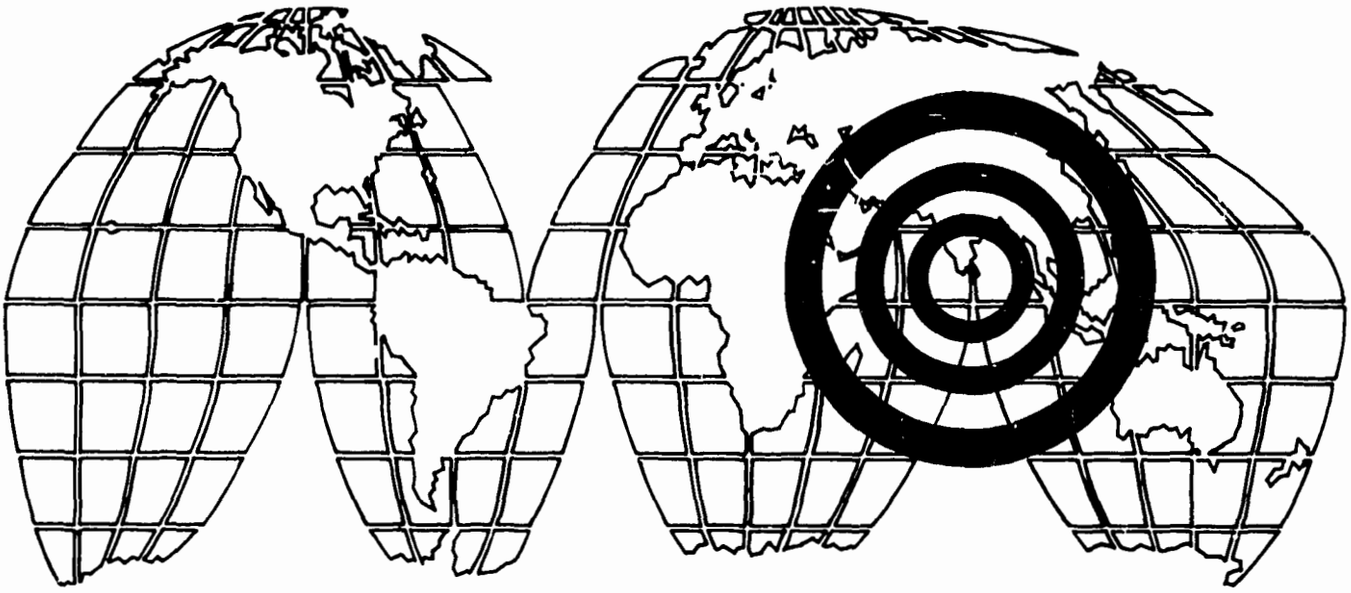
A.I.D. Project Impact Evaluation Report No. 39

Sri Lanka: The Impact of PL 480 Title I Food Assistance



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SRI LANKA: THE IMPACT OF PL 480 TITLE I FOOD ASSISTANCE

A.I.D. Impact Evaluation No. 39

by

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A complete list of reports issued in the A.I.D. Evaluation Publication series is included in the last three pages of this document, together with information for ordering reports.

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FOREWORD

In October 1979, the Administrator of the Agency for International Development initiated an Agency-wide ex-post evaluation system focusing on the impact of AID-funded projects. These impact evaluations are concentrated in particular substantive areas as determined by A.I.D.'s most senior executives. The evaluations are to be performed largely by Agency personnel and result in a series of studies which, by virtue of their comparability in scope, will ensure cumulative findings of use to the Agency and the larger development community. This study of the impact of A.I.D. Sri Lanka: The Impact of PL 480 Title I Food Assistance was conducted in February 1982 as part of this effort. A final evaluation report will summarize and analyze the results of all the studies in this sector, and relate them to program, policy and design requirements.

SUMMARY

Sri Lanka is noted as a leading proponent of the pursuit of an equitable growth strategy. One of the few remaining democratic states in Asia, this socially heterogeneous society has shifted political power across the spectrum of party politics, but each government has reaffirmed the basic commitment to supply both social services and food subsidies to the population. It has done so with remarkable consistency and effectiveness.

There is a long history of food support to the population, dating from the close of the colonial period. This system provided subsidized, and sometimes free, rations of basic foodstuffs to various segments of the population, reaching a peak with free but limited distribution of these essentials to both the rich and poor. Increasing demands on the public treasury made continuation of this program untenable, and with the election of 1977 which brought in a more conservative government, a gradual shift took place leading to revision of the program. The food stamp scheme was introduced to provide purchasing power to the poor for a variety of staple foods (estimated at about half the population), generally through cooperative stores. This program was not indexed to inflation, and the purchasing power of the food stamps has eroded since 1979. Wheat flour, some of which is provided under the PL 480 Title I program, was eligible for purchase with food stamps.

Although Title I has four objectives, the economic development objective is of primary relevance to AID. The other objectives are the furtherance of U.S. foreign policy interests, the reduction of U.S. surplus agricultural commodities, and the expansion of U.S. commercial sales. Because it interacts with the recipient country's economy as a whole, as well as because of its varied objectives, an evaluation of the Title I program presents problems of methodology, scope, and analysis. The program in Sri Lanka was also constrained by time and data availability.

The PL 480 Title I program has operated in Sri Lanka since 1956. It has been of continuous support to the nation, with the exception of a short break as a result of enforcement of the Hickenlooper amendment*, and in total has provided some $277 million in food support. The bulk of these commodities has consisted of wheat flour and, following the completion of the Prima Flour Mill, of wheat. At various times, other commodities were supplied, including relatively small amounts of

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* This amendment requires closure of foreign aid when U.S. property is expropriated without compensation.

rice and maize. Wheat has become a fixture in the diet of some population groups in Sri Lanka. Wheat flour is a traditional part of the diet of the Tamil populations of the north and the tea estates, and is consumed more broadly in Sri Lanka as bread, which is used mostly as convenience food in both the urban and rural sectors because it requires no cooking, is easily transportable, and can be eaten with traditional curries.

Rice, however, is clearly preferred to wheat by the majority of the population. Bread is considered a supplement to, but not a substitute for, rice. It is not surprising, given this preference, that food stamps are primarily used to purchase rice rather than bread or flour. Wheat, therefore, does not directly reach the bulk of the rural poor, who are assisted through food stamps, although the urban poor consume wheat in the form of bread. Reaching the rural poor only indirectly is not necessarily inappropriate. Given the low (relative to rice) international cost of wheat, which has approximately the same nutritional value as rice, a large supply of wheat may free rice for broader consumption through substitution. This indirect effect would probably be a positive one for the poor.

Overall, Title I was apparently policy neutral: it continued to provide commodities throughout the broad swings of Sri Lanka's domestic economic and political life and throughout swings in U.S. policy toward Sri Lanka. The evidence suggests that the supply of wheat or wheat flour caused no disincentive effects on the domestic production of rice, which markedly increased simultaneously with PL 480 imports as a result of both effective pricing policies and technological innovations. PL 480 may, however, be associated with a disincentive to the production of coarse grains which are relatively minor crops in Sri Lanka.

Title I represents a significant and positive balance of payments resource, and the Sri Lankan government views the program basically in this light. It is highly regarded in the government, and is treated as a multi-year resource, even though it is programmed annually. Neither the United States nor Sri Lanka seems intent on PL 480's termination, although self-reliance (the ability to procure sufficient food through production and trade) is considered desirable. Sri Lanka would benefit from multi-year Title I commitment, but only Title III is supposed to be long-term food aid. Although Title III provides a multi-year commitment of food aid, thereby facilitating long-term planning, it also requires policy reform, and while the former is needed in Sri Lanka, the latter is not. An innovative arrangement that incorporates a multi-year commitment of food aid but does not require policy reform

or involve the considerable administrative costs associated with Title III needs to be explored.

The self-help measures included in Title I agreements have been virtually superfluous and also unquantifiable and non-addictive above basal efforts. Because Sri Lanka was generally pursuing sound rural development strategies independent of Title I, the PL 480 funds were relatively minor in relation to the government's total budgetary commitment to the rural sector, and proceeds from the sale of Title I commodities are credited to the general government account and cannot be identified. Because the rural policies of the government are basically appropriate, no change in procedure is needed.

Nutritional considerations have not entered directly into Sri Lankan food policy formulation. Several high risk nutritional groups can be identified, but such groups have not received compensatory benefits beyond what is available to the population in general through food programs. One group (tea estate workers) is excluded from food stamp benefits because their reported income makes them ineligible, even though it is clear that this group is more impoverished than rural non-estate households with lower reported incomes.

On balance, the Title I program has probably made a positive contribution to U.S./Sri Lankan relations. During periods when other assistance was suspended, Title I continuity was a positive influence on these relations. The program was modestly helpful in supporting the objective of relieving U.S. grain surpluses and opening U.S. commercial sale possibilities there, although the small size of Sri Lanka limited this impact.

Preface

PL 480-I represents the largest AID program. In FY 1982, over $600 million was spent. The program provides concessionary financial assistance to 25 countries for the purchase of food grains and other agricultural commodities. In order to improve the development programming of the provided assistance, the Administrator, Mr. McPherson, has mandated PPC/E/S to conduct a series of country specific impact evaluation studies to learn the Agency's experience.

Since the program assistance provided via PL 480-I is generally not "projected" as in the case of a roads, irrigation, or agricultural services project, the evaluation methodology employed differed from the many other impact evaluation studies conducted to date. By virtue of the program's main economic focus, the evaluation has tended to center its attention on macro-economic issues such as the impact on balance of payments support, agricultural price policy and related incentives or disincentives to food production, and income distribution effects. In addition, where information was available, attention focused on the impact of the program on dietary patterns and nutrition and/or health status. Where specific self-help agreements are identified, the evaluation teams have reviewed the available evidence on target population impact. Finally where certain foreign policy objectives are attained via the use of this program, they are highlighted.

This report on Sri Lanka represents the first in the series of completed country PL 480-I studies. Three other studies will be available soon on Egypt, Peru, and Jamaica. It is envisioned that three additional country studies will complete the review with a synthesis paper to conclude the series in early 1983. The Office of Evaluation Dave Steinberg, The Sri Lanka Team Leader, for their diligence in preparing this report. We commend this report to you.

Richard N. Blue
Associate Assistant Administrator
Office of Evaluation
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Coordination

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INTRODUCTION

An impact evaluation, as defined by AID, primarily explores what happens to the intended and unintended beneficiaries of AID-supported projects. A PL 480 Title I evaluation provides a challenge in meeting this objective.

Title I commodity imports do not constitute a project in usual AID parlance: there is no carefully crafted paper relating the project to a strategy and outlining in detail the nature of the implementation process. PL 480 is, instead, a program, and often one that has continued for many years. In the case of Sri Lanka, the program has been active since 1956. Furthermore, if one is to analyze the beneficiaries of Title I, then one must look to the society as a whole, both its government and its people. Its total economic performance, macroeconomic and microeconomic, needs to be assessed. Although the opportunities for analysis are many and varied, the job is both complex and of major magnitude.

These requirements cannot be fulfilled within the context of the usual AID impact evaluation format and timing. Thus, in both breadth and length this report is different from other evaluations in this series. If it seems overly concerned with the political culture of the island, its ethnic divisions, its trade patterns, and business communities, then the reasons lie in the nature of the PL 480 program as well as in the structure of food policy formulation and its political responsiveness in Sri Lanka. The report's length also reflects the need to include discussion of aspects of the economic structure of the nation in a manner that few other impact evaluations may require.

This interdisciplinary evaluation team was composed of a macroeconomist; a nutritionist; two Sri Lankan specialists, one of whom came from the local AID Mission; two generalists; and an agricultural economist from the U.S. Department of Agriculture. With a team of this size, the report cannot reflect the nuances of views of each of the team members, let alone their stylistic preferences. Nor can such a report always reflect in space allotted the importance each specialist assigns to his or her discipline. It does, however, reflect a consensus, and all team members have had an opportunity to write relevant appendixes in which their views are expressed for their professional peers at such length as they deem appropriate, while the main text of the report is designed to provide an overview and is essentially for a broader audience.

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The team would like to thank the Government of Sri Lanka for allowing so many of its busy officials to meet with us and for making available the data that existed on these complex issues. Our meetings with these officials, which were frank and cordial, often gave the team insight into aspects of food policy in a manner that could not be obtained elsewhere.

The opinions expressed in the report and the appendixes are those of the team as a whole and its individual members respectively, and these conclusions should not be considered in any manner to reflect the official views of the United States Embassy or the AID Mission in Colombo, or any part of the United States Government.

The team had the privilege of travelling around a large part of the nation, meeting with a number of farmers, officials, and other people from a variety of occupations, all of whom gave graciously of their time. Special thanks goes to the Food Commissioner's office for making available the services of Mr. Liyana Arachchi, who accompanied the team on its long field trip, and to the AID Mission for its support, and especially for allowing Mr. Tilak Samaranayake to become a member of the team.

GLOSSARY

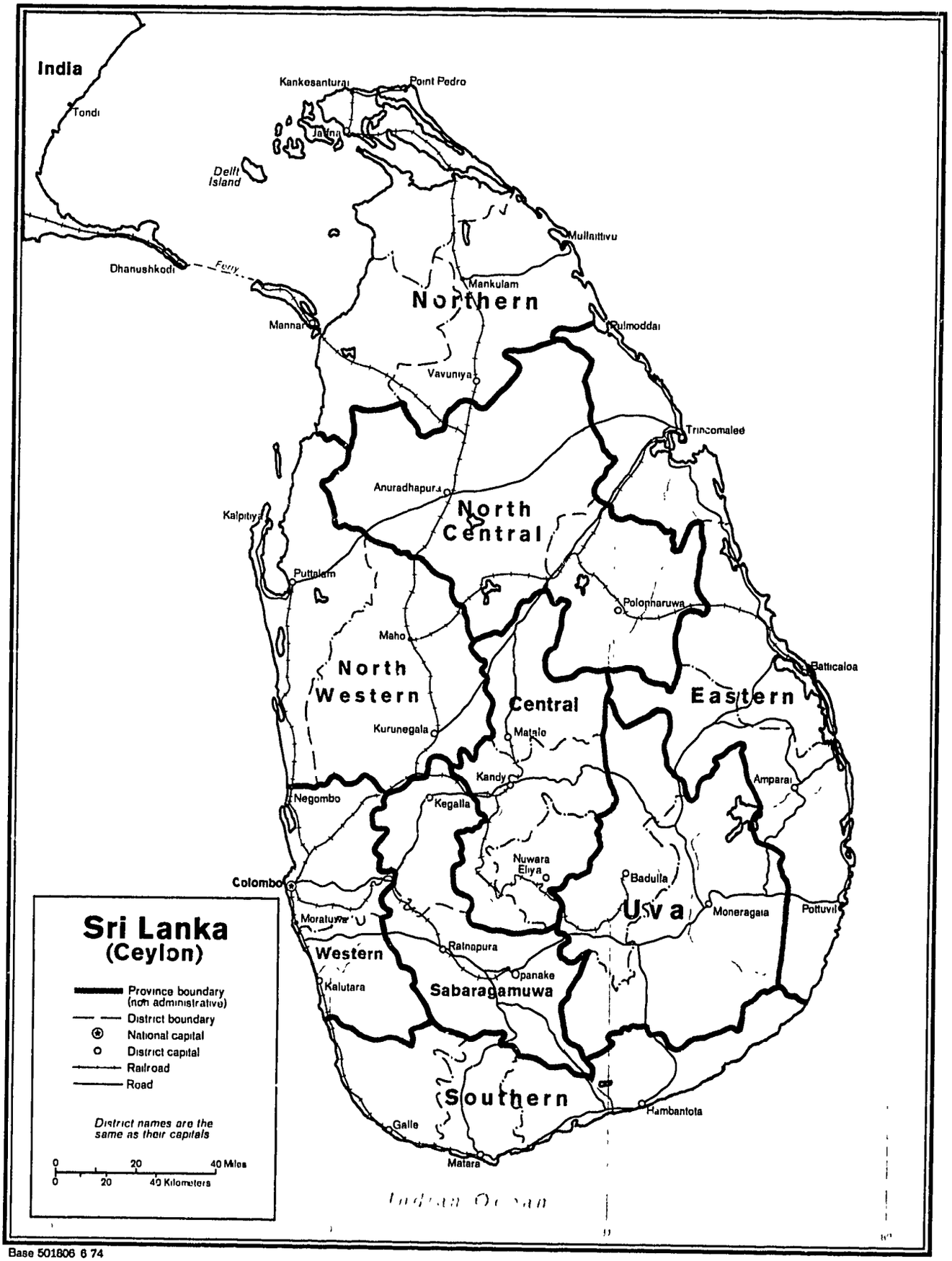
Title I	A U.S. foreign assistance loan program that provides commodities to a recipient government, which in turn sells these commodities. It differs from Title II which is a grant program of food assistance through private and voluntary organizations.
Bushel	45 pounds of paddy (unmilled rice)
Chena	Dry land (unirrigated) cultivation; originally chena referred to slash and burn cultivation, but the term is used more broadly today
Dry zone	North and eastern regions of Sri Lanka receiving less than 40 inches of rain per year
Estate sector	Areas producing tea, rubber, and coconut
Flour	Refers to wheat flour unless otherwise specified
GDP	Gross Domestic Product
GNP	Gross National Product
IRRI	International Rice Research Institute
Kilogram	2.2 pounds
Maha	The major crop of the year, cultivated from November to March
Measure	2 pounds
Paddy	Unmilled rice; also, the irrigated land on which paddy is grown
PQLI	Physical Quality of Life Index
Roti	A South Asian flat wheat bread, usually unleavened, largely consumed by Muslims and Tamils in Sri Lanka
SLFP	Sri Lanka Freedom Party

Ton	2,200 pounds; refers to metric tons unless otherwise specified
Wet zone	Southwest and mountainous regions receiving about 80 inches of rain per year
UNP	United National Party
Yala	The second crop of the year; in the dry zone, it is dependent on irrigation, and in the wet zone, on residual moisture

Exchange Rates:

1967-1971:	U.S.$1 = Rs5.93
1971:	U.S.$1 = Rs5.95
1972:	U.S.$1 = Rs6.40
1973:	U.S.$1 = Rs6.74
1974:	U.S.$1 = Rs6.69
1975:	U.S.$1 = Rs7.71
1976:	U.S.$1 = Rs8.86
1977:	(10 ½ mos. U.S.$1 = Rs8.60)
	(1 ½ mos. U.S.$1 = Rs15.56)
1978:	U.S.$1 = Rs15.50
1979:	U.S.$1 = Rs15.44
1980:	U.S.$1 = Rs18.00
1981:	U.S.$1 = Rs20.00

Note: Until 1972, Sri Lanka was known as Ceylon. The terms are both used in the text depending on the context.



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I. SETTING

Sri Lanka has demonstrated a remarkable record of consistent and profound concern for the equitable distribution of social services. This sensitivity to social issues is manifest within the context of a strong dedication to participatory democracy. However much political groupings may have disagreed on economic tactics, the essential commitment to equity has been constant. One of the few remaining democratic states in Asia, Sri Lanka has evolved a tradition of shifts between the two major party blocs at each balloting since its independence in 1948. The most recent and important shift in power took place in 1977. When the elections replaced the socialist Sri Lanka Freedom Party (SLFP) with the United National Party (UNP), the latter began an economic liberalization program to increase growth in an economy that had been virtually stagnant. The new government also maintained the commitment to equity, but under different budgetary ceilings. It succeeded, without political turmoil, in replacing universal free rice rations with food stamps for half the population, a testimony to the stability of Sri Lanka's political system. This was in marked contrast to other countries such as Egypt that attempted unsuccessfully to reduce consumer subsidies.

Since 1977, the government has allowed consumer rice prices to reach world market levels and has raised the support price of paddy to farmers, turning it from a ceiling price to a floor guarantee. Government procurement dropped from a maximum of 65 percent of marketed rice in 1965 to about 10 percent in 1980, leaving purchase of the remaining marketable surplus to the local entrepreneurs.

The new government also promoted the private sector in other ways, allowing and indeed encouraging the growth of foreign and domestic investment and banking. It has also sought to move toward more nontraditional exports and fostered new jobs by attracting foreign investment in the Greater Colombo Free Trade Zone. In the sphere of public investment, the government accelerated the planning and construction of the long-anticipated Mahaweli irrigation and power project. It encouraged short-term migration of labor to the Middle East; today there are approximately 100,000 Sri Lankans there who remit some $200 million annually. Other efforts to liberalize the economy include an expanded nationwide housing program and a removal of disincentives to the indigenous private sector. The exchange rate has been allowed to float within broad limits, and import policies have been radically liberalized.

These new policies unleashed latent but powerful economic forces. The average annual growth rate from 1970 to 1977 was 2.9 percent, but it increased to an average of 6.8 percent from

1978 to 1980. Paddy production was 67 million bushels in 1974, dropped to a low of 55 million bushels after a drought in 1975, and climbed to about 100 million bushels in 1980. Yields rose from 41 bushels to 57 bushels per acre during that decade. With the increase in paddy production, and thus rice availability, per capita consumption of flour decreased. This not only reflected the fact that flour and bread prices were administratively increased relative to rice prices, but also that rice is preferred to bread.

Not all sectors of the economy progressed, however. In contrast to food crops, the plantation economies of both tea and rubber, much of which had been nationalized by the previous government, continued to reflect the adverse effects of bureaucratic mismanagement and disinvestment over many years. Poor performance in the plantation sector was exacerbated by a weak international market in those commodities especially in coconut products, Sri Lanka's other major export. Coupled with the petroleum price increases of 1978 and 1979, these factors precipitated substantial increases in the cost of living, increases from which Sri Lanka had been sheltered before 1977 by subsidies and administered prices. The consumer price index climbed by 60 percent from 1977 to 1980. While real wages in the private sector rose by 68 percent from 1977 to 1980, they actually fell in the public sector. These influences affected various segments of the population differently.

Sri Lanka is a small but socially segmented and complex nation of about 15 million people in which ethnicity, religion, regionalism, caste, class, and political affiliation crosscut the society in ways that are significant for both social and economic policies and national politics. While an ethnographic taxonomy of Sri Lanka is not warranted here, several of the more salient divisions are important to understanding political and economic power and food policy.

The census recognizes nine communities. Most important are the low-country Sinhalese, about 42 percent of the population, who inhabit the coastal wet zone and the central dry zone. They are Buddhist, as are the Kandyan Sinhalese who number about 29 percent of the population and who reside in the wet uplands and dry zone. The Tamil community, essentially Hindu although there are a minority of Catholics among them, are divided into the Ceylon Tamils and the Indian Tamils. The former, about 11 percent, inhabit the north and the east coast and have been resident in Ceylon for a millenium, while the latter, 10 percent, were brought by the British in the nineteenth century as indentured laborers to provide the steady work required for the tea estates. Most Indian Tamils are not citizens and have no civil rights. The remainder of the population groupings reflects the peripatetic nature of the trading patterns of the Indian Ocean. Muslim Moors (7 percent) are

descendants of the various groups of Arab traders who plied these waters. Their co-religionists are a small number of Malays, largely located on the southeast coast. The remainder of the population is essentially Burghers and Eurasian, the descendants of the waves of Portuguese, Dutch, and English colonial officers, staff, merchants, and adventurers who settled on the island.

Sri Lanka has managed its communal tensions more effectively than many nations with similar diversity, such as Burma, Malaysia, and Thailand, but not without significant communal strife. Buddhist populism-nationalism has been a growing political phenomenon in independent Ceylon and has been met with increasing ethnic nationalism on the part of other communities, and indeed separatism among a minority of Ceylon Tamils. Severe communal riots between Ceylon Tamils and Sinhalese occurred in 1958 and lesser conflicts have cropped up sporadically since that time. The latest, in August 1981, generated a state of emergency that ended in January 1982. The political enfranchisement of all the communities except the Indian Tamils in the estate areas has forced governments from the two major political blocks to intercede in communal conflicts, play a mediating role, and formulate development policies including those concerning the distribution of goods and services in a relatively equitable manner.

Sri Lanka is unusual among developing nations because it has urbanized far less rapidly than most. More than 75 percent of the population still resides in rural areas, which has important implications for food policies: rural-based social patterns and values continue to dominate the structure of social relations in Sri Lanka.

Caste continues to be an important force in Sri Lankan life, but it is an area of less conflict than intercommunal relations. Castes are primary building blocks for grassroots political organizations and are significant in mobilizing electoral support, thus also affecting food policies. Ceylon's caste structure can be characterized as an inverted pyramid. The highest caste is also the largest--the traditional farmer caste. Caste and class do not closely correlate; some of the lower castes have achieved dramatically higher educational levels and amassed greater commercial wealth than the higher castes. It is still true, however, that no government of Sri Lanka has ever been led by a Tamil and that the farming caste dominates.

These political elites that emerged from the colonial period continue to dominate Sri Lankan politics. Whether leaning toward the left or the right, they have made a concerted effort to maintain relatively high levels of budgetary resources for social services, including health and education,

and adequate food consumption. The leadership did so based on a strong tradition that was influenced by Buddhist ethics. Universal primary education began in 1900, universal sufferage was introduced in 1931, a school feeding program was initiated by the 1930s, and the government began rationing some essential commodities, such as rice, during World War II. The results were highly literacy, a declining death rate, increased life expectancy, and low infant mortality (estimated at 37/1,000 in 1982). Sri Lanka's Physical Quality of Life Index (PQLI) was widely acclaimed in some circles. The Sri Lanka experiment has been sometimes described as an alternative development model in which equity predominates over growth.

The switch to an income transfer program was accomplished through a food stamp scheme that allowed one-half the population, i.e., those with reported incomes of less than Rs300 per month per household, to receive approximately Rs105 per month (for a typical family of five) in food stamps. These could be used to purchase rice, flour (some of which was Title I), other grains, sugar, fish, and a few other selected commodities through designated outlets, predominantly cooperatives. It was an attempt, not without controversy, to delineate and subsidize only the poor. To keep overall budgetary expenditures constant, however, the value of stamps was not indexed to inflation, and later the rolls were closed to new recipients. The extent to which the food stamp program has succeeded, and PL 480's possible role in it, is outlined below.

II. THE PROGRAM

The history of Sri Lankan food and development policy has been turbulent. The nation has swung back and forth between statist administration of the economy and market supremacy, and sequentially from food subsidies for the lower income groups to

food subsidies for all, to free rice for all including the rich, to subsidies, and finally to food stamps for the (putative) poor. Sri Lanka has moved to the ends of the political spectrum in the span of thirty years. A leitmotif throughout this has been the PL 480 Title I program. PL 480 commodities provided stability to Sri Lankan-U.S. relations when there was little other bilateral communication. Through the ups and downs of U.S.-Ceylonese relations, the ascendance and descendance of capitalism, the gains and losses in agricultural production, and a world fuel crisis, the PL 480 Title I program continued. Even when Ceylon became the first and only country subjected to the Hickenlooper Amendment (which called for the termination of American development project aid for several years when a country expropriated U.S. property without compensation), the PL 480 commodities continued to arrive in the Colombo harbor except for a short break. While diplomacy, trade, and cash aid moved in complex counterpoint to the changes in Sri Lankan politics, the Title I program served as the harmonic continuo.

This continuity was justified, for the purposes of PL 480 Title I are not exclusively developmental, although development is the focus of AID's particular responsibility. Other legislated objectives of PL 480 are the support of U.S. foreign policy, the use of U.S. commodity surpluses, and the opening and development of commercial markets for U.S. products. Together with the development objectives, these constitute the four major legislative mandates of Title I.

Since 1956, the United States has provided Sri Lanka with about $277 million in PL 480 grains (see Table I). Another $90 million is anticipated over the next five years, in addition to any supplementary assistance that may be programmed because of the current drought (March 1982). The vast bulk of these commodities have consisted of wheat flour and later of wheat. With the completion of the Prima Flour Mill in Trincomalee in 1980, the largest mill of its type in the world, wheat imports must now be in grain form. In addition to wheat flour, small quantities of rice and maize have at one time also been included in the program.

The PL 480 program has been impressive not only in its magnitude, but also in its relative importance to Sri Lanka and to the local AID program. PL 480 commodities represented 19.2 percent in monetary terms of all foreign aid in 1980, and their value comprised 64.6 percent of all food aid in 1980; their average value has been about 47 percent. They have, thus, been of considerable importance to the Sri Lankan economy.

The program has also been an important component of total U.S. aid. In 1980, the value of Title I commodities represented 40.2 percent of the U.S. assistance effort, and 35.2

Table 1. Public Law 480 Title I Commodity Shipments to Sri Lanka for Fiscal Years 1955-1981

FY	Wheat		Wheat flour		Corn		Rice	
	000 Mt	000$	000 Mt	000$	000 Mt	000$	000 Mt	000$
1955	-	-	-	-	-	-	-	-
1956	-	-	-	-	-	-	-	-
1957	-	-	-	-	-	-	-	-
1958	-	-	-	-	-	-	-	-
1959	-	-	31.4	2,152	-	-	49.0	6,559
1960	-	-	35.9	2,540	-	-	41.0	5,151
1961	-	-	50.1	3,713	-	-	-	-
1962	-	-	21.0	1,550	-	-	-	-
1963	-	-	43.4	3,427	-	-	-	-
1964	-	-	-	-	-	-	-	-
1965	-	-	-	-	-	-	-	-
1966	-	-	-	-	-	-	-	-
1967	-	-	52.1	4,233	4.4	293	-	-
1968	-	-	84.7	7,190	5.2	307	-	-
1969	-	-	220.1	18,764	-	-	-	-
1970	-	-	127.8	10,122	-	-	-	-
1971	-	-	42.5	3,842	-	-	-	-
1972	25.7	1,540	203.5	17,022	-	-	-	-
1973	-	-	88.3	10,160	-	-	-	-
1974	-	-	20.1	5,219	-	-	-	-
1975	-	-	86.3	18,672	-	-	-	-
1976	-	-	115.8	23,055	-	-	-	-
1977	-	-	199.8	31,371	-	-	20.7	4,924
1978	-	-	180.8	34,328	-	-	-	-
1979	-	-	83.3	17,861	-	-	-	-
1980	153.8	24,690	-	-	-	-	-	-
1981	108.9	17,830	-	-	-	-	-	-
Total	288.4	$44,060	1,686.9	$215,221	9.6	$600	110.8	$16,634

Source: FAS/EC/A. Hawthorne/4-22-82.

percent in 1979. From 1971 to 1977 it was the only identified American support after the AID Mission was closed. It has not, therefore, been merely an appendage of the foreign assistance program, although it has been ignored by some parts of AID in Washington, if not by the Department of Agriculture.

The development objectives of the Title I program, as opposed to those solely concerned with diplomatic relations and commodity disposal and sales promotion, fall within three basic categories: the effect of such support on the balance of payments, the effect of the commodities themselves on consumption and agricultural production, and the uses to which the rupees generated through the sale of these commodities have been put.

Because of the nature of the objectives set forth in the PL 480 legislation, the use of Title I by the Sri Lankan government, and the concerns expressed in the self-help measures, any evaluation must deal holistically with the Sri Lanka economic, social, diplomatic, and indeed political culture, for the Title I program has affected the nation's total developmental concerns and priorities.

III. FINDINGS AND ANALYSIS

A. Sri Lanka: Policy and Performance

1. From Equity With Growth to Growth With Equity

Sri Lanka presents a picture of either continuity or dramatic change in development programming depending upon one's vantage point -- a long history of progressive social welfare policy or a checkered record of abrupt economic policy shifts and reversals. Neither perspective is incorrect. The history of independent and pre-independence Ceylon encompasses a deeply held consensus on the social contract that defines the basic goals and responsibilities of the state and the individual, but with divisions about the appropriate means to fulfill that social contract.

Long before either the development economists or the donors enunciated a policy stressing "basic human needs" and "New Directions," (AID's term), Sri Lanka's political elite had accepted the importance of universal access to education, health services, the ballot box, employment, and a minimum quantity of basic foods. Over more than 30 years of oscillation between socialist-populist governments on the one hand, and free enterprise governments on the other, Sri Lanka pursued programs of investment in welfare and social overhead that kept

the island nation far ahead of its economic peers in conventional measures of social development. By the late 1960s, when the Physical Quality of Life Index first attracted attention, Sri Lanka was noted as a nation whose social performance far exceeded the norm for countries with comparable per capita GNP. Literacy, life expectancy, and infant mortality measures in Sri Lanka were near Southern European levels at a time when per capita income was less than $150 per year.

In more conventional measures of economic growth and development, Sri Lanka presented a far less rosy picture. Ceylon entered independence during a bull market for its traditional exports and caught the crest of the Korean war boom in high commodity prices within its first decade as a nation during the 1950s. Changing world market conditions and the emergence of a semi-socialist brand of Ceylonese populism played havoc with the domestic economy over much of the second decade of independence. Welfare gains continued as the scope of government services was widened, but growth fluctuated with the London financial markets and the monsoons. Vacillating macroeconomic policies and excessive dependence on the traditional food and export crops made overall economic performance in the 1960s erratic at best.

The third decade (the 1970s) of Sri Lankan independence was a unique period in which to study the interactions between growth and equity. In 1971, the electorate returned a government that had moved from agrarian populism to increasingly doctrinaire socialism. For six years the government's resources and policy initiatives were explicitly oriented towards redistribution, welfare, and equity within the framework of a command economy. The buoyancy of the 1950s and the erratic growth rates of the 1960s gave way to near economic stagnation in the first half of the 1970s with increasing bureaucratic interference. The socialist government moved towards public management of agro-industries and plantations and expanded the scope of the public industrial sector. Incentives for private investment were systematically eliminated in almost all sectors of the economy with the exception of small-holder food production, where the political power of the small farmers prevented the extension of socialist ownership. Although the government intervened massively in the procurement and marketing process, price incentives for rice production remained high. Overall, the economy grew at 2 to 3 percent annually. The extensive net of welfare and social service programs combined with a universal rice subsidy program ensured that the actual standard of living of most Sri Lankans did not deteriorate seriously even during this long period of economic stagnation.

Of the two themes in Sri Lankan development, equity seems to have been more dominant. A literate and universally enfranchised electorate that participates in national and local elec-

tions at rates far higher than in England or the United States prevents any government from reneging on its basic obligations under the Sri Lankan social contract. There is far less national consensus on how economic growth and the free market are best reconciled with social equity, however, and it is not unlikely that the 1980s will witness some departures from the policies of the 1977 to 1982 period.

2. Macroeconomic Performance During the 1970s

In response to the near stagnation in Sri Lanka's economy during much of the 1970s, the government initiated new policy reforms in November 1977 to improve the economy. The results of economic liberalization, especially in the early years of 1978 to 1979, were remarkable. Gross Domestic Product (GDP) increased at an annual average rate of 4.0 percent per year during the decade of the 1970s. During the pre-liberalization period (1970-1977), however, the rate was 2.9 percent; during the latter period (1978-1980), it was 6.8 percent.

Agriculture, accounting for about a quarter of GDP, grew at an average annual rate of 2.0 percent during the earlier years compared to 3.5 percent in the post-1977 years. Paddy production, in particular, has recorded substantial gains. As a result, the proportion of rice consumption accounted for by imports declined from an average of 33 percent in 1970-1977 to about 12 percent in 1978-1980. The strong performance of paddy production was matched by most subsidiary crops. This is in sharp contrast, however, to the poor performance of the tree crops (tea, rubber, and coconuts) from which a substantial proportion of the country's export earnings are derived.

Among the more striking features of the recent period is the substantial rise in investment. Gross fixed capital formation increased from an annual average of 15 percent during 1970-1977 to an annual average of 26.3 percent during the 1978-1980 period, reflecting both the public and private sectors. Government capital expenditures rose primarily because of the Accelerated Mahaweli and the Housing and Urban Renewal programs.

The outstanding economic success recorded during the 1978-1980 period was not sustained in the latter part of 1980 when the economy began to develop serious financial problems. Budgetary receipts as a percent of GDP declined from 26.2 in 1978, to 23.1 in 1979, to 18.9 in 1980. To some extent this decline was due to a reduction in export tax revenues, which in turn reflected a decrease in the tax burden on tea and coconuts; it was also due to lower export volumes resulting from drought.

Expenditures have been larger than budgeted, however. The excess expenditures of 1980 over budget estimates was due primarily to government decisions associated with various subsidy and transfer programs, including a decision not to reduce the number of recipients of food and kerosene stamps, from 7.5 million to 5 million as had been planned in the budget. A second factor was the large inadvertent buildup of food stocks by the Food Commissioner, which was due to the major increase in the price of flour in February 1980, thereby causing a reduction in commercial sales. A third major cause was the unanticipated inflation-related increase in the budget. The main factor explaining the budget deficits in capital expenditures was the underestimation of costs of the two lead investment projects: the Mahaweli Development project and the Housing and Urban Development project. The government failed to scale down these programs sufficiently to match available resources. As a result of all of these factors, the overall budget deficit increased from 13.7 percent of GDP in 1978 to 21.1 percent in 1980.

To begin to reverse this precarious budgetary situation, the government revised the 1981 budget by reducing capital expenditures from 19 to 14 percent of GDP, thereby reducing the overall deficit from 21 percent in 1980 to 15 percent in 1981. To enforce this reduction, all ministries were instructed not to introduce new projects in 1981, 1982, and 1983 other than those already identified and included in the investment program. In addition, no supplementary budgetary demands (with a few exceptions) were allowed.

Associated with budgetary problems, and complementary to them, has been a substantial acceleration of inflation during the latter years of the liberalization program. In 1977, consumer prices in Colombo increased by 1.2 percent over the previous year; in 1978, the increase was 12.2 percent; in 1979, 10.8 percent; and in 1980, 26.1 percent. Other measures (for example, the wholesale price index) recorded inflation in 1980 at over 30 percent. A major element explaining its rapid increase appears to be the sharp rise in prices administered by the government, which in turn reflects the government's effort to eliminate food subsidies in 1980. Continued escalation of import prices and devaluations also have contributed to inflation.

After four years of improvement, the balance of payments deteriorated sharply in 1980. This was due in large part to factors beyond Sri Lanka's control. Not only was there a serious decline in the terms of trade, but also world inflation made imports more expensive. Exports as a proportion of GDP decreased from 30.9 percent in 1978 to 25.7 percent in 1980. Imports, on the other hand, increased from 36.6 percent of GDP in 1978 to 49.8 percent in 1980.

