparatively short period after policy measures to ban or reduce imports. If policies are to be diverted towards providing a dynamic base in the peasant agricultural sector, along with the efforts on rice, a new emphasis on the subsidiary food sector is required. Something more than mere announcement of guaranteed prices is essential.

The crucial issues--ensuring a smooth flow of local rice in the domestic market, giving sufficient incentive for increasing production and encouragement of production and use of subsidiary food crops--are closely linked with the general policy of consumer welfare. The choice apparently seems to be between continued policy of consumer welfare and at least meaningful partial sacrifice of it to generate forces to enlarge domestic production and expand employment opportunities. But to remove the rice rationing scheme which in general has had no serious ill-effects on the domestic production incentive, and replace it with a "cheap wheat flour" policy seem to complicate the entire government involvement in the food sector. The costs and benefits of moving away from rice consumption need to be carefully evaluated.

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