Although the government took corrective steps in 1981 to reverse these adverse trends, they may need to be supplemented by continued assistance from donors. Specifically, while the government may need to procure additional resources to increase both domestic and foreign receipts, and although the public investment program needs to be maintained within the bounds of available resources, donors--who played a major role in encouraging both the economic liberalization program and the major public sector investments--need to share the burden of further adjustments. The extent to which PL 480 Title I has had a beneficial impact of the economy in the past, and its potential for the future, are explored below.

3. The Political Economy of Food Policy

Sri Lanka presents an alternative to the classic model of food price policy in developing countries, one that elsewhere involves a political balance heavily weighted in favor of urban wage earners, leading to negative terms of trade for the agricultural sector. Legitimized by an urban consensus or facing the potential of destabilizing political action from a potent urban population, other governments have traditionally moved towards increasing state intervention to control or subsidize urban consumer prices for key food items, financing the costs of price administration or subsidy either directly or indirectly from taxes on the rural sector. Low administered food prices for the consumer paired with low administered producer prices paid by government procurement monopolies are perhaps the most prevalent form of this "rural squeeze." The long-term production impacts of urban consumer-oriented food price policies are usually negative. Governments pursuing this strategy find themselves going increasingly to the world market for food purchases to meet their political obligations in the cities as domestic food production stagnates or declines relative to population growth.

Sri Lanka's policies are different because its political economy is fundamentally unlike that in most developing countries. The paramount position of the electoral process is the central fact in Sri Lanka political and economic life. Universal suffrage combined with unusally high voter turnout rates (now well over 80 percent) and high levels of political interest on the part of the electorate have produced a pattern of regular changes of government. Politics in Sri Lanka is also unusual in that it is strongly weighted towards the rural sector. Both the colonial administrators of Ceylon and the indigenous political elites in the years leading to independence shared a belief in the inherent conservatism of the rural yeomanry. The first constitution of Ceylon embodied electoral principles that sought to achieve protection of minority

political interests through electoral boundary processes, a general predeliction of one-person-one-vote when possible, and "extra" parliamentary seats on the basis of geography, embodying the rural bias. At the national level, the net effect of the electoral weighting system has been to enhance the political power of the rural areas generally and the dry-zone farmers (the country's major paddy producers) in particular.

If the rural voters were allied with either of the two major parties, their political potency would decline. In practice, however, the rural voters have proven to be at least as independent as their urban counterparts. Only about one-fifth of the parliamentary seats in Sri Lanka are considered "safe," with the remaining 80 percent swinging fairly regularly among the major political blocs. The rural electorates have been at the center of this process and every election has been decided by the rural vote.

In this unusual political setting, politicians are careful to pitch significant elements of their campaign rhetoric (and subsequent performance in office) towards the constituency upon whose support they will stand or fall. It is the Sri Lankan paddy farmer, not the Colombo civil servant or industrial trade union member, who calls the tune in Sri Lankan politics. In this setting, it is not surprising that agricultural policy has been more on center stage than in many countries.

The starting point for the food and agriculture policy of any government of Sri Lanka is the farm family. Although Sri Lanka has experimented with a wide range of welfare and food subsidy programs, they have all taken cognizance of the political power of the farmer. Two features of the Sri Lankan experience stand out: all consumer-oriented food programs have preferentially benefited the rural population, and low consumer prices have not been financed primarily through low producer prices and highly negative terms of trade for the food grower.

Figure 1 below looks at four production variables across the terms of the last two governments: six years of socialist rule under the SLFP and four years of economic liberalization under the UNP. Sri Lanka moved from universal food subsidies (1971-1977), to focused food subsidies (1977-1979), to targeted food stamps (1980-present). The broad trends reflect generally high farmgate prices (highest in the socialist period when there were administered prices), as well as major institutional support from the government (extension of new varieties, subsidized inputs, and fertilizer) across the terms of office of both governments.

Several relationships become evident: administered prices were not necessarily lower than market prices; the period of the greatest total food subsidy was also a high producer price

period; reduced food subsidies and subsequent rationalization of the program into an income transfer (food stamp) scheme paralleled intensified institutional support to the production process (new seed varieties and fertilizer).

None of these features conforms to the general development experience elsewhere, and all of them appear to reflect the strong rural bias in the political system. The most dramatic demonstration of the power of the rural voter over food policy has come in the move to targeted subsidies and (later) to targeted food stamps. The elifibility rules for both were crafted to enable most of the rural population to qualify (legally, or otherwise), but largely to exclude the urban and estate sector population other than the desperately poor at the margins of society. The choice of a monthly income measure (Rs300 per month) permitted inclusion of the vast majority of small farmers, tenants, and agricultural laborers, while excluding unskilled industrial workers, most estate workers, unskilled government minor staff, and other salaried workers.

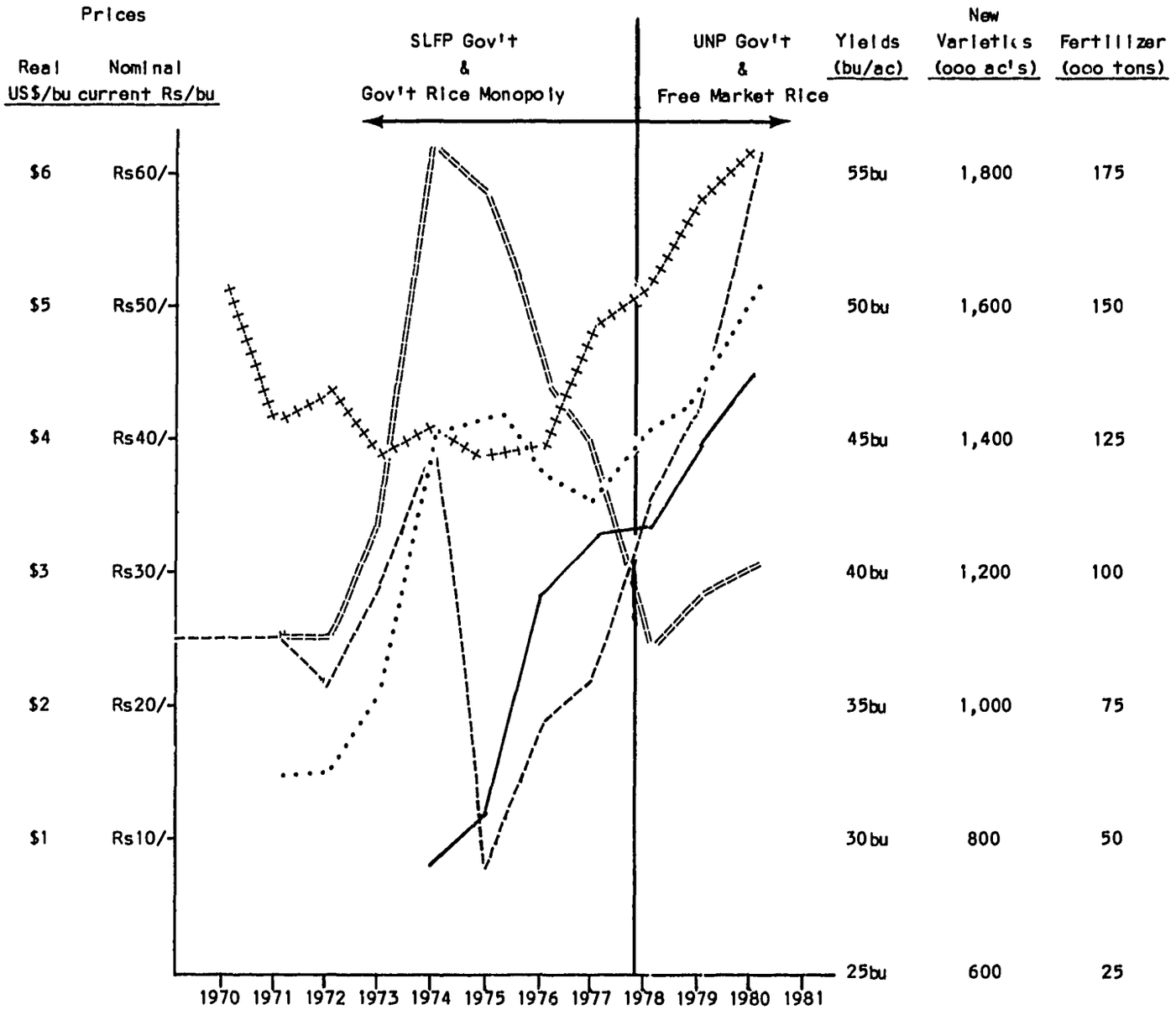
As the government of Sri Lanka looked toward 1983, the rural bias manifested itself in a number of ways:

1. The government was preparing to implement a special "drought relief" food stamp program that would only operate in rural areas and would be a one-shot program rather than a continuous claim on the treasury.

2. The government was looking at better ways to address nutrition issues through stamps (within the currently eligible group), but has to balance this concern with its potential political impact. The stated government policy aim of shrinking the rolls from 7.5 million to 5.0 million would remove benefits from an average of more than 15,000 residents per electorate, which is greater than the average electoral margin of the governing party at the last election. The number of recipients was obviously of more political importance than the size of the transfer.

3. As the government entered the final year before elections with an unanticipated additional shortfall in total food grain availability, it was actively seeking emergency donor relief principally in the form of rice (the dominant rural food) rather than wheat (bread is predominantly an urban food), despite the higher cost of rice. The government felt it could not go to the polls with a shortage of rice in the market place that would be most strongly felt by the rural voters, even though fiscal prudence would argue for buying cheap wheat to cover the gap.

Figure 1. Changes In Four Production Variables During the Last Two Governments of Sri Lanka



Real paddy price ======
Paddy yields +++++
Paddy fertilizer use -----
Nominal paddy price .....
Area in improved new varieties ____

Note: Real paddy prices are current rupees converted to dollars at the average official exchange rate for each year.

Sources: Ministry of Agriculture, Central Bank of Ceylon.

U.S. PL 480 Title I commodities could unintentionally (from the U.S. vantage point) play a role in the coming elections. If the Sri Lanka Government managed the PL 480 commodities carefully, they would provide some consumer price protection to the bread-eating urban population and wheat-eating Tamils, without exerting undue downward pressure on the producer prices paid for rice to farmers. If the present government were to overplay its intervention in the market with external food commodities, and lower producer prices, it would run the risk of harming the farmers, which could (and most assuredly would) be effectively exploited by the opposition.

On balance, the rural bias in Sri Lankan politics has had quite positive impacts in terms of U.S. policy objectives and in terms of development more broadly construed: it has permitted production incentives to be preserved through a long period of innovative experimentation and development of social welfare policies. The power of the Sri Lankan farmer has ensured that the parameters of politics include equity considerations, whatever the government. The constitutional provisions giving the farmer dominance in electoral politics have not favored conservatism so much as they have provided a safeguard against excessive ideological zeal on the part of all parties.

4. Food Production--Policy and Performance

The food sector (as distinct from agriculture as a whole, which also encompasses the major tree export crops) has had high policy priority and budgetary support under both governments over the past decade. Population growth during the 1950s and 1960s had begun to cause serious worry among the leadership over the question of meeting national food needs. Although Ceylon quite successfully went through the first generation of genetic rice upgrading (before IRRI) based upon an unusually strong indigenous plant breeding and research-extension capacity, domestic paddy production needed both a technical and an economic stimulus. In the late 1960s and early 1970s, the Department of Agriculture was actively engaged in a nationwide plant breeding and variety trials program to develop region-specific varieties and cultivation practices for Maha and Yala rice crops. The new varieties embodied both IRRI and local genetic strains with site-specific resistance and performance characteristics. By the mid 1970s, Sri Lanka had a full complement of tested varieties and cultivation recommendations and began to promote the new rice on a nationwide basis. In tandem with the varietal push, the agricultural ministry reversed a longstanding policy of restraining fertilizer availability for paddy (because of the perception that the old varieties had a poor production response to fertilizer), so the new varieties

moved out to the field simultaneously with large new increments of subsidized paddy fertilizer, especially urea.

The preceding chart illustrates the pattern of yields, new variety use, farmgate prices, and aggregate paddy fertilizer use. Allowing for some hyperbole in the totals for 1980 and 1981, performance on the production side has been quite remarkable.[1] Some of the recent production gains are no doubt directly attributable to the shift to a nearly free market in paddy and rice. Much of the gain, however, appears to reflect institutional and technological factors--a particularly commendable performance by the agricultural research and extension elements; a strong institutional capacity to deliver new seed and the supporting subsidized package of inputs on an island-wide basis; and substantial fertilizer subsidies. To give considerable credit to these institutional and technical factors is not to gainsay the importance of the market reforms in paddy and rice. High yields and continued forward movement on the production curve will depend on continued high returns to the farmer. Although these may at times in the past have been achieved by administered prices, market pricing is a far greater guarantee of production incentives, provided that the government carefully restricted imports to the barest minimum. Market prices in the face of excessive imports can be subject to the classic kinds of downward pressures and production disincentives that have plagued countries such as Egypt and the Sudan.

5. The Private Sector and Food: A Special Case

Sri Lankan public policy in the food sector has always been somewhat independent of general economic policy. While a far-reaching economic liberalization has been extended to almost the entire economy since 1977, the food sector was only selectively opened up to the forces of the market place.

The signal change on the production side after 1977 was the withdrawal of the Government of Sri Lanka from its position as monopoly procurer of paddy. The Paddy Marketing Board had served as the exclusive authorized vehicle for paddy purchases over most of the SLFP period. During this phase, the government had set a guaranteed purchase price, and all procurement was done using this price as a base (with adjustment for qua-

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[1] It should be noted that there is some skepticism about the 1980 production figures. It has been suggested that the magnitude of the current drought may be subject to "bureaucratic expansion" to account for overstatement of last year's production.

lity factors). Small quantities of paddy moved unofficially into market channels, but the government's role was preeminent. The most unusual aspect of this period of administered producer prices was that the government freely chose to move procurement prices upward to sustain farmer incentives rather than to finance consumer subsidies by passing costs back onto the agricultural producers. The highest real prices ever paid for paddy in Sri Lanka prevailed during two of the years of the administered price system (1974-1975). The production side was further sheltered from the marketplace as the government exercised near monopolies on many production inputs (fertilizer, certified seed, herbicides, etc.). During much of the 1970s, the government kept fertilizer and agro-chemical availabilities very tight because of the view that Sri Lankan farmers overuse inputs on traditional rice varieties. Because the government controlled the seed market and the extension support for the new varieties, the 1970s was a period of unusually high central control in the management of total production.

The 1977 liberalization changed part of this pattern. Inputs became available through parallel public and private channels, and the government made some provisions to permit the private sector to participate in subsidized fertilizer distribution. The farmers were free to sell their rice in the open market or to the Paddy Marketing Board. The government continued to set a paddy price, but the function of the price was reversed and became a floor rather than a ceiling price. Although the free market price for paddy and inputs may have played a small role in increased production after 1977, the primary impacts on production had less to do with the private sector policies of the government than with technical and institutional factors associated with the adoption and input support of the new improved varieties of rice. The present government of Sri Lanka appears to attribute more of the production increases to the liberalization policy than may be warranted by the evidence. This could become an important future issue if government determines that market pricing alone will drive the production curve in rice and elects to abate institutional and technical support to the sector. Policy analysts should be alert to this possibility over the next few years when budgetary pressures will force the government to seek out programs that can be pruned. For the present, private sector policies are a useful element of the agricultural production process, but are certainly not sufficient in themselves.

On the consumption side, the liberalization is even less dramatic. The government moved from the universal food subsidy system to a targeted income transfer system aimed at limiting their budgetary costs. At the same time, the retail price of rice was decontrolled and has risen steadily over the years since 1977. The government continues to play a substantial

role in the market, however. The Paddy Marketing Board enters the market at the floor price (sufficient to buy paddy at harvest peaks when the market drops). With control of 5 to 10 percent of the total crop, it is in a position to play a moderating role in the retail market. The Board consciously uses its stocks to counteract natural supply and demand effects in the marketplace, holding stocks off the market when supplies are high and releasing stocks (through the cooperative system) when supplies are tight and prices are rising. For nonrice commodities except wheat, the government has relinquished its role as monopoly supplier and the major nonrice items are now free to move with the market. Even the government cooperatives have to buy in direct competition with the private sector, and their only significant advantage over private distributors is their predominant role in handling food stamps, thus providing them with a certain captive market. Overall, the consumption side of the food system has gone more than half-way to free-market operations, but the government preserves a strong institutional capacity to intervene when it chooses to do so.

A policy purist might be critical of these partial moves to liberalize food production and food consumption policy, but the team's conclusion is that the historical record of relatively benign government intervention in the marketplace has had more positive impacts than negative ones. Consumers are highly confident that the government will stabilize the rice market and do not rush to hoard rice even when conditions of drought threaten national production levels. Farmers, likewise, find that the ability to fall back on the Board as a buyer at the floor price gives them some bargaining power with the rice millers and rice traders. The balance is still imperfect, but the evidence suggests that the semi-liberalization of the food sector is probably appropriate to Sri Lanka's overall social and economic objectives. It exemplifies yet another case of the ability of Sri Lankan governments to creatively balance the interests of equity with those of efficiency and growth.

B. The Role of PL 480 Title I in Policy and Performance

1. Macroeconomic Analysis

Food aid, introduced to Sri Lanka by the British, has been an important economic resource for the country since World War II. Shipments of U.S. PL 480 Title I food aid began in 1956 and, except when the Hickenlooper Amendment was invoked, have continued to the present. During the 25-year period 1956-1981, the U.S. provided $277 million of Title I food commodities to that country, 44 percent of total U.S. foreign

assistance. This section discusses the macroeconomic aspects of Title I food aid during the 1971-1981 period.

The magnitude of food aid provided to Sri Lanka has been significant not only in absolute terms but also in relation to total foreign aid from all sources and total economic assistance from the United States. Food aid from all sources has averaged about $40 million a year, over one-fifth of the total foreign assistance provided to Sri Lanka from 1971-1981; it was almost $67 million in 1975 (a drought year) and never less than $15 million (1973). In relative terms, it was as much as 44 percent of total foreign assistance (1974), and until 1979, never less than 20 percent. In 1979, however, it accounted for only 13 percent, and by 1981, its relative importance diminished still further to less than 12 percent.

Title I food aid (in contrast to total food aid) has averaged almost $18 million per year, ranging from a low of $5 million (1974) to a high of almost $35 million (1978). With the exception of the 1974-1975 drought years, the proportion of total food aid accounted for by Title I has also been substantial, ranging from a low of 33 percent (1971) to a high of almost 65 percent (1980). However, in 1974 and 1975, Title I was only 10 percent and 30 percent respectively, of total food aid. Overall, then, Title I has accounted for about 44 percent of Sri Lanka's total food aid, and food aid, in turn, has accounted for about 21 percent of Sri Lanka's total foreign assistance. Clearly, Title I has been an important resource to the country.

A similar picture emerges with respect to the importance of Title I relative to the overall U.S. foreign assistance program in Sri Lanka. Until 1979, food aid (Title I and Title II) constituted nearly the entire program. At that time, however, U.S. development assistance was increased and Title I food assistance was decreased, with the result that Title I accounted for only 35 percent of the total program in 1979 and 28 percent in 1981. Nevertheless, while its relative importance has diminished, it still constitutes an important element of the overall program. Thus, in 1981, about $18 million of Title I food assistance was provided to Sri Lanka, which was comparable to the annual average provided during the 1971-1981 period.

Food aid must also be evaluated in terms of its reliability. To what extent was the United States a reliable provider? When drought conditions in 1974 required Sri Lanka to request three times as much food aid as in 1973, the dollar amount of food provided by the United States under Title I actually decreased. In 1975, the United States more than the tripled Title I food aid over the 1973 level, but total food aid was almost five times above the 1973 level. Thus, other

donors were more reliable than the United States in providing concessional food assistance to Sri Lanka when such food assistance was especially needed. (This tends to confirm a common and legitimate criticism of Title I; that is, when world food supplies are particularly tight, the United States may not be a reliable supplier of concessional assistance. The United States is, however, typically a reliable supplier of food under commercial terms.)

This discussion is organized into three parts: (1) Title I and the balance of payments; (2) Title I and the government's budget, both recurrent and for development; and (3) Title I and agricultural development. This framework reflects the three principal features of food aid. First, food aid frees up foreign exchange that otherwise would have been allocated to purchase food commercially on the international market. Second, the food is sold, and therefore generates local currency that the government can use as a budgetary resource to finance both recurrent and capital expenditures. Third, because the commodity in question is food, it may have an important (and possibly adverse) impact on agricultural development, especially on domestic food production.

The government of Sri Lanka considers balance of payments support the single most important feature of the Title I program. Without minimizing its utility, no one indicated that the local currency generated from the sale of food aid was particularly important. Perhaps this is because the local currency is deposited in the general treasury, and, therefore, no one can identify any particular activity that would not have been financed in the absence of the local currency.

In 1971, food aid financed almost 10 percent of the external gap of $231 million. Title I food aid accounted for about one-third of total food aid, or 3.2 percent of the total gap. Fluctuations in the external resource gap and food aid levels tend to move independently. For example, the external gap decreased in 1972 by about $29 million, yet Title I food aid increased by almost $10 million; thus, a larger Title I program was financing a smaller resource gap in 1972 compared to 1971, and therefore the <u>relative</u> importance of Title I in providing balance of payments support was greater. In 1974, a serious drought year, food aid from all sources financed almost 13 percent of the external gap; but Title I was then at its lowest level in the 1970s, accounting for only 1.3 percent of the gap. From 1978 to 1981, the years of the economic liberalization program, the external resource gap increased over fourfold from $261 million to almost $1.2 billion. Food aid decreased from $60 million to $37 million over this period, and therefore became less important in both absolute and relative terms, financing about 23 percent of the gap in 1978 and only 3.2 percent in 1981. Title I, which recently has accounted for

one-half to two-thirds of total food aid, has accordingly become a relatively minor resource in financing the substantially increasing gap, and therefore plays a less-critical role than in earlier years in alleviating the balance of payments constraint.

Title I food aid can be viewed as a short-term instrument available to countries confronting (a) a serious foreign exchange constraint and (b) a food shortfall. Thus, while balance of payments support is one legitimate justification for Title I food aid (perhaps particularly in support of appropriate economic policies that typically are associated with the balance of payment problems), it is important to ask what measures the government is taking to obviate the need for food aid in the long term. One indicator of the severity of the problem is the extent to which food imports, in relation to total imports, are decreasing over time. Total food imports in dollar terms steadily increased during 1971-1975 from $155 million; however, the proportion of food imports to total imports remained stable and very high--between 43 percent and 48 percent of total imports were accounted for by food during this period. After decreasing substantially in 1976, food imports again began to increase, reaching $371 million in 1980, comparable to the earlier peak in 1975. However, as a proportion of total imports (which have increased dramatically in response to the liberalization program), food imports reached a low of 18 percent in 1980.

Rice imports fluctuated considerably during the 1970s, from 266,000 tons in 1972 to a high of 526,000 tons in 1977. Since then, rice imports have declined dramatically to 157,000 tons in 1981, reflecting the substantial success in increasing domestic rice production. In terms of the total import bill, rice accounted for as much as 18 percent ($137 million) in 1975, but only 2.8 percent ($50 million) in 1981. Wheat flour imports have steadily increased each year (except 1976) from a low of 323,000 tons in 1971 to a high of 606,000 tons in 1978. In 1979, imported wheat flour was substantially reduced, and by 1980 flour imports were only about one-half the 1978 level. At the same time, wheat grain imports began to increase. By 1980, they were 227,000 tons, double the 1979 level and almost triple the 1978 level. (Replacing wheat flour imports with wheat grain imports reflects the completion of the Prima Flour Mill on the east coast of Sri Lanka.) In all likelihood, wheat grain will continue to be imported, not only to supply Prima but also to satisfy domestic demand.

The demand for bread, wheat, and flour is projected to increase over the 1981-1986 period at a rate much higher than the demand for most other food commodities. Thus, while requirements for most food commodities are projected to increase by 9 to 10 percent over the five years, wheat requirements are

also projected to increase by almost 35 percent. (Sugar requirements are also projected to increase at a relatively rapid rate.) Therefore, if Title I food aid in the form of wheat grain to Sri Lanka is not to be viewed as a long-term resource transfer, then Sri Lanka will need to find alternative ways to meet domestic demand.

The second potentially beneficial feature of Title I food aid to the recipient country is that its sale generates local currency that the government can use to supplement its domestic budget. As indicated above, the allocation of this local currency in Sri Lanka cannot be linked to any particular activity because it is deposited in the treasury and becomes part of general budgetary resources. Still, it is useful to understand how Sri Lanka's budgetary resources have been allocated over time since some of these resources were derived from Title I sales.

The recurrent budget reflects the government's firm commitment to assure that food is available to the entire population. Initially, a ration scheme provided this assurance, but in 1979 a food stamp scheme was introduced and the ration scheme was phased out. This constituted an important shift in government policy, moving from a subsidy in kind to a straight income transfer, and from a general subsidy serving the entire population to a targeted subsidy benefiting only the lower 50 percent of the income distribution.

A major impetus for the shift was the need to reduce what had become an increasingly large financial burden. The food subsidy under the ration scheme averaged over $125 million per year (about 20 percent of the recurrent budget) from 1971-1978. In 1979, it accounted for 19.4 percent, and the food stamp program (introduced in that year) absorbed yet another 4.2 percent; thus, 23.6 percent of the recurrent budget (over $183 million) was allocated to subsidize food consumption in 1979. In 1980, the ration scheme was almost entirely phased out, and both programs then absorbed only 11.5 percent of the recurrent budget ($94 million); in 1981, these programs were estimated to absorb 11.7 percent ($82 million).

The government is also committed to the provision of social services. From 1971-1977, approximately 23 percent of the recurrent budget was allocated to social services; from 1978-1981, this proportion was reduced to 16 percent. In absolute terms, the pre-1977 government allocated about $134 million per year to social services while the new government has allocated about $121 million per year. Defense expenditures during the 1977-1981 period have remained relatively constant (about $24 million per year).

Agriculture and irrigation have typically been allocated a larger share of the capital expenditure budget than any other sector, including industry, transportation, or communications. Agriculture accounted for about 31 percent of development expenditures ($60 million per year) from 1971-1977. In 1979, the agriculture budget was $146 million, more than double the 1978 level, and in 1980 it was $286 million, almost double that of 1979. Though budgetary constraints have forced a reduction in 1981, both the absolute level of resources allocated to agriculture ($210 million) and its proportion of total development expenditures (39 percent) remain high. These large investments in agriculture during the more recent years are primarily for the Mahaweli Development Program.

One important implication of the government's public investment decisions throughout the period, but especially during the post-1977 years, is that agricultural development ranks highest on the list of overall investment priorities. This suggests that the government does not view Title I food aid as a resource that can substitute for increasing domestic food production. If, however, self-sufficiency in wheat (the principal commodity imported under Title I) proves not to be a viable alternative, then increased investments may be needed to make the production of traditional export crops and other foreign exchange earning sectors more efficient so that wheat grain can be purchased on the international market.

One final budgetary implication concerns the extent to which the government would have carried out the relatively expensive food subsidy program in the absence of the budgetary support provided by Title I. Just as most experts are convinced that the government would have imported food commercially had it not been provided concessionally, they also believe that the government would have continued to subsidize food consumption even without the local currency provided by the sale of Title I. No one, of course, will speculate on which budget priorities would have been sacrificed had Title I resources not been available. On the other hand, it is also true, and recognized by government officials, that Title I facilitated the financing of the food subsidy program. In this sense, one can conclude that the Title I program permitted the government to support a program which otherwise would have been more difficult to finance.

2. Title I Food Aid and Agricultural Development

Two issues are important here. First, because the commodity supplied under Title I is food, did the program have a disincentive effect on domestic food production? Second, again because the commodity in question is food, did the program have

a positive effect on improving consumption and nutrition? The first issue is treated here; the second issue, below and in Appendix C.

As indicated above, wheat, the principal commodity imported under the Title I program, is not produced in Sri Lanka to any significant extent. Therefore, Title I could have had no direct disincentive effect on domestic wheat production. However, imported wheat and domestically produced rice would appear to be relatively close substitutes. Therefore, it is possible that consumers substituted bread for rice, thereby causing the demand for rice, hence its production, to decrease. The evidence, however, suggests that this was not the case--at least during the 1970s. Paddy production stayed relatively constant during the early years of the decade at about 1.3 million tons per year; in 1974 it increased to 1.6 million tons; then in 1975 (a drought year), it decreased dramatically to 1.2 million tons. By 1977, production had recovered to 1.7 million tons and by 1980 it reached 2.1 million tons--an annual average rate of growth of over 9 percent. (It is, of course, arguable that paddy production would have increased even more in the absence of Title I wheat.)

Water availability is the key variable determining how much acreage can be sown under paddy. This, in conjunction with improved seeds and the application of fertilizer, is the principal factor explaining why yields have increased at an average rate of over 5 percent per year since 1977. In addition, the farmgate price for paddy has regularly been above the government guaranteed floor price, which itself has provided an ample incentive to producers. Still, the availability of water and variable inputs has probably been more important than price in explaining the increased production and yields. In any event, the importation of wheat under Title I has not caused paddy production to decrease; on the contrary, production has increased substantially, especially since 1977.

Consistent with this conclusion is the fact that Sri Lankans--without exception--prefer rice over bread. In March 1982, the price of rice and the price of bread was about the same (Rs6 per kilogram or $0.14 per pound). However, if the price of bread were less than rice, people indicated that they would still tend to purchase the higher priced rice. When there is a significant change in the relative price of rice to wheat (bread) the data show that people alter their consumption accordingly. (See Appendix L for a more detailed analysis.)

When the price of bread or wheat flour is reduced to zero, as a certain amount was during various phases of the ration program, people will consume (or at least accept) it, as they would any free good. But when people must use their food stamps to purchase rice or wheat flour, they choose to consume less flour than when it is free. Thus, flour consumption increased from 63 pounds to 90 pounds per capita during 1971-1979 (an average annual increase of 3.4 percent). In 1980, however, a year after the food stamp program was introduced, flour consumption dropped by 39 percent to 55 pounds per capita.

It is also possible that if people were not substituting imported flour for domestically produced rice, they were substituting flour for other domestically produced grains. For example, was Title I wheat consumed in lieu of coarse grains (such as sorghum and finger millet) or cassava? Production of cassava, sorghum, and finger millet (drought-resistant crops) increased in the early 1970s, peaking in 1974 and 1975, the drought years. This was most pronounced for sorghum which increased from 300 tons in 1973, to 300,000 tons in 1974, to 600,000 tons in 1975. Finger millet (called kurrakan in Sri Lanka) increased from 5,000 tons in 1973, to 15,000 tons in 1974, to 20,000 tons in 1975. Production increases for cassava were substantial, but not as dramatic. The producer prices of these crops also increased substantially, reflecting the fact that rice was in short supply. From 1973 to 1974, the price of sorghum increased fourfold, the price of kurrakan almost doubled, and the price of cassava increased by 60 percent.

Since the drought, the area sown to these crops has decreased substantially. For sorghum, as much as 3.8 thousand hectares were sown in 1975 and only 100 hectares in 1980; for kurrakan, 26.8 thousand hectares were sown in 1975 and only 8,000 in 1980; for cassava, 79.2 thousand hectares were sown in 1975 and only 27 thousand in 1980. Production of these crops has decreased substantially as a result. One factor that may explain this decrease is the absence of a clear price incentive. Thus, there has been no guaranteed floor price for any of these three commodities until 1980 when a floor price for sorghum was introduced; however, this will be removed in 1982, and a floor price for kurrakan, which tastes better and is more nutritious than sorghum, will be introduced instead.

Another factor that may help to explain the decreased production of the coarse grains and cassava is, of course, the availability of wheat flour, provided in part under Title I. The importation of wheat flour, and more recently wheat grain in lieu of wheat flour, has increased throughout the 1970s. Two points, however, should be kept in mind. First, in contrast to many African countries, coarse grains and cassava are not staple foods in Sri Lanka. Therefore, to the extent production of these crops has decreased as a direct result of

wheat imports, the decrease has been from a relatively low base and therefore has adversely affected relatively few people. Second, the hypothesis that food aid has had a disincentive effect on food production in Sri Lanka is not supported by the only study that has been carried out on this subject, with the possible exception of minor food grains.

3. Local Currency and Self-Help Measures

PL 480 Titles I and II currently constitute approximately one-third of all U.S. foreign assistance worldwide. About half of this is Title I. Determining which commodities are available at any time is the responsibility of the United States Department of Agriculture (USDA). Determining how they are programmed is a responsibility shared by USDA, AID, the Department of State, the Office of Management and Budget, and the Treasury Department. Diffused bureaucratic responsibility sometimes means that the program is not given the attention it deserves in AID for it is not totally a product of that agency. PL 480 assumes a more important role in the field than in Washington because of the magnitude of the funds in relation to total assistance provided to any particular country. In Sri Lanka, food aid has been important both economically and because of its continuity.

A key aspect of the program is the uses to which the local currency that is generated from the sales of the commodities are put. The uses of some of these funds are spelled out in self-help agreements that specify what the recipient government will do with them. In Sri Lanka, the local currency is credited to the national treasury without specification, and cannot, therefore, be traced or demonstrably attributed to any particular activity within the general government's budget.

It is highly unlikely that the Sri Lankan government would agree to place the rupees generated from Title I sales in a separate account. Apparently, this is only done in cases of grant assistance, not for loans. Given the superior performance of the Sri Lankan government in its overall human resource and agricultural policies, little would be gained if this were done, and administrative costs would increase.

The local currency accruing to the government from Title I sales is usually assumed by the United States to be used to finance self-help measures. Because of the lack of real (in AID bureaucratic terms) programming responsibility, together with the issue of diffused responsibility and little concern with follow up, these self-help measures tend to be exhortatory, a checklist of appropriate developmental measures that would, if carried out, materially improve the country's developmental posture especially in the rural sector.

The situation is somewhat different in Sri Lanka compared to many other nations. It is a leader in equitably distributing development benefits, and Sri Lanka's performance cannot be faulted in terms of the broad distribution of general benefits in a balanced manner throughout the country. The major exception to equitable distribution concerns the Indian Tamils on the tea estates who are not citizens and many of whom face repatriation to India. In addition to a broad concern with equity and sound pricing policies, Sri Lanka has taken a variety of measures to improve food productivity, especially of the paddy sector, and with remarkably successful results through introduction of new seeds and the spread of fertilizer.

The self-help measures included in the Title I agreements tend to be more inclusive and more detailed without being more specific over time. The 1981 agreement, for example, called for such measures as an integrated food/agriculture/nutrition strategy with a five- to ten-year investment plan to implement it, together with emphasis on data collection, training, and statistical analysis to support that plan. The agreement also included other measures such as applied agricultural research, better storage, reforestation, and watershed management, all of which are to be aimed at "directly improving the lives of the poorest...." Earlier agreements called for improved irrigation; more fertilizer, seed, and credit; better extension work; and cooperatives.

Most of the agreements reviewed were general, but a few did have specific targets, such as the 1968 agreement which called for increasing paddy production from 50 million bushels in 1968 to 70 million bushels by 1970. In 1970, paddy production was 77.4 million bushels, but interestingly in 1968 it was already 64.5 million bushels. The 1967 agreements stipulated that fertlizer use be 60,000 tons that year and rise to 150,000 tons by 1970. This objective was also met. When specificity was used, it was sometimes spurious because targets were attained before the agreement was signed, or they could have been reached without any additional effort on the part of the government.

The question of additionality is a new provision of the Agricultural and Development Act Amendments passed in December 1981. Prior to that time, additionality was required only for PL 480 Title III. Thus, this evaluation did not deal with earlier agreements in terms of additionality. It is likely, however, that there was additionality in the past, even though it was not required, because Sri Lankan government funds were tight and Title I provided additional resources. It is impossible, however, to reconstruct and demonstrate where this additionality may have been located.

The agreements between the U.S. and Sri Lankan governments call for food assistance to go to "directly improving the lives of the poorest." There has been much debate in Washington about the meaning of the term "directly" when applied to assistance to the rural poor. The term has been broadly interpreted not to preclude many types of programs, such as agricultural research, which have significant, although indirect effects on the poor. It is evident in the case of Sri Lanka that the rural and urban poor are being helped indirectly by Title I, but neither the consumption of the wheat flour nor the self-help measures "directly" assist the poor. When a government is already engaged in massive programs to assist the poor, as Sri Lanka is, especially the poor in rural areas on whom the very political continuation of that government depends, then it is inappropriate either to force assistance to reach the poor or to confuse terms. The poor may be indirectly helped insofar as flour in urban areas frees rice for rural consumption by the lower income groups.

The December 1981 Farm Bill legislation, in addition to requiring additionality, requires quantifiable targets for Title I agreements. Whatever the overall wisdom of that approach may be in other countries, in Sri Lanka it is unlikely to produce any tangible results. In the past, Sri Lanka did quite well without such measurable targets, and it is likely to continue to do so with or without quantifiable measures. The inclusion of quantifiable targets will probably mean that some of these goals will be excerpted from the government's planning documents and included in the agreements and require additional administrative validating meaures. Thus, if it is necessary to meet the additionality and measurability requirements, they will be met. However, if it should prove impossible to meet them in any one year, such omission should not stop the program. The Government of Sri Lanka should not be penalized for a short period of failure when it has had a long history of progress, infrequently interrupted by temporary government fiscal stringency.

There are also other objectives of PL 480 that prompt the continuation of the program, even were the developmental objective to remain unfulfilled for a short period. It makes sense, therefore, to judge the fulfillment of self-help measures not on an annual basis, but on broad, long-term trends that take into account the positive performance of the past. It should be understood that false specificity will appear in the PL 480 agreements without adding anything that is new and without causing any improvement in the overall chronic concern about

the rural poor in Sri Lanka, a concern that has its deep roots in both equity considerations and policies.[2]

4. Food and Nutrition

Sri Lanka's pursuit of a basic human needs strategy long before it became fashionable involved a pervasive health care system that included both western and traditional medicine, potable water systems, education, electricity, a road network, and a sophisticated agricultural research program. The low infant mortality figure of 37 per 1,000 live births probably reflects a mixture of good pre- and post-natal care, proper hygienic practices and sanitation, and good nutritional status of the mother and child. If nutritional improvement has come about, it has been without the articulation of a specific nutrition policy; it would rather be attributable to government programs in health, education, and subsidized food consumption. The role of food aid in this change can only be hypothesized, based on coincidental evidence of both national and individual data. Analysis suggests that food aid had a facilitating rather than an instrumental role in whatever nutritional changes may have taken place. Underconsumption continues to be a serious problem for certain population groups: the urban poor; rural landless and near landless laborers, especially in the dry zones; and the estate workers. Data from 1976 and 1979-1980 suggest that in comparable age groups and large geographic regions, the incidence of chronic malnutrition diminished somewhat between 1976 and 1979-1980. Such data, however, should be treated with caution. Performance subsequent to 1980 may have been adversely affected by rising food prices and diminishing real value of food stamps. Thirty-five percent of preschool children were chronically malnourished in 1976 compared with about 27 percent in 1980 (chronically malnourished means less than 80 percent height for age). Elite Sri Lankan children's growth was found in 1976 to be nearly equivalent to U.S. standards.

In one area of the Mahaweli, a small nutrition survey in 1980 showed that 30 percent of the children were nutritionally stunted and 19.6 percent nutritionally wasted (i.e., less than 90 percent height for age and less than 80 percent weight for height, respectively). Subsequent analysis showed that new settlers and those without previous farming experience in the dry zone were at higher risk of malnutrition. In the 1970-1980 nutrition status survey, the Tamil estate workers on the tea plantations in the highlands were more afflicted (50 percent)

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[2]The team was not a party to and is not commenting on the FY 1981 Title I negotiations.

with chronic malnutrition than any other subpopulation on which data were available.

The basic Sinhalese diet is rice, coconut products, and curries (Perera, et al, 1972). This differs somewhat from the Tamil diet in which wheat flour in the form of roti (flat wheat breads) is a regular feature. Throughout most of Sri Lanka there is a strong preference for rice, the price of which now fluctuates in accordance with both the world and local market conditions. The preference for rice is so strong that poor quality, broken, or inferior rice will be purchased before shifting to a lower cost diet of wheat flour, bread, cassava, or coarse grains.

Aside from the populations of the estates and the Jaffna district who eat roti as a traditional part of their diet, wheat is largely consumed as bread. It is prepared in small bakeries throughout the island, and sold at a fixed price of Rs2.70 per one pound loaf. Bread is used because it requires no cooking, (thus saves fuel costs), is easily transportable to the workplace or rice fields, and serves as a convenience food. It was regarded as less filling than rice by many manual laborers to whom the team spoke.

The elimination of the food ration program in favor of a food stamp scheme was an attempt to reduce program costs through better targeting of benefits based on monetary income. In September 1979, when the program was inaugurated, about one-half of the population, or 7.5 million people, were certified to receive food stamps. Exhibit 1 below describes some basic mechanics of the food stamp scheme. Food stamp quantities differ with family size, but an average family of five with three adults, one child from 2 to 12 years old, and one child under 8 years, would receive Rs100 per month if they earned under Rs300 per month. The value of food stamps has remained constant since 1979 even though the cost of living index for food rose from 263.3 in 1979 to 340.8 in the second quarter of 1980. Available evidence indicates that some food stamp recipients should be eliminated based on the income criterion (generally those with high but unreported incomes, an estimated 20 to 30 percent of current recipients) and certain nonparticipants should be added to the roles, those with incomes less than Rs300 per month and others who live in severe poverty but have reported incomes slightly higher than Rs300 per month. A recent carefully executed study by the Medical Research Institute indicates that many rural people are spending more than their income on food alone, causing serious indebtedness. In March 1982, in the face of increasing inflation, the government proposed to double the value of the stamps. Efforts are also underway to redefine the roster of eligible recipients to include those who were inadvertently excluded, and to prune the program to about 5 million recipients. This will be difficult

Exhibit 1. Basic Mechanics of the Food Stamp Scheme

1. Food stamps are a consumer subsidy with entitlement values set in rupees. The Food Stamp Coupon Books are given by the government to recipients in lieu of cash to buy food.

2. Food stamp holders are allowed to purchase from the following approved basket of commodities: rice, paddy, flour, bread, sugar, milk products, locally produced pulses, and kerosene (separate stamps which may be interchanged for food).

3. Eligibility: Household earnings Rs300 or less per month. (Based on a 5-member family)

4. Food Stamp Values:

	Per month
Children below 8 years of age	Rs25
Children over 8 and under 12 years of age	Rs20
Those over 12 years of age	Rs15
Kerosene stamps (per family per month)	Rs9.50

5. Issues: Food and kerosene stamps were issued every three months except for the sixth, seventh, and eighth issues which were for six months. At first issue, 7.26 million people claimed eligibility. 1982 figures show 7.5 million people receiving food stamps. In order to limit applicants, no new eligibility forms have been accepted since March 1, 1980.

6. Operation Procedures: Food stamp holders may purchase commodities at a Government Cooperative Branch or authorized private retail dealer. Bakeries are also authorized to accept food stamps for bread.

7. Validity Period for Food Stamps: Recipients have a period of 1 month to use stamps. Unused stamps may be deposited in a savings account before the 15th of the following month. There are no withdrawal restrictions. The wholesaler has two months from date of issuance to redeem stamps and the retailer 3 months.

8. Food Stamp Reimbursement: Food Stamps will be accepted as full or part payment for the supplies of rice, paddy, flour, and sugar by the Food Department to the private dealers and cooperatives (M.P.C.S.S.). Kerosene stamps will be accepted for payment by the Petroleum Corporation for the kerosene supplies. The Food Commissioner will recover from the Treasury the value of kerosene stamps which have been used to purchase food items. The National Savings Bank can claim reimbursement for invalidated food stamps deposited into savings accounts by submitting a monthly statement to the Treasury.

Note: For a more detailed explanation of the Food Stamp Scheme see Appendix G.

prior to the election of 1983. Some officials are seeking to change the level of the income criterion, the size of the transfer, and the foods qualified for purchase with food stamps to better target the program either for expansion or contraction of the recipient population.

The food stamp program is important to Title I, for it subsidizes consumption of a basket of goods including wheat, flour and bread, some of which is supplied by PL 480.. Evidence indicates that preference for rice is so strong that minimal quantities of flour are bought with food stamps. The low consumption of wheat (as bread) through the food stamps program is also caused by the physical separation of cooperatives and bakeries.

If the food stamp program is intended to improve food consumption of those consumers who cannot purchase an adequate diet, the maximum income of Rs300 is probably an inadequate criterion for qualification because several obviously needy groups are excluded (manual laborers, low-level government workers, and tea pluckers), primarily because their incomes are recorded. The tea estate workers are the most isolated segment of the population, separated physically from supplementary off-estate employment and linguistically and culturally from the predominant population groups. They are excluded from the food stamp program on the basis of their income even though they live in worse poverty than any other group on the island. In the current drought, their already precarious situation has become calamitous. Because of their preference for wheat, tea estate workers would be a potential direct beneficiary of Title I, but they do not have access to it through the food stamp program, although they may purchase wheat flour from estate cooperatives for cash.

Overall, there is no evidence that PL 480 Title I commodities have directly improved food consumption of any nutritionally at-risk groups. When free and subsidized wheat was available, even to estate workers, its direct impact on nutrition and consumption was probably higher. Title I's role in affecting food availability may have been indirect in that it freed rice for broader consumption, but this effect cannot be tested with available data.

5. United States Interests

Two factors give Sri Lanka an international importance greater than its modest size and economic position might otherwise suggest: its strategic location and its influential role in both the nonaligned movement and the Group of 77. Strategically, Sri Lanka lies astride merchant shipping lanes that are

as important to the flow of oil and trade between Asia and the Middle East and Europe today as they were to colonial trade in past centuries. It is juxtaposed between important western naval and air facilities in the Indian Ocean, the Philippines, and the Far East. There is no question that the United States has an added interest in the neutrality and independence of a nation which commands strategic resources and a position of this nature.

Quite independently of the strategic issue, however, the United States has a natural interest in Sri Lanka which relates to a long history of moderate and constructive diplomacy as a founder member of the nonaligned group and as a particularly articulate and sophisticated actor within the Group of 77 and related bodies that speak for the interests of the "South." Sri Lanka has been a consistent proponent of moderate and responsible positions within major influential forums and has provided leadership in complex and sensitive negotiations such as the Law of the Sea and the Brandt Commissions. Although the United States and Sri Lanka have differed on many of these issues, the United States and the world community at large have benefited from the careful and constructive diplomatic style which has given Sri Lanka a singular degree of leadership and respect within the Third World. It is clear that if Sri Lanka were to be irreparably rent by communal strife or seriously affected by a deteriorated economic position, this would be counter to U.S. interests. Moderation in Sri Lanka, which is reflected by the respect it receives in international circles and the preservation of the tradition of strongly participatory democratic government, is far preferable to the United States.

The extent to which the PL 480 program has helped to achieve this foreign policy interest of the United States is not easily quantifiable. The stability of the program, however, and its continuation even when relations between the two nations were cool, indicate that PL 480 Title I is likely to have had a positive role in bilateral relations. Today, PL 480 is an important aspect of these relations, and overall the results have been both developmentally and politically positive over the past several years.

Because of Sri Lanka's small size, its relative importance in the areas of market development and surplus disposal through PL 480 has been small in comparison with the important development and foreign policy roles.

IV. CONCLUSIONS

1. The PL 480 Title I program was neutral in relation to Sri Lankan policies. It neither caused nor responded to

changes in Sri Lankan development policy since its inception in 1956. It was viewed as an instrument of change neither by the AID Mission nor by the Sri Lankan Government.

2. If the substantial level of food commodities provided by PL 480 Title I made a positive contribution to Sri Lankan food consumption, it was because it was carefully utilized by the government, whose food sector policies are generally sound and equitable.

3. The Title I program represented a significant positive balance of payments resource over the 25 years of its existence, during most of which external resources were generally scarce.

4. The Sri Lanka Government views the Title I program basically as a balance of payments resource, and values it highly.

5. Although the program was negotiated annually, the Government of Sri Lanka treated it as a multi-year resource in terms of its planning.

6. The program made a positive contribution to U.S.-Sri Lanka relations. The continuation of the program during periods when other U.S. aid was suspended was appreciated by the government and served as a useful force in the continuity of these relations.

7. The program was modestly useful in supporting the objective of relieving U.S. grain surpluses, although the small size of Sri Lanka limited this impact.

8. The program may have had limited usefulness in achieving the legislative requirements to support market development, specifically for U.S. commodities. PL 480 wheat imports joined with other forces to facilitate the expansion of the wheat and flour market through introduction of changes causing substantial increases in demand for wheat.

9. The commodity mix was generally appropriate over the life of the program. Rice is the preferred grain, but wheat is eaten preferentially by certain groups of the very poor, and also provides the least costly solution to maintaining national food supply. It may have positively affected food consumption of low income groups by freeing rice supplies for rural families by providing wheat to urban dwellers and by providing lower cost sources of calories than rice. The small amounts of corn occasionally shipped under the program were probably inappropriate for it is generally not used for human consumption, and the agricultural economy of Sri Lanka is not conducive to a major grain-fed livestock industry.

10. The recent switch from flour to wheat appears to be sound. It lowers the total cost of flour to the Sri Lankan Government and delivers a better final product to the consumer in a more timely manner and with lower wastage.

11. Sri Lanka has been unusually successful in addressing both the consumer and producer pricing objectives of food policy, especially in rice. As a result, the PL 480 Title I commodities have apparently not been a disincentive to paddy production. There is some anecdotal evidence that the import of wheat may have adversely affected the production of the coarse grains.

12. The self-help measures associated with the PL 480 Title I program have generally been superfluous for three reasons: Sri Lanka was pursuing generally sound rural development strategies independent of Title I; the sales proceeds were minor compared to the overall rural development budget of the government; and compliance was not taken seriously either by AID or the Sri Lankan government.

13. Although Sri Lanka has an expressed goal of rice self-sufficiency, there is no present plan for moving out of concessional wheat imports. Overall food self-sufficiency for the island is a target unlikely to be realized at any foreseeable time. Furthermore, nutritional self-sufficiency would require an even greater food supply and aggressive consumer-oriented food policies. Food self-reliance (moving out of concessional food aid), however, is a desirable goal and may be achievable with export earnings from tree crop and other sectors.

14. Consumer behavior suggests that there is a substantive demand for wheat and bread that will be a permanent but modest feature of the Sri Lankan consumption basket.

15. It is highly unlikely that Sri Lanka will become self-sufficient in wheat in the forseeable future or that it will be able to substitute other crops for it.

16. There is no evidence that either the Sri Lankan Government or the U.S. Mission in Sri Lanka is preparing a phase-out of PL 480 Title I.

17. Since 1977, private sector dominance in rice purchases at the farmgate and in grain/flour/bread marketing has had a positive impact on production and probably improved distribution to consumers. Although consumer prices have risen generally, low income consumers have probably been most adversely affected by the net impact of freer food market, public subsidies, trade liberalization and general macroeconomic policies as their food stamps have lost value through inflation.

18. The liberalization and the concomitant market pricing of rice do not appear to explain most of the yield increases in recent years. Institutional and technical factors together with heavily subsidized inputs such as fertilizer seem to have played the largest role in bringing out these increases.

19. Nutritional status in Sri Lanka is better than average for countries at similar per capita GNP levels, although about 30 percent of children continue to be chronically malnourished. There is some evidence that nutrition status improved slightly between 1976 and 1980, but with the price increases since 1980 it may have deteriorated, especially among estate workers.

20. Nutritional considerations have not entered directly into food policy decisions. Several high risk nutritional groups can be identified--rural landless, tea estate workers, urban poor, and Mahaweli settlers who are at risk due to poverty and low income. Such groups have not received any additional benefits (and in the case of tea estate workers, they have received fewer benefits) beyond what is available to the population in general and to those earning less than Rs300 per month. Consequently, malnutrition remains a problem for those sectors of the population.

21. Electoral and partisan politics are a major force in food and welfare policies in Sri Lanka. The rural bias in the electoral structure and unusually high electoral participation rates have resulted in a political influence on food policy leading generally towards greater distributive equity.

22. The AID planning and programming process related to PL 480 (both in Washington and in the field) does not show evidence over time of a level of analytic and strategic effort commensurate with the program's total place in the bilateral aid program.

V. RECOMMENDATIONS

The following comments are provided for the USAID Mission in Colombo for consideration in the formulation of any PL 480 agreements with the Sri Lankan Government.

1. As the report notes, the United States is typically a more reliable provider of commercial food than of food assistance. PL 480 commodities cannot be guaranteed in times of crisis or need.

2. Sri Lanka should thus consider means by which it could move toward food self-reliance--the ability to purchase commercially any basic grains that it may require.

3. Past self-help measures have concentrated on improving the production of food and have been appropriate. Future self-help measures might also concentrate on improvement of Sri Lanka's foreign exchange position through expansion and removal of disincentives on traditional exports. Then Sri Lanka could be in a position to purchase food needs from any commercial source.

4. A rolling five-year self-help approach would be more in keeping with the positive actions of the government in the past.

5. Although this long-term approach suggests application of Title III, this is not recommended, because the policy framework that is an integral part of Title III is already built into Sri Lanka policies. Title III would offer nothing new except unnecessary administrative costs.

6. PL 480 Title I legislation has multi-year provisions. The Mission might wish to explore whether these provisions would provide an acceptable framework.

VI. LESSONS LEARNED

1. In spite of attempts to integrate the PL 480 Title I program into overall assistance strategies, Title I may be policy neutral in its effects. This Sri Lankan case demonstrates that Title I did not influence the major policy shift that occurred in 1977, nor was it significantly smaller when the polices pursued by the government were less conducive to economic growth.

2. The specificity of self-help measures may not be necessary in nations that already follow appropriate national development policies. Under two separate governments since 1975, Sri Lanka followed policies that obviated the need for specific self-help measures. Other nations may not be in this position.

3. If quantified self-help measures are necessary, then an adequate monitoring system is required. Self-help measures were impossible to trace even in the case of Sri Lanka. In less sophisticated countries, a better system of monitoring is required.

4. Annual, specific self-help measures may not be necessary in Title I agreements if the basic national policies are sound. Longer range analysis may be more appropriate. More important in nations that have already adopted effective policies may be self-help measures that predicate continuation of

existing policies over periods of time ranging from three to five years.

5. "Additionality" in terms of improved policies or performance may by unnecessary in nations already following reasonable development policies. Although the policies and performance of any nation may be improved, concentration on such improvements by donors may obscure what already are substantial and effective commitments to both growth and equity.

6. Donors need to understand the nature of local food demand patterns to anticipate impacts of PL 480 imports. The Sri Lanka case demonstrates that wheat, although not the preferred grain, did have substantial demand (urban and Tamil) in the country and was less expensive to import, than rice, calorie for calorie. If such commodities are intended to reach a specific element of the population directly (which in many cases, they are not), greater understanding of consumption patterns is necessary.

7. Title I commodities, to have an effect on improving nutrition, do not themselves necessarily have to be consumed directly by the elements of the population that donors seek to assist. The importation of wheat and wheat flour, consumed only on the margin by the rural poor, was not inappropriate even though it did not reach the majority of the poor to the degree anticipated. The impact of PL 480 commodities on nutrition depends significantly on efforts to meet effective demand for food by all socioeconomic groups.

8. Import of Title I commodities requires a degree of management and data that most nations lack. Most governments have databases and distribution systems far less sophisticated than Sri Lanka's. Yet Sri Lanka has had difficulty in forecasting yields, and thus imported food grain needs. More detailed analysis is required of any nation's capacity to forecast production and consumption needs so that Title I imports do not depress local prices and discourage production, which was not the case in Sri Lanka.

APPENDIX A

METHODOLOGY

METHODOLOGY

An impact evaluation of a food import program presents several critical methodological problems. Three of the four legislative objectives promulgated for the Title I program are relevant primarily to the United States, not to the inhabitants of the recipient country. These are (1) the improvement of American relations with the country concerned, (2) the increase in opportunities for commercial sales, (3) and disposal of surplus agricultural commodities. If one were to do an impact evaluation on the latter two objectives, it would necessarily involve the American business and agricultural communities.

The other objective of the Title I program, overall economic development, also poses difficulties. It requires an analysis of the macroeconomic state of the economy, the major policy changes that have taken place over time, the complex operation of the public and private sectors and their interaction, and indeed even the political culture of the country as a whole. No feasible number of interviews with individual citizens, the ultimate beneficiaries of the program, could provide a valid statistical base on which to form judgments, since the PL 480 program does not act independently of the overall economy.

It is important to note that Title I is not a project and does not conform in any sense to the usual definition of that term in AID. As a program, and one that has operated for over two and a half decades, it has no discrete group of beneficiaries. Since all the normal criteria for impact evaluations are irrelevant (e.g., there was no site to visit, no production to assess, no institution to examine), a new approach to the nature of the program evaluation had to be found.

The first major consideration was the formation of an overall conceptual approach to the evaluation. There was considerable intra-team discussion in the early days in the field to determine what basic hypotheses might provide a framework for analysis. The small size of PL 480 relative to the total Sri Lankan budget and the unproven and loose relationship between the PL 480 terms and Sri Lankan Government policies and self-help measures forced a very broad variety of hypothesized relationships:

1. PL 480 Title I <u>caused</u> variation in measures of the four legislative objectives.

2. PL 480 Title I <u>co-varied with</u>, but did not cause, changes in measures of the four legislative concerns.

3. PL 480 Title I was essentially independent of variation in measures of the four legislative concerns.

Of course, each of these possibilities might vary with each of the four objectives considered. The team reasoned that hypothesis 1 (causal relationships between Title I and the four objectives) would be methodologically very challenging to demonstrate without substantive documentation that seemed to be lacking. Hypothesis 2 (noncausal co-variance) would be relatively simple to analyze with the material available (e.g., the ebb and flow of Title I levels when policies shifted). Hypothesis 3 (neither causal linkage nor co-variance) raised some fundamental questions about the nature of the program and its impact.

This very general set of hypotheses was supplemented by a number of much more specific working hypotheses that related to the operation of each of the four objectives and especially to a broad number of issues in the food sector. The nature of the Title I program and its relationship to the operation of the economy as a whole gave wide scope to the inquiry.

Thus, the team determined that the only rational approach to this impact evaluation within the context of a "rapid rural appraisal" approach (i.e., one month in the field) was to make use of the considerable volume of data that existed in Sri Lanka and supplement this with personal observations that extended to different occupational and ethnic groups in as many ecological settings as possible. As is true in most developing nations, the data are often inconsistent and contain considerable gaps. Yet we were fortunate because Sri Lanka does have a comparative advantage in that the data had been aggregated from a variety of field surveys conducted over time.

It was important to analyze longitudinal data collected by various arms of the government because of the major government, and thus policy, shift that took place in 1977. This shift allowed the team to explore the possible effects of PL 480 Title I in both periods, in some areas with more confidence than in others. The major policy reforms presented an opportunity to analyze the extent to which PL 480 Title I did or did not contribute to different economic objectives. In other cases, not enough time had elapsed and the data were not available to make judgments. These changes were probably the most significant economic policy shifts carried out under democratic procedures by any developing society.

In the context of a program rather than a project, this approach--the general overview and analysis of the functioning

of the Sri Lankan economy as a whole, before and after 1977--requires a different type of impact evaluation methodology than is now prevalent in AID. The team determined that it was important to spend a longer time in the capital city than might normally be required to meet the wide variety of government officials, and seek out as much of the impressive array of data among what sometimes appeared to be a bewildering variety of interlocking government ministries, boards, and corporations. Many have some responsibility for one or more aspects of the food system and the PL 480 program, the overall performance of self-help measures stipulated in agreements, and the functioning of the public and private sectors in terms of the trade regimes and balance of payments.

The aspects of the Sri Lankan economy that seemed most pertinent from the vantage point of developmental issues were threefold: balance of payments issues and policy reform, the local currency generated and the self-help measures that were promulgated in the official agreements reached between the U.S. and Sri Lankan Governments, and the question of food and nutrition--if and how the wheat or flour imported under Title I directly or indirectly reached or did not reach the poor, and the effect of this on nutritional status.

Analysis of the self-help measures proved perhaps to be the least rewarding. The report comments on the overall efficacy of Sri Lankan Government policies, but because all rupee proceeds from the sales go into the "consolidated account" (the general government revenues), there were no means by which these funds could be traced, and thus no specific projects that could be visited or evaluated. It would have been necessary to explore the whole range of Sri Lankan agricultural policies beginning in 1956 to determine whether or not the self-help measures worked. This clearly could not be done in the time allocated. It seemed pointless, for example, to visit one grain storage site when no specific indicators of increases in storage capacity were specified and no locations given. The overall fieldwork did, however, provide some impressions of rural development policies and activities.

The aspects of the evaluation involving specific uses of Title I wheat are compromised by the fact that PL 480 wheat is only a portion of total wheat imports. Nevertheless, the team believed that several issues could be explored: how the wheat is distributed; who eats it; and the effects it has on dietary patterns, food consumption, and nutritional status.

In an analysis of these three points, the policy shifts of 1977 are important and facilitate comparative analysis. The free and subsidized rice program of pre-1977 was replaced with

a food stamp scheme directed toward the poor (as defined by governmental standards explained in the text). Consumption data exist for the pre-1977 period and are now being tabulated for the post-1977 periods, unfortunately making it impossible to reach conclusions now on possible changes during this time.

The construction of the Prima Mill (wheat flour), which precludes future importation of wheat flour, is particularly important and is given special treatment in the text and in the appendixes. The mill site was critical to visit to appraise the impact of the program and its future role.

In view of both the heterogeneous nature of the factors that had to be considered in the evaluation and the limited time available, the team visited representative areas of the nation, not to conduct statistically valid interviews, but rather to grasp issues and form impressions. Thus, the first trip was to the southwest coastal region, essentially a heavily populated Sinhalese region of rice, coconut, and rubber production. The second trip was through the fishing areas of the west coast to the dry zone of north central Sri Lanka where irrigated rice is prevalent as well as cassava, and where a severe drought was in progress that will affect the import of food this year and next, and lead to revisions in the food stamp program; then on to the east coast, a Tamil area and the site of the Prima Mill at Trincomalee. The third trip was to the west zone highlands to see small-scale paddy production and the tea estates. Eleven days, or about 40 percent of the time, were spent in the field, and a total of about 1,200 miles were covered on these trips.

Those whom the team interviewed included government officials, AID officers, farmers, university professors, estate workers, district officials, cooperative store managers, as well as others.

The report closes with three sections, rather than with the usual two. There are conclusions about the program, recommendations concerning the Sri Lankan Title I program, and a section on lessons learned--in an attempt to abstract from the Sri Lankan experience and apply the conclusions more broadly.

A question still exists as to whether the impact evaluation format in terms of timing, length of report, time on the field, and size of team is the most appropriate means to analyze Title I programs. Certainly, the collection of aggregate data and the preliminary approaches to their analysis should occur prior to arrival in the field. Thus, the time

allotted to Title I impact evaluations may have to be shifted, and in countries lacking Sri Lanka's depth of data, some sample survey work prior to the team's arrival may be necessary.

APPENDIX B

MACROECONOMIC ASPECTS OF TITLE I FOOD AID IN SRI LANKA

by

Donald G. McClelland

MACROECONOMIC ASPECTS OF TITLE I FOOD AID IN SRI LANKA

I. INTRODUCTION

Food aid, introduced to Sri Lanka by the British, has been an important economic resource for the country since World War II. Shipments of U.S PL 480 Title I food aid began in 1956 and, except when the Hickenlooper Amendment was invoked, have continued to the present. During the 25-year period 1956-1981, the United States provided $277 million of Title I food commodities to Sri Lanka, 44 percent of total U.S. foreign assistance to that country. This appendix discusses the macroeconomic aspects of Title I food aid during the 1971-1981 period.

Following a brief summary of the magnitude of this resource transfer and a description of Sri Lanka's economic performance during the 1970s, the appendix analyzes the relationships between Title I food aid and (1) Sri Lanka's balance of payments; (2) the government's budget, both recurrent and development; and (3) agricultural production. This framework reflects the three principal features of food aid. First, food aid frees up foreign exchange which (in the case of Sri Lanka) would otherwise have been allocated to purchase food commercially on the international market. Second, the food aid is sold, and therefore generates local currency which the government can use as a budgetary resource to finance both recurrent and capital expenditures. Third, because the commodity in question is food, it may have an important (and possibly adverse) impact on domestic food production. The concluding section summarizes the analysis.

II. MAGNITUDE OF FOOD AID

Table B-1 suggests that the magnitude of food aid provided to Sri Lanka has been significant not only in absolute terms but also in relation to total foreign aid from all sources and total economic assistance from the United States. Food aid from all sources has averaged about $40 million a year, over one-fifth of total foreign assistance provided to Sri Lanka from 1971-1981; it was almost $67 million in 1975 (a drought year) and never less than $15 million (1973). In relative terms, it was as much as 44 percent of total foreign assistance (1974), and until 1979, never less than 20 percent. In 1979, however, it accounted for only 13 percent, and by 1981, its relative importance had diminished still further to less than 10 percent.

Table B-1. PL 480 Title I Food Aid in Relation to Total Foreign Aid, Total U.S. Aid, and Total Food Aid, Sri Lanka, 1971-1981 ($ millions)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	Annual Average
Total Foreign Aid	101.4	80.5	63.5	111.4	184.9	161.6	190.7	248.4	272.7	287.0	380.8	189.4
Total Food Aid	22.4	28.1	15.5	49.2	66.8	41.0	52.9	59.5	36.3	34.2	37.2	40.3
Total Food Aid as a % of Total Foreign Aid	22.1	34.9	24.4	44.2	36.1	25.4	27.7	24.0	13.3	11.9	9.8	21.3
U.S. Aid	8.1	23.2	7.0	5.2	19.8	25.8	29.6	34.6	46.6	55.0	64.2	29.0
PL 480 Title I	7.4	17.6	6.8	5.1	19.8	19.1	29.6	34.5	16.4	22.1	18.2	17.9
U.S. Aid as a % of Total Foreign Aid	8.0	28.8	11.0	4.7	10.7	16.0	15.5	13.9	17.1	19.2	16.9	15.3
PL 480 Title I as a % of Total Foreign Aid	7.3	21.9	10.7	4.6	10.7	11.8	15.5	13.9	6.0	7.7	4.8	9.5
PL 480 Title I as a % of Total Food Aid	33.0	62.6	43.9	10.4	29.6	46.6	56.0	58.0	45.2	64.6	48.9	44.4
PL 480 Title I as a % of Total U.S. Aid	91.4	75.9	97.1	98.1	100.0	74.0	100.0	99.7	35.2	40.2	28.3	61.7

Source: Ministry of Finance and Planning, External Resources Department, Annual Report of Selected Economic Indicators, 1971 through 1981.

Title I food aid (in contrast to total food aid) has averaged almost $18 million per year, ranging from a low of $5 million (1974) to a high of almost $35 million (1978). With the exception of the 1974-1975 drought years, the proportion of total food aid accounted for by Title I has also been substantial, ranging from a low of 33 percent (1971) to a high of almost 65 percent (1980). However, in 1974 and 1975, Title I was only 10 percent and 30 percent respectively, of total food aid. Overall, then, Title I has accounted for about 44 percent of Sri Lanka's total food aid, and food aid, in turn, has accounted for about 21 percent of Sri Lanka's total foreign assistance. Clearly, Title I has been an important resource to the country.

A similar picture emerges with respect to the importance of Title I relative to the overall U.S. foreign assistance program in Sri Lanka. Until 1979, food aid (Title I and Title II) constituted nearly the entire program. At that time, however, U.S. development assistance was increased and Title I food assistance was decreased, with the result that Title I accounted for only 35 percent of the total program in 1979 and 28 percent in 1981. Nevertheless, while its relative importance has diminished, it still constitutes an important element of the overall program. Thus, in 1981, about $18 million of Title I food assistance was provided to Sri Lanka, which was comparable to the annual average provided during the 1971-1981 period.

The importance of food aid must also be evaluated in terms of its reliability. To what extent has the United States been a reliable provider of food assistance? When the drought of 1974 required Sri Lanka to request over three times as much food aid as in 1973 (from $15.5 million to $49.2 million) the amount of food provided by the United States under Title I actually decreased from $6.8 million to $5.1 million; the proportion of total food aid accounted for by Title I dropped from 44 percent to 10 percent. In 1975, Title I food aid was almost triple the 1973 level, but food aid provided by all donors was over four times the 1973 level. Thus, other donors were more reliable than the United States in providing concessional food assistance to Sri Lanka when such food assistance was especially needed. (This tends to confirm a common and legitimate criticism of Title I; that is, when world food supplies are particularly tight, the United States may not be a reliable supplier of concessional assistance. The United States is, however, typically a reliable supplier of food under commercial terms.)

III. SRI LANKA'S ECONOMIC PERFORMANCE DURING THE 1970s

An analysis of the macroeconomic impact of Title I food aid on Sri Lanka's economy during 1971-1981 requires a general understanding of the country's economic performance during this period--especially under the more restrictive economic policies pursued prior to the 1977 elections compared to the more liberal economic policies initiated by the present government. During much of the 1970s, Sri Lanka's economy experienced near stagnation. In November 1977, the new government introduced policy reforms designed to liberalize the economy. The results of the economic liberalization program, especially in the early years of 1978-1979, have been remarkable. During the preliberalization period (1970-1977), gross domestic product (GDP) increased at an annual average rate of 2.9 percent; during the latter period (1977-1980), it averaged over 6.8 percent, over twice as high.

Agriculture, which accounts for about one-quarter of GDP, grew at an average annual rate of 2.0 percent during the earlier years compared to 3.5 percent in the post-1977 years. Paddy production, in particular, has recorded substantial gains since 1977. As a result, the proportion of rice consumption accounted for by imports declined from an average of 33 percent in 1970-1977 to about 12 percent in 1978-1980. The strong performance of paddy production, however, is in sharp contrast to the poor performance of the tree crops (tea, rubber, and coconut) which provide a substantial proportion of the country's foreign exchange earnings.[1] Production of most subsidiary food crops showed remarkable progress during the 1970-1977 period, but this trend was reversed following implementation of the liberalized trade policy and the unrestricted imports of basic food items. By 1981, however, production had improved, partly in response to the introduction of the floor price scheme for 13 subsidiary food crops and the increasing prices of rice and flour.

Among the more striking features of the recent period compared to the earlier period is the substantial increase in investment. Gross fixed capital formation increased from an annual average rate of 15.0 percent of GDP during 1970-1977 to 26.3 percent during the 1978-1980 period. This increase in investment is reflected in both the public and private sectors.

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[1]Two main factors explain this poor performance: a decline in international prices, especially for tea; and increasingly poor management of the publicly owned segments of these tree crop sectors that were nationalized in 1973-1974 and that account for the bulk of total output. Drought was also a factor.

investment is reflected in both the public and private sectors. The increase in government capital expenditures can be attributed primarily to the Accelerated Mahaweli Program (basically the development of irrigation) and the Housing and Urban Renewal Program.

In the latter part of 1980, the economy began to develop serious financial problems. Budgetary receipts declined from 26.2 percent of GDP in 1978, to 23.1 percent in 1979, to 18.9 percent in 1980. To a large extent this was due to a reduction in export tax revenues, which in turn was the result of lower export prices and volumes. Reduced revenues were also due to a policy measure consciously designed to reduce the tax burden on tea and coconut growers.

Expenditures, on the other hand, have been larger than budgeted. In the case of recurrent expenditures in 1980, this was associated primarily with various subsidy and transfer programs, including a government decision not to reduce the number of food stamp and kerosene stamp recipients from 7.3 million to 5 million as planned in the budget. A second factor was the large increase in the consumer price of flour in February 1980, which resulted in less than anticipated sales of public stocks, and in turn, a substantial (and costly) build up of stocks. A third major factor was unanticipated inflation-related increases in the budget. In the case of capital expenditures, the costs of the two lead projects, Mahaweli Development and Housing and Urban Renewal, were underestimated; also, the government failed to scale down these programs sufficiently to match available resources. As a result of these factors, the overall budget deficit increased from 13.7 percent of GDP in 1978 to 21.1 percent in 1980.

To reverse this adverse budgetary trend, the government revised the 1980 budget by reducing capital expenditures from 19 percent of GDP to 14 percent, thereby reducing the overall deficit from 21 percent in 1980 to 15 percent in 1981. To enforce this reduction, all ministries were instructed not to introduce new projects in 1981, 1982, and 1983; in addition, no supplementary budgetary requests (with a few exceptions) were allowed.

In addition to budgetary problems, there has been a substantial acceleration in the rate of inflation during the more recent years of the liberalization program. In 1977, consumer prices in Colombo increased by only 1.2 percent over the previous year. In 1978, the increase was 12.2 percent; in 1979, 10.8 percent; and in 1980, 26.1 percent. (Wholesale prices increased by over 30 percent in 1980.) A major reason for the rapid increase in inflation was the sharp rise in prices administered by the government, which (in 1980) reflected the government's effort to eliminate food subsidies. Another important element was continued increases in import prices. The

substantial expansion of government expenditures and deficit financing also contributed.

After four years of improvement, the balance of payments deteriorated sharply in 1980. This was due in large part to factors beyond Sri Lanka's control. Not only was there a serious deterioration in the terms of trade, but also world inflation made imports more expensive. Exports decreased from 30.9 percent of GDP in 1978 to 25.7 percent in 1980. Imports, on the other hand, increased from 36.6 percent of GDP in 1978 to 49.8 percent in 1980. Several sharp increases in the world price of oil, on which Sri Lanka is entirely dependent, had a major adverse impact.

Although the government took corrective steps in 1981 to reverse these trends, additional resource mobilization efforts are needed to increase both domestic and foreign receipts; also, the public investment program needs to be maintained within the bounds of available resources. However, donors--who played a major role in encouraging both the economic liberalization program and the major public sector investments--need to share the burden of further adjustment. PL 480 Title I food aid may be an appropriate instrument for encouraging and facilitating the continuation of existing economic policies which, for the most part, appear to be sound. This depends in part, however, on the impact Title I has had on Sri Lanka's economy in the past. This is examined below.

IV. TITLE I FOOD AID AND THE BALANCE OF PAYMENTS

The Government of Sri Lanka considers balance of payments support the single most important feature of the Title I program. Only the Food Commissioner felt tha the key element of the program was the fact that "food" was the commodity being supplied. No one indicated that the local currency generated from the sale of food aid was, or was not, particularly important. Perhaps this is because the local currency is depsoited in the general treasury, and therefore, no one can identify any particular activity that it has financed. (One person did point out that Title I local currency generations had financed a specific research study.) [2]

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[2]These conclusions are based on discussions with officials of various government ministries (including Agricultural Development and Research, Plan Implementation, Food and Cooperatives, and Finance and Planning); the Central Bank of Ceylon; parastatal organizations (including the State Flour Milling Corporation and the Paddy Marketing Board); educational institutions (including the Agrarian Research and Training Institute; the University of Peradeniya and the Rice Research Institute); and the American Embassy and USAID officials.

Table B-2 helps measure the relative importance of food aid, especially under Title I, in providing balance of payments support. In 1971, foreign aid receipts ($101 million) financed about 44 percent of the external resource gap ($231 million). Food aid from all sources ($22 million) financed almost 10 percent of the external resource gap, and Title I food aid ($7 million) financed 3.2 percent of the total gap.

Fluctuations in the external resource gap and food aid levels tend to move independently. For example, the external gap decreased in 1972 by about $29 million, yet Title I food aid increased by almost $10 million; thus, a larger Title I program was financing a smaller resource gap in 1972 compared to 1971, and therefore the relative importance of Title I in providing balance of payments support was greater. In 1974, a serious drought year, food aid from all sources financed almost 13 percent of the external gap; but Title I was then at its lowest level in the 1970s, accounting for only 1.3 percent of the gap. From 1978 to 1981, the years of the economic liberalization program, the external resource gap increased over fourfold from $261 million to almost $1.2 billion. Food aid decreased from $60 million to $37 million over this period, and therefore became less important in both absolute and relative terms, financing about 23 percent of the gap in 1978 and only 3.2 percent in 1981. Title I, which recently has accounted for one-half to two-thirds of total food aid, has accordingly become a relatively minor resource in financing the substantially increasing gap, and therefore plays a less-critical role than in earlier years in alleviating the balance of payments constraint.

Title I food aid should be viewed as a short-term resource available to certain countries (a) confronting a foreign exchange constraint and (b) experiencing a food shortfall. Thus, while balance of payments support may be one legitimate justification for Title I food aid (perhaps particularly in support of economic liberalization policies that typically are associated with balance of payments problems during the initial implementation years), it is important for the recipient government to take appropriate steps to obviate the need for food aid in the long-term. One indicator of progress along these lines is the extent to which food imports, in relation to total imports, are decreasing over time. Table B-3 suggests that the value of food imports steadily increased during 1971-1975 from $155 million to $357 million; the proportion of food imports to total imports remained relatively stable but very high; food accounted for 43 percent to 48 percent of the import bill during this period. After decreasing substantially in 1976, food imports again began to increase, reaching $371 million in 1980 but dropping to $244 million in 1981. Relative to total imports, food imports in 1981 were at their lowest level in a decade (14 percent), largely because total imports

Table B-2. Relative importance of PL 480 Title I Food Aid and Total Food Aid in Financing the External Resource Gap, Sri Lanka, 1971-1981 ($ million)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[1]	1981[1]
Foreign Earnings		348.4	412.9	582.8	588.6	616.1	851.1	1,016.7	1,244.2	1,373.7	1,530.2
Exports		296.6	348.1	508.2	507.5	531.3	728.9	852.1	989.8	977.9	1,020.2
Services[2]						72.6	101.3	125.3	193.8	255.8	290.2
Private Transfers[2]		51.9	64.8	74.6	81.1	12.3	20.9	39.4	60.6	139.9	215.9
Foreign Payments		550.2	638.9	964.3	985.6	893.3	945.5	1,277.9	1,733.5	2,356.9	2,690.2
Imports		336.4	392.3	697.0	691.8	611.4	690.5	1,006.5	1,461.8	1,884.2	1,831.8
Services		50.5	49.6	55.0	61.9	59.9	68.0	117.6	145.9	208.1	283.4
Private Transfers		7.8	6.8	8.4	5.3	6.0	7.5	17.3	11.8	14.3	27.8
Capital Repayments		155.5	190.2	203.9	226.6	216.0	179.6	136.5	114.0	250.3	547.4
External Resource Gap	-230.6	-201.7	-226.0	-381.5	-397.0	-277.2	- 94.4	-261.2	-489.3	-983.2	-1,160.0
Total Foreign Aid	101.4	80.5	63.5	111.4	184.9	161.6	190.7	248.4	272.7	287.0	380.8
Total Food Aid	22.4	28.1	15.5	49.2	66.8	41.0	52.9	59.5	36.3	34.2	37.2
PL 480 Title I	7.4	17.6	6.8	5.1	19.8	19.1	29.6	34.5	16.4	22.1	18.2
Remaining External Resource Gap	-129.2	-121.2	-162.5	-270.1	-212.1	-115.6	96.3	- 12.8	-216.6	-696.2	-779.2
Total Foreign Aid as a % of the External Resource Gap	44.0	39.9	28.1	29.2	46.6	58.3	202.0	95.1	55.7	29.2	32.8
Total Food Aid as a % of the External Resource Gap	9.7	13.9	6.9	12.9	16.8	14.8	56.0	22.8	7.4	3.5	3.2
PL 480 Title I as a % of the External Resource Gap	3.2	8.7	3.0	1.3	5.0	6.9	31.4	13.2	3.4	2.2	1.6

[1] Provisional.
[2] Services and private transfers combined for 1972-1975; private transfers include remittances.

Source: Central Bank of Ceylon, Review of the Economy, 1977, p. 199; 1978, pp. 228-29; and 1980, p. 210.

Table B-3. Food Imports in Relation to Total Imports, Sri Lanka, 1971-1981
($ millions and 000 tons) [1]

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981[2]
Total Imports[3]	334.9	344.1	424.3	684.8	744.8	554.1	721.4	940.9	1,449.1	2,034.4	1,762.6
Food and Drink	154.8 (46.2)	152.8 (44.4)	195.0 (46.0)	293.2 (42.8)	357.4 (48.0)	181.3 (32.7)	255.4 (35.4)	263.1 (28.0)	308.8 (21.3)	371.0 (18.2)	244.4 (13.9)
Rice											
$ millions	30.5	22.7	49.0	118.1	137.4	84.9	112.7	40.1	56.6	53.2	49.6
percent	(9.1)	(6.6)	(11.5)	(17.2)	(18.4)	(15.3)	(15.6)	(4.3)	(3.9)	(2.6)	(2.8)
000 tons	339	266	344	332	457	419	526	160	212	190	157
Flour											
$ millions	33.2	34.4	71.5	147.2	146.0	91.5	98.8	132.5	104.8	100.1	1.4
percent	(9.9)	(10.0)	(16.9)	(21.5)	(19.6)	(16.5)	(13.7)	(14.1)	(7.2)	(5.4)	(0.1)
000 tons	323	327	371	448	462	381	516	606	466	361	320
Wheat Grain											
$ millions	5.9	6.4	8.3	21.3	20.6	20.6	16.8	8.8	16.0	46.5	
percent	(1.8)	(1.9)	(2.0)	(3.1)	(2.8)	(3.7)	(2.3)	(0.9)	(1.1)	(2.3)	
000 tons	83	92	83	100	93	130	115	84	112	227	
Sugar											
$ millions	38.5	39.9	51.0	20.1	38.2	15.0	22.8	37.6	59.5	119.6	141.3
percent	(11.5)	(11.6)	(12.0)	(2.9)	(5.1)	(2.7)	(3.2)	(4.0)	(4.1)	(5.9)	(8.0)
000 tons	288	217	194	43	62	47	96	166	245	200	

[1] Figures in parentheses are percentages.
[2] 1981 dollar figures from Central Bank of Ceylon; 1981 tonnage figures from Ministry of Lands and Land Development (March 4, 1982).
[3] Based on Customs data and, therefore, not necessarily consistent with data in Table B-2.

Source: IBRD, Sri Lanka: Policies and Prospects for Economic Adjustment, May 15, 1981, pp. 216-17. Based on data from Ministry of Finance and Planning.

had increased dramatically in conjunction with the liberalization program.

The quantity of food imports is perhaps a better measure of progress than their value, since volume is not subject to price variations. The volume of rice imports fluctuated considerably during the pre-election years, from a low of 266,000 tons in 1972 to a high of 526,000 tons in 1977. Since then, rice imports have steadily declined to 157,000 tons in 1981; this reflects the country's substantial success in increasing domestic rice production. In value terms, rice accounted for as much as 18 percent ($137 million) of the total import bill in 1975 but only 2.8 percent ($50 million) in 1981.

Wheat flour (as distinct from wheat grain) imports steadily increased each year (except 1976) from a low of 323,000 tons in 1971 to a high of 606,000 tons in 1978. In 1979, imported wheat flour was substantially reduced, and by 1981 it was 320,000 tons, less than the 1971 level. At the same time, wheat grain imports began to increase. By 1980, they reached 227,000 tons, double the 1979 level and almost triple the 1978 level. (Importing wheat grain rather than wheat flour was made possible by construction of the Singapore-financed Prima Flour Mill on the east coast of the country.) In all likelihood, increasing quantities of wheat grain will continue to be imported in lieu of wheat flour--not only to supply the Prima Mill, which produces bran sold by Singapore as animal feed, but also to satisfy an increasing Sri Lankan demand for flour and bread. Thus, Table B-4 indicates that the demand for wheat, flour, and bread is projected to increase by almost 35 percent over the 1981-1986 period, while the demand for all other food commodities is projected to increase by only 8-10 percent over the five-year period.[3]

If Title I food aid in the form of wheat grain is <u>not</u> to be viewed as a long-term concessional resource transfer to Sri Lank, then alternative ways to meet domestic demand for wheat will need to be found. One alternative is for the government to continue to support on-going research aimed at developing a wheat technology applicable to Sri Lankan soil and climatic conditions. To the extent that wheat varieties are developed

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[3]This estimate of substantially increasing demand for wheat and flour relative to other food commodities is open to question. The USAID Mission has pointed out that the 404,000-ton wheat requirement for 1981 as reported in Table B-4 is different from the original 492,000-ton requirement projected by the Deparment of Census and Statistics in 1978. This is the only figure in Table B-4 that has been adjusted. Had it not been adjusted, the increased demand for wheat, flour, and bread from 1981 to 1986 would have been 10.6 percent rather than 34.7 percent.

Table B-4. Projected Food Requirements for Selected Commodities, Sri Lanka, 1981, 1986, and 1991

Commodity	1981	1986		1991	
	000 mt	000 mt	Percentage Increase	000 mt	Percentage Increase
Rice	1,511	1,659	9.8	1,802	8.6
Wheat, Flour, Bread	404	544	34.7	596	9.6
Roots and Tubers	471	512	8.7	549	7.2
Sugar	185	204	10.3	221	8.3
Pulses	119	131	10.1	142	8.4
Meat, Fish	419	464	10.7	508	9.5
Milk Food	776	836	7.7	894	6.9

Source: Ministry of Agricultural Development and Research, Agricultural Statistics of Sri Lanka, 1951/52-1980/81, p. 4. (Based on projections of the Department of Census and Statistics.)

which are both technically and economically viable, the need to allocate foreign exchange to purchase wheat commercially will be reduced.[4]

On the other hand, if wheat cannot be produced efficiently in Sri Lanka, additional foreign exchange will be required to purchase it on the international market. Thus, the most appropriate indicator of Sri Lanka's progress in shifting from concessional to commercial wheat imports may be its ability to increase export earnings sufficiently to import at commercial terms. During 1972-1980, the value of Sri Lanka's wheat and wheat flour imports ranged from 10 to 29 percent of its foreign exchange earnings. During the earlier 1972-1976 period, it averaged 22 percent per year, while during the more recent 1977-1980 period, it averaged 12 percent per year. This may suggest that the country is increasingly able to purchase its wheat needs on the international market without relying on concessional food assistance.

V. TITLE I FOOD AID AND THE DOMESTIC BUDGET

The second potentially beneficial feature of Title I food aid for the recipient country is that its sale generates local currency that the government can use to supplement its domestic budget. As indicated above, the allocation of this local currency in Sri Lanka cannot be linked to any particular activity because it is deposited in the treasury and becomes part of general budgetary resources. Still, it is useful to understand how these resources have been allocated over time since some of them were derived from Title I sales. Table B-5 sets forth key line items of the recurrent budget from 1971-1981, and Table B-6 disaggregates capital expenditures among major investment categories.

The recurrent budget reflects the government's firm commitment to assure that food is available to the entire population. Initially, a ration scheme provided this assurance, but in 1979 a food stamp scheme was introduced and the ration scheme was phased out. This consitituted an important shift in government policy, moving from a subsidy in kind to a straight income transfer, and from a general subsidy serving the entire population to a targeted subsidy benefiting only the lower 50 percent of the income distribution.

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[4]Wheat was planted on 3,100 small test plots throughout the country in November 1981, and yields reported to date are characterized as "good." The economics of wheat production has not yet been explored.

Table B-5. Food Subsidy and Food Stamp Expenditures in Relation to Recurrent Budget, Sri Lanka, 1971-1981 ($ millions and percentages)

	1971		1972		1973		1974		1975		1976		1977		1978		1979		1980[1]		1981[2]	
	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%	$	%
Administration	84.9	17.2	90.6	18.4	85.9	16.1	124.1	19.6	117.1	18.7	102.6	16.3	109.7	16.1	107.6	14.2	140.3	18.1	143.5	17.5	151.8	21.7
of which:																						
Civil	-	-	-	-	-	-	-	-	-	-	-	-	(85.1)	(12.5)	(87.7)	(11.6)	(114.9)	(14.8	(116.2)	(14.2)	(129.1)	(18.5)
Defense	-	-	-	-	-	-	-	-	-	-	-	-	(24.6)	(3.6)	(19.9)	(2.6)	(25.5)	(3.3)	(25.9)	(3.2)	(23.3)	(3.3)
Social Services	125.5	25.4	125.0	25.4	127.2	23.8	136.3	21.5	132.4	21.2	138.0	21.9	150.1	22.1	100.7	13.3	119.0	15.3	126.3	15.4	137.2	19.6
of which:																						
Education	(81.2)	(16.4)	(81.1)	(16.5)	(83.5)	(15.6)	(87.1)	(13.8)	(85.0)	(13.6)	(88.9)	(14.1)	(94.4)	(13.9)	(63.4)	(8.3)	(73.3)	(9.4)	(78.2)	(9.5)	(90.6)	(13.0)
Health	(40.0)	(8.1)	(39.7)	(8.1)	(38.9)	(7.3)	(43.6)	(6.9)	(42.0)	(6.7)	(43.6)	(6.9)	(49.9)	(7.3)	(33.4)	(4.4)	(40.3)	(5.2)	(42.3)	(5.2)	(40.8)	(5.8)
Economic Services	25.5	5.2	22.7	4.6	24.6	4.6	24.7	3.9	21.4	3.4	21.9	3.5	23.3	3.4	15.5	2.0	23.2	3.0	26.4	3.2	27.3	3.9
of which:																						
Agriculture & Irrigation	-	-	-	-	-	-	-	-	-	-	-	-	(12.4)	(1.8)	(8.7)	(1.1)	(13.6)	(1.8)	(14.6)	(1.8)	(14.0)	(2.0)
Transfers	182.5	36.9	164.1	33.3	205.0	38.4	255.8	40.4	267.6	42.8	226.1	35.9	269.3	39.6	329.9	43.4	312.2	40.2	305.8	37.3	261.0	37.4
of which:																						
Food Subsidies	(103.2)	(20.9)	(89.7)	(18.2)	(104.0)	(19.5)	(142.3)	(22.5)	(159.5)	(25.5)	(105.9)	(16.8)	(156.3)	(23.0)	(139.5)	(18.4)	(150.6)	(19.4)	(5.8)	(0.7)	(6.2)	(0.9)
Food Stamps	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(32.9)	(4.2)	(88.6)	(10.8)	(75.5)	(10.8)
Other[3]	76.1	15.4	90.0	18.3	90.9	17.0	91.8	14.5	86.8	13.9	141.5	22.5	127.9	18.8	205.5	27.1	181.8	23.4	218.6	26.6	121.2	17.3
Total	494.6	100.0	492.3	100.0	533.7	100.0	632.6	100.0	625.6	100.0	630.1	100.0	680.2	100.0	759.3	100.0	776.5	100.0	820.6	100.0	698.6	100.0

[1] Revised estimates.
[2] Budget estimates.
[3] Consists mainly of interest on domestic and foreign debt.

Source: IBRD, Sri Lanka: Policies and Prospects for Economic Adjustment, May 15, 1981, pp. 233-34 (Based on data from Central Bank of Ceylon)

TABLE B-6. Capital Expenditure and Net Lending, Sri Lanka, 1971-1981
($ millions and percentages)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980 1/	1981 2/
Agriculture and Irrigation	44.4 (33.7)	43.9 (31.7)	46.7 (28.6)	70.4 (39.9)	77.8 (30.9)	74.3 (25.1)	59.2 (25.2)	58.7 (17.1)	145.9 (29.4)	285.6 (36.5)	210.4 (38.5)
Manufacturing and Mining	20.7 (15.7)	12.2 (8.8)	19.6 (12.0)	11.8 (6.7)	39.8 (15.8)	62.2 (21.0)	50.5 (21.5)	82.2 (23.9)	49.9 (10.1)	53.9 (6.9)	19.2 (3.5)
Other Economic Services	28.6 (21.7)	33.8 (24.4)	36.2 (22.2)	37.2 (21.1)	55.5 (22.1)	64.1 (21.7)	45.4 (19.3)	56.8 (16.5)	89.2 (18.0)	119.4 (15.2)	54.7 (10.0)
Social Services	17.3 (13.1)	20.8 (15.0)	19.7 (12.1)	18.2 (10.3)	25.8 (10.3)	34.3 (11.6)	26.2 (11.1)	39.6 (11.5)	83.0 (16.7)	71.2 (9.1)	62.3 (11.4)
Net Lending	4.4 (3.3)	5.8 (4.2)	6.4 (3.9)	7.3 (4.1)	8.0 (3.2)	18.8 (6.4)	9.2 (3.9)	36.7 (10.7)	27.3 (5.5)	64.0 (8.2)	37.9 (6.9)
Others	16.3 (12.4)	22.0 (15.9)	34.6 (21.2)	31.5 (17.8)	44.6 (17.7)	42.1 (14.2)	44.6 (19.0)	69.6 (20.3)	100.6 (20.3)	189.0 (24.1)	162.1 (29.7)
Total	131.6 (100.0)	138.4 (100.0)	163.2 (100.0)	176.5 (100.0)	251.6 (100.0)	295.8 (100.0)	235.1 (100.0)	343.9 (100.0)	496.0 (100.0)	783.1 (100.0)	546.6 (100.0)

1/ Revised Estimates
2/ Budget Estimates

Source: IBRD, Sri Lanka: Policies and Prospects for Economic Adjustment, May 15, 1981, pp. 235, 240.

A major impetus for the shift was the need to reduce what had become an increasingly large financial burden. The food subsidy under the ration scheme averaged over $125 million per year (about 20 percent of the recurrent budget) from 1971-1978. In 1979, it accounted for 19.4 percent, and the food stamp program (introduced in that year) absorbed yet another 4.2 percent; thus, 23.6 percent of the recurrent budget (over $183 million) was allocated to subsidize food consumption in 1979. In 1980, the ration scheme was almost entirely phased out, and both programs then absorbed only 11.5 percent of the recurrent budget ($94 million); in 1981, these programs were estimated to absorb 11.7 percent ($82 million).

Table B-5 also measures the government's commitment to the provision of social services (primarily education and health). From 1971-1977, approximately 23 percent of the recurrent budget was allocated to social services; from 1978-1981, this proportion was reduced to 16 percent. In absolute terms, the pre-1977 government allocated about $134 million per year to social services while the new government has allocated about $121 million per year. Table B-5 also reveals that defense expenditures during the 1977-1981 period have remained relatively constant (about $24 million per year).

Table B-6 shows how capital expenditures have been allocated over time. Agriculture and irrigation have typically been allocated a larger share of the budget than any other sector, including industry, transportation, and communications. Agriculture accounted for about 31 percent of development expenditures ($60 million per year) from 1971-1977. In 1979, the agriculture budget was $146 million, more than double the 1978 level, and in 1980 it was $286 million, almost double that of 1979. Though budgetary constraints have forced a reduction in 1981, both the absolute level of resources allocated to agricultur ($210 million) and its proportion of total development expenditures (39 percent) remain high. These large investments in agriculture during the more recent years are primarily for the Mahaweli Development Program. Table B-6 also suggests that increased investment in agriculture has been at the expense of manufacturing and mining, which absorbed 10 percent of the capital budget in 1979, 7 percent in 1980, and only 3.5 percent in 1981.

One important implication of the government's public investment decisions throughout the period, but especially during the post-1977 years, is that agricultural development ranks highest on the list of overall investment priorities. This suggests that the government does not view Title I food aid as a resource that can substitute for increasing domestic food production. If, however, self-sufficiency in wheat (the principal commodity imported under Title I) proves not to be a viable alternative, then increased investment may be needed to

make the production of traditional export crops and other foreign exchange earning sectors more efficient so that wheat grain can be purchased on the international market.

One final budgetary implication concerns the extent to which the government would have carried out the relatively expensive food subsidy program in the absence of the budgetary support provided by Title I. Just as most experts are convinced that the government would have imported food commercially had it not been provided concessionally, they also believe that the government would have continued to subsidize food consumption even without the local currency provided by the sale of Title I. No one, of course, will speculate on which budget priorities would have been sacrificed had Title I resources not been available. On the other hand, it is also true, and recognized by government officials, that Title I facilitated the financing of the food subsidy program. In this sense, one can conclude that the Title I program permitted the government to support a program which otherwise would have been more difficult to finance.

VI. TITLE I FOOD AID AND AGRICULTURAL PRODUCTION

Two issues are important here. First, because the commodity supplied under Title I is food, did the program have a disincentive effect on domestic food production? Second, again because the commodity in question is food, did the program have a positive effect on improving consumption and nutrition? The first issue is treated here; the second issue, in Appendix C.

As indicated above, wheat, the principal commodity imported under the Title I program, is not produced in Sri Lanka to any significant extent. Therefore, Title I has had little or no direct disincentive effect on domestic wheat production. However, imported wheat and domestically produced rice would appear to be relatively close substitutes. Therefore, it is possible that consumers substituted bread for rice, thereby causing the demand for rice, and hence its production, to decrease. The evidence presented in Table B-7, however, suggests that this was not the case--at least during the 1970s. Paddy production stayed relatively constant during the early years of the decade at about 1.3 million tons per year; in 1974 it increased to 1.6 million tons; then in 1975 (a drought year), it decreased dramatically to 1.2 million tons. By 1977, production had recovered to 1.7 million tons and by 1980 it reached 2.1 million tons--an annual average rate of growth of over 9 percent. (It is, of course, arguable that paddy production would have increased even more in the absence of Title I wheat.)

Table B-7. Area Sown, Production, Average Yields, and Prices of Selected Food Crops, Sri Lanka, 1971-1981

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981[1]
Paddy											
Area Sown (000 ha)	726	727	725	825	696	724	828	876	839	845	
Production (000 tons)	1,396	1,312	1,312	1,602	1,154	1,252	1,677	1,891	1,917	2,133	
Yield (kg/ha harvested)	2,366	2,416	2,298	2,353	2,270	2,315	2,521	2,613	2,730	2,930	
Farmgate Price (Rs/bushel)	14.45	14.83	24.24	41.21	41.84	37.37	35.22	40.74	42.03	51.22	
Floor Price (Rs/bushel)	14.00	14.00	18.00	33.00	33.00	33.00	33.00	40.00	40.00	50.00	
Cassava											
Area Sown (000 ha)		31.3	51.5	91.3	79.2	69.4	54.6	39.9	33.5	27.0	36.3
Production (000 tons)		390.5	610.7	848.3	767.0	683.7	544.8	499.5	365.1	317.6	457.3
Farmgate Price (Rs/cwt)	11.88	14.38	26.71	43.43	31.29	26.47	27.90	29.69	39.55	63.51	
Floor Price (Rs/cwt)	-	-	-	-	-	-	-	-	-	-	-
Sorghum											
Area Sown (000 ha)		0.1	0.3	2.2	3.8	1.0	1.4	0.6	0.2	0.1	0.08
Production (000 tons)		0.03	0.3	3.1	6.3	1.7	2.0	0.6	0.2	0.08	0.07
Farmgate Price (Rs/bushel)	12.12	20.00	12.38	67.56	70.57	42.67	50.42	28.00	27.50	NA	
Floor Price[2] (Rs/bushel)	-	-	-	-	-	-	-	-	-	33.59	42.25

Table B-7. Area Sown, Production, Average Yields, and Prices of Selected Food Crops, Sri Lanka, 1971-1981 (cont.)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981[1]
Finger Millet											
Area Sown											
(000 ha)	21.4	5.5	8.5	29.0	26.8	19.8	25.6	17.7	10.8	8.0	
Production											
(000 tons)	11.8	4.2	4.9	15.4	20.2	15.3	23.0	14.4	10.6	6.6	
Farmgate Price											
(Rs/bushel)	12.37	13.77	34.27	66.49	48.94	35.21	33.80	29.36	40.93	54.58	
Floor Price[2]	-	-	-	-	-	-	-	-	-	-	

[1]Target
[2]In 1982, the floor price for sorghum will be removed; at the same time, a floor of Rs51.82/bushel will be introduced for finger millet (kurrakan), which not only tastes better than sorghum, but also is more nutritious.

Source: IBRD, Sri Lanka: Policies and Prospects for Economic Adjustment, May 15, 1981, pp. 244-45 (for area sown, production, and yield data for paddy, cassava, and sorghum); Ministry of Agricultural Development and Research, Agricultural Statistics of Sri Lanka, 1951/52-1980/81, pp. 2, 40, 45, 48 (for finger millet and price data).

Water availability is the key variable determining how much acreage can be sown under paddy. This, in conjunction with improved seeds and the application of fertilizer, is the principal factor explaining why yields have increased at an average rate of over 5 percent per year since 1977. In addition, the farmgate price for paddy has regularly been above the government guaranteed floor price, which itself has provided an ample incentive to producers. Still, the availability of water and variable inputs has probably been more important than price in explaining the increased production and yields. In any event, the importation of wheat under Title I has not caused paddy production to decrease; on the contrary, production has increased substantially, especially since 1977.

Consistent with this conclusion is the fact that Sri Lankans--without exception--prefer rice over bread. In March 1982, the price of rice and the price of bread were about the same (Rs6 per kilogram or $0.14 per pound). However, if the price of bread were less than rice, people indicated they would still tent to purchase the higher priced rice. When there is a significant changes in the relative price of rice to wheat (bread) the data show that people alter their consumption accordingly. (See Appendix E for a more detailed analysis.)

When the price of bread or wheat flour is reduced to zero, as a certain amount was during various phases of the ration program, people will consume (or at least accept) it, as they would any free good. But when people must use their food stamps to purchase rice or wheat flour, they choose to consume less flour than when it is free. Thus, Table B-8 indicates that flour consumption increased from 63 pounds to 90 pounds per capita during 1971-1979 (an average annual increase of 3.4 percent). In 1980, however, a year after the food stamp program was introduced, flour consumption dropped by 39 percent to 55 pounds per capita.

It is also possible that if people were not substituting imported flour for domestically produced rice, they were substituting flour for other domestically produced grains. For example, was Title I wheat consumed in lieu of coarse grains (such as sorghum and finger millet) or cassava? Table B-7 suggests that production of cassava, sorghum, and finger millet (drought-resistant crops) increased in the early 1970s, peaking in 1974 and 1975, the drought years. This was most pronounced for sorghum which increased from 300 tons in 1973, to 300,000 tons in 1974, to 600,000 tons in 1975. Finger millet (called kurrakan in Sri Lanka) increased from 5,000 tons in 1973, to

15,000 tons in 1974, to 20,000 tons in 1975. Production increases for cassava were substantial, but not as dramatic. The producer prices of these crops also increased substantially, reflecting the fact that rice was in short supply. From 1973 to 1974, the price of sorghum increased fourfold, the price of kurrakan almost doubled, and the price of cassava increased by 60 percent.

Table B-8. Consumption of Wheat Flour Per Capita, Sri Lanka, 1971-1980 (in pounds)

Year	No. of Pounds
1971	63.1
1972	74.3
1973	75.7
1974	68.6
1975	76.5
1976	80.1
1977	91.8
1978	88.6
1979	90.5
1980	55.1

Source: Ministry of Agricultural Development and Research, Agricultural Statistics of Sri Lanka, 1951/52-1980/81, p.23.

Since the drought, the area sown to these crops has decreased substantially. For sorghum, as much as 3.8 thousand hectares were sown in 1975 and only 100 hectares in 1980; for kurrakan, 26.8 thousand hectares were sown in 1975 and only 8,000 in 1980; for cassava, 79.2 thousand hectares were sown in 1975 and only 27 thousand in 1980. Production of these crops has decreased substantially as a result. One factor that may explain this decrease is the absence of a clear price incentive. Thus, there had been no guaranteed floor price for any of these three commodities until 1980 when a floor price for sorghum was introduced; however, this will be removed in 1982, and a floor price for kurrakan, which tastes better and is more nutritious than sorghum, will be introduced instead.

Another factor that may help to explain the decreased production of the coarse grains and cassava is, of course, the availability of wheat flour, provided in part under Title I. As indicated in Table B-3, the importation of wheat flour, and more recently wheat grain in lieu of wheat flour, has increased throughout the 1970s. Two points, however, should be kept in mind. First, in contrast to many African countries, coarse

grains and cassava are not staple foods in Sri Lanka. Therefore, to the extent production of these crops has decreased as a direct result of wheat imports, the decrease has been from a relatively low base and therefore has adversely affected relatively few people. Second, the hypothesis that food aid has had a disincentive effect on food production in Sri Lanka is not supported by the only study that has been carried out on this subject.[5]

VII. CONCLUSIONS

Title I food aid comprised nearly the entire AID program throughout much of the 1970s. With the resumption of development assistance, it now constitutes a relatively smaller, but integral, element of the overall Mission strategy. What has been the primary impact of the program on the economy of Sri Lanka during the 1970s? This analysis suggests that the restrictive economic policies pursued by the pre-1977 government as well as the economic liberalization program initiated by the current government were formulated, and would have been implemented, independently of Title I. At the same time, Title I resources made it easier for both governments to carry out their respective economic policies. The food aid program made foreign exchange, which otherwise would have been allocated to purchase food commercially on the international market, available to import nonfood commodities. It also generated local currency which would not otherwise have been available to help finance the domestic budget. The availability of Title I wheat was not a disincentive to the domestic production of rice, the staple of the Sri Lankan diet. It may, however, have been associated with decreased production of coarse grains.

The Government of Sri Lanka considers balance of payments support the single most important benefit deriving from the Title I program. This analysis suggests that Title I provided relatively more balance of payments support in the early 1970s, when the external resource gap was more manageable, than in recent years. However, because the currently large external

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[5]P.A.S. Dahanayake, "Disincentive Effects of Food Aid on Food Production in Sri Lanka," Central Bank of Ceylon, Department of Economic Research, August 1978. This study included karrakan and cassava, but not sorghum. Also, while the study concludes that food aid, per se, had no direct disincentive effect on domestic production, it suggests that total food imports may have had a marginal negative effect on the production of minor food grains.

gap is primarily the result of the economic liberalization program, balance of payments support, including that provided by Title I, is probably more appropriate for the successful implementation of that program than highly project-oriented forms of external assistance.

Because Title I resources in Sri Lanka are fungible, it is impossible to determine how the local currency generated from the sale of the food aid was allocated. It is likely that the local currency permitted the government to finance the food subsidy scheme more easily than would have been the case in the absence of Title I. It is also likely that it helped the government to finance its priority development objective--increased agricultural production (especially rice production).

While there is no evidence to suggest that the importation of Title I wheat is a disincentive to domestic rice production, it may be associated with the reduced production of coarse grains, including sorghum and finger millet. If so, this is probably less the case now than prior to February 1980 when flour consumption was heavily subsidized. Moreover, prevailing producer prices for the coarse grains (which are largely determined by the private sector) often do not provide an adequate incentive to producers. In any event, any disincentive effect of Title I wheat is probably much less severe in Sri Lanka than in countries where coarse grains are a staple food.

Given Sri Lanka's overall positive economic performance, the government's need for foreign exchange to finance the economic liberalization program, and the demand for imported wheat (a commodity the country does not produce), continuation of the Title I program would seem to have merit. Such a program should be couched in terms of supporting (1) existing appropriate macroeconomic and sectoral policies, and (2) the existing emphasis on agricultural development. It need not, as in many other countries, be designed to support policy reform or specific and discrete development projects. However, successful implementation of Sri Lanka's economic policies and agricultural development program is inherently long-term, while Title I should be viewed as a short-term (one-year) resource transfer; this raises a programmatic problem for AID and the government. Although Title III provides for a multi-year commitment of food aid, thereby facilitating long-term planning, it also requires policy reform; while the former is needed in Sri Lanka, the latter is not. An innovative arrangement that incorporates a multi-year commitment of food aid (wheat), but does not require policy reform or involve the considerable administrative costs typically associated with Title III programs, needs to be explored. Such an arrangement might be linked to satisfactory performance concerning IBRD/IMF policy recommendations as well as achieving food consumption and nutrition objectives.

APPENDIX C

NUTRITION AND FOOD CONSUMPTION IN SRI LANKA

by

Judith McGuire

NUTRITION AND FOOD CONSUMPTION IN SRI LANKA

I. INTRODUCTION

Sri Lanka pursued the quintessential basic needs strategy long before "basic needs" came into (and subsequently went out of) fashion in the rest of the world. Free education for all, a well distributed health care system (including Western as well as traditional medicine), extension of water, electricity, and communications into the rural areas, and a sophisticated grassroots agricultural research and extension system have enabled Ceylon to achieve a quality of life better than its per capita income would suggest. Infant mortality below 40 per 1,000 probably reflects a mixture of good pre- and post-natal health care, proper hygienic practices and sanitation, and good nutritional status of mother and child. If nutritional improvement has come about, however, it has done so without specific articulation of a nutrition policy, but rather indirectly through policies in health, education, and subsidized consumption. The role of food aid in this change can only be hypothesized based on coincidental evidence of national- and individual-level data. What follows is a discussion of this circumstantial evidence which suggests that food aid has had a facilitating rather than instrumental role in the nutritional changes which have taken place.

II. NUTRITIONAL STATUS SURVEYS

Two national-level nutrition status surveys have been carried out in Ceylon. In the 1976 survey (Center for Disease Control, 1976) a random sample of children 6-71 months of age in health districts throughout the island were weighed and measured and examined for evidence of Vitamin A and iron deficiency. A total of 6,863 children were included in the sample. Results (Table C-1) indicate a surprisingly high prevalence of chronic malnutrition (given the country's low IMR), especially in the Estate Sector.

Table C-1. Undernutrition in Preschool Children (6-72 Months Old) by Health District, 1976

SHS Area	Acute Undernutrition[1]	Chronic Undernutrition[2]	Chronic & Acute Undernutrition[3]
Ratnapura	8.8	37.3	4.1
Kandy	8.5	49.6	5.5
Batticaloa	8.4	36.5	4.0
Galle	8.2	33.3	4.1
Matale	7.2	38.9	3.8
Kegalle	7.1	39.6	4.0
Anuradhapura	6.9	30.7	2.9
Kalutara	6.2	26.8	3.4
Matara	6.0	29.7	2.2
Vavuniya	5.8	29.6	2.2
Badulla	5.8	49.4	4.0
Kurunegala	5.7	30.4	2.3
Puttalam	5.1	24.4	1.9
Colombo	4.9	20.7	1.6
Jaffna	3.7	28.4	1.6
Weighted Average	6.6	34.7	3.4

[1] Less than 80 percent weight for height
[2] Less than 90 percent height for age
[3] Less than 80 percent weight for height and less than 90 percent height for age

Source: Sri Lanka Nutrition Status Survey 1976, Washington, D.C.: Office of Nutrition (USAID) 1976 ARC. CG-641.1-15774 1240 78.

The age distribution of malnutrition (Table C-2) shows the characteristic peak of acute malnutrition at 12-24 months of age, reflecting the nutritional stresses of weaning and the nutritional demands of growth. The frequency of chronic malnutrition increased with older age groups, suggesting additive effects of poor diet with each year of life. Vitamin A and iron deficiency did not appear to be serious public health problems in these areas.

Table C-2. Malnutrition in Sri Lanka, by age, 1976

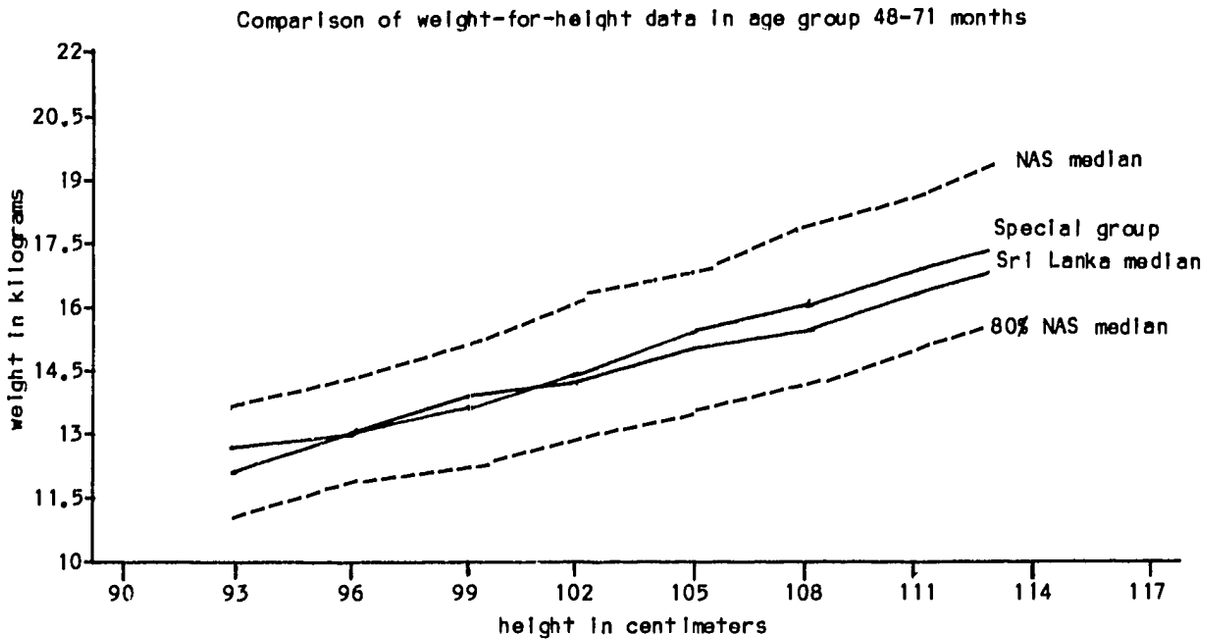
Age (months)	% Acute Malnutrition	% Chronic Malnutrition	% Acute and Chronic Malnutrition
6-11	5.0	11.2	1.6
12-23	10.8	24.8	3.8
24-35	6.9	33.1	4.0
36-47	4.8	40.8	3.4
48-59	5.0	41.9	2.6
60-71	6.2	46.2	3.9
Average	6.6	34.7	3.4

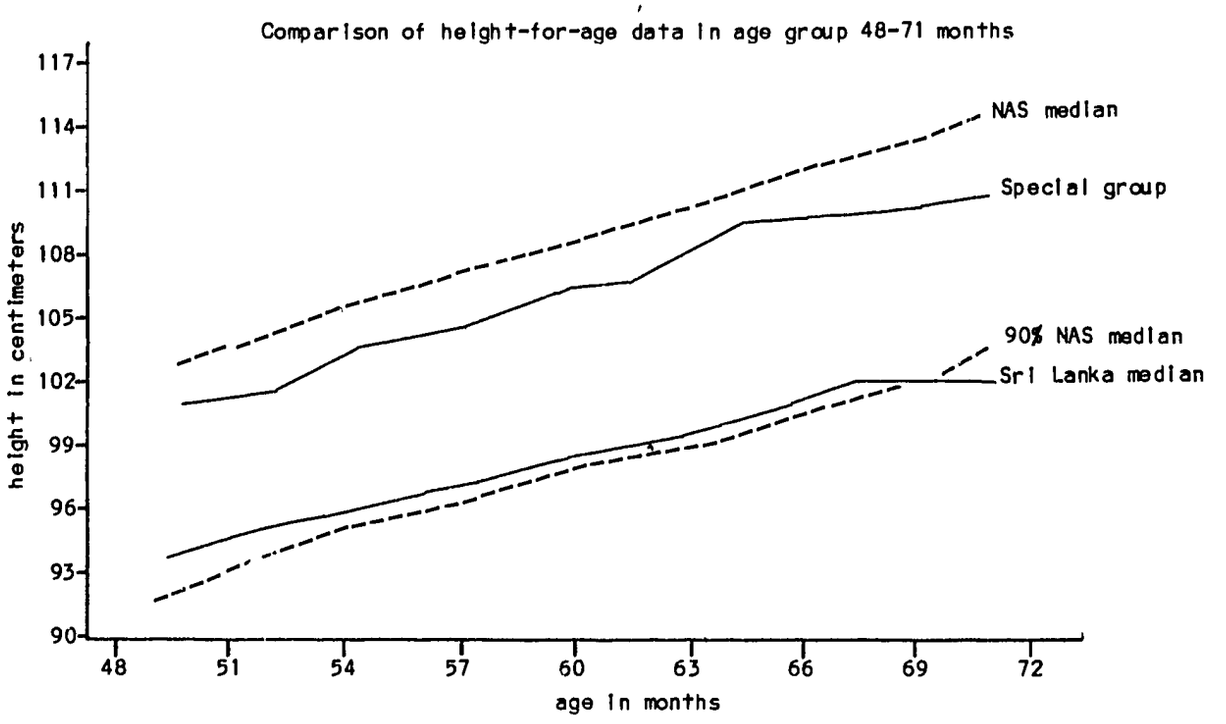
Source: CDC. Sri Lanka Nutrition Status Survey, 1976.

Unfortunately, socioeconomic data were not simultaneously collected to allow disaggregation of malnutrition by income groups, land-holding patterns, or agricultural production system. Equally unfortunate is the fact that health districts correspond neither with administrative-political districts nor with agroecological zones used in the socioeconomic and consumer expenditure surveys carried out by the Central Bank of Ceylon and the Department of Census and Statistics.

Perhaps the most valuable contribution of the 1976 survey was a nutritional survey of elite Ceylonese children in Colombo preschools. That survey showed that 2.2 percent of the 48-71 months age groups were below 90 percent of the NAS reference median height-for-age in contrast to about 0.4 percent of the reference population (Figure C-1) and 35 percent of the rural

Figure C-1. Growth Performance of Elite Sri Lankan Children, Sri Lanka Special Group and NAS Reference Medians, Rural Sri Lanka Survey, 1976





Source: CDC; 1976

population. In weight-for-height, 2.6 percent of the elite children fell below 80 percent median weight-for-height whereas 0.8 percent of the reference population and 3.4 percent of the rural population did. This indicates that racial or genetic characteristics explain far less of the apparent malnutrition in the national surveys than do poverty, inadequate food consumption, and poor health.

The most recent nutrition status survey (sample size not reported), which is on-going, has replicated the CDC Methodology and sampling method but the sampling frame is based on administrative districts and on children 9-59 months of age (some data on older children were gathered for comparative purposes, however). Hence the two surveys are not directly comparable. The results of the first eight districts of the most recent survey are currently available (Table C-3). These results indicate a lingering protein-energy malnutrition problem in those districts. The first eight districts were selected for examination, however, because they have also been

Table C-3. Undernutrition in Preschool Children by Administrative District 1979-1980

Acute District	Chronic Malnutrition[1]	Acute & Chronic Malnutrition[2]	Malnutrition[3]
Kurunegala[4]	8.3	15.5	2.6
Matale[4]	4.7	22.1	2.0
Puttalam[4]	10.2	15.0	4.0
Vavuniya[4]	4.6	22.0	4.3
Nuwara Eliya[4]	5.6	34.6	2.6
(estate)	(2.4)	(49.2)	(3.1)
Moneragala[4]	8.7	17.9	2.8
Hambantota[5]	6.3	23.8	1.4
Matara[5]	5.0	22.0	1.8

[1] Less than 80 percent weight-for-height.
[2] Less than 90 percent height-for-age.
[3] Less than 90 percent height-for-age and less than 80 percent weight-for-height.
[4] Six District Survey, FNPPD, 1980. 6 to 59 months old.
[5] FNPPD/MRI Survey, 1979. 6 to 72 months old (together equals Matara health district).

targeted for "special development" efforts and therefore may represent a biased sample. A separate analysis (Levinson, 1980 a and b) indicated that in that survey females were twice as likely to be malnourished as males. This is probably due to family food beliefs and practices which benefit male children more than female children.

A crude way to compare the two surveys is to add a correction factor for the 60 to 71 months old group into the latter survey (using observed values for the older age group) and compare data on overlapping (but not identical) regions (Table C-4).

Luckily two administrative districts (Kurunegala and Puttalam) are also health districts. In addition, the Matara health district, is comprised of the Matara and Hambantota administrative districts, both of which were sampled in 1979. In the case of the other districts sampled in 1980, some are part of the larger health district (e.g., Matale health district includes Matale as well as another administrative district) so that the populations are somewhat similar.

The adjusted data suggested that in comparable age groups and comparable geographic regions, the incidence of chronic malnutrition diminished somewhat between 1976 and 1979-1980. Because acute malnutrition is subject to the vagaries of illness, food supply, and seasonal factors, such data should not be compared for the purposes of determining general trends in nutritional status. Height-for-age data, however, indicate long-term problems and have a lag period in responding to improvement or deterioration in food consumption or public health. The 1979-1980 data may in fact reflect the food situation in 1977, for instance, when many of the children were still _in utero_ or being weaned.

A small nutrition status survey in 1980 in the H block of the Mahaweli District (FNPPD, 1980 e) showed that 30 percent of the children were nutritionally stunted and 19.6 percent were wasted (less than 90 percent height-for-age and less than 80 percent weight-for-height, respectively). This was above average for rural Sri Lanka (Table C-5). The results showed that recent settlers and those who did not have previous experience with farming in the dry lowlands, were at higher risk of malnutrition.

Table C-4. Comparative Data: 1976 and 1979-1980 Nutrition Status Surveys

District 1979-1980	1979-1980 Chronic Malnutrition	1979-1980 Chronic & Acute Malnutrition	District 1976	1976 Chronic Malnutrition	1976 Chronic & Acute Malnutrition
Kurunegala[1]	18.2	2.6[2]	Kurunegala	30.4	2.3
Puttalam[1]	16.8	4.0[2]	Puttalam	24.4	1.9
Hambantota[3]	23.[illegible]	1.4	Matara[4]	29.7	2.2
Matara[3]	22.0	1.8			
Matale[1]	25.8	2.0	Matale[5]	39.9	3.8
Vavuniya[1]	22.6	4.3	Vavuniya[6]	29.6	2.3
Nuwara Eliya[1]			Kandy[7]	49.6	5.5
Rural	38.6	2.6			
Estate	50.0	3.1			
Moneragala[1]	20.6	2.8	Moneragala[8]	17.9	1.9

[1] 1979-1980 data presented on children 6-59 months of age; adjusted here for children 60-71 months of age assuming 16 percent of sample found in latter age group and using figures gathered in district on 60-71 month old age group.
[2] Data on 6-59 months old children.
[3] 1979-1980 data presented for 6-71 month old age group.
[4] Matara health district includes Matara and Hambantota Districts.
[5] Matale health district includes Matale and Polonnaruwa Districts.
[6] Vavuniya health district includes Vavuniya and Mannar Districts.
[7] Kandy health district includes Kandy and Nuwara Eliya Districts.
[8] Moneragala health district includes Moneragala and Badulla Districts.

Table C-5. Nutritional Status of Children of Mahaweli Settlers by Participation in Food Program 1980
Percent of Children

	Food Stamps	World Food Program	Food Stamps and WFP	No Program
No. of households	35.0	176.0	216.0	203.0
No. of children	48.0	195.0	261.0	209.0
Ht./Age less than 90%	25.0	31.7	32.1	28.2
Wt./Age less than 80%	66.6	68.2	70.1	70.8
Wt./Ht. less than 80%	16.6	18.4	23.3	16.7
Morbidity--two week	2.0	13.2	16.0	14.3
Preschool death in previous 5 years	12.2	1.7	2.9	6.2

III. FOOD CONSUMPTION

The basic Sinhalese diet consists of rice, coconut products, and curries. (Perera, et al, 1972) Since World War II, when rice became temporarily scarce, wheat flour and bread have come to play an important but secondary role in the diet (De Mel and Fernando, 1980). The basic Tamil diet consists of flat wheat breads (roti), rice, and more legumes and less coconut than the Sinhalese diet. Both groups consume tropical fruits, vegetables, greens, meat and fish, eggs, and dairy products according to their income.

Between World War II and 1978, consumption of basic foods was subsidized by the government through a combination of free food, rationed food, and subsidized prices (Tables C-6.1, C-6.2, and C-7). In recent years, apparent household food consumption and nutritional adequacy improved (Table C-8).

Since 1978, consumption of the lowest income groups has been subsidized through food stamps. Eligibility is based on maximum income of Rs300 per month and the allotment is proportional to family size and ages of children. The program was designed to transfer purchasing power in lieu of subsidized commodities to 7.5 million people, about one-half of the population. In order to keep budgetary allocation constant, the value of the stamps was not increased to reflect the increases in the cost of living or the cost of a market basket of foods. Hence the rice-equivalent value of the stamps in July 1981 was less than 50 percent of their value in September 1979 when the

Table C-6.1. Rice Distribution

		Basic Rice Ration Price (Rs/lb)		Additional Rice Ratio			
				Colombo & Suburbs		Rest of Island	
	Quantity (lb/wk)	Non-Income Tax Payers	Income Tax Payers	Quantity (lb/wk)	Price (Rs/lb)	Quantity (lb/wk)	Price (Rs/lb)
Prior to 1971	2.0	Free	Free	2.0	0.37	2.0	0.375
November 1971	2.0	Free	Free	2.0	0.50	2.0	0.50
December 1972	2.0	Free	0.50	2.0	0.50	2.0	0.50
February 1973	2.0	Free	0.80	2.0	0.80	2.0	0.80
March 1973	2.0	Free	0.70	2.0	0.70	2.0	0.70
October 1, 1973	1.0	Free	1.00	2.0*	0.70*	2.0*	0.70*
October 29, 1973	1.0	Free	1.00	2.0	1.00	1.0	1.00
November 1973	1.0	Free	1.00	2.0*	1.00*	1.0*	1.00*
December 1973	1.0	Free	1.00	1.0	1.00	1.0[1]	1.00
January 1974	1.0	Free	1.00	1.0	1.00	1.0	1.00
February 1, 1974	1.0	Free	1.00	1.0*	1.00*	1.0*	1.00*
February 18, 1974	1.0	Free	1.00	1.0	1.00	1.0	1.00
March 1974	1.0	Free	1.00	2.0	1.00	1.0	1.00
April 1, 1974	1.0	Free	1.00	2.0	1.00	2.0	1.00
April 15, 1974	1.0	Free	1.15	2.0	1.15	2.0	1.15
April 29, 1974	1.0	Free	1.15	1.0	1.15	1.0	1.15
May 1974	1.0	Free	1.15	2.0	1.15	1.0	1.15
July 1974	1.0	Free	1.25	2.0	1.25	1.0	1.25
August 1974	1.0	Free	1.10	2.0[2]	1.10	1.0	1.10
November 1975	1.0	Free	1.00	2.0	1.00	1.0	1.00
April 1977	1.0	Free	1.00	2.0	1.00	2.0	1.00
May 1977	1.0	Free	1.00	3.0	1.00	3.0	1.00
January 1978[3]							

[1] The districts of Vavuniya, Mannar, Polonnaruwa, Anuradhapura, Trincomalee, Matale, Amparai, Batticaloa and Hambantota were excluded from receiving the additional ration. This additional ration was, however, extended to estate workers from December 17, 1973.

[2] From August 5, 1974, to May 1977, non-Colombo urban areas and deficit districts also received this additional 2.0 lb/wk ration.

[3] Uniform ration of 4 pounds of rice per person per week to be confined to households earning less than Rs300 per month (1 lb. free and 3 lbs. at Rs1.00 per pound).

Note: An asterisk (*) indicates slight unregisterable change.

Sources: Food Commissioner; Central Bank of Ceylon; and Budget Speech 1978, Ronnie de Mel, Minister of Finance and Planning, November 15, 1977.

Table C-6.2. Flour and Sugar Distribution

	Flour Sales and Ration		Sugar Sales and Ration			
			On Ration		Off Ration	
	Quantity (lb/wk)	Price (Rs/lb)	Quantity (lb/wk)	Price (Rs/lb)	Quantity (lb/wk)	Price (Rs/lb)
Prior to 1971	Unlimited[1]	0.33				
January 1973	Unlimited[1]	0.38				
June 1973	Unlimited[1]	0.48				
October 1973	1.0	0.70				
March 1974	1.0*	0.70*	1.0	0.72	1.0	5.00[2]
April 8, 1974	0.5	0.70	1.0	0.72	1.0	5.00
April 15, 1974	0.5*	0.70*	1.0	0.72	1.0	5.00
April 29, 1974	0.5	0.70[3]	1.0	0.72	1.0	5.00
May 1974	0.5	0.70[4]	1.0	0.72	1.0	5.00
July 1974	0.5	0.70[4]	1.0	0.72	1.0	5.00
August 1974	0.5	1.10	1.0	0.72	1.0	5.00
September 1974	0.5	1.10	1.0	0.72	1.0	7.50[5]
October 1974	0.5	1.10	0.75	0.72	1.0	7.50
December 1974	1.5[6]	1.10	0.75	0.72	1.0	7.50
	1.0[7]	1.10	0.75	0.72	1.0	7.50
March 1975	Flour de-rationed	1.10	0.75	0.72	1.0	7.50
May 1975	Unlimited[1]	1.10	0.75	0.72	1.0[8]	7.50
November 1975	Unlimited[1]	1.10	0.75	0.72	1.0	6.00
July 1976	Unlimited[1]	0.86	0.75	0.72	1.0	6.00
November 1976	Unlimited[1]	0.80	1.0	0.72	1.0	6.00
March 1977	Unlimited[1]	0.80	1.0	0.72	1.0	5.00
August 1977	4.0[9]	0.60	1.0	0.72	1.0	5.00
September 1977	4.0	0.60	1.5[10]	0.72	1.0	5.00
January 1978	4.0	0.60	1.5	0.72	1.0	3.00

[1] Flour was issued under ration only after October 1, 1973. Prior to that, unlimited quantities were available at the given price.
[2] Prior to March 1, 1974, the price of off-ration sugar was Rs2.00/lb, while the quantum of sugar issued on ration was 1/4 pound per person at Rs0.72/lb.
[3] One pound issued every fortnight at Rs0.70/lb.
[4] Except those residing in Colombo and suburbs, who receive an extra pound of rice weekly instead of one pound of flour fortnightly.
[5] Issued only to specified categories of institutions.
[6] Quantity allocation for the estate areas.
[7] Quantity allocation for the rest of the island.
[8] All consumers able to purchase any quantity of sugar at the off-ration price of Rs7.50/lb, in addition to the monthly ration.
[9] Consumers would also be able to purchase any quantity of flour at the off-ration price of Rs0.60/lb.
[10] Sugar to children under 12 years of the protected category of 7 million people.

Note: An asterisk (*) indicates slight unregisterable change.

Sources: Food Commissioner; Central Bank of Ceylon; and Budget Speech 1978, Ronnie de Mel, Minister of Finance and Planning, November 15, 1977.

Table C-7. Subsidies on the Food Ration and on Food and Kerosene Stamps (in millions of Rs)

Year	Rice	Flour	Sugar	Others	Net Subsidies	Food Stamps	Kerosene Stamps	Total Subsidies & Stamps	Total as a % of Total Govt. Exp.	Total as a % of GNP Market Price
1966/1967	445.3	-22.1	-224.8	3.6	202.0	-	-	202.0	8	2
1967/1968	548.9	-24.0	-239.5	10.9	296.3	-	-	296.3	10	3
1968/1969	582.0	-11.2	-254.6	12.6	328.8	-	-	328.8	10	3
1969/1970	532.4	3.6	-221.1	12.5	327.4	-	-	327.4	9	3
1970/1971[1]	586.2	10.4	-64.0	1.9	534.5	-	-	534.5	14	5
1971/1972	526.5	22.6	-47.1	33.2	525.2	-	-	525.2	10	4
1972/1973	564.0	111.0	-21.8	24.0	677.2	-	-	677.2	13	4
1974	745.1	148.1	26.5	30.8	950.5	-	-	950.5	16	5
1975	785.5	218.0	215.0	11.9	1230.4	-	-	1230.4	17	6
1976	679.3	52.0	165.1	41.2	937.6	-	-	937.6	11	4
1977	943.0	363.6	70.0	47.5	1424.1	-	-	1424.1	16	5
1978	1066.1	1027.9	-	68.7	2162.7	-	-	2162.7	12	5
1979	1215.6	894.1	138.6	77.7	2326.0	508.0	59.3	2893.3	14	6
1980	-	-	-	105.0	105.0	1595.0	182.0	1782.0	7	3
Revised Estimates 1981	-	-	-	125.0	125.0	1510.0	177.0	1812.0	7	2

[1] 4/5th of expenditures during the fiscal year of 15 months--1st October, 1971 to 31st December, 1972.

Source: Central Bank Reports

Table C-8. Apparent Food Consumption in Sri Lanka, 1953-1978

	1953 [1] Cross-Section	1957 [1] Upper Income	1955-1960 [1] Food Balance	1963 [1] Cross-Section	1968-1970 [3] Food Balance	1969-1970 [3] Cross-Section	1973 [4] Cross-Section	1977	1978 [6] Food Balance
Rice	842	915	1000	1040	998	918	835		
Wheat	na	na	223	na	313	284	286		1386
Coarse Grains	na	na	27	na	na	20	73		
Roots & Tubers	na	na	74	na	na	29	na		150
Sugar	134	263	190	184	236	200	123		147
Pulses	na	na	58	na	na	52	33		29
Coconut & Oil	450	539	362	na	369	489	443		443
Fish	47	102	50	na	51	39	26		40
Meat	10	75	8	na	6	8	30		4
Total	1990[5]	2030[5]	2047	2100[5]	2235	2264	1936	2055[5]	2325

[1] Jogaratnam, T. and T. T. Poleman. Food in the Economy of Ceylon. Cornell International Agricultural Development Bulletin No. 11. Ithaca: New York State College of Agriculture, 1969.

[2] Perera, L. N. et al. The Effect of Income on Food Habits in Ceylon. Cornell International Agricultural Development. Reprint 55. Ithaca: New York State College of Agriculture and Life Sciences, 1972.

[3] De Mel, B. V. and T. Jogaratnam. Population Growth, Nutrition and Food Supplies in Sri Lanka, Marga, 4 (3); 60-93, 1977.

[4] Gavan, J. D. and I. S. Chandrasekera. The Impact of Public Food Grain Distribution on Food Consumption and Welfare in Sri Lanka.

[5] AID. All data currently available on Sri Lanka. Unpub, n.d.

[6] Siriwardena, T. D. W. Strategy in the Production of Vegetable Protein Requirements of Sri Lankans. Photocopy, n.d.

program started. In 1979, food stamps would have provided 36 percent of energy requirements of the hypothetical family if they used stamps to buy only rice. In 1981 this figure fell to 18 percent of energy needs (FNPPD, 1980). Data on food consumption subsequent to 1978 are not yet available (the 1978-1979 socioeconomic and household income and expenditure surveys should be available in June 1982). Empirical evidence suggests, however, that food consumption of the lowest income groups has been reduced, both in quantity (less food consumed) and quality (less dried fish and beans). This conclusion is based on the assumption that recent increases in food prices (due to the removal of most direct government subsidies on food and the freeing up of the marketing system) have not been matched by increased incomes and employment in the lowest income groups.

If people ate only rice (or wheat) and met only calorie and amino acid protein needs, at least 5 kg of rice per day would be needed by a typical family of five.[1] Although no one would choose such a bland and bulky diet and that is more rice than anyone actually eats, the predominance of rice as a source of calories and protein is not atypical of the diet of rural Sri Lankans. A less expensive alternative would use Jak fruit, cassava, or millet instead of rice, but rice is more available to the general populace. Be that as it may, the rice diet of a family of five would cost at least Rs27/50 per day. Such a family would receive approximately Rs99/50 per month (including the kerosene stamp) toward a total dietary cost of about Rs825 per month. That is to say, the minimum rice diet would cost twice their entire income (including food stamp income).

On the basis of the all rice diet, any such family earning less than Rs1,000 per month or producing an equivalent amount of rice is probably unable to consume enough calories and protein to meet its needs unless some of the food is free (gifts,

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[1] Assumes three adults (two men) at 2,000 kcal and 50 gm protein per day, one child 8-12 years old at 1,500 kcal and 45 gm protein per day and one child under 8 years of age at 1,000 kcal and 25 gm protein per day. Assumes rice costs of Rs5/50 per kg (current price, but low quality rice in postharvest glut). Rice provides 3,500 kcal and 68 gm protein per kg. To meet gross nitrogen needs, 3.2 kg would be needed per day. Using NPU (67), 4.8 kg would be required per day, and using amino acid score (47), 6.9 kg of rice would be required to meet protein requirements. These caloric requirements presume either small or relatively inactive people. Overall this represents a conservative estimate of the cost of a minimum diet.

foraged food, or borrowed food). Therefore any family of similar size and composition actually earning less than Rs300 per month and receiving Rs100 in food stamps cannot purchase an adequate wheat or rice diet. Such households apparently surviving on food stamps probably have higher incomes than reported, eat a lower status diet (although coarse grains and cassava were not seen in cooperative stores), have access to nonpurchased food from their own or someone else's land, or are going into debt buying food. Nutritional status surveys corroborate that some families are not surviving well at all.

While a farmer can easily underestimate his income to a surveyor and procure "no-cost" food, the urban poor, the landless, and the estate workers are not as lucky. For instance, even if all three adults in the hypothetical household worked full time (24 days per month) for a tea estate, they would earn just enough (Rs36/80 per day) to purchase the minimum diet.[2] In other words, the food stamp program can in no way address the nutritional shortfalls of those truly earning less than Rs300 per month or even triple that income if they eat a rice and coconut based diet. The current value of the food stamps for such a family is sufficient for less than three days.

If nutritional considerations alone were to guide the food stamp program in the free market food economy, the amount of the allotment would have to increase substantially. Furthermore, any family earning less than Rs1,200 or producing less than an equivalent amount of food should have the shortfall met with food stamps. This is not a case of poor food-purchasing habits or inadequate intrafamily distribution of food (although both may contribute to the nutrition problem), but rather it is a problem of insufficient income. Low income consumers are frequently the most efficient food buyers--they have to be to survive. In the best of all worlds, the minimal diet would include some legumes, vegetables, and oil, but that would be even more expensive.

It is unclear how many households are truly unable to procure or purchase a minimally adequate diet. Evidence from a carefully controlled study carried out by the Medical Research Institute indicated that in one area people are expending more than their incomes, mostly on food, with the result that indebtedness is increasing each month. Their short-term solution is to liquidate jewelry and other assets, but that cannot continue for long.

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[2] Adult women earn Rs14 per day; men earn Rs16 per day; normal work week is six days.

To meet a higher proportion of dietary needs without increasing the national food stamp budget would require drastically reducing participation in the program. It may be, however, that the food stamp roles cannot be cut back much without cutting out people who actually need help. To cut back the roles would require refining the criteria of eligibility. Yet targeting the program--perhaps based on poverty or nutritional risk--may go against the grain of equity. Until now, the major social welfare programs--education, health care, and rice rations--have been available universally. It may well be that Sri Lanka's enviable social progress came about because those social welfare projects were targeted to the whole population. If this were true, then targeting food stamps only to the very neediest (as opposed to half of the population as currently) could cause Sri Lanka to lose ground on equity by creating "the poor" as a psychosocial entity.

The food stamp program is faced with a dilemma that tests the priorities of the program's different objectives:

--Should the program increase (through larger transfers or a larger number of recipients)? This could be argued from political as well as nutritional points of view.

--Should the program decrease (through reduction in beneficiaries)? This has been argued from an economic point of view.

--How much political power, equity, and nutritional concern is the government willing to trade off in the interest of economic growth?

These issues are currently being debated throughout the government.

During 1982, two events will probably affect consumption patterns significantly. First, the drought in early 1982 may reduce rice production and, given the government's low rice reserves and low procurement price, it is unlikely that much rice can be disbursed to cushion price impacts of a shortfall. Therefore, it may be necessary to import rice to meet demand. If rice prices increase, demand for wheat flour and bread may also be in higher demand due to substitution. Because wheat supply and prices are highly controlled by the government, increased demand for wheat will either cause shortages, force the government to increase wheat imports, possibly through PL 480, or abandon price controls on wheat.

Secondly, the 1983 elections have escalated political demands to hold down prices and increase transfers to districts. The upshot of the recent events is a proposal that the face value of food stamps be increased 100 percent in 1982 (although real value will still be less than it was in 1979) and that additional food stamps be made available (through the Social Welfare Department) to drought-affected communities and individuals. While they may improve food consumption of the lowest income groups, these efforts are unlikely to return food consumption by lowest income groups to what it was at the time of the 1973 survey.

Low income consumers seem to change consumption patterns in response to prices (and income), time constraints of the homemaker, and fuel costs. Although rice is far preferred to bread, bread is used because it is convenient, it is already cooked, and it is inexpensive. Several agricultural laborers to whom we spoke mentioned that bread didn't fill them up and that 1 kg didn't feed as many people as 1 kg of rice (currently 1 pound of bread costs Rs2/70, 1 kg of rice officially Rs6/15). When people can afford it, they prefer to eat lower quality rice, even broken rice, rather than bread except when the price differential is substantial. Food stamps seem to allow consumers to purchase rice (albeit lower quality rice) when rice prices increase. This is reflected in minimal bread purchases with food stamps. In that kerosene can be purchased with the kerosene/food stamp, cooking costs of rice may also be subsidized, but food stamp recipients frequently use the kerosene stamps to buy food.

Low-income Tamils seem to consume more wheat roti when rice and fuel costs increase. They say roti require less time and fuel to make and they are more filling than rice.

In the estate sector, food stamps are virtually unavailable not because people earn high incomes in absolute terms, but because the eligibility is based on unrealistically low income and because tea estate income is officially recorded and therefore impossible to underestimate on the food stamp application (as casual laborers and small farmers are able to do). The contention that tea estate workers are really better off because they have higher recorded incomes, "free housing," and "free health care" is not apparent to the observer. The quality of their housing is low, few of them have safe convenient water, and health care (provided by the national health care systems) is available throughout the island. They also have higher caloric needs due to the physical demands of their work.

The estate workers buy most of their food from the estate store--or, rather, deductions for rice and flour are made from their paychecks, based on somewhat higher than market prices. Because tea estates extend for long distances, estate workers' access to the "free market" in food is limited (as well as their time to go shopping: women work 9-12 hours per day). The wages are barely sufficient to buy even a very minimal diet. In fact, workers are chronically indebted to the estate store. In the current drought, tea pluckers may work only 3-4 days per week and may not have any additional employment options (once again due to physical isolation but also due to low educational achievement and language barriers). Given that food stamps are unavailable to them, the drought will undoubtedly have serious nutritional impacts on estate workers. Nutritional status was very poor in 1976 and 1980 (50 percent of children were chronically malnourished in both surveys) and even today wages continue to be low (in food equivalents), water and sanitation are appalling, and living quarters are crowded. Without scientifically measuring nutritional status, it was apparent that a higher proportion of estate children are more seriously malnourished than children observed elsewhere in Sri Lanka. Contrary to the consensus opinion in Colombo, malnutrition on the estates is not due solely to poor sanitation and environment, it is also related to inadequate food consumption.

IV. FOOD SUPPLY

Sri Lanka desires to be self-sufficient[3] in food, and through a massive investment and subsidized input scheme, it has become nearly "self-sufficient" in rice. Although that is an impressive accomplishment, the direct and indirect costs may be large. Free irrigation water; subsidized fertilizer, seed, tractors, and petrol; and extensive and sophisticated agricultural research and extension have all been focused on rice,

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[3] "Self-sufficiency" is a relative term implying that imports are not needed to meet market demand. One should not be lulled into thinking that self-sufficiency means the food supply is adequate. Unless everyone is able to procure and consume enough food to meet his nutritional needs, "self-sufficiency" is meaningless. As can be seen from the previous discussion, nutritional self-sufficiency in rice would require massive transfers from government to consumer to enable a typical family of five to buy sufficient rice each month.

while legumes, coarse grains, roots and tubers, and smallholder cash crops have been given lower priority. Millet, sorghum, and legumes, which are nutritious, inexpensive to the consumer, and resistant to drought (a regular occurrence in some parts of the island) have virtually disappeared from the market. Yet they have met the nutritional needs of the rural poor in the past and are clearly needed to compensate for the high cost of the rice diet.

In general, the food marketing and distribution systems (including the cooperatives) are adequate to ensure availability of food throughout the country. Between the public purchase and private traders, farmers are able to market their goods easily. While on-farm storage seems to be limited, adequate storage facilities exist on regional and national levels.

Farmers in all but the driest regions tend to grow paddy rice, using both broadcast and transplanting systems. Tractors and draught animals are frequently used for land preparation. In the dry zone, state-owned land is frequently cultivated (legally or otherwise) using slash and burn methods (chena land). Cash crops (e.g., chilies, vegetables, onions) and food crops (cassava, coarse grains, vegetables) are grown on this chena land. In the wet zone, the rains are depended upon for irrigation and little chena land is available.

Although the agricultural extension system appears to be encouraging production of roots and tubers, coarse grains, and legumes, the program impact on market prices and availability has not been noted.

V. POSSIBLE EFFECTS OF PL 480 TITLE I ON NUTRITION AND FOOD CONSUMPTION

The impact of PL 480 on nutrition and food consumption can be summarized within three broad categories.

A. PL 480's Effect on Food Supply

Title I has mostly consisted of wheat and it provides about one-quarter of the national wheat supply.[4] Government

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[4] Based on 1980 figures of 153.8 (000) metric tons of wheat imported as PL 480 Title I (See Table 1) at 72 percent extraction compared with 495 (000) metric tons of available wheat (See Table H-1).

controlled wheat (90 percent of total) is primarily distributed through bakeries as bread (60 percent) and through cooperatives as flour (40 percent).

1. Bread is consumed as a convenient and economical food (to spare fuel costs as well as to substitute for more expensive rice). Bread is also a "modern" food and more palatable than cold rice at the workplace.

2. Wheat flour is consumed as a traditional part of some people's diet and as a convenience food (roti). Wheat consumption by nutritionally at-risk groups is low, except for high consumption by tea estate workers.

3. Food stamps have probably enabled low income consumers to eat rice even though in the face of slightly higher wheat prices. One of the major nutritional risk groups, estate workers, is ineligible for food stamps on the basis of reported incomes.

4. When wheat rations and subsidized prices were in force, wheat may have had a direct impact on nutrition simply because more food including wheat reached the lowest income groups. Giving wheat to everyone, however, is an uneconomical way to get wheat to the poorest people.

5. Wheat imports may have increased bread consumption by upper income and urban groups, which in turn may have reduced demand for rice and increased rice availability to low income groups. Wheat imports caused a dietary change, at least in upper income homes, such that there is currently a substantial demand/taste for wheat.

6. PL 480 wheat within the subsidized consumption system may have enabled low income consumers not to reduce consumption when food prices rose. In that it has resulted in a large resource transfer to Sri Lanka, PL 480 may also have partially financed the subsidized consumption system.

7. There is no irrefutable evidence that PL 480 wheat directly or indirectly improved food consumption of any of the nutritionally at-risk groups.

B. PL 480's Effect on Local Currency and General Development Policies

Local policies are probably unaffected by PL 480 self-help measures. Since nutrition planning is virtually unknown in Sri Lanka and since there is no evidence that nutritional considerations have been included as part of economic or agricul-

tural policies, any impacts of development programs on nutrition are by and large incidental.

If the impressive economic growth of recent years has somehow managed to avert nutritional problems, the mechanism for accomplishing this has not been explicit. Given the negative impact of recent economic policies on equity and food prices, nutritional status has probably deteriorated since 1979. Absolute per capita food supply has increased only slightly since 1979.

The obsession with rice production at the cost of coarse grains and legumes, which may be more important nutritionally to low income groups, means that agricultural self-help measures have probably had no positive nutritional impact.

C. PL 480's Effect on Foreign Exchange

In that foreign exchange is used for fuel development, and given that recent economic development has not been shown to affect nutrition positively (or mitigate negative influence), it cannot be said that the foreign exchange freed up by PL 480 has had any nutritional impact.

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APPENDIX D

SRI LANKA'S PRIVATE SECTOR SINCE 1977

by

John Stuart Blackton

SRI LANKA'S PRIVATE SECTOR SINCE 1977

I. THE PRIVATE SECTOR BEFORE 1977

The state of the private sector which confronted the new government in 1977 was a rather sorry one, although it reflected patterns which are all too familiar in a great many developing countries. The colonial structure of the economy left independent Ceylon with an initially lopsided private sector: highly developed plantation industries and a financial structure geared to the import/export trade combined with a minimal industrial base and little effective institutional capacity to mobilize investment resources. Over the next 30 years the situation improved marginally in some areas and deteriorated severely in others. Both political blocs in Ceylon sought to promote industrialization, but the early efforts were naive, if well intentiioned. The maze of industrial of policies promulgated by alternating UNP and SLFP governments left Ceylon with a set of inefficient import substitution industries surviving behind excessive rates of effective protection and a lack of incentives for export industries which kept Ceylonese industrialists out of the international marketplace and sheltered from the winds of international competition.

Private firms developed within the framework of the Companies Act of 1938, a colonial modification of the British Companies Act of 1929, which is still in force in 1982. The law did not provide for the forms of corporate structure which have been most effective in promoting capital mobilization in the developed world, and the vast majority of Ceylonese firms continue to be family enterprises or closely held firms. Although a few plantation stocks have traded on the local exchanges for a very long time, the capital markets of Ceylon were not developed in ways which facilitated the financing of company equity. Most firms continued well into the 1970s on a mixture of short term commercial financing and limited medium- and long-term debt financing from informal noninstitutional sources (family, friends, the "black money" pool, private unregistered financial intermediaries, and the like). While the financial agility of the noninstitutional money markets in Sri Lanka took its toll in a number of ways. The noninstitutional finance market is inherently inefficient because it cannot use public channels to move market information on supply and demand for funds. It also lacks the ability to achieve economies of scale and typically involves unnecessarily high transaction costs for both borrower and lender. It favors debt financing over equity financing with an inevitable bias towards expansion of existing enterprise over new starts.

The only element of the financial structure in Sri Lanka which was well developed before independence was the commercial bank capacity to handle documentary credits and import/export finance. Even this function had been eroded in the 1970s as foreign exchange availability dwindled and the government nationalized the large commercial banks. Not surprisingly, the composition of the private sector in Sri Lanka by 1977 was weighted heavily towards trade and services which lend themselves to small-scale and to debt financing.

The years between 1971 and 1977 period was difficult years at best for all private sector firms and disastrous for many firms. With hindsight it is clear that the basic sectoral investment policies of the government during this period were misguided in the extreme. Public enterprises and ill-conceived welfarism consumed the lion's share of public resources, while confiscatory tax policies and direct expropriation of private businesses turned a weak private investment climate into a virtually nonexistent investment climate. Over and above mismanagement at the macrolevel, Sri Lanka was plagued by a convergence of other economic forces which dampened economic performance as a whole and took a particularly high toll in the private sector. Foreign exchange availabilities dwindled severely during the period, and the private sector was last in line at the foreign exchange allocation window of the socialist government. Sri Lanka's overall terms of trade deteriorated severely over the SLFP years and the government's trade policies discriminated against exports (both manufactured exports and the major traditional plantation exports). Total economic performance for the period was dismal, and growth in the private sector was probably negative for the period as a whole. Foreign investment in Sri Lanka, which had been minimal before 1971, dried up entirely in the SLFP years as the nation acquired an international reputation for being not simply neutral to private enterprise, but actively hostile to private business.

II. THE PRIVATE SECTOR POLICY REFORMS OF 1977

It was against this undeniably bleak setting that the new UNP government launched a sweeping economic liberalization program in which an important role was assigned to the private sector. Within months after the election, the government announced that its central industrial policy objective was to "encourage export-led industrial development in preference to import-substitution oriented industrial development that has characterized the period since the late fifties, since the latter has proved to be both uneconomic and incapable of

generating employment."[1] The government sought more broadly to give major production incentives to private producers in all the production sectors (industry, food crops, and traditional exports) and to create the conditions for private capital mobilization and investment which would free public investment resources for rehabilitation of Sri Lanka's sadly deteriorated infrastructure base. The first UNP budget set out four overall economic objectives: (1) to revive the economy, (2) to increase output from agriculture, industry and trade, (3) to stimulate domestic savings and investment, and (4) to improve the balance of payments. Two structural changes were promulgated very early on in the life of the new government to give substance to these policy objectives:

1. Price controls were eliminated (with the exception of bread and pharmaceuticals).

2. Import controls were virtually eliminated. The government switched from a complex and inefficient system of import permits to a "negative list" of ineligible commodities. All nonprohibited imports could be freely imported against a simplified tariff structure with six bands ranging from duty-free to a 100-percent tariff.

In parallel with these policy changes, a number of important institutional initiatives were undertaken to unscramble the maze of bureaucratic authorities which claimed overlapping jurisdictions in the investment area. The most significant among the new institutions are:

1. Greater Colombo Economic Commission (GCEC): Operates a free zone for foreign investors prepared to accept a 100-percent export obligation.

2. Foreign Investment Advisory Committee (FIAC): Evaluates and approves all foreign investment outside the free zone operated by GCEC. Such investments generally must include at least 51 percent Sri Lankan equity. FIAC can offer an array of incentives which correspond to the attractiveness of the project in terms of either technology transfer or employment creation.

3. Local Investment Approvals Committees (LIACs): Three LIACs (fisheries, textiles, and general industries) have approval authority for domestic industrial investments. The LIAC approval confers access to government financing support and the right to open LCs for equipment imports in excess of $35,000.

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[1] Government of Sri Lanka, Greater Colombo Economic Rehabilitation Area, November 1, 1977.

4. Export Development Board (EDB): This body has broad responsibilities for promoting exports--especially non-traditional exports. It operates a variety of export rebate and export subsidy schemes and has a refinance window (operated in conjunction with the Central Bank of Ceylon) which can provide term financing up to 15 years for export ventures. The EDB also has the unusual ability to take equity positions in export companies through the purchase of redeemable preference shares for up to 20 percent of project equity.

5. Sri Lanka Export Credit Insurance Corporation (SLECIC): The SLECIC conducts a wide range of commercial insurance and guarantee functions, including holding performance guarantees on bank-financed trade transactions for local exporters, financing of bid bonds for Sri Lankan firms tendering internationally, and conventional pre- and post-shipment credit guarantees on commerical Letters of Credit (LC).

An important policy area for the private sector which has not received adequate attention in the first stages of the liberalization is tax policy. The tax structure of Ceylon reflects the colonial structure of the economy. Indirect taxes on import/export transactions and domestic trade transactions have been the mainstay of government revenues throughout the current century. The increase in trade activity associated with the liberalization has accelerated revenues to government from this somewhat archaic tax structure, but the system induces undesirable distortions in the patterns of investment and commercial activity. The Table D-1 below reflects trends in the yield of the tax system over the past two governments.

Several features of the tax structure have particular salience for private sector policy. The most significant among these are the following:

1. The present structure of Business Turnover Taxes levies higher rates on trade transactions than on manufacturing transactions. This provides additional disincentives for domestic manufactures and adds to other distortions which already favor trade over manufacturing.

2. The Business Turnover Tax (BTT) does not incorporate the features of a modern Value Added Tax which does not re-tax at successive stages of production. Quite the contrary, the Sri Lanka BTT permits cascading taxes which can induce significant distortions into the manufacturing sector by discouraging forward and backward linkages between specialized manufacturers and by favoring simple one-step enterprises which transform fredstock into finished goods at a single site.

Table D-1. Contributions of Sri Lankan Taxes to Revenue
(percentage composition)

Tax	1971	1974	1978	1981
Direct Taxes				
Taxes on income and profits	19.9	15.3	19.6	14.1
Personal	-	5.9	3.7	2.9
Corporate	-	10.4	6.9	11.2
Taxes on property and property transfers	2.2	1.8	1.4	1.2
Indirect Taxes				
Taxes on goods and services	37.6	36.9	29.9	34.9
Business turnover tax	14.6	15.4	10.4	19.7
Liquor	7.4	5.5	5.3	5.3
Tobacco	11.1	9.5	7.3	7.5
Tea (ad valorem)	1.7	4.1	4.9	0.7
Other	2.7	2.3	2.0	1.6
Import duties	12.6	7.1	4.1	22.5
Export duties	11.9	16.9	40.8	27.3
Tea	7.3	4.0	26.8	14.4
Rubber	0.6	7.3	9.7	10.3
Coconut	2.5	4.1	3.3	2.0
Other	1.6	1.4	1.0	0.7
FEEC revenue	15.7	22.1	3.2	-
Total tax revenue	100.0	100.0	100.0	100.0
Tax revenue as % of total current revenue	86.0	91.6	93.8	94.5
Nontax current revenue as % of total current revenue	14.0	8.4	6.2	5.5

Source: Central Bank of Ceylon

3. The application of the Business Tax to financial intermediaries has led to the treatment of banking profits in ways which serve as a disincentive to equity finance and project lending and favor conventional short term commercial transactions.

4. The current tariff structure combines revenue and protection elements in a single tax which produces unintended effects in terms of effective rates of protection and contributes to the distortion of investment decisions in the private sector towards enterprises which are inefficient but overprotected.

5. Export firms and new joint-ventures enjoy a wide range of temporary exemptions from business and corporate taxation, but face uncertainty about the range of taxes they will confront when the exemptions expire. These uncertainties dampen willingness to expand or make major changes to the capital structure of private firms.

III. THE PRIVATE SECTOR RESPONSE TO THE LIBERALIZATION OF 1977

In developing countries which have experienced relatively long periods of socialist regulation of the economy and limited private access to the foreign exchange markets, there is an almost inevitable sequence of events which marks the early years of the liberalization. It is important to understand how universal these are as one seeks to assess the performance of Sri Lanka's private sector under the new regime. Most of the early period after a liberalization involves the satisfaction of pent-up consumer demand and the redirection of a scarcity-oriented trading and commercial sector to the operation of a free market. The conventional features of the early years after liberalization involve a sequence of events as outlined below:

1. Imported goods flood the markets and consumers are euphoric while traders grow rich overnight.

2. The new money from trade goes into real estate and land prices and rents rise dramatically--squeezing some while enriching others.

3. The banking system expands dramatically, attracting new deposits (usually in FX at near-Euromarket rates). Depositors are initially euphoric because of the high nominal interest rates.

4. The Consumer Price Index rises at historically unprecedented rates and euphoria begins to wither among the less favored groups.

5. Trade and commerce continue to predominate in the private sector and the government begins to worry about the problems of directing resources to productive investments rather than trade.

6. The banking and trading constituencies (who are making a killing in commercial transactions) resist pressures to diversify their investment portfolios towards production, and public criticism of financial intermediaries mounts.

7. Government begins to re-examine the social and political cost of liberalization and to consider alterations in policy to respond to the new distortions.

To date, Sri Lanka has kept rather closely to the liberalization libretto. The first years after 1977 witnessed massive imports of consumer goods as traders, conditioned by years of scarcity, overinvested in inventory and saturated the markets. Consumers, likewise accustomed to scarcity or at best to uncertainty in the marketplace, displayed the "hoarding" response which usually follows years of artificially restrained consumer demand. At the same time, free foreign exchange and new sources of commercial wealth combined with greater access to the banking system to fuel a housing and construction boom in 1978 and 1979. Speculation in real estate was rampant and contractors and land speculators were among the earliest beneficiaries of the new policies. Inevitably there were some sharp market corrections after the initial frenzy and the traders found themselves faced with unanticipated carrying costs on speculative inventory while the land market slackened somewhat in 1980. The liberalization had, however, undeniably reshaped the domestic economy of Sri Lanka and evidence of the changes is abundant.

Nowhere was the impact greater than upon the patterns of income and wealth distribution in the island. While land and trade have long been the sources of substantial wealth in the society, the socialist interlude had diminished the returns to both, and the tenured urban salariat and the tenured small paddy farmer enjoyed greater economic security and a higher relative position in the income hierarchy of Sri Lanka than in the 1950s and 1960s. Predictably, the benefits of the liberalization flowed rather differently than the benefits of the socialist policies of 1971-1977, and not all Sri Lankan households were equally well positioned to capture these new

benefits from a free market economy. Households with at least one member in the commercial world (from street hawker to chairman of a finance house) gained two immediate advantages from the new policies: (1) their turnover increased dramatically, producing more nominal income, and (2) their ability to pass costs through to the consumer allowed them to "index" their incomes in a period of increasing inflation and thereby assure that their real incomes kept pace with the economy.

Civil servants, pensioners, state enterprise employees and the urban salariat in general saw elements of cost of living rising faster than their incomes and many households experienced a relative decline in their economic status. Government wage increases and the fact that most households were able to deploy at least one member into the private sector at some level (even agricultural and unskilled construction labor rates reflected the payout from the liberalization) meant that it was unlikely that any large group in the society experienced an absolute decline in real welfare. This proposition may be debatable at the margins, but the combination of rising growth rates in the GNP and a substantial "safety net" of government welfare programs for the population most at risk probably ensured that most families preserved or improved their basic standard of living over the past five years.

Much of the debate over the outcomes of economic liberalization policies arises from the fact that individuals are more conscious of their relative economic status than their absolute economic status. If household "A" has a constant level of real income for five years while households "B" and "C" next door have a 50 percent increase in real income over the same period, then household "A" will feel that it has lost ground. High inflation compounds the problem because rapidly rising nominal prices create a perception of eroding buying power even when incomes rise in tandem with prices. If household "A" in Colombo bought rice at Rs2 per kilo in 1977 and now pays Rs5 per kilo, the fact that the household income rose from Rs400 to Rs1,000 per month will not mitigate the sense that life is becoming more costly. If household "A" also sees that households "B" and "C" have seen their incomes rise from Rs400 to Rs1,500 per month and now buy fancy rice at Rs7 per kilo, household "A" will be positively convinced that its standard of living is deteriorating.

Precisely these phenomena are occurring in Sri Lanka in 1982. Increasing public attention is being drawn to the relative shifts in income among different groups, and the ability of some households to prosper more rapidly under a free market regime is creating the perception that the liberalization has undermined social equity. The recent decision (March 1982) of the Sri Lankan Government to renege on its hardline policy

decision not to index food stamps reflects the government's increasing sensitivity to these perceptions.

The government faces a multifold challenge in the next two years:

-- To guide the economy past the "consumer euphoria" stage of liberalization towards sustained productive private investment

-- To adjust its welfare policies in ways which better reflect the dynamics of a liberal economy and avoid contributing to economic distortions

-- To take care that the institutional and policy developments which accompany the second stage of the liberalization are carefully attuned to the need to ensure the broadest possible participation in the free economy by Sri Lankans from all strata

-- To consciously shrink the relative size of the public sector salariat by moving increasing responsibility for economic activity to the public sector and substantially slowing recruitment into all forms of public service.

These challenges are not insurmountable. They are the prerequisites for the movement from an "infant liberalization" to a "mature liberalization" and they have been successfully accomplished by a number of countries. They have also proved catastrophic stumbling blocks to many less developed countries, and the Third World is littered with "failed" liberalization attempts. To understand the issues confronting the Government of Sri Lanka in the private sector policy area it is useful to examine the two basic elements upon which the liberalization depends: (1) the financial system to mobilize private capital and allocate investment resources, and (2) the productive base of the private sector in Sri Lanka today. These are treated in the section which follows.

IV. FINANCIAL INTERMEDIARIES: PERFORMANCE SINCE 1977

While it cannot be argued that Sri Lanka in 1982 possesses the depth and variety of financial markets which it will need to achieve the ambitious industrial goals it has set for the coming decade, the development of local financial institutions since 1977 has been impressive indeed. The aggregate balance sheet of the commercial banks grew nearly sixfold from slightly more than Rs4 billion in 1976 (the last full year of the SLFP

government) to about Rs34 billion in November 1981. Over the span of two years between their inception in 1979 and November 1981, the newly created Foreign Currency Banking Units showed a tenfold growth in foreign exchange assets from Rs0.5 billion to more than Rs5.0 billion.

A score of foreign banks have joined the seven banks which survived the socialist interlude, and the commercial banking sector is alive with competition for business in 1982. The 1971-1977 period was not a total loss for the banking system as this period saw government-induced branching of the two public sector banks down to the lowest levels of village settlement. While the carrying costs of some of these village branches may prove too high and lead to retrenchment, the Colombo-based banking structure penetrated the entire island in the 1970s and this fact is unlikely to be reversed. As is always the case in new banking markets, there is some talk of Sri Lanka being overbanked, but this appears to reflect the complaints of the early entrants who now have to compete for business which fell into their laps in the early days of the liberalization.

Not surprisingly, banking activity has concentrated first on the easy and lucrative side of the liberalization: domestic and international trade transactions. The dramatic rise in imports after the election of 1977 heated up the letter-of-credit (LC) business and fostered unprecedented levels of demand for short-term commercial money. At the same time, depositors, still wary after the last government and uncertain about the direction of the market, kept their money short to preserve liquidity. The 1977-1978 period had the earmarks of a trader's market (as in Hong Kong and Singapore in the 1950s) with private money moving at high velocity but only for short intervals. The term structure of deposits began to lengthen in 1980 as the government liberalized bank rate policy and permitted the yields on term deposits to rise to Euromarket levels (and above Euromarket in some instances). The early response of the banking system was to hold the term structure of their loan portfolios shorter than their deposit structure and balance their maturities in the Euromarket. This led understandably to complaints from the local business community that the foreign banks in particular were not carrying their fair share of the debt market and were in town simply to skim off the cream of the LC business.

Several factors conjoined in late 1980 and early 1981 to alter this picture. The new banks were beginning to get their feet on the ground and to size up the local investment market. Simultaneously, the government of Sri Lanka began (apparently with the encouragement of its external banking consultants) to exert some mild "moral suasion" on the foreign banks to take a more active interest in the term market. The results are already evident, and by November 1981 (latest month for which

full banking figures are available) the tables had actually been reversed (see Table D-2). The term structure of the aggregate loan portfolio of the Foreign Currency Banking Units (FCBUs) is now longer than the term structure of deposits.

Table D-2. Maturity Pattern of Deposits and Advances of Foreign Currency Banking Units as of the End of November 1981 (in millions of U.S.$ and Rs)

Banking Units	U.S.$	Rs	% of Total	U.S.$	Rs	% of Total
Up to 3 mo.	166.3	3,423.5	75.3	122.3	2,516.6	58.5
Over 3 mo. to 6 mo.	33.3	683.2	15.0	14.7	303.2	7.0
Over 6 mo. to 12 mo.	1.1	23.8	0.6	10.7	221.0	5.2
Over 12 mo. to 3 yr.	20.0	441.9	9.1	29.0	597.2	13.9
More than 3 yr.	-	-	-	32.3	664.0	15.4
Total	220.7	4,542.4	100.0	209.0	4,302.0	100.0

Source: Central Bank of Ceylon

Given the natural proclivity of conservative bank managers to match maturities and to see offshore banking in developing countries as an opportunity to milk capital for safer loans in Europe, this turnaround is encouraging indeed. It represents a tangible vote of confidence in the Sri Lanka market and one which will not be missed by foreign investors who tend to look to offshore banks as bellwethers of the marketplace. It is worth adding the caveat that most offshore banks in Sri Lanka have low exposure limits and that the 15 percent of bank funds out at three years or more is only U.S.$32 million spread among a considerable number of clients. There is still a very long way to go in developing the depth and range of term finance which one would hope to see in a strong developing private sector in Sri Lanka, but the early signs are auspicious. Table D-3 illustrates the relatively broad base of participation in the financial markets on the deposit side.

Table D-3. Ownership of Deposits With Commercial Banks
(time deposits, demand deposits, savings)

Ownership	End of period	Demand Amount	Demand %	Time Amount	Time %	Savings Amount	Savings %	Total Amount	Total %
1. Municipal Institutions	December 1980	191.9	4.0	698.7	12.9	25.4	1.1	1,116.0	7.8
	March 1981	254.0	5.3	879.0	11.2	24.6	1.0	1,139.4	7.5
	June 1981	241.5	5.8	919.1	10.2	25.2	0.9	1,184.9	7.5
2. Plantations	December 1980	205.6	4.2	122.0	1.8	1.8	0.1	329.3	2.3
	March 1981	209.1	4.3	105.4	1.3	1.3	0.1	314.1	2.1
	June 1981	148.3	3.7	103.9	1.3	1.0	...	253.2	1.6
3. Trading Establishments	December 1980	854.2	11.7	548.1	7.9	35.3	1.4	1,437.6	10.2
	March 1981	717.0	14.9	527.1	6.7	33.0	1.3	1,264.1	8.3
	June 1981	560.6	13.6	594.6	6.7	35.9	1.3	1,181.8	7.6
4. Manufacturing Establishments	December 1980	706.2	14.6	254.0	3.6	6.0	0.2	966.2	6.8
	March 1981	677.2	14.0	303.8	3.9	9.4	0.3	978.1	6.4
	June 1981	621.7	15.1	391.9	4.5	5.1	0.3	1,008.5	6.4
5. Other Business	December 1980	1,263.4	26.1	1,262.0	18.1	25.5	1.0	2,550.9	17.8
	June 1981	913.7	222.1	2,002.7	22.7	19.5	0.7	2,935.8	18.9
6. Non-Business Institutions	December 1980	356.9	7.3	874.3	12.6	34.0	1.4	1,265.2	8.8
	March 1981	364.4	7.6	666.6	8.4	70.1	2.7	1,077.9	7.2
	June 1981	385.4	9.3	775.8	8.8	41.6	1.6	1,202.8	7.7
7. Municipalities and Local Govt. Bodies	December 1980	114.7	2.4	43.6	0.7	4.7	0.2	163.0	1.1
	March 1981	99.3	2.0	66.5	0.8	9.3	0.4	175.2	1.1
	June 1981	74.1	1.8	47.6	0.5	3.7	0.1	125.4	0.8
8. Individuals	December 1980	1,144.3	23.7	2,951.8	42.4	2,367.1	94.6	6,463.2	45.2
	March 1981	1,181.3	24.5	3,397.6	43.1	2,411.1	93.4	6,981.6	49.9
	June 1981	1,181.6	28.6	4,008.4	45.3	2,555.5	95.1	7,745.5	49.5
Total	December 1980	4,337.3	100	6,954.4	100	2,490.8	100	14,291.5	100
	March 1981	4,822.5	100	7,833.8	100	2,581.0	100	15,197.7	100
	June 1981	4,125.9	100	3,843.9	100	2,687.6	100	15,638.1	100
9. Of Which Deposits of Free Trade Zone Enterprises	December 1980	5.3	0.1	22.7	0.3	...	...	27.8	0.2
	March 1981	4.2	0.1	29.5	0.4	...	...	33.7	0.2
	June 1981	7.4	0.2	21.9	0.2	0.2	...	29.5	0.2

Sources: Bank Controller's Office, Bank of Ceylon, Central Bank

A. Trends in the Lending Portfolio

Commercial finance still dominates the portfolio of most commercial banks in Sri Lanka, but the picture is changing in directions which are positive. Government banking policy permits a relatively wide band of interest charges, and banks are able to offset the higher risks of term lending with higher rates. While real interest rates on most loans continue to be negative (i.e., interest rate is lower than most conventional inflation measures), they are high in absolute terms (most loans from the commercial banking system are in the 17 percent to 22 percent band, while long-term financing from state credit institutions ranges more widely from 5 percent to 25 percent). The impact of these high nominal rates of interest is to favor enterprises and ventures with relatively fast payout periods. Table D-4 below gives the purposes for all loans in the aggregate commercial bank portfolio.

Table D-4. Commercial Bank Loans Classified by Purpose and Term
(as of June 30, 1981)

	Amount		Percentage of All Loans			
Purpose of Loan	Rs Mn.	% of Total	Short Term	Medium Term	Long Term	All Loans
Commercial	9,186.7	49.0	79.3	16.9	3.8	100.0
Financial	449.9	2.4	48.2	34.1	17.7	100.0
Agricultural	2,682.4	14.3	57.4	32.4	10.2	100.0
Industrial	3,453.9	18.4	74.5	20.1	5.4	100.0
Tourism	189.5	1.0	36.6	34.6	28.8	100.0
Engineering and Bldg. Construction	392.4	2.1	81.9	14.5	3.6	100.0
Mining and Fishing	219.1	1.2	36.8	31.0	32.2	100.0
Housing	926.8	4.9	22.4	34.5	43.1	100.0
Consumption	363.1	1.9	44.9	46.8	8.3	100.0
Other Advances	888.4	4.8	39.7	17.1	43.2	100.0
Total	18,752.3	100.0	68.3	21.9	9.8	100.0
Of which Advances to FTZ Enterprises	27.9	100.0	59.1	14.5	26.4	100.0

Source: Banking Control Department

Within this overall pattern of loan usage, the industrial sector took only about 20 percent of the total. Industrial lending levels are a key indicator of the potential economic returns to any national liberalization policy. In the longer run, productive private sector investment in enterprises with relatively steady payouts over the medium and long term are the engines upon which a liberal economy must depend. Once the heady days of financing hair dryers and tape players are over, the financial sector has to begin to direct substantial resources into the productive sector or the liberalization bubble will burst. Table D-5 below illustrates the composition of industrial loans on the books of Sri Lankan banks as of mid-1981. Two features of importance to the private sector stand out clearly: (1) the private sector holds more than two thirds of commercial industrial loans, and (2) there are a significant number of industrial subsectors where the private sector is getting the major share of new commercial finance (including rubber and plastics, wearing apparel, basic and fabricated metal products, etc.).

While there is a major need to deepen and diversify the financial base of Sri Lanka's young industrial sector, these early signs are encouraging. There is some talk of a liquidity squeeze in the coming year as the government goes more heavily into the market to finance local currency budgetary deficits. The effects of this squeeze on the currently positive trends in industrial finance are difficult to predict. The situation is not altogether dissimilar from that in the United States where the government and corporations are competing for longer term money in a tight market and driving capital costs up at a time when government policy is otherwise favorable to private sector expansion. That a relative newcomer to the liberalization game like Sri Lanka should face some of the same monetary and fiscal dilemmas which plague advanced industrial economies is not surprising. It may be particularly important, however, that Sri Lanka receives the right mixture of external advice and support to chart a safe path through the coming budgetary crunch in ways which do not reverse the remarkable early growth in the productive private sector since 1977.

B. The Development of Capital Markets in Sri Lanka

Despite the growing range and sophistication of banking institutions in Sri Lanka, there are a great many gaps in the structure of the financial and capital markets. These gaps are greater on the capital side, however, which is not unusual for a country in the early stages of liberalization. Even socialist governments use banking and financial services, so these tend to develop (at least to a certain level) under all economic regimes. Only a relatively liberal economy needs to

Table D-5. Sectoral Distribution of Industrial Loans as of End of June 1981 (in millions of Rs)

Industrial Sector	Total Loans
Food, Beverages, and Tobacco	328.2
Government Corporations	48.5
Other	279.7
Textile	914.5
Government Corporations	420.9
Other	493.6
Wearing Apparel and Leather Industries	371.9
Government Corporations	47.5
Other	324.4
Wood and Wood Products, including Furniture	65.8
Government Corporations	5.1
Other	60.7
Paper and Paper Products	125.1
Government Corporations	43.0
Other	82.1
Rubber and Plastic Products	111.1
Government Corporations	4.1
Other	107.0
Chemicals, Petroleum and Coal	252.3
Government Corporations	116.3
Other	136.0
Nonmetallic Mineral Products (Except Petroleum and Coal)	124.2
Government Corporations	63.9
Other	60.3
Basic Metal Products	192.5
Government Corporations	56.5
Other	136.0
Fabricated Metal Products Machinery and Transport Equipment	138.7
Government Corporations	13.7
Other	125.0
Others	699.5
Government Corporations	191.6
Other	507.9
Total	3,323.8
Government Corporations	1,011.1
Other	2,312.7

Source: Bank of Ceylon

generate private equity capital, however, and it is in the natural order of things that capital market institutions grow more slowly than financial market institutions. The current government has given extremely attractive incentives for equity investment (approved projects can sell shares which qualify the buyer for a 100-percent tax deduction, effectively subsidizing share costs by 50 percent for the majority of investors who are in the 50-percent marginal tax bracket). The market structures for handling this equity finance are not yet fully evolved. Four small local brokerage houses make up a secondary market for equities which has more of the characteristics of a "curb market" than a real stock exchange. Offshore and local banks participate in flotations, and new capital shares are rather rapidly sold with the aid of substantial direct advertising in the national media. The principal ventures to enter the public share market have been hotel operations, but even these are encountering problems associated with the small size of the market. New issues in the $0.5 to $5.0 million range have done relatively well, but larger issues have been difficult to sell within the local market. Larger hotel ventures typically start with a 60- to 70-percent foreign equity stake and sell the remaining equity in the local market. Issues with large foreign participation (often Indian and Singaporean) have proven particularly attractive to local investors.

Until the capital market structure develops to accommodate the downstream trading of this volume of shares, however, one can anticipate some sticky problem for the Sri Lankan private sector. Antiquated securities laws and relatively weak market institutions ensure that there is less quality control on equity issues than might be desirable. Considerable potential exists for "watering," insider trading, and the other abuses which have been chronic problems on young Asian and Middle Eastern exchanges. If these things do happen, then there is the risk of either an investor backlash or, more seriously, a move to overregulation of the capital markets.

The Sri Lankan economy is a small one, and there is no need to build all the trappings of the New York Stock Exchange or even the Hong Kong Exchange at this time. There is, however, a genuine need for enlightened policy guidance in the capital market area so that <u>appropriate</u> market institutions and <u>appropriate</u> controls and supervision develop to ensure the integrity of the market place. This is an area where Western donors could play an important role over the 1980s in providing the ranges of disinterested technical expertise in capital markets which Sri Lanka must necessarily find beyond her shores.

V. THE SECOND HALF OF THE 1980s: PROSPECTS FOR THE PRIVATE SECTOR

The fifth anniversary of the 1977 liberalization is fast approaching. The politically astute and traditionally somewhat cantankerous Sri Lanka electorate will go to the polls sometime in the next 12 months to pass judgment on the economy. Election timings are seldom fortuitous for incumbent governments in Sri Lanka and 1983 will be no exception for the UNP. While important and useful changes in Sri Lanka's economy have been wrought since 1977, the distortions and dislocations of the liberalization are still far from resolution. That these are a natural and inevitable consequence of major policy transitions is no comfort to those voters who have experienced either the reality of reduced living standards or the perception that their living standards have declined. As the patterns of income and wealth distribution alter within an economy, there are inescapable centers of bitterness and resentment from less favored sectors of the populace. While economists can find much to praise in the liberalization and can be sustained by their faith that "right policies" are bound to produce a better life for everyone in the long run, the liberalization has not yet proceeded to the stage where those universal benefits are obvious to everyone.

There is a not inconsiderable chance that the mercurial voters of Sri Lanka will call for a change of course. The largest uncertainty facing the domestic private sector is how great that change might be. Optimists within the business community like to argue that the benefits (in terms of growth and improved efficiency) are already so great that even a new government would find it imprudent to dismantle the framework within which the private sector now operates. More skeptical voices in the business and financial communities, however, suggest that the mobilization of those elements of the population who feel least served by the new economic policies may be the central campaign tactic of the opposition. In this event, an opposition victory would be a mandate for a substantial return to the socialist economy of the 1970s. The consensus of moderate and conservative opinion seems to be that another five years of liberal economic policies will be sufficient to move the center-point of Ceylon politics sufficiently to the right, and that no non-Marxist government would be prepared to abandon a basic commitment to the free market. Much in the manner that a number of Western economies are currently asking voters to demonstrate considerable patience to allow the classic liberal prescriptions to work their magic, the incumbent government in Sri Lanka will be asking the voters to perform an act of faith in reconfirming a policy which has only gone half the distance. Past experience and conventional wisdom would argue that an inevitable change of party and change of national direction

will occur. It is possible, however, that the Sri Lankan voter will choose 1983 to disprove the maxim that voters have short memories and will opt for a few more years of economic adjustment to the free market in lieu of a return to the economic dormancy of the socialist years.

The verdict of the 1983 elections will be a matter of small moment in global affairs, but may well be the fundamental watershed in the economic development of Sri Lanka. With a decade to rebuild the economy along the Singaporean lines favored by current leadership, Sri Lanka might move from its status as a social wunderkind (with remarkable welfare for a poor country) to join the junior ranks of the economic wunderkinder in Asia who have found economic liberalization to be the successful path to high growth and high welfare. Were this to happen, Sri Lanka would be the only member of this elect class to have achieved substantial growth and equity within the framework of a free and democratic political system. Economic liberalism has been discredited as the path to development in the Third World by many commentators who point to the political and moral costs of the Korean/Taiwanese/Singapore models. Sri Lanka offers a rare opportunity for a reaffirmation of the 19th century belief that economic liberalism and political liberalism need not be inimical.

Several broad conclusions stand out:

1. The liberalization since 1977 has not been a total one. It falls far short, for example, of the Chilean situation. This moderation in applying the free-market doctrine seems broadly supportable in terms of national, social, and economic goals.

2. Private sector performance has been "normal" for the early stages of liberalization. Commerce, trade, and real estate have outperformed industry.

3. The growth of banking intermediaries and capital markets has been unusually good.

4. The nonfinancial business infrastructure is still weak.

5. Company law and business tax policy are outmoded and are hindering private sector growth.

6. Policy gains have been made during the early stages which can set the stage for more developmental performance by the private sector in the next five years.

7. Public criticism of the liberalization is mounting and government is faced with a situation similar to the

Tory dilemma in Britain: discontinue the medicine because the patient doesn't like the taste or ignore the screams and push on with the cure.

8. Industrial policy has unnecessarily dichotomized both export and domestic industry. Some unsound export industries are being encouraged while the import substitution sector is still facing "wrong" pricing signals from the tariff and tax structure of Sri Lanka.

9. The overall scorecard is "average" for performance and "quite high" for policy, but many tough decisions lie ahead in the next two years just as the government faces elections.

APPENDIX E

TRENDS AND ANALYSES OF BASIC FOOD CONSUMPTION

by

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TRENDS AND ANALYSES OF BASIC FOOD CONSUMPTION

I. INTRODUCTION

With the 1979 implementation of the food stamp scheme, replacing more than a quarter-of-a-century-old consumer subsidy program in basic food items such as rice and wheat flour, the Government of Sri Lanka instituted a major revision of its food policy. The main distinction between the two programs is that the former policy was based on the concept of providing basic food items either at no cost or at subsidized prices, while the latter involved the provision of encashable food stamps to households receiving less than Rs300 per month. This revision in food policy was intended to reduce public expenditures on welfare programs and, at the same time, extend food assistance only to the most needy segment of the population.

The removal of price subsidy was in turn accompanied by upward price adjustments of government administered prices of rice and flour to levels reflecting the actual cost to the country. The new pricing policy adopted by the government after 1979 led to unprecedented increases in the prices of rice and flour compared to the period when the administered prices remained below actual costs by substantial margins. The purpose of this Appendix is to examine the extent to which the recent price increases of basic food items affected household expenditure and food consumption with special reference to low income groups.

II. FOOD PRICES AND HOUSEHOLD EXPENDITURE

A. Price Trends

Table E-1 traces price changes of rice and flour between 1977 and 1981 to provide a comparison between the period before 1979 when food subsidies were available and after 1979 when the food prices reflected no subsidies. While the government-administered price of rice has experienced a 77-percent increase between 1979 and 1981 compared to a 62-percent increase between 1977 and 1979, the price of flour has been subject to several upward revisions to produce a much higher increase of around 120 percent between 1979 and 1981. The increase in price of flour between 1977 and 1979 has also been of the same magnitude. As a result, the flour price, which remained at 61 percent of the administered price of rice in 1977, moved ahead and by the end of 1981 reached 17 percent above the price of rice.

Table E-1. Price Trends in Rice and Flour Between 1977 and 1981 (per kg)

Item	Dec. 1977	Dec. 1978	Dec. 1979	Dec. 1980	Dec. 1981
Rice (administered price)[1]	2.15	2.15	3.48	4.48	6.15
Annual Increase (%)	-	-	62.00	29.00	37.00
Rice (open market)[2]	3.70	4.24	5.13	6.72	7.50
Annual Increase (%)	-	15.00	21.00	31.00	12.00
Flour	1.32	2.47	3.00	5.23	6.60
Annual Increase	-	87.00	21.00	74.00	26.00
Flour price as a % of administered price of rice	61.00	115.00	86.00	117.00	107.00

[1] This refers to rice marketed by the government through co-operatives. The Food Commissioner's Department functions as the main distributing agent of rice to cooperatives.
[2] There is no fixed priced for rice traded in the open market. The open market price principally depends on the variety and supply and demand conditions.

Source: Food Department

B. Household Expenditure

The government decision to maintain rice and flour prices without subsidies made these two commodities relatively expensive. This resulted in households spending more on these two commodities, if they were to maintain consumption levels. Alternatively, where households could not fully adjust to rising prices, a drop in consumption in absolute terms was inevitable. Table E-2 demonstrates the consequence of higher rice and flour prices on the household budget and consumption (of these two commodities) between 1978 and 1981. In December

Table E-2. Monthly Household Consumption and Expenditure Estimates of Rice and Flour, 1978-1981

Item	Dec. 1978[1]	Dec. 1979[1]	Dec. 1981[1]
Average Household Monthly Consumption (Kgs)			
Rice	38.7	41.4	39.1
Flour	18.3	16.9	11.9
Total	57.0	58.3	51.0
Change	-	1.3%	-12.5%
Average Household Expenditure on Rice and Flour	128.4[2]	194.8[3]	319.0[4]
Average Expenditure on Rice and Flour of Households Receiving Rs300 per Month	108.7	110.8	224.5

[1] Computed on the basis of annual per capita consumption assuming 5.1 persons per household.

[2] Rs2.15 per kilogram of rice and Rs2.47 per kilogram of flour.

[3] Rs3.48 per kilogram of rice and Rs3.00 per kilogram of flour.

[4] Rs6.15 per kilogram of rice and Rs6.60 per kilogram of flour.

1978, the household expenditure on an average monthly consumption of 57 kilograms of rice and flour was estimated at Rs128.00. A year later, although there had been an increase of 2.3 percent in aggregate consumption, the monthly average household expenditure on rice and flour increased to Rs195.00, representing an increase of 51 percent compared to the corresponding period in 1978. Despite a 12.5-percent reduction in 1981 in aggregate consumption compared to 1979, monthly household expenditure on these two commodities by the end of 1981 stood at Rs319.00, recording a 64-percent increase since December 1979.

The computation provided in Table E-2 suggests that households receiving less than Rs300.00 per month are perhaps the most seriously affected by the elimination of the food subsidy and the resultant price increases. Households in this income group received about eight kilograms of free rice per month in

1978 and, by spending an additional Rs109.00 per month, they were able to maintain consumption of rice and flour at the level of the monthly national average of 57 kilograms.

The food stamp scheme was in operation by December 1979. If food stamps were used in accordance with the revealed preference of from 70 to 90 percent for rice and 5 to 10 percent for flour observed in the recent survey conducted by the Food and Nutrition Policy Planning Division (FNPPD) of the Ministry of Plan Implementation, the additional household expenditure required to maintain the monthly national average was only between Rs95.00 and Rs111.00. Due to price escalation after 1979, food stamp recipients were required to more than double the additional expenditure by the end of December 1981 in order to purchase the monthly average quantities of the two items. The principal reason for the sharply increased extra expenditure was the decline in the purchasing power of food stamps which remained fixed in monetary terms since the inception of the scheme. Accordingly, households were required to purchase a part of these quantities, earlier obtained through stamps, from their own funds due to the considerable drop in purchasing power of food stamps. Estimates indicate that the value of food stamps more than halved by the end of 1981.

A comparative assessment of the monthly household consumption of rice and flour enables one to separate broadly the effects of higher prices on household expenditure and consumption. Assuming that households maintained the 1979 consumption levels in 1981 as well, the monthly household expenditure on 41.4 kilograms of rice and 16.9 kilograms of flour would have been Rs366.00 in December 1981. This represents an increase of about 88 percent in terms of monthly expenditure on the same quantities in December 1979. On the other hand, the monetary value of the December 1981 monthly average consumption of 39.1 kilograms of rice and 11.9 kilograms of flour was around Rs319.00. It appears, therefore, that about 73 percent of the price increase of rice and flour between 1979 and 1981 was absorbed by households, which contributed to a consumption decline of 12.5 percent during the period under consideration. Thus, higher prices have produced the combined effects of increased household expenditure and lower consumption.

The inability of households to absorb fully the price increase leads to the tentative conclusion that the overall price increase in the food sector has been relatively greater than the income growth of those families below the poverty line--those representing between 40 and 50 percent of the population. The overall income growth of the economy, measured in terms of gross national product in current prices, has been in the region of 50 percent. However, given much diversity in factors of production, income and and asset distribution, etc., substantial variations in income growth exist. According to

wage statistics for the unorganized private sector compiled by the Central Bank, skilled manpower in the construction sector appears to have experienced a wage increase of more than 70 percent during the 1979-1981 period. This is followed by unskilled workers in the same sector, with an increase of around 50 to 60 percent; workers in the agricultural sector, particularly in the paddy sector, also experienced an increase of around 50 percent. Except in some selected manpower categories, the wage increase in the organized private sector remained below 50 percent during the two-year period and, in the case of plantation sector workers, the average income increase was less than 20 percent. Despite the lack of direct evidence to substantiate the proposition, it is likely that households receiving less than Rs300.00 per month and without regular means of income have experienced no significant improvement in income levels since 1979. According to current estimates, at least 40 to 50 percent of the population still belongs to this income group, while in 1979 the number varied between 46 percent (according to the Consumer Finance Survey) and about 55 percent (on the basis of the initial enrollment in the food stamp scheme).

There is also some evidence which indicates that households are making adjustments to their expenditure patterns to take into account the increasing prices of basic food items. The 1973 Consumer Finance Survey reported that of total household expenditures, on average about 62 percent went for food. A recent nutrition survey conducted by the FNPPD of the Ministry of Plan Implementation tentatively concluded that the expenditure on food currently stands at 70 percent of total household expenditures. To produce an average expenditure share of 70 percent for the country as a whole, some income groups must spend exceedingly greater shares on food, and among low income groups the likelihood of this is undoubtedly high. This level of expenditure on food is high by any standard and, moreover, it is indicative of the adverse effects of higher food prices on the socioeconomic living standards of the majority of the population since expenditures on other goods and services must necessarily be reduced, both in absolute and relative terms, in order to increase allocations for food consumption.

III. TRENDS AND VARIATIONS IN FOOD CONSUMPTION

As previously noted, a drop in food consumption accompanied rising prices of basic food items. In this section, recent food consumption trends will be examined with the objective of assessing the magnitude of the recent drop in consumption. At the outset, it must be pointed out that the government, under its open trade policy, is committed to maintain

adequate food supplies to meet domestic demand in basic food commodities. Accordingly, the declining trend in consumption cannot be directly attributable to supply shortfalls. Rather, it was an outcome of lower effective demand which was, however, a result of government pricing policies introduced in 1979.

Rice and wheat flour together account for about 95 percent of the total food grain consumption of an average Sri Lankan. According to time series data since 1960, the highest level of consumption of the total of these two commodities was about 130 kilograms. The lowest level was in 1981 with an estimated per capita consumption of around 120 kilograms. The aggregate per capita consumption shown in Table E-3 for the 1977-1981 period indicates that per capita consumption gradually increased between 1977 and 1979 and remained well above the 130-kilogram per annum level, but dropped thereafter reaching the relatively low level of about 120 kilograms. Taking the 1979 per capita consumption as the base year, the 1980 and 1981 respective aggregates are equivalent to 92.8 percent and 87.2 percent of the 1979 total.

Table E-3. Rice and Flour Per Capita Consumption From 1977 to 1981 (in kg)

	1977	1978	1979	1980[1]	1981[2]
Rice	94.96	91.36	97.67	104.18	92.48
Flour	39.5	42.9	39.9	23.5	27.5
Total	134.46	134.26	137.57	126.68	119.98
As a % (1979=100)	97.7	97.6	100	92.8	87.2

[1] Provisional.

[2] Estimate.

Source: Food Commissioner's Department and Census and Statistics Department.

The substitution between rice and flour is clearly observable with regard to food consumption in Sri Lanka. Nevertheless, this substitution occurs within certain limits, depending principally on relative prices and consumer preference between

the two commodities. Time series data during the last two decades demonstrate that flour consumption, as a proportion of both rice and flour, reached its highest level in 1978 accounting for 35 percent when the flour price was 62 percent of the administered price of rice. After the flour subsidy was withdrawn in early 1980, flour consumption dropped to its lowest level in nearly two decades, i.e., 23.5 kilograms per capita with its share dropping to 18 percent of the aggregate total of the two commodities. The drop in flour consumption was compensated for, at least to some extent, by the increase in rice consumption to 104.2 kilograms in 1980. The trend has been reversed between 1980 and 1981, with rice consumption declining to 92.5 kilograms, and flour consumption slightly recovering to 27.5 kilograms, partly due to the sharply increasing price of rice. This narrowed the price difference between the two commodities, i.e., reducing the price of flour to 7 percent above the administered price of rice, compared to 17 percent above in 1980.

Although there is close substitution between rice and flour, depending on the price differential between the two, rice still remains the most preferred and major source of food. There are, however, discernable seasonable changes and regional variations in rice and flour consumption in the country. During the months following the major harvesting season of rice, i.e., March through June, flour consumption drops due to the lower price of rice. The open market price of rice reaches its lowest point during this period and frequently low quality varieties are available at a price lower than the administered price. Flour consumption during this four-month period drops to from 25 to 28 percent of its respective share of 33 percent of the annual total were flour consumption not subject to seasonal changes. In major rice producing areas, flour consumption during this period drops from 30 to 70 percent compared to the rest of the year. Flour consumption picks up during the growing season of the Maha crop, i.e., between October and February, reaching a peak in the November-January period.

The regional difference in flour consumption are not really attributable to any particular socioeconomic variable. In the urban and estate sectors relative to the rural sector, less rice is consumed, and flour is higher in per capita terms. In 1981, average per capita flour consumption among the 6.3-percent estate sector population of the country's total remained around 35 kilograms, while among the 21.5 percent urban population it was around 41 kilograms. This compares to the national per capita level of 27.5 kilograms. The rural population, accounting for 72.2 percent of the population, as a whole consumed about 19 kilograms of flour in 1981. Even during the years when flour consumption remained high for the country as a whole, flour consumption in the rural sector remained low. In

1979, for example, when the urban population consumed more than 60 kilograms per person, the rural sector consumption in per capita terms remained around 25 kilograms.[1]

The low per capita consumption of flour in the rural sector is not, however, entirely associated with rice production (although rice production certainly accounts for a greater proportion of the total variation or is the most dominant factor with regard to flour consumption). Other factors that appear to reduce flour consumption include: (1) high concentration of low income households (i.e., food stamp recipients), (2) the predominantly rural characteristic of the population without proper access to markets, and (3) local production of subsidiary food crops such as finger millet and cassava (low-cost substitutes for rice and wheat). A high regional concentration of Tamil population, on the other hand, positively influences flour consumption. When flour consumption dropped by about 36 percent at the national level in 1980 as compared to 1979, the rural sector reduced consumption about 46 percent, followed by a 38-percent reduction by the urban sector and a 26-percent reduction by the estate sector. Flour consumption is gradually recovering. The urban sector and the estate sector are also experiencing slow but steady progress while the recovery in the rural sector is extremely slow. The urban sector's flour consumption in 1981 was about 86 percent of 1979 consumption, the estate sector's was about 82 percent, and the rural sector's still less than 62 percent.

The preference for rice throughout the country is a major concern, given the rising prices of basic food commodities, particularly rice. Although firm conclusions cannot be derived in the absence of food consumption data among different income groups, there is indirect evidence to hypothesize that a greater probability of the drop in food consumption is

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[1] The per capita flour consumption among the urban population, derived from supply data, overestimates flour consumption because the demand for flour is high due to a number of factors not directly related to the flour consumption of the urban population. First, population movements towards urban and suburban areas, particularly during the week, for work, business, and other purposes, increase the demand for flour and flour-based products in urban areas. Second, in urban areas there is a heavy concentration of hotels, including tourist hotels, and flour-based industries, such as bakeries and confectionaries and their products reach far beyond urban thresholds. If such flour demands can be netted out, flour consumption in urban areas drops by considerable proportions, and the estate sector becomes the highest flour-consuming sector in per capita terms in the country.

associated with low income groups. Since most of the food stamp recipients preferably trade with cooperatives, the rice drawoffs through cooperatives provide a reasonable indication of the emerging trends in rice consumption (among food stamp recipients) as a result of rising prices. In 1979, the Food Commissioner's Department distributed about 540,000 metric tons to cooperatives which accounted for about 40 percent of the total rice supply in 1979. Rice distribution in 1980 dropped to about 276,000 metric tons accounting for less than 20 percent of the total rice supply, and in 1981 the distribution dropped further to about 150,000 metric tons or about 12 percent of the total supply.

Although cooperatives are permitted to procure rice directly at the farmgate, it is doubtful that the cooperatives' direct procurement reaches any significant proportions, especially when the objective of the cooperatives is to sell at the administered price or less. Even under a most optimistic assumption, the cooperatives' direct procurement is unlikely to exceed 10 percent of the total supply. Given the cooperatives' relatively small share of procurement in terms of the total rice supply compared to the share of population covered under the food stamp scheme, a greater proportion of the drop appears to have occurred among the food stamp recipients in the country.

IV. PUBLIC POLICY AND FOOD CONSUMPTION

The government of Sri Lanka has maintained progressive policies since the early 1940s to assist low income households to meet their food consumption needs. Government assistance will have to be continued, in spite of high public expenditures, until the country reaches food self-sufficiency and the economy is able to provide adequate incomes to permit Sri Lankan people to buy their food requirements. Public assistance should be adjusted in accordance with rising prices to prevent the possible deterioration of food consumption and nutritional standards of the low income households.

Given a share of about 70 percent of household expenditure on food, price acceleration on basic food items is frequently the principal source for strong pressures on domestic inflation. Therefore, policy efforts must be made to stabilize food prices. During the 1977-1981 period, for example (with the only exception being in 1977), the percentage contribution to the Consumer Price Index (CPI) by the food sector has been

significantly above its respective share of 61.9 percent.[2] In 1978, for example, about 88 percent of the CPI increase was accounted for by the increase in the food sector; in 1980 its contribution remained relatively high, accounting for 72 percent of the total. This results from greater price increases in the food sector relative to other sectors, causing a shift in respective shares of the composition of major expenditure categories of the CPI.[3]

In order to stabilize food prices, and until food self-sufficiency is reached, Sri Lanka must continue to seek concessional imports such as wheat under PL 480 Title I. Although some economists hold the view that concessional food imports have a disincentive effect on domestic food production, it is difficult to establish such an argument generally, with perhaps the exception of subsidiary food production. Paddy production in particular depends largely on an adequate water supply, credit, and the timely availability of agricultural inputs, such as fertilizer, at affordable prices. Even during the periods when food prices were heavily subsidized and strict government regulation existed with regard to paddy procurement, paddy production continued to increase. If there is any disincentive effect on domestic food production, it results from rice imports, since the domestic price level is directly affected by the government-administered price of rice because it functions as the floor price in the open market as well. Since wheat is not grown in Sri Lanka and the Sri Lankan people are accustomed to flour consumption in varying degrees, wheat imports will not be a disincentive to domestic food production. Accordingly, by limiting the rice imports to the extent necessary and possible, and allowing flour imports to respond to other domestic needs, the government can minimize any disincentive effect of food imports on domestic food production. In the case of flour consumption, the government can encourage a change of consumer preference to reduce flour consumption to a minimum, through appropriate pricing policies.

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[2] The CPI is computed on a weighted average in terms of the following percentage weights: food 61.9, clothing 9.4, fuel and light 4.3, rent 5.7, and miscellaneous 18.7.

[3] If the food sector contribution to the CPI remained at the 61.9-percent level, it can be concluded that the food sector has not been subject to any exceptional pressures or that the price increase in the food sector more or less remained around the price increases in the economy as a whole. If, on the other hand, price increases in the food sector remain relatively high, their contribution to the overall inflation becomes dominant, as evidenced during the last few years.

APPENDIX F

HISTORY OF THE SRI LANKA FOOD SUBSIDY PROGRAM

by

Christine Adamczyk

HISTORY OF SRI LANKAN FOOD SUBSIDY PROGRAM

The Sri Lankan Government has a long policy history reflecting concern for the well-being of its people. The importance of equity has sometimes overshadowed the totality of the economy. Now after some 20 years of food subsidies, the government has diversified into a food stamp program as a means of helping to control fiscal expenditures.

When the system of food subsidies was introduced in 1943, the crucial considerations cited by the maritime colonial government for the scheme were to ensure an equitable distribution of essential food items to the population at a time of scarcity and to make these available at reasonable prices. These subsidies were continued after the war as part of the more comprehensive social welfare plan. Although the war subsidies on currystuffs and milk were revoked and the private sector reentered internal trade, the government continued its monopoly of importing rice, sugar, and flour. Meanwhile, rice rationing was continued; flour and sugar were taken off ration with the government remaining the sole importer. Especially important in terms of government profits was sugar.

In the early years, the purchases of the Department of Good Supplies (as it was then named) were financed by an Advance Account (token account) and subsidies were met by surplus or otherwise available funds of the government.

It was in the 1948-1949 budget, under the title "Food Commissioner (supplies)" that the government first set aside the sum of Rs50 million to subsidize essential foodstuffs. A supplementary budget of Rs212 million was also allocated to cover expenditure of subsidies that had accumulated during the war years. For the first time, revenue was provided to bear the cost of the subsidy.

In October-December 1950, to offset a marked increase in the cost of living, the government reduced the price of rationed rice and reinstated the flour subsidy which had been allowed to lapse in 1949. This measure quadrupled the net food subsidy bill from Rs34.9 million to Rs127.3 million for 1950-1951.

New policies were proposed in 1951-1952 with an emphasis on economic development rather than social services, and the program was geared towards limiting food subsidy expenditures. When the 1952-1953 budget was presented, the net food subsidy bill was about one-third of estimated revenue (Rs300 million). This fiscal burden was too great, and it was at this point that the Monetary Board of the Central Bank noted, "so far as the

Bank knows, in no other country in the world was a basic foodstuff subsidized to the same degree as rice in Ceylon."[1]

The Ceylonese consumer was in the curious position of being able to buy his ration of imported rice at less than one-third the world market price, but having to pay far in excess of the world price for rice bought off the ration.

Ceylon's first state of emergency was declared in July 1953 when the government announced removal of net food subsidies. In this plan, the government increased the quantity of the rice ration for different categories of recipients (for instance, manual laborers, ordinary, and infants; a modification was made from 1 3/4 measures to 2 measures--2 pounds--for a manual worker). This increase was designed to help alleviate the additional costs to the consumer of Rs30 per measure of rice when bought on the free market. Strikes, public disorders, suspension of communications, transportation, and destruction to personal property all ensued. Ten people were killed, the Prime Minister resigned as a result, and the political commitment to food subsidies rose to an all-time high.

The government, having been exposed to civil strife and cognizant of the previous disorder, reduced the price of rationed rice from Rs0.70 Ceylon cents per measure (2 pounds) to Rs0.55 cents. This was the beginning of a slow drop in the retail price of rice by successive governments, which eventually lowered rice to Rs0.25 cents per measure by April 1980.

The food subsidy bill was kept low despite the increase in the rice ration in July 1953 in part by increasing the retail price of rationed rice. Another contributing element to the smaller deficits in the food subsidy account in 1953-1954 was the decline in the import prices of rice, flour, and sugar.

Following the Korean war, the Sri Lankan government found it possible to raise the quantity of subsidized rice issued in ration form due to the decline in prices. The amount of the weekly rice ration equalized the portion for all consumers at two measures per week per person, which remained unchanged until December 1966. It was in 1954 that PL 480 was created, partly for the purpose of disposing of these very commodities.

The development priority was one of the key elements stressed in the 1955-1956 budget. The government strove to attain the delicate mix of achieving rapid economic development while at the same time maintaining financial stability. In this same year, a startling rise in expenditures brought the total government budget to $40.3 million, of which $13.4

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[1] Central Bank Report of the Monetary Board for 1952, pp. 7-8.

million was for food subsidies. This created a deficit of $0.2 million, quite a change from the previous year's surplus of $21.4 million. There were no provisions in the government budget for food subsidies or deficits. When the price trends of rice and sugar showed that subsidy expenditures would be more costly than anticipated, this evoked even more alarm in government. The combination of the rise in the world market price of sugar (reducing sugar sale profits), lowering the price of rationed rice from Rs0.08 to 0.06 per measure, and increased purchases of locally produced paddy contributed heavily to the dismal budget situation.

In June 1958, the retail price of rice was further reduced by Rs0.05 cents per measure to Rs0.35 cents. Effective June 1959, the price of rationed rice was further revised downward to Rs.25 cents for the first measure and Rs0.45 cents for the second measure. This resulted in the net food subsidy bill in 1958-1959 increasing by Rs33.1 million to Rs144.4 million. This was largely due to the higher prices paid for rice and flour imports from the United States under PL 480 and partially due to the June 1958 reduction in the retail rice price. The average landed cost of rice imported from the United States under PL 480 was Sterling L 47.0 per ton f.o.b. as compared with the average landed cost of Sterling L 31.2 per ton for Burmese rice.

In the ensuing years until December 1966, the price of rationed rice and the quantity of the weekly rice ration of two measures per person remained unchanged.

Ceylon's domestic and external financial situations have been greatly influenced by the repercussions of the food subsidies. Rice was the main problem of the subsidy system, since almost all gross food subsidies were for rice, both imported and locally produced. In December 1966, the subsidy on imported rice reflected the fact that the retail rice price (Rs0.25 cents per measure) was a little less than one-half of the import cost (Rs52 cents). The subsidy on locally produced rice, however, was Rs63 cents per measure, almost 2.3 times greater than the subsidy on imported rice. The high subsidy on locally produced rice was due to the higher cost to the government of procuring local rice under the Guaranteed Price Scheme (GPS) for retail sale at the same price as that of imported rice, and to the attempt to provide incentives to the farmer. At Rs88 cents, it was completely out of balance with the world rice price and was approximately 70 percent higher than the landed cost of imported rice. It was at this time that the weekly rice ration was reduced from two measures a person to one measure, with the reduced ration distributed free of charge. The government felt that the reduction in the quantum issued under the ration increased the demand for rice in the open market and gave impetus to local cultivation of paddy.

Sugar and flour were distributed without restriction, the consumption of flour increasing markedly as it was substituted for rice.

The policy of providing subsidized food commodities to the population as a whole underwent a drastic change in 1972. Income criterion was introduced to determine eligibility. The free rice ration was withdrawn from income tax payers and their dependents, affecting 10 percent of the country's population.

When commodity prices in world markets rose in 1973, the government was compelled to effect substantial changes in its food distribution scheme. The issue of free ration was cut down to half a measure per person per week, with the additional measure being sold at Rs2 per measure. The government cut the ration with the intention of reducing imports and thereby generating savings in foreign exchange. Also in 1973 the world market prices for flour and sugar soared. It was in October of that year that the flour and sugar rationing scheme was instated with the hope of reducing consumption and thereby imports. Sugar was issued at 1 pound per person and sold at a highly subsidized price of Rs0.72 cents. Flour was rationed at Rs0.72 cents per pound. The rationing scheme for rice was also restricted on the basis of a differential system under which the quantity of rice was related to needs of a community on a regional basis.

In 1974, for the first time since government subsidization, the sale of flour and sugar resulted in a loss. The early policy plan for the sale of these two items was to offset partial costs of the gross food subsidy program with profits from the unrestricted flour and sugar sales.

When the world market price for flour stabilized in 1976, it was removed from the rationing scheme and fixed at a price of Rs0.86 cents a pound to the consumer. Sugar continued to be rationed at 3/4 pound a week at Rs0.72 cents a pound. Sugar was also available on the open market initially at Rs0.06 per pound, but dropped to Rs0.3 per pound near the end of 1979.

Sri Lanka is unique in that it subsidizes both the producer and the consumer, placing the economy between the two groups. For example, during the rationing years paddy producers were entitled to rice ration books to purchase subsidized imported rice, while they were also selling rice to the government.

In 1978 the trend was toward moving away from the subsidies and diverting resources for development purposes. At last the market was to determine prices in a free economy. The revalidation of the ration books was a positive step towards this trend. In order to ease the burden on the budget and

confine food subsidies to those who really needed them, the ration scheme was restricted to those households earning less than Rs3,600 a year. In June 1979, when final revalidation figures were submitted, a total of 7.72 million people claimed eligibility on the basis of income. The new program allowed households to receive 1 pound of free rice weekly and 3 pounds of paid rice at a subsidized rate of Rs1 per pound. Children and infants received 1 1/2 pounds per month of sugar at a subsidized Rs0.72 cents per pound. (See Table F-1 for further information.)

Table F-1. Changes in the Allotment and Price of Free and Paid Ration Rice and Paid Ration Wheat, 1943 to 1979

Date of Change		Rice			Wheat	Prices	
		Free	Paid	Total	Paid	Ration Rice	Ration Wheat
May	1943	0	2.0			18.0	
October	1947	0	2.0		9.0		
March	1948	0	2.0		14.25		
October	1950	0	2.0		11.50	15.0	
December	1950	0	2.0	2.0	12.5		
September	1952	0	2.0	2.0	0	12.5[1]	
July	1953	0	2.5	2.5	0	35.0[1]	
October	1953	0	2.5	2.5	0	27.5[1]	
November	1954	0	4.0	4.0	0	27.5	
May	1955	0	4.0	4.0	0	25.0	
October	1955	0	4.0	4.0	0	12.5	
May	1956	0	4.0	4.0	0	20.0	
June	1958	0	4.0	4.0	0	17.5	
June	1959	0	4.0	4.0	0	12.5, 22.5[2]	
April	1960	0	4.0	4.0	0	12.5	
December	1966	2.0	0	2.0	0	0	
September	1970	2.0	2.0	4.0	0	37.5	
February	1973	2.0	2.0	4.0	0	50.0	
October	1973[3]	1.0	2.0	3.0	1.0	100.0	70
April	1974	1.0	1.0[4]	2.0	0.5	115.0	70
August	1974	1.0	1.0	2.0	0.5[5]	110.0	110
December	1974	1.0	1.0	2.0	1.0	110.0	110
March	1975	1.0	1.0	2.0	0	110.0	
November	1975	1.0	1.0	2.0	0	100.0	
	1977	1.0	3.0	4.0	0	100.0	
January	1978	1.0	3.0	4.0		50.0	
July	1979	0			130.00		

[1] Infants and children received less, workers more.
[2] The price for the first two pounds was 12.5 cents and for the next 2 pounds 22.5 cents.
[3] Income-tax payers were no longer eligible for free-ration rice.
[4] In the urban areas of rice-deficit districts, two pounds of paid ration rice were issued.
[5] The estate sector received a larger wheat flour ration of 1 ½ pounds and the ration in Colombo and some other urban areas was increased to 1 pound of ration wheat.

Sources: Sri Lanka, Food Commissioner's Department, Personal communication; and Vidya Sagar, "Cereal Consumption in Ceylon - Pattern and Demand Estimates," Sri Lanka, Ministry of Planning and Employment and Ministry of Agriculture and Lands, Colombo, March 1971 (Mimeographed).

APPENDIX G

FOOD STAMP SCHEME

by

Christine Adamczyk

FOOD STAMP SCHEME

I. HISTORY OF THE FOOD STAMP SCHEME

In September 1979, the Government of Sri Lanka introduced a targeted food stamp scheme that has received considerable international attention and has been the centerpiece of Sri Lankan food policy since that date. The most significant fiscal advantage of the scheme was that the size of the entitlements was set in nominal (i.e., rupee) terms. Unlike the case of a commodity-specific subsidy where the quantum of the commodity is fixed, food stamps permit easier control of budgetary costs. Sri Lankans earning Rs3,600 per annum or less were requested to fill out application forms. Under the previous ration book scheme, residents in the estates were eligible to receive rations after estate superintendents furnished eligibility statements, and many of these estate workers received ration books under the food stamp scheme. This procedure was changed, and all estate workers were included in the scheme, although most fully employed tea estate workers are disqualified because of income. Eligibility is based upon total household income of less than Rs300 per month. If household income is higher than Rs300 per month, the household qualifies to receive food stamps only if there are more than five household members. Even then only one allotment of stamps is given for each additional member over five and for each additional Rs60 of income per capita or less.

The following criteria in the initial application form were used to help determine eligibility:

1. Welfare benefits received
2. Members of household receiving public assistance or charity
3. Pensions
4. Income Support Allowance
5. Sources of income from all household members
6. Crop cultivation, total land holdings, and number of livestock
7. Other properties: land, residential housing, or any other buildings, including the annual income they provide and their present value

8. Monthly utility bills and rent

9. Remittances from household members living outside the home

10. Other assets, including cars, trucks, tractors, boats, etc. (computing present value)

11. Bank savings, certificates, etc.

At the divisional level, processing the forms was entrusted to village officers (Grama Sevakas) who were required to make an investigation of each application. Thorough screening was not possible before the first issue of the stamps, so essentially all possessors of revalidated ration books who had applied for the stamps were deemed recipients. The Evaluation Report of the Food Stamp Scheme (publication No. 8) indicates that it was not until the third issue of the stamps that the authorities were able to determine the actual number of recipients. It is not known if this recipient count was preceded by any further screening of food stamp application to determine if the legitimately qualified were the only recipients.

The food stamps were then issued to a family within three categories according to age group:

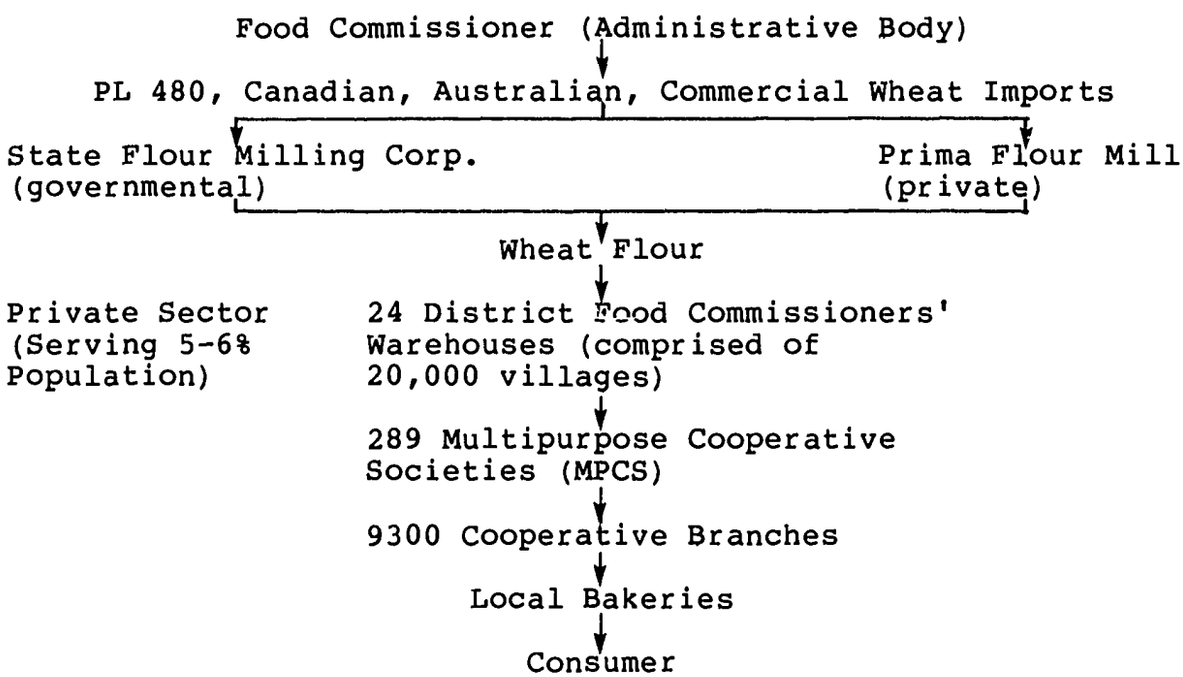
Age Group	Per Month
Children below 8 years of age	Rs25
Children over 8 but below 12 years of age	Rs20
Persons over 12 years of age	Rs15

The food stamps can be used to purchase any of the commodities in the approved "basket": rice, paddy, flour, bread, sugar, local milk products, and locally produced pulses (if available).

Kerosene stamps were also issued under the food stamp scheme in order to facilitate procurement. They were worth Rs9.50, sufficient for the purchase of seven bottles per month at subsidized prices in 1979. Kerosene stamps can be converted to food stamps but not vice versa.

Food stamp holders are allowed to purchase any commodities offered under the scheme from a cooperative branch. In the instance of bread and kerosene, which may not be available through the cooperatives, private dealers have been authorized to make these goods available. In the case of wheat for bread making, wheat flows from the docks to the cooperatives through the Food Commissioner's representatives and the two major flour mills. The cooperatives then sell flour to local bakeries for bread or to customers directly (see Figure G-1).

Figure G-1. Flow of PL 480 Wheat



Theoretically, no bread distributor can refuse food stamps in part or full payment. (However, some bakers revealed they do not accept food stamps.) The food stamps in turn can be used by the bakery or any other dealer to purchase flour from the MPCS.

Food stamps are good for a period of one month after the issue date. Although food stamp purchases will be invalidated after termination of that period, consumers may deposit unused coupons on or before the 15th of the following month in their savings account, with no restrictions on withdrawal. It is

generally noted that rarely are food stamp deposits made. In fact, most stamps are redeemed during the first two weeks of the month. The retailer then has a period of two months after the consumer invalidation date for redemption. The wholesale dealers in turn have three months to obtain reimbursement from the Treasury.

The Food Commissioner's Department has estimated that Rs1.05 is the overhead cost per capita allocation for each book of food stamps issued. The average overhead cost per issue is Rs9.3 million, totaling approximately Rs75 million for all eight issues.

The 1979 total government expenditure on food stamps for the four months amounted to Rs508 million. Rs1,595 and Rs1,510 million were allotted in 1980 and 1981, respectively. The consumer subsidy represented 14 percent of government expenditure and 6 percent of GNP in 1979, and declined to 7 percent of the former in 1981 (see Table G-1).

II. FINDINGS AND OBSERVATIONS

Using household income as a criterion for determining food stamp eligibility has been questioned by various sources. The system discriminates against poor households with large families because they tend to have higher absolute incomes, although lower per capita income than a smaller low-income household. For example, a household of five with a per capita income of Rs62 to 65 receives stamps for each member of the family only if their monthly income is under Rs300. When the family size is raised to six members, with the same per capita earning, only one person in the household is eligible to receive stamps because total family income exceeds Rs300 per month. If one assumes that per capita purchasing power is associated with poverty and malnutrition, then income as the criterion for eligibility is a poor choice. It is estimated that 20 to 30 percent of current food stamp recipients earn more than the Rs300 eligibility cutoff point. This has been possible because of the difficulty of quantifying and identifying in-kind and casual income. It has been the responsibility of the village government officer to verify application eligibility forms. It is believed that in many instances the officer is subject to local pressures or may be a new appointee and not know the true income situation of his village populace, or, because he has to reside in the village, he is reluctant to reduce the income transfer to his neighbor. Up to this point there has been no systematic approach for monitoring incomes on a continuous basis. On the other hand, tea estate workers who

Table G-1. Subsidies on the Food Ration and on Food and Kerosene Stamps (in millions of Rs)

Year	Rice	Flour	Sugar	Others	Net Subsidies	Food Stamps	Kerosene Stamps	Total Subsidies & Stamps	Total as a % of Total Govt. Exp.	Total as a % of GNP Market Price
1966-1967	445.3	- 22.1	-224.8	3.6	202.0	-	-	202.0	8	2
1967-1968	548.9	- 24.0	-239.5	10.9	296.3	-	-	296.3	10	3
1968-1969	582.0	- 11.2	-254.6	12.6	328.8	-	-	328.8	10	3
1969-1970	532.4	1.6	-221.1	12.5	327.4	-	-	327.4	9	3
1970-1971[1]	586.2	10.4	- 64.0	1.9	534.5	-	-	534.5	14	5
1971-1972	526.5	22.6	- 47.1	33.2	525.2	-	-	525.2	10	4
1972-1973	564.0	111.0	- 21.8	34.0	677.2	-	-	677.2	15	4
1974	745.1	148.1	26.5	30.8	956.5	-	-	950.5	16	5
1975	785.5	218.0	215.0	11.9	1230.4	-	-	1230.4	17	6
1976	679.3	52.0	165.1	41.2	937.6	-	-	937.6	11	4
1977	943.0	363.6	70.0	47.5	1424.1	-	-	1424.1	16	5
1978	1066.1	1027.9	-	68.7	2162.7	-	-	2162.7	12	5
1979	1215.6	894.1	138.6	77.7	2326.0	508.0	59.3	2893.3	14	6
1980	-	-	-	105.0	105.0	1595.0	182.0	1782.0	7	3
Revised Estimates 1981	-	-	-	125.0	125.0	1510.0	177.0	1812.0	7	2

[1] 4/5 of expenditures during the fiscal year of 15 months - 1st October, 1971 - 31st December, 1972.

Sources: Central Bank Reports; World Bank Report, 1975 onwards.

apparently earn more than Rs300 per month are unable to receive food stamps because the estates record incomes and report them to the government. Yet estate workers are some of the most needy of the island.

In the 1981 nationwide evaluation survey of 15,560 households (about 1 percent of the population), it was revealed that approximately 10 percent of the households claiming food stamp eligibility were not receiving them, even though they were aware of the scheme and made the effort to produce them. Unfortunately, due to the small survey sample, the magnitude of this problem cannot be accurately determined. The Food Commissioner's office plans to undertake a Re-certification Campaign, projected for June 1982. It is anticipated that after the data have been analyzed, the number of food stamp recipients will be cut to 5 million from the present 7.5 million recipients. The government hopes to use the results to better target resources so that the poorer households will be eligible to receive the benefits which will allow them to meet their basic daily nutritional needs.

The mean income of all food stamp recipient households island-wide is estimated at Rs165. The variance between districts was not greatly discernable. The average value of food stamps for all 24 districts amounted to approximately Rs90 per month, while between various districts the average fluctuated between Rs78 and Rs106 per month. There appears to be no distinct pattern in the distribution of mean incomes by district, except that the range of mean income values tended to be narrow in the lower income groups and increase progressively with higher incomes.

In comparing the value of food stamps received with mean recipient incomes, the ration amounted to 55 percent and varied between 40 percent and 83 percent across districts. The contribution of food stamps to household income decreased as income increased. In the case of the less-than-Rs100 income group, food stamps added more than double the income, while in the Rs100 to Rs200 group the increment was between 60 to 80 percent. Food stamps comprised 35 to 55 percent of household income in the Rs200 to Rs300 groups.

Although the food stamp scheme has improved the income status of the low income groups, it cannot be stated with equal emphasis that it has improved the purchasing power of these groups within the context of present inflationary trends. For example, from September 1979 to September 1980, the value of food stamps dropped by 21 percent in terms of the Food Price Index for Colombo and by 30 percent because the price of rice, on which the majority of coupons are spent, increased. The

purchasing power had been reduced to half of its original value by July 1981.

A plan for indexing food stamp values to price inflation has been presented to the Cabinet by the Food Commissioner's Office. It has been proposed, however, to maintain the Rs300 per month eligibility cutoff point and to increase the value of the stamps by 50 percent. With time, development, and inflation this constant eligibility cutoff income will assure that fewer people qualify. New allocations are Rs50 for children below 8 years of age, Rs40 for children between 8 to 12 years of age, and Rs30 for adults. The scheme has not yet been approved, and it is unknown when a final decision will be made.

Survey data and team observations verify that the pattern of food stamp utilization is not evenly spread over the basket of commodities available for purchase. According to the Survey, the proportion of food stamps spent on rice ranged from 70 to 90 percent in 21 of 24 total districts. It appears that the amount of rice consumption, especially in the true poverty groups, was made possible by the food stamp scheme.

Sugar is another important consumption item in households, accounting for anywhere from 4 to 42 percent of food stamp purchases. Generally purchases ranged from 10 to 15 percent of food stamp values. It is not known whether these food purchases supplemented or substituted for normal household purchases.

Although the food stamp scheme was designed to emphasize the nutritional needs of the younger household members, by giving them much higher food stamp values, a relatively low level of milk food purchases by households was found to exist. The average rate of milk purchases with food stamps was only about 5 percent. Preliminary conclusions suggest that poorer households prefer to maximize the quantity (in calories) of food purchased, within a set of preferences that gives greatest weight to rice.

The Survey found that purchases of flour and bread with food stamps were very low. The low demand for flour has probably resulted from the phasing out of the subsidy on this commodity. To a large degree rice was substituted for flour when prices of the two commodities became about equal. This was especially true in the rice producing areas. Bread consumption appears to have higher prevalence in the urban areas where it is viewed as a convenience item. A random sample by the evaluation team showed that if bread prices were substantially lower than the rice prices, more people would be inclined to use bread as a rice substitute and/or supplementary

food. In rural areas there is no doubt that rice is the preferred food. It was also noted by the evaluation team that in addition to the food basket items available for purchase under the food stamp scheme, households were allowed to buy such items as soap, school supplies, and ceramics. Basically, whatever the cooperative had in inventory was available to be purchased with food stamps. It was learned that although this practice is not condoned, a blind eye was turned toward its continued low-level existence.

The Food Commissioner's Office has recently announced a plan in conjunction with the Department of Social Services to aid families in drought stricken areas. The specifics are listed in Table G-2.

Table G-2. Plan for Aid to Families in Drought-Stricken Areas

		Drought Relief	
No. of Household Members	Monthly Income	Food Stamps	Cash
Not exceeding 6 persons	300	Rs70	Rs70
7-10 persons	300	Rs95	Rs95
More than 11 persons	300	Rs115	Rs115

Although the eligibility cutoff point remains at Rs300 it has been recommended that the Government Agent (District Officer) be encouraged to use discretion in aiding needy families that may earn slightly more than the Rs300 monthly income. The drought relief food stamps may be used only to purchase flour and rice and have been issued for the months of March, April, and May.

The following recommendations have been put forth for consideration to improve the food stamp scheme:

1. Base the quantity of stamps issued to a specific district according to a quota system based on district size, population, income, employment, and area nutritional status.

2. Establish "unbiased" District panels to screen eligible candidates with proper monitoring of all district programs.

3. Reserve funds within Districts for additional beneficiaries who, because of loss of employment, loss of spouse, or emergency, may be added to the scheme.

4. Base eligibility criterion on per capita income as opposed to household income, with allocations decreasing proportionally once the income exceeds the set poverty level.

5. In order to compensate for inflation, tie the real value of food stamps to a rice quantity value, or provide an explicit subsidy on items to be purchased with food stamps by the beneficiaries.

6. Provide regular evaluation of the scheme to improve its effectiveness.

APPENDIX H

FOOD GRAIN AVAILABILITY IN SRI LANKA

by

William T. Cammack

FOOD GRAIN AVAILABILITY IN SRI LANKA

I. INTRODUCTION

The ancient civilizations of Sri Lanka were able to rise and flourish because of their highly advanced systems of irrigation that allowed farmers to produce food surpluses. Food surpluses in turn permitted the expansion of the tank (reservoir) system and the building of great stupas, temples, palaces, and great cities.

The Basankkulam (reservoir) was built about 2,400 years ago. This reservoir, improved and expanded over time, was in continuous use for about 1,500 years while the ancient city of Anuradhapura flourished. Systems of reservoirs, called tanks, with interconnecting channels were developed throughout much of the dry zone areas of Sri Lanka. The engineering accuracy of these ancient irrigation systems is impressive.

Food grain surpluses that allowed the ancient civilizations of Anuradhapura, Polonnaruwa, and Sigiriya to develop totally disappeared in the 1800s, and the irrigation systems generally fell into decay. Sri Lanka has been an importer of food grains for at least a century.

During the colonial period, labor intensive plantation type agriculture, such as spices, coffee, tea, coconut and rubber, was developed for export markets. The importation of labor coupled with population growth led to increased food demand while food production stagnated.

In recent history, imports of wheat flour and wheat have been added to rice imports to fill this food gap. Table H-1 shows the total wheat flour, wheat, and rice availability on a per capita basis from 1952 to 1980. Rice imports have decreased since 1977, while wheat flour and wheat imports have gone up since the 1960s. This shift from rice to wheat was caused by: (1) a subsidized food policy that encouraged the shift to wheat for budgetary reasons (wheat flour and wheat are cheaper than rice), and (2) a shift in taste preferences, especially among urban dwellers, from rice to bread for at least a portion of their food grain requirements because bread is more convenient and does not involve the expense of cooking.

This appendix will examine paddy production in Sri Lanka and the more recent phenomenon of wheat flour and wheat imports as the second most important food grain. While coarse grains will not be covered here, it should be pointed out that they

Table H-1. Total Annual Available Wheat, Wheat Flour, and Rice, Sri Lanka, 1952-1980

Year	Net Paddy Production[1]	Milled Rice[2]	Rice Imports[3]	Total Available Rice[4]	Wheat Imports[5]	Flour Imports[3]	Total Flour Equivalent Imports[6]	Population[7]	Total Per Capita Availability of Flour and Rice[8] (pounds)
	Long Tons								
1952	452,703	307,838	412,327	720,165	203	214,751	214,897	8,005,617	261.63
1953	325,075	221,051	416,799	637,850		296,363	296,363	8,185,702	255.65
1954	468,256	318,414	408,871	727,285	102	206,316	206,389	8,398,609	249.02
1955	556,223	378,232	371,064	749,296	305	222,476	222,696	8,617,054	252.59
1956	421,279	286,470	499,427	785,897	102	188,530	188,603	8,841,181	246.89
1957	492,804	335,107	531,441	866,548		197,779	197,779	9,071,137	262.82
1958	555,508	377,745	562,236	939,981		230,302	230,302	9,307,074	281.66
1959	555,859	377,984	593,031	971,015		262,824	262,824	9,549,147	289.43
1960	676,610	460,095	536,726	996,821		170,744	170,744	9,797,518	266.94
1961	687,024	467,176	476,661	943,837	305	176,131	176,351	10,052,348	249.62
1962	771,287	524,475	417,307	941,782	102	178,265	178,338	10,313,806	243.27
1963	789,906	537,136	409,481	946,617		142,083	142,083	10,582,064	230.46
1964	809,611	550,535	668,748	1,219,283	305	326,341	326,561	10,832,744	319.65
1965	563,067	382,886	538,657	921,543	102	144,422	144,495	11,089,363	215.28
1966	727,643	494,797	704,523	1,199,320	305	366,831	367,051	11,352,060	309.80
1967	880,154	598,505	360,494	958,999	305	210,512	210,732	11,620,901	225.47
1968	1,043,899	709,851	375,948	1,085,799	17,684	346,073	358,805	11,896,272	272.01
1969	1,083,395	736,709	313,777	1,050,486	25,917	332,931	351,591	12,178,084	257.89
1970	1,271,847	864,856	553,502	1,418,358	30,229	369,000	390,765	12,466,574	325.06
1971	1,078,538	733,406	344,748	1,078,154	44,982	333,000	365,387	12,761,896	253.37
1972	1,019,186	693,046	270,751	963,797	71,143	324,000	375,223	13,022,191	230.20
1973	1,007,703	685,238	349,111	1,034,349	88,761	365,000	428,908	13,308,210	246.29
1974	1,253,625	852,465	302,268	1,154,733	82,368	442,000	501,305	13,590,076	272.96
1975	885,424	602,088	472,954	1,075,042	90,431	455,000	520,110	13,877,911	257.47
1976	959,207	652,261	419,000	1,071,261	87,187	380,000	442,775	14,171,843	239.30
1977	1,313,820	893,398	534,000	1,427,398	87,187	523,861	586,636	14,443,940	322.34
1978	1,410,364	959,047	183,000	1,142,047	80,140	602,900	660,607	14,184,000	284.70
1979	1,434,078	975,173	208,000	1,183,173	109,702	466,600	545,585	14,471,000	267.68
1980	1,591,429	1,082,171	165,300	1,247,471	193,884	355,099	494,668	14,738,000	264.77

1 Total paddy production minimized requirements for next season minus 14.2 percent past-maturity leases.
2 Column 1 times 0.68 milling factor.
3 1952-1963 FAO Data Series; 1964-1980 Food Commission Data Series.
4 Column 2 + Column 3.
5 1952-1977 FAO Data Series; 1978-1980 Food Commission Data Series.
6 Column 6 + 0.72 (Column 5).
7 Midyear population.
8 Column 4 + Column 7/Column 8.

Sources: Borsdorf, Anderson, and Anderson, Grain Policy Development and Implementation in Sri Lanka, Kansas State University, March 1979; Ministry of Agricultural Development and Research, Colombo, August 1981.

(millet, sorghum, and others) have historically been important food grains especially among the rural poor population. The role of coarse grains as food has declined in recent years. The reasons for this decline are unclear, but government cheap food policy undoubtedly played a role.

II. PADDY PRODUCTION

Since independence, the government of Sri Lanka has put large amounts of resources, both human and capital, into reliable sources of rice for import and expanding paddy production. Despite their stated goals of self-sufficiency and increased efforts at paddy production efforts, Sri Lanka remains a rice importer.

Very early after independence, the Government of Sri Lanka indicated its commitment to an adequate, stable rice supply by signing long-term agreements with the People's Republic of China (PRC) and Burma. The government-to-goverment agreement with the PRC was signed in December 1952. This agreement provided that Sri Lanka would sell 50,000 metric tons of sheet rubber to the PRC for each of five years; in turn Sri Lanka would purchase 270,000 tons of rice annually from the PRC for five years. The prices under the barter agreement were advantageous to Sri Lanka for both commodities.

The 1953 Sri Lanka-Burma agreement was a commitment by Burma to sell a minimum of 200,000 tons of rice annually to Sri Lanka for a period of four years. Both these agreements have been renewed several times. The purpose of the Burma and China agreements was an assured supply of rice for import. Today Pakistan, Thailand, and Burma are Sri Lanka's primary sources of rice.[1]

In the 1950s the Government of Sri Lanka was active on the production side as well. In 1957 the Department of Agrarian Services was established to deal with the package of agricultural development problems, especially paddy production. The function of the Department of Agrarian Services was quite distinct from the Department of Agriculture, whose role was to organize technical research and the extension services.

The Department of Agrarian Services complements the Department of Agriculture in promoting food production while

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[1] Edirisingle, Nevill, and Palaman. Implications of Government Interventions in the Rice Economy of Sri Lanka. Ithica: Cornell University. January 1976, pp. 62-66.

improving and stabilizing farmers' incomes. The department's responsibilities are wide ranging, from improving minor irrigation projects, to the supply of free paddy seed to poor farmers, to the operation of the Guaranteed Price Scheme (GPS). Since the GPS played a major role in farmers' incomes, the operation of the scheme must be explained briefly.

The Government of Sri Lanka appoints a cooperative society to act as its agent. The cooperative buys the farmers' crops at a price established by the government. The cooperatives then resell the commodities to the government after keeping a small commission. In the case of paddy, it is then sent to a government-owned or government-licensed private rice mill for processing. The rice then goes into the government food distribution system or is distributed through the open market system. In 1971, the Paddy Marketing Board was created as a separate organization to administer the GPS.[2]

On February 1, 1958 the Government of Sri Lanka enacted a major piece of legislation that had an important impact on rural Sri Lanka. The Paddy Lands Act's primary objectives were security of land tenure and increased productivity. A good proportion of paddy land was farmed by tenants with high indebtness. These tenants became the victims of a vicious cycle where low income coupled with high indebtedness resulted in low productivity. The Act gave tenants permanent and secure rights to the land. It made eviction unlawful and introduced the concept of inheritance of tenancies. Under the Act tenants were not to pay higher rents. The Commissioner of Agrarian Services was given the responsibility of establishing rents. The maximum rent under the law was 15 bushels of paddy per acre or one-quarter of the total yield, whichever was less. The Act also established the maximum interest for loans of seeds and other inputs provided by the landlords. Another benefit of the Act was establishment of village-level organizations called cultivation committees. These committees deal with a wide range of issues concerning agriculture at the village level. For example, minor irrigation repair, assurance that needed supplies are available, control of pests, and settlement of livestock damage disputes are the responsibility of the village cultivation committees.[3]

Laws and organizations such as these provided an important backdrop in which farmers could be assured that improved inputs

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[2] Interview with the Paddy Marketing Board, March 1982.

[3] Donald R. Snodgrass, Ceylon: An Export Economy in Transition. Homewood, Illinois: Richard E. Irwin, Inc. 1966, pp. 45-48.

would be available and there was some assurance there would be a market for his paddy. Sri Lanka's high literacy compared to other Third World countries was also an important factor.

Rice imports as a percent of total available food grains have declined since 1977. As Table H-2 indicates, production of domestic paddy increased substantially, from 77.4 million bushels in 1970 to 102 million bushels in 1980. Paddy yields per acre were flat during the mid-1970s, but rebounded at the end of the decade. In 1980 the average yield was 56.3 bushels.

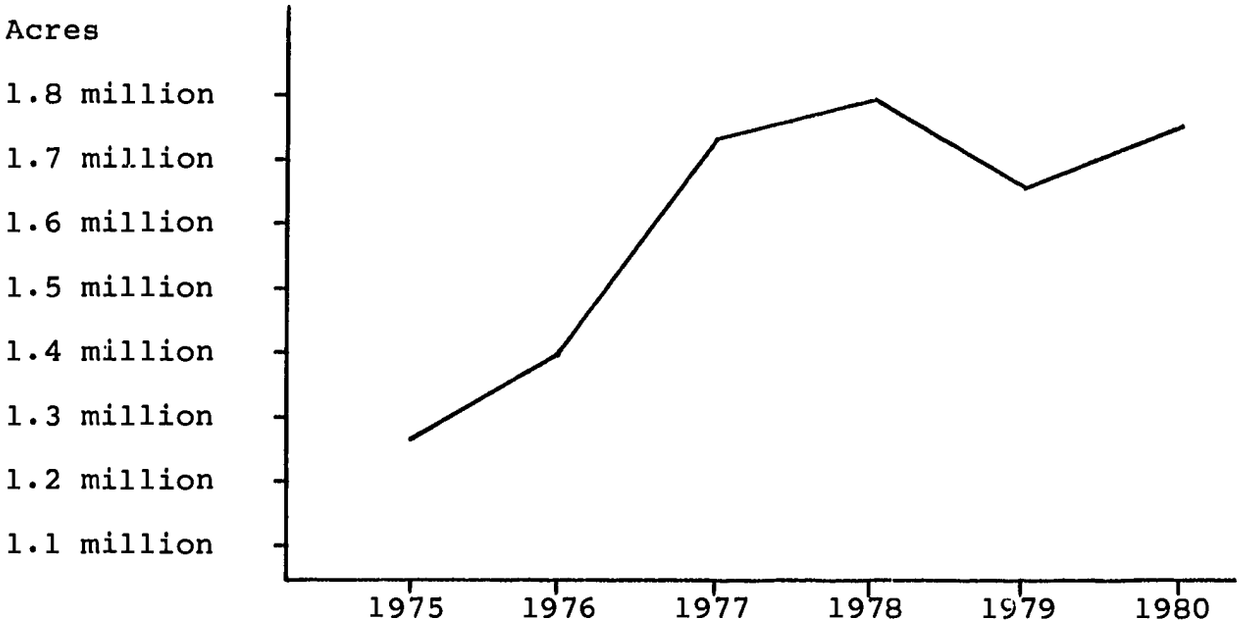
Table H-2. Paddy Production Yield Per Acre, 1970-1980

Year	Net Acreage Harvested (000 acres)	Paddy Production (million bu)	Yield (bu/acre)
1970	1,510	77.4	51.3
1971	1,457	66.9	45.9
1972	1,342	62.9	46.8
1973	1,411	67.9	44.6
1974	1,674	76.7	45.6
1975	1,256	55.3	44.0
1976	1,334	60.4	44.9
1977	1,644	80.4	48.9
1978	1,787	90.6	50.7
1979	1,722	91.9	53.4
1980	1,815	102.2	56.3

Source: Ministry of Agricultural Development and Research. Agricultural Statistics of Sri Lanka, pp. 5-6.

What caused this increase in paddy production? Evidence indicates that the pieces of the paddy production puzzle were in place in 1977; these were (1) a wide acceptance and availability of improved paddy seeds and improved inputs (Figures H-1 and H-2); (2) continued tractorization at a steady pace, especially from 1977 onward (Table H-3); (3) a cadre of trained agricultural extension administrators and workers; (4) existence of government pricing policies as an incentive for paddy productions; and (5) last but not least, reasonably favorable weather from 1977 through 1980.

Figure H-1 Area under Improved Varieties of Paddy



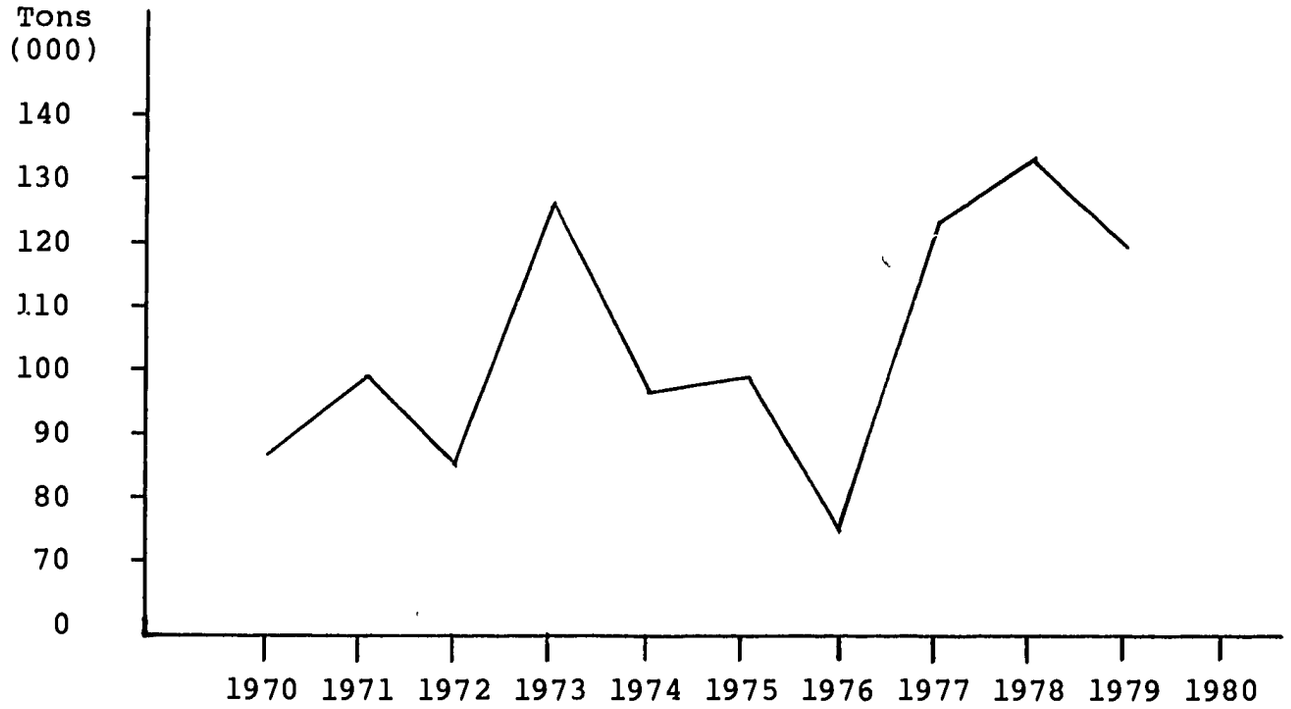
Source: Ministry of Agricultural Developmental Research. Agricultural Statistics of Sri Lanka, 1981. p. 7.

Table H-3. Number of Tractors Imported

Year	Two Wheel	Four Wheel	Total
1973	400	-	400
1974	1	102	103
1975	1,300	133	1,433
1976	0	512	512
1977	2,302	797	3,099
1978	3,025	2,225	5,250
1979	1,030	1,846	2,876
1980	2,970	1,260	4,230

Source: Ministry of Agricultural Development and Research, Agricultural Statistics of Sri Lanka, 1981, p. 16.

Figure H-2. Fertilizer Issued for Paddy



Source: Ministry of Agricultural Development and Research. Agricultural Statistics of Sri Lanka, 1981. p. 13.

Throughout the world, government pricing policies play a key role in the returns farmers receive for their investment in land, labor, and capital. In Sri Lanka, the government has had a heavy hand in determining both the price of paddy and the price the consumer pays for rice.

Soon after independence, the Government of Sri Lanka established the GPS paddy price at Rs8.00 per bushel or Rs560 per ton. In July 1951, the GPS price for paddy was increased to Rs630 per ton. In August 1952, in an attempt to keep paddy prices up and provide incentives, the government raised the price of paddy to Rs840 per ton or Rs12.00 per bushel. This price prevailed until 1967. Table H-4 reveals that throughout the period from 1958 to 1967, the GPS of Rs12.00 per bushel was substantially above the CIF cost of imported rice converted to paddy bases. The guaranteed paddy price was well above the imported cost of rice between 1958 and 1977, the only exception being 1974 when rice import costs rose rapidly, causing the GPS price to lag behind cost of imported rice.

Table H-4. Comparison Between Domestic Guaranteed Price and Cost of Import, 1958-1980

Year	Domestic Guaranteed Price/Paddy per bushel[1] (Rupees)	Imported CIF Cost Paddy Bases, per bushel[2] (Rupees)	Domestic Price as a % Imported Cost
1958	12.00	5.73	219
1959	12.00	7.62	15
1960	12.00	6.30	188
1961	12.00	6.10	196
1962	12.00	6.73	178
1963	12.00	6.19	193
1964	12.00	7.23	165
1965	12.00	7.44	161
1966	12.00	7.52	160
1967	12.00	8.94	134
1968	14.00	14.00	even
1969	14.00	11.35	123
1970	14.00	9.36	149
1971	14.00	10.00	140
1972	14.00	7.60	184
1973	18.00	13.32	135
1974	30.25	37.07	82
1975	33.00	30.28	108
1976	33.00	24.17	136
1977	33.00	24.73	133
1978	40.00	56.00	71
1979	40.00	59.84	66
1980	40.00	66.26	60

[1] Annual average price weighted by months.
[2] Imported price (unmilled paddy).

Source: Paddy Marketing Board, Food Department, and Ministry of Agriculture

In 1978 there was a turnaround as the GPS price lagged behind the cost of imports. In 1978 there was a sharp increase from Rs24.73 per bushel of imported (paddy bases) to Rs56.00 a bushel. The same year the GPS price for domestic paddy rose only to Rs40.00 per bushel and remained there through 1980. Although the agreements with the PRC and Burma were favorable to Sri Lanka in terms of the price of rice and transportation costs, one assumes that the cost of imported rice reflects the world market price. The Government of Sri Lanka's GPS price has typically been well above the price of imported rice. Therefore, one must conclude that the GPS price was in fact an incentive to paddy production and that imports were not a disincentive to paddy production.

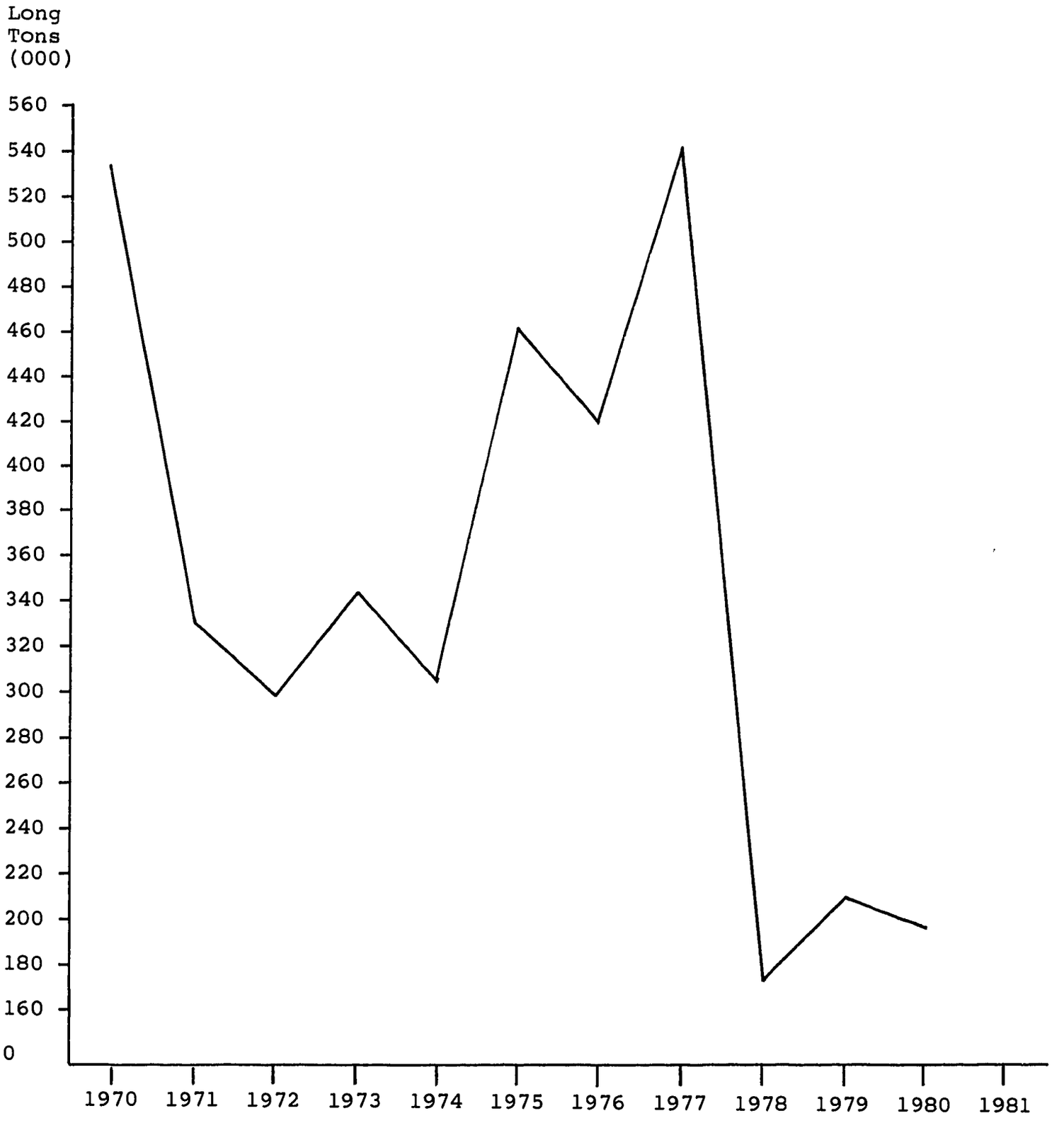
The fact that the GPS paddy price has lagged behind the CIF imported price recently (1978, 1979, and 1980) should not go unnoticed. This coupled with the fact that the paddy price index for these years is considerable behind the wholesale price index for the same periods is revealed in Table H-5.

Table H-5. Guaranteed Paddy Procurement Price Index Compared to Wholesale Price Index (1974 = 100)

	Wholesale Price Index	Paddy Procurement Price	Paddy Price Index
1976	111.9	33.00	105
1977	135.3	33.87	108
1978	156.7	40.00	128
1979	171.6	40.00	128

Sources: Ministry of Agricultural Development and Research, Agricultural Statistics of Sri Lanka, 1981, p. 16; Central Bank of Ceylon.

Figure H-3. Rice Imports, 1970-1981



Source: Ministry of Agricultural Development and Research. Agricultural Statistics of Sri Lanka, 1981. p. 19.

III. PADDY PRODUCTION COST TRENDS

Studies of paddy production cost in Sri Lanka over time have not been done recently. A study by the Sri Lanka Department of Agriculture examined paddy production cost by specific district for one cropping year--the 1978-1979 maha and yala seasons on both dry land and irrigated land. Further, a 1979 Kansas State University study concluded that the trend lines of the GPS paddy price and the open market price of paddy were converging with the paddy production cost trend line. Without empirical evidence it is difficult to know if this trend has continued since 1979. This is an area that needs additional study.

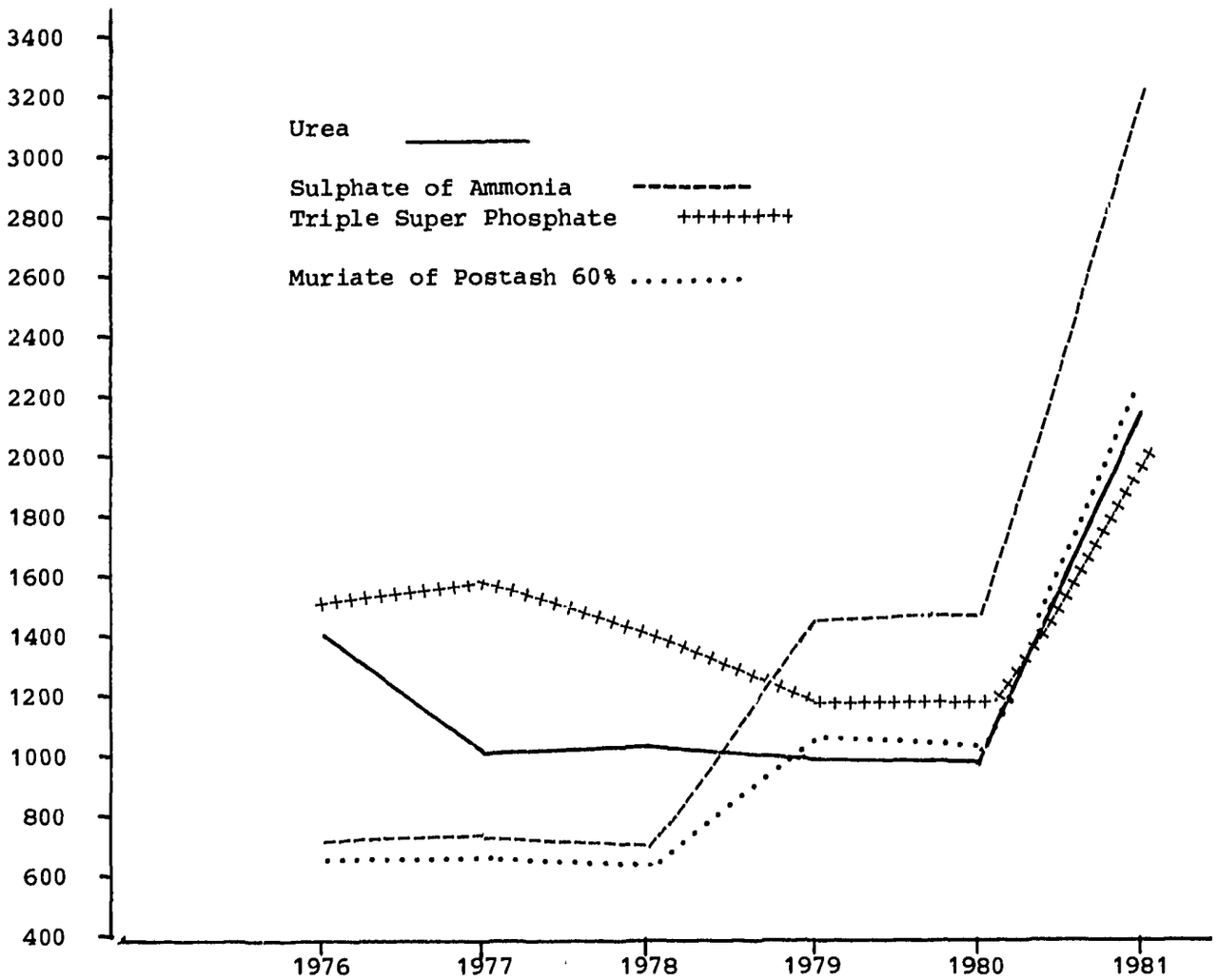
The price of paddy has increased since 1978, but so has the price of paddy inputs. The Department of Agriculture's 1979 cost of paddy production study during the maha crop of 1978-1979 reveals that average daily wages for agricultural labor were Rs11.37 per day. During the recent field work, an unscientific sample indicated day wages for agricultural workers for the 1981-1982 maha ranged from Rs17.00 to Rs22.00 per day. It should be noted that wide variation of wages exists for agricultural workers throughout the island, and these figures are meant only to indicate trends in the absence of sufficient data.

Meanwhile, Figure H-4 reveals that the selling price of fertilizer rose dramatically in 1980 when the Government of Sri Lanka lowered the amount of subsidy. Whether or not fertilizer prices should be subsidized is beyond the scope of this appendix; the sole purpose of examining fertilizer prices is to help establish paddy production cost trends. Based on limited data and impressions it would appear that the trend lines of paddy prices and production cost continue to converge.

With the change of government in 1977, the amount of paddy purchased by the Paddy Marketing Board was reduced sharply from 31 percent of the total crop in 1977 to approximately 10 percent of the 1980 paddy crop. Table H-6 reveals that the percentage of the paddy crop purchased by the Paddy Marketing Board varied widely in the 1960s, from 63 percent in 1965 to a low of 20.79 percent in 1969. The sharp reduction in the amount of paddy purchased by the Paddy Marketing Board since 1977 has had the effect of establishing a floor on paddy prices rather than establishing a ceiling when the government was purchasing large portions of the paddy crop.

At the same time, Table H-7 examines what was taking place as the private sector became a major retailer of rice. The open market price of rice jumped sharply in 1974 when supplies of rice were tight. The price increased more gradually after the move to the free market system in 1977.

Figure H-4. Fertilizer Selling Prices, 1976-1980
(rupees per ton)



Source: Rural Development Office, USAID, Colombo.

Table H-6. Procurement of Paddy Under the Guaranteed Price Scheme

Year	% of Production	Paddy Million Bushels	Rice Equivalent to Thousand
1958	44.26	16.2	226.8
1959	45.60	20.8	232.4
1960	48.37	20.8	291.2
1961	51.39	22.2	310.8
1962	56.13	27.0	378.0
1963	52.24	25.7	359.8
1964	58.22	29.4	411.6
1965	63.64	23.1	323.4
1966	61.27	28.0	392.0
1967	28.10	15.4	215.6
1968	23.10	14.9	208.6
1969	20.79	13.7	191.8
1970	33.83	26.2	366.8
1971	48.88	32.7	457.8
1972	41.97	26.4	369.0
1973	36.41	22.9	320.0
1974	27.21	20.9	292.3
1975	20.98	11.6	162.1
1976	21.50	12.9	180.6
1977	30.60	24.6	344.4
1978	35.65	32.3	452.2
1979	28.18	25.9	363.1
1980	9.9	10.1	141.4

Bushel of Paddy = 0.014 rice tons

Sources: Paddy Marketing Board; Statistical Unit, Ministry of Agricultural Development Research.

Table H-7. Comparison of GPS and Open Market Prices

Year	GPS (Rs per kg)	Open Market (Rs per kg)
1965	.85	.88
1966	.85	.90
1967	.87	1.22
1968	.97	1.31
1969	.97	1.32
1970	.97	1.31
1971	.97	1.28
1972	.98	1.53
1973	1.34	2.96
1974	2.30	5.12
1975	2.30	3.63
1976	2.30	3.32
1977	2.33	3.16
1978	2.80	3.50
1979	2.80	3.75
1980	3.43	4.68

Source: Ministry of Agricultural Development and Research, Agricultural Statistics of Sri Lanka, 1981, pp. 24-25.

The net result of the policy shift has been that the private sector now plays the major role in paddy marketing and an increasing role in retail rice sales. Table H-8 reveals that the percentage of rice distributed by the Food Department has reduced gradually after a high of 60 percent in 1972. In 1978, the last year before the food stamp system was begun, the Food Department distributed 30 percent of the total available rice crop.

IV. WHEAT FLOUR AND IMPORTS OF WHEAT FLOUR

Sri Lanka has been an importer of wheat flour for more than 30 years. In 1952 Sri Lanka imported 214,000 long tons of

Table H-8. Percent of Total Production Distributed by Food Commissioner's Department

Year	Total Rice Available: Production & Imports (1000 tons)	Distributed by Food Department	% of Total	Residual Home Consumption plus Open Market Sales	% of Total
1969	1187.0	530.9	45	656.1	55
1970	1610.3	631.3	39	978.7	61
1971	1270.5	868.2	68	402.3	32
1972	1142.6	783.6	69	359	31
1973	1218.5	676.0	55	542.5	45
1974	1372.1	550.3	40	821.8	60
1975	1226.5	605.9	49	620.6	51
1976	1258.5	602.4	48	656.1	52
1977	1659.5	665.1	40	994.4	60
1978	1426.3	426.8	30	999.7	70

Note: Food Stamp program started in September 1979.

Source: Ministry of Agricultural Development and Research, Agricultural Statistics of Sri Lanka 1981, p. 18.

wheat flour. Wheat imported as flour continued to be the primary source of bread until 1980. Table H-1 shows that there was no correlation between paddy production, rice imports, and wheat flour imports. Consequently the total per capita availability of flour and rice varied widely. For example, in 1963, Sri Lanka had a rice availability of 946,617 long tons but imported 142,000 long tons of wheat flour for a per capita availability of flour and rice of 230 pounds. In 1964 the total rice availability was 1,219,283, but 326,000 long tons of wheat flour were imported or 319 pounds of rice and wheat flour per person. In 1965 total rice available was down to 921,543 with imports of flour also down to 144,000 long tons. This came out to 215 pounds of rice and wheat flour per person. These wide swings in total per capita availability of flour and rice continued to persist throughout the 1970s.[4]

Soon after the United National Party came to power in 1977, as a part of the new government's efforts to attract foreign investment, an agreement was signed with Prima Limited, a Singapore flour milling corporation. The agreement provided that Prima would build a large modern flour mill in Trincomalee, Sri Lanka. The mill, one of the largest flour mills in the world today, cost about U.S.$54 million. The flour mill currently has a daily flour milling capacity of 1,800 metric tons, with a built-in expansion potential of another 600 metric tons per day. The mill is located on China Bay, reportedly one of the two best harbors in Asia. The mill's ship unloading facility can handle the largest bulk grain ships that ply the ocean today.

The agreement between Prima and the Government of Sri Lanka is not a public document; however, the agreement provides that the Government of Sri Lanka will purchase a minimum of 400,000 metric tons of wheat annually. Prima will mill the wheat into flour at an extraction rate of 74 percent flour-26 percent bran and millings. Prima is given the bran as payment in kind.

At the end of 20 years the facility will be turned over to the Government of Sri Lanka. It was reported that if, during the 20-year agreement period, the total amount of flour milled is below the 20 year amount specified in the agreement, the agreement will be extended. Prima officials believe that it is very unlikely this will happen. Prima, in any case, will receive the total amount of bran specified in the agreement. They are confident that the demand for flour in Sri Lanka will

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[4] Borsdorf, Roe, et al. Grain Policy Development and Implementation in Sri Lanka. Report No. 78, Manhattan, Kansas: Food and Feedgrain Institute. March 1979.

increase. Currently the flour mill is operating at about 60-66 percent capacity. The mill is working 18-20 days a month. The top management of the mill are expatriate Singaporean Chinese. The mill provides employment for 450 Sri Lankans in addition to the jobs created in the loading and trucking phase of the flour distribution. These operations are done by private contractors.[5]

This agreement with Prima benefits Sri Lanka in that top quality flour is available at no milling cost. It is presumed that Prima benefits from the sales of the bran, which the Sri Lankan government is ill equipped to market. Prima sells the bran on the world market from its home office in Singapore mostly for livestock feed. In 20 years, Sri Lanka will own the mill. The training of skilled mill operators will certainly benefit Sri Lanka. Additionally, with proper maintenance, the life of the mill will be much longer than 20 years.

There is no evidence that the PL 480 Title I wheat that is sold to the Government of Sri Lanka and milled at the Prima mill in Trincomalee or at the State Flour Milling Corporation in Colombo is a disincentive to food grain production in Sri Lanka. Wheat is not produced in Sri Lanka. While wheat flour consumption is increasing, rice is still the staple food. The present role of wheat is to fill a food gap. To date, the Government of Sri Lanka has provided sufficient incentive to paddy farmers. If and when Sri Lanka becomes self-sufficient in paddy, it will very likely export any rice surplus and import wheat. The demand for wheat in Sri Lanka will continue to increase.[6]

V. MARKET DEVELOPMENT

PL 480 Title I as a market development tool has played a role in developing Sri Lanka into a market for U.S. wheat. It is doubtful that PL 480 Title I was solely responsible for this development.

From the equitable food policy pursued by all Sri Lanka governments, it is clear that there was a food gap to be filled. Wheat is the logical food grain to fill that gap for Sri Lanka, because wheat offers more total food per dollar invested than an equal investment in rice or any other food grain. On the other hand, PL 480 Title I certainly allowed and

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[5] Interview with Prima (Sri Lanka) Inc. executive. March 1982.

[6] Interview with Government of Sri Lanka officials, March 1982.

encouraged the partial shift to wheat by a large percentage of the Sri Lankan population. During March 1982, considerable attention was focused on Sri Lanka's potential as a wheat producer; 1,300 small wheat test plots were harvested throughout the island with reportedly favorable results. However, many agriculturalists remain doubtful that Sri Lanka will ever become a wheat producer.

APPENDIX I

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Mr. Blackton is currently the Deputy for Industry Finance and Trade in USAID Cairo with policy and management responsibilities for a $2.2 billion industry and credit portfolio. He was previously Director of the Sector Analysis Office in Cairo and prior to that served as Agricultural Management Specialist in the Near East Bureau of AID/W. Mr. Blackton did graduate work in development economics at the University of Ceylon at Peradeniya and the Delhi School of Economics in India. He subsequently studied agricultural economics and political economy at Cornell where he also served on the research staff of the Cornell Center for International Studies. He has lived and worked for much of his life in South and Southeast Asia and more recently in the Middle East. Mr. Blackton's principal areas of research and policy interest include the interactions between equity and growth in the development process, the role of private entrepreneurship and private financial institutions in development, and the interactions between politics and economics in development policy formulation. He has published on topics in Sri Lankan, Indian, Thai, Laotian, and Egyptian development over the 1960s and 1970s. His major publication on Sri Lanka is Local Government and Rural Development in Sri Lanka (Cornell, 1974).

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Mr. Cammack is employed by the United States Department of Agriculture, Foreign Agricu tural Service. His primary responsibility in the Program Planning and Development Division is the commercial credit sales program in Asia, focusing on Korea, as the major market for U.S. agricultural commodities and the biggest user of commercial credit. His responsibility also includes the commercial credit program and the PL 480 Title I Program in Pakistan. Mr. Cammack was raised on a farm in Texas. His academic background includes a Bachelor of Business Administration degree, with a Master's degree in Agricultural Economics. His work experience includes two years in India as a Peace Corps Volunteer, two years with USAID in Nepal, and six years with USDA. Additionally, he has had experience in the grain business in the private sector.

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Dr. McGuire is currently the nutrition economist in the Policy Development and Program Review Office, Bureau for Program and Policy Coordination at AID. She received her doctorate in Nutritional Biochemistry and Metabolism and International Nutrition Planning at M.I.T. in 1979. Her doctoral thesis, carried out in rural Guatemala, determined seasonal valuations in women's energy expenditure, work patterns, and economic activities. Subsequently she has worked in Panama, Guatemala, and Kenya in various aspects of nutrition planning and policy analysis and has worked on U.S. domestic nutrition policy in the U.S. Department of Agriculture.

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Mr. Steinberg is currently with the Office of Evaluation, the Bureau for Program and Policy Coordination, AID. Formerly the Director of the Office of Philippines, Thailand, and Burma Affairs, he was also Director of the Office for Technical Support for the Asian and Near East Bureaus. Mr. Steinberg was a resident in Asia for over 15 years in Korea, Burma, Thailand,

